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THREE EGALITARIAN VIEWS AND AMERICAN LAW

I. INTRODUCTION

In the last decade, several acts with an egalitarian flavor have
become law – the Individuals with Disabilities Education Act
(IDEA) and the Americans with Disabilities Act (ADA). As well,
other laws or executive orders, such as those involving affirmative
action, have extended the legal concept of equality of opportunity.
The last thirty years have also seen an explosion of work in political
philosophy on egalitarianism, and in particular, on the relationship
between equality and responsibility. As responsibility is a key issue
in the law, it is natural that jurists and legal scholars should turn to
this corpus of work to guide them in advocating and interpreting law
on equality.

   In this article, I will evaluate three important views on equality, in
the philosophical literature, in order to recommend which of them
should guide legal thinking on equality. These are the theories of
equality of primary goods, due to John Rawls (1971), of equality
of resources, due to Ronald Dworkin (1981a, b), and of equality of
opportunity for welfare, due to Richard Arneson (1989, 1990) and
further articulated by me (Roemer 1993, 1998).

   I will be concerned here with the issue of responsibility as
it affects the resources that should be made available to persons
through legal action, as when the IDEA mandates that extra
resources be made available to disabled children in schools. In this
case, one might not immediately see where responsibility comes
into play: but I shall argue that it does, because we never hold a small

child responsible for her disability, and this, I claim, is a condition which makes the provision of extra resources to her compelling. I will not be concerned with a second site of responsibility, the issue of responsibility in criminal behavior, and its relationship to punishment. This is, I think, an entirely different question, as it involves quite different social considerations.

There are two conditions, which together *suffice* to bring a compelling case that the provision of extra resources, by the state, to a person is due. The first is that such provision would improve a life, which, without those resources, would be one of quality far below the norm. The second is that neither the individual, nor his guardians (usually parents) are responsible for the condition that has reduced the quality of his life below the norm. These conditions hold in the case of most physical or mental disabilities. Conversely, the law at present does not provide extra resources (in a systematic way) to children of very poor and demoralized parents, who may in fact be as disabled with respect to the prospect of performing well in school as many children with clear, biological disabilities. I suggest that this is, in part, because one of the two conditions I enunciated fails to hold: it is not beyond contention that we should hold the parents unaccountable for the fate of the child in this case. Now one might argue that the child of poor and demoralized parents should receive resources because his effective disability is not his own fault – I do not disagree. My aim in this paragraph is only to show that the two conditions I stipulated suffice to bring a compelling case for resource provision, and for many, those conditions may in addition be *necessary*.

Here is a précis of the argument to follow. Before entering the fray, I should state that, in my view, the work of John Rawls and Ronald Dworkin has engendered a renaissance in egalitarian studies; it is path-breaking work. Nevertheless, I shall argue that the Rawlsian theory is not a good guide to the law because it deals inconsistently with the issue of responsibility. In addition, Dworkin's theory is not a good guide for at least one reason and perhaps two: the first is that Dworkin's method for arriving at the assignment of resources can produce an unacceptable kind of inequality, and the second is – something more contestable – that he holds people responsible for the wrong things. Finally, I argue that

the Arneson-cum-Roemer approach to equality of opportunity is the best guide.

II. RAWLSIAN EQUALITY

Rawls argues that, once a system of equal liberty is in place, social institutions should be designed to render the worst-off people in society as well off as possible, where 'worst-off' is with respect to a measure of possession of primary goods. There are many problems with Rawls's formulation; here, I wish to focus on how he deals with responsibility.

For Rawls, individuals have life plans, which they pursue, and primary goods are postulated to be essential inputs in the realization of any life plan. A person is happy, according to Rawls, in so far as his life plan is going well. I concur with this non-hedonistic conception of happiness.[1] Rawls has two important views about the nature of life plans: first, the state should not favor one life plan over another (this neutrality Rawls analogizes to religious tolerance by the state), and second, a person's life plan is his own responsibility. (On this second point, see Rawls [1982: 170] and Rawls [1985: 243].)

Rawls constructs the 'original position' as a thought experiment to deduce what kind of institutions and policies – including what kind of resource transfers – society should design and implement, respectively. In the original position, each individual is represented by an alter ego who is shielded from certain information about the circumstances of its person in the real world. To be explicit, a 'veil of ignorance' surrounds the alter egos in the original position, whose purpose is to deny them information about aspects of their persons' circumstances that are *morally arbitrary*. (An example of such information would be the wealth of the family into which the person is born.) Not knowing these circumstances, the alter egos have apparently the right posture for deciding about, inter alia, resource-allocating institutions.

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[1] Actually, hedonism is not excluded as a special case, because a person's life plan could be to enjoy life as much as possible. Many, however, will have less hedonistic goals and for them happiness means something quite different from enjoyment of life in the sensuous, mundane sense.

JOHN E. ROEMER

In the Rawlsian construction of the original position, the souls know neither the resources their persons will be allocated by the birth lottery, nor the life plans of their respective persons. The motivation for denying them knowledge of their persons' life plans – or even of the distribution of such life plans in the actual world – is to prevent them from using such information to favor persons with certain life plans. Suppose, for example, that 90% of persons in the actual world are known to have life plan A, and 10% life plan B. Then souls behind the veil might rationally allocate the lion's share of resources to persons of type A, since with large probability, any soul will become a person of type A. Thus, the kind of impartiality that Rawls aims to achieve, in the original position, would not occur. Souls are denied knowledge of the actual distribution of resources because that distribution, he contends, is morally arbitrary.

The problem with this construction is that life plans are, by hypothesis, not morally arbitrary features. But the veil of ignorance treats life plans and the morally arbitrary distribution of resources in *exactly the same way*. Thus, as a formal device, the original position fails to capture the essential difference between these two aspects of persons. A veil of ignorance that would capture the distinction Rawls desires between life plans and resources cannot treat these two things identically. The 'model' of the original position cannot tell, that is to say, if life plans are just other morally arbitrary features of persons, or something else.

It follows that whatever correct inferences Rawls draws about the nature of resource distribution that would be agreed to by souls in *his* original position, are not sound, *if* we understand what the veil of ignorance is supposed to do, and if we agree (with Rawls) that persons should be held responsible for their life plans.

Famously, Rawls deduces that in the original position, souls would agree to advocate a distribution of primary goods that would satisfy the difference principle, that is, that would make the worst-off as well off as possible. Although I (and many decision theorists) think this inference is itself invalid (see Roemer 1996, Chapter 5), I do not wish to press this point here. My present point is something else: *Granted* that Rawls's inference is correct for the original position as he has constructed it, the inference is neverthe-

less inapplicable to his project, because Rawls has constructed the veil of ignorance improperly to model his moral views.

Let me be concrete. Suppose that a person has a life plan to climb Mount Everest. He thinks that his life will have been virtually useless if he fails to make a serious attempt. He judges that, because he is not a superb athlete, he will require a lot of money to carry out his plan – to hire teams of sherpas, perhaps several times, and so on. If we deem this person responsible for his life plan, perhaps his alter ego should know it behind the veil of ignorance – but, of course, his alter ego should not know, behind the veil, what wealth he will inherit from his family, that being something morally arbitrary. This alter ego would not agree to an egalitarian resource distribution, for under such a distribution, his person would surely not have enough money to make the Everest attempt, and therefore his life would be almost valueless. His only chance to make the Everest attempt is to be born into a rich family, or to be born with a (morally arbitrary) talent that enables him to earn a large salary, and *not* to have that wealth or income taxed away.

This example shows that, behind a veil of ignorance where souls know the life plans of the persons whom they represent, they would not unanimously agree to the difference principle.[2] And it is at least arguable that, if persons are responsible for their life plans, then their souls should know those plans in the original position. But I need not claim that strong view: my claim is, more weakly, that the original position should not treat life plans and morally arbitrary features of persons in the *same way*.

Now Rawls could object to this proposal that the soul, knowing the life plan of his Everest hopeful, will not be impartial in regard to the distribution of resources. In my view, this is just an admission that one cannot design an original position that will deliver the kind of impartiality Rawls aims at, *and* preserve a distinction between morally arbitrary and non-arbitrary features of persons. Brian Barry (1996) has argued that Rawls puts forth both a *contractarian* and an

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[2] There is an apparent escape hatch here. Perhaps the difference principle would still leave a lot of income to high fliers, enough so that our Everest-hopeful could still afford the ascent after paying his taxes. I think an example can always be constructed to make this false. But another response to this proposal is to argue that the difference principle requires a great deal of leveling, more than Rawls indicated. On this, see G.A. Cohen (1992).

impartiality view in his writings, and that these two approaches are inconsistent. I agree with Barry, and what I have just explained is, if you will, a confirmation of (more weakly, is consistent with) Barry's claim.

The alternative to this inegalitarian conclusion (that the soul representing the Everest hopeful will not advocate maximin), for Rawls, is to drop the contention that life plans are the responsibility of individuals. But if a person is not responsible, or at least in part responsible, for his life plan, it is hard to imagine that he could be responsible for anything important about his situation. (Indeed, Nozick [1974] points this out, in a famous passage.) Moreover, and for our purposes, such a view is too far from current legal thinking to be of any practical use to the law.

In sum, I claim that the Rawlsian original position is constructed in such a way as to nullify an important Rawlsian postulate, that persons are to be held responsible for their conceptions of plans of life. This postulate is, I say, assumed in legal thinking. It therefore follows that Rawls's deduction of the difference principle does *not* include as a premise what law requires, and so it can provide no basis for guiding those who are concerned to implement equality with responsibility through the law.

III. DWORKINIAN EQUALITY

In 1981, Ronald Dworkin published two articles, which apparently repaired the Rawlsian error that I have described. In the first, he argued that "equality of welfare" is an unattractive kind of equality, for several reasons; the one upon which we will focus is that it fails to hold individuals responsible for their expensive tastes. In the second, he proposed an arguably more attractive conception of equality, and a precise way of computing what that conception entailed with respect to the distribution of resources.

Dworkin postulated that a person should be held responsible for the choices emanating from his preferences, as long as he identifies with his preferences. The qualification excludes addictions and compulsions, preferences (so Dworkin says) a person wishes he did not have. Not excluded are preferences for climbing Mount Everest and, importantly, preferences in regard to risk (not just the risk of

falling into a glacier on Everest, but the risk of losing a gamble). Dworkin's assumption here is akin to Rawls's view that persons should be held responsible for their life plans.

But, unlike Rawls, Dworkin developed his view about preference responsibility in a consistent manner. He postulated what amounts to a veil of ignorance in which each person is represented by an alter ego who knows his person's preferences, but not the resources with which his person will be equipped by the birth lottery – (families, talents,[3] and so on).

Behind Dworkin's veil of ignorance, there are insurance markets.[4] All alter egos are endowed with the same purchasing power, with which they purchase insurance against the risk of their persons' ending up badly off in the actual world. In purchasing insurance, alter egos use the preferences their persons' have in the actual world (always with the stipulation that addictive preferences are excluded). What they do not know behind the veil are the resources (e.g., family membership) with which their persons will be endowed or assigned by the birth lottery.

There will be an equilibrium in this insurance market, with equilibrium prices for various policies, in which all markets for insurance contracts clear. Dworkin says that the "equal distribution of resources" is that which is implemented when, once the birth lottery occurs, all insurance contracts are fulfilled.

Let us study this more closely. The first observation is qualitative: the insurance-market device captures nicely Dworkin's views that (1) individuals are responsible for their preferences, and (2) people should be equally placed in regard to resources. For the alter egos use their persons' real preferences (for risk, for climbing Everest) in

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[3] Actually, Dworkin worries about whether the alter egos should know the talents of their person, because, he says, talents and preferences are intimately related, and it is unrealistic to suppose a soul could know preferences, but not the associated talents. So Dworkin supposes that a soul does not know how talents will be remunerated in the world.

[4] There is an important distinction between the uses of the veil of ignorance by Rawls and Dworkin. Rawls uses the original position as a way of deducing the right principles for society; Dworkin does not. He proposes that the insurance mechanism is the right principle, and uses the veil only to calculate what the redistributive taxation should be. Indeed, Dworkin criticizes Rawls for his use of the original position.

deciding what insurance contracts to purchase, and they are equally placed behind the veil with regard to resources. They all have the same purchasing power behind the veil, and they are all shielded from knowledge of how resourced their persons will actually be by the birth lottery.

If one agrees with Dworkin's two postulates – that individuals should be held responsible for their preferences, and that the distribution of 'resources' is morally arbitrary – then the insurance scheme is, I think, a clever way of capturing the nature of what is arguably an ethically attractive distribution. What I will argue, however, is that that distribution is not egalitarian. In particular, it would in general violate a fundamental precept of what a resource-egalitarian distribution should be.[5] The insurance mechanism might well stipulate that disabled persons receive *fewer* resources (e.g., money) than able people do. So just as Rawls's original position does not properly model his view about life plans, so Dworkin's veil of ignorance-cum-insurance does not properly capture his resource-egalitarian view.

To see this requires studying the insurance mechanism carefully. There is, it turns out, a standard way of modeling Dworkin's insurance scheme, using the tool of general equilibrium theory. The insurance market is called a market for contingent claims. Dworkin did not know this concept when he wrote in 1981, and he spent considerable time in his article describing how the insurance mechanism would work; nevertheless, his attempt fails, and is subject to numerous criticisms. Let it be said, simply, that economists would agree how to model a perfectly competitive insurance market behind the Dworkinian veil of ignorance.

We describe first the *set of states* that the souls behind Dworkin's veil of ignorance face. A *state* is an assignment of alter egos to actual positions – relevantly, resource positions – in the real world. If we assume that each alter ego is self-interested, an assumption which is not necessary, but which will simplify the explanation, then all that matters to a decision maker behind the veil is the set of probabilities that he will end up with any given resource endowment (say, talents, wealth, and income). The number of states is very large: if there are

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[5] I first observed this in Roemer 1985, and again, later, in Roemer 1996 (Chapter 7). Hopefully, the present formulation is clearer than those earlier ones.

100 alter egos, each of whom could occupy any one of 100 positions in the real world, then there are100 factorial (100!) states: one state for each allocation of alter egos to positions.

The commodities on the insurance market are called contingent claims contracts. If there are N different states then there are exactly N commodities. Commodity i is a contract that says "the bearer will collect $1 from the insurance company if state i is realized". Thus, if I purchase one hundred units of this commodity, and state i occurs then I take my contract to the insurance company and exchange it for $100. I can also *sell* a contract to the insurance company that says "the bearer will deliver $1 to the insurance company should state i occur." In equilibrium, both of these contracts will have the same price, some number p_i; any soul can purchase any number of units of the contract for delivery from the insurance company at p_i per unit, or can sell any number of units of this kind of contract to the insurance company at this price, subject to the proviso that he would have an endowment sufficient to deliver the dollars required if state i is realized.

What is a soul's budget for purchasing insurance contracts? It is initially zero. The only income it has with which to purchase contracts for delivery of dollars in various states is the income it collects from selling contracts for delivery of dollars to the insurance company in other states. All souls are in exactly this situation: they each possess, initially, zero income behind the veil of ignorance.

Facing a set of prices for these contingent claim contracts, each soul purchases and sells contracts so as to maximize its expected utility.

A set of prices constitutes an equilibrium price vector if the total amount of dollars that the insurance company collects *in each state* equals the total number of dollars it must pay out on contracts. Thus, the insurance company makes precisely zero profits, regardless what state is realized. Under standard assumptions on preferences, an equilibrium price vector exists. (This is a corollary of the famous Arrow-Debreu equilibrium existence theorem.)

Think about how this insurance market works. Suppose in every state many persons will end up poor – our own real world. Then, assuming souls are risk averse, there will be a high demand for contracts that pay out for people who land in those poor positions.

Thus, the price to purchase contracts that deliver dollars will be rela-
tively high in all states. On the other hand, a soul will not be willing
to pay much for a contract that delivers dollars to him in a state
where he is rich: he would rather sell contracts to deliver dollars in
those states, to produce income with which to buy delivery of dollars
in states where he is unfortunate. Thus, after the birth lottery occurs,
we will in general see rich people writing checks to the insurance
company, which in turn writes checks to poor people.

Our Everest hopeful, however, will *not* sell contracts for the states
in which he is rich, because he would use all his income, in those
states, to make the Everest attempt. Therefore, he will not have
any income behind the veil of ignorance to purchase contracts for
delivery in the states in which he is poor. Thus, he will simply live
with what the birth lottery provides him. Indeed, if he needs an
extremely large wealth, he will even *purchase* contracts for delivery
in the states in which he is rich, and *sell* contracts to pay the insur-
ance company in states in which he is poor, since he does not have
a chance at an Everest attempt in those unfortunate states anyway,
and the Everest attempt is all that matters to him.

We can now state Dworkin's view: a resource egalitarian should
advocate a system of taxation, in the real world, that mimics the
transfers that would be implemented under the equilibrium contracts
in the market for contingent claims behind the veil of ignorance
constructed above, where souls know the non-addictive prefer-
ences of their persons, but not the endowments of resources or
resource-earning capacities those persons actually have in the world.

I will now construct a simple example to show that the outcome
of the Dworkin insurance market can violate a fundamental precept
of what resource egalitarianism should require. Imagine that there
are two persons, one handicapped the other able. In the real world,
each has wealth of $10,000. This wealth enables the able person
to live quite satisfactorily, but the disabled person must spend it
all on the most basic requirements of life – medicine and phys-
ical therapy will constitute large budget items for him (no opera or
pre-phylloxera claret).

We model this as follows. The utility that each of these two
achieves is a function $u(I, A)$, where I is the income he has and A
is his degree of ableness, which takes on values 1 (for the disabled)

and 4 (for the able). In particular, we postulate an entirely standard utility function, of the Cobb-Douglas type:

(1) $u(I, A) = I^{1/2}A^{1/2}.$

We further assume that this is a von Neumann–Morgenstern utility function, which means that it obeys the von Neumann–Morgenstern axioms of expected utility theory.

The uncertainty that the two souls face concerns only what degree of ableness they will have in the real world, for the wealth they will be endowed with is $10,000 in either case. Let us call the souls Aristotle and Plato, and let us call the persons Mary and Jane. Then there are two possible states of the world: Aristotle is born Mary and Plato Jane, or Aristotle is born Jane and Plato Mary. We postulate that Mary is able (has $A = 4$), and Jane is disabled (has $A = 1$).

It can be shown that, because the souls have identical preferences, and face the same birth lottery, the equilibrium transfers under the contingent-claims insurance market are precisely those that solve a decision problem of the (essentially unique) soul behind the veil. The decision problem is: How would I like to allocate the $20,000 of available wealth between Mary and Jane, given the probabilities that I end up as Mary or Jane? This means the soul chooses the number x to solve this problem:

$$\text{Maximize}_{x} \frac{1}{2}(10000 - x)^{1/2}4^{1/2} + \frac{1}{2}(10000 + x)^{1/2}1^{1/2}.$$

The maximandum of the above program is the expected utility the soul has, if x dollars are transferred from Mary to Jane. The uncertainty is whether the soul is born with $A = 4$ or $A = 1$.

The solution to this problem is $x = -\$6000$: that is *the disabled Jane should transfer $6000 to the able Mary*. The intuition behind this apparently strange result is that, when maximizing expected utility, a decision-maker attempts to equalize the *marginal* utility of money at the allocation, across all states. If Jane and Mary have the same wealth, Mary's marginal utility is higher with these preferences. Since each person has decreasing marginal utility in wealth, we must take money away from Jane (which will increase her *marginal* utility of money) and give it to Mary (which will decrease hers) until the two marginal utilities are equal.

Thus, in this example, the Dworkin mechanism awards more than an equal share of the wealth to the able person. This, I maintain, contradicts the most basic precept of what resource egalitarianism should entail.

I can think of several responses to this example in defense of Dworkin's proposal. These are:

(a) 'equilibrium in the market for contingent claims' is not Dworkinian insurance,

(b) expected utility theory is an incorrect model of decision making under uncertainty,

(c) preferences like these are an aberration, and

(d) it is not a basic precept of resource egalitarianism that "an income distribution in which the disabled have more income than the able is preferable to a distribution in which they have equal income."

Regarding (a). Granted, Dworkin did not himself use contingent claims markets. But that was due to his lack of training in economic theory. Among those who study insurance (namely, economists), this is the universally agreed upon way of modeling perfectly competitive insurance markets.

Regarding (b). There has been an extended controversy among economists concerning whether rationality requires that decision makers' preferences obey the von Neumann Morgenstern axioms. The issue is not settled. It remains the case that the great majority of practitioners use the von Neumann–Morgenstern model. If that model is finally abandoned a great deal of the theory of insurance and finance will have to be reconstructed. It is possible that, with such abandonment, the market for contingent claims behind the veil of ignorance would not produce the pathological result I have constructed. At the moment, this is a thin reed upon which to hang a reply.

Regarding (c). I do not claim that disabled persons always enjoy lower marginal utility than able persons, when they consume the same levels of income: only that this is a distinct possibility. Thus, to exhibit an example, which is not weird,[6] in which the opposite

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[6] The preferences in the example are entirely standard.

occurs is sufficient to show that the Dworkin insurance market does not implement resource egalitarianism.

Regarding (d). This is, perhaps, the most persuasive attack on my argument. What we surely can assert is: Given that disabled persons are generally much poorer than able persons, a resource egalitarian should advocate transferring income from the able to the disabled. But my argument requires something stronger, namely, the assertion that I have set off with quote marks in statement (d). In other words, a resource egalitarian might challenge my example by saying: "Had Jane been endowed with $3000 by the birth lottery, and Mary with $17,000, I would advocate transferring some money form Mary to Jane. And that is exactly what your contingent claims market does, too – it would transfer $1000 from Mary to Jane." (This is correct: the insurance market will cause the final allocation of money to be $4000 for Jane and $16000 for Mary, independently of what their original money endowments are.)

More generally, Andrew Williams writes, in the role of a Dworkin advocate, that

If all individuals face the same options, and some individuals think it would be wasteful for them to devote resources to their lives if they were blighted by disability when doing so comes at the expense of leading a flourishing life should disability not strike, then they are entitled to make that decision. To force them to make a particular decision about intra-personal distribution deprives them of a choice which each individual is entitled to make for themselves. The price to pay for respecting such entitlements, and the 'ambition-sensitivity' they require, however, is abandoning a commitment to preserve particular distributive patterns regardless of individual preference, including a pattern which requires that the disabled shall have no less wealth than those are able.[7]

Nevertheless, I believe that resource egalitarianism does have, as a fundamental precept, the statement set off by quotation marks in (d). *Other things being equal*, a distribution of income in which the disabled person has more than the able person is preferable to one in which they have the same income, from a resource-egalitarian viewpoint. Now the ceteris paribus phrase can be upset if, for instance, the able person has to labor for his income and the disabled person does not, or even – perhaps – if they have different preferences. But, in the example I gave, ceteris paribus held. (For concreteness'

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[7] Personal correspondence, October 9, 2000.

sake, think of the money endowments of Mary and Jane in the example as inherited wealth.) Williams's defense of the result of the insurance mechanism in this case may show that the allocation of wealth in question is attractive from the liberal viewpoint, but I am not persuaded that that distribution should be called egalitarian, a fortiori, resource-egalitarian.

What do I conclude? That the Dworkinian insurance mechanism implements a certain conception of justice, which may be attractive by virtue of its injection of responsibility into the calculus of distribution, but it is not a conception of resource equality. Here, 'resource equality,' whatever it is, need only entail that "in a resource-egalitarian allocation, if there are two resources, and two people, and Jane has less of resource 1 than Mary does, then Jane must have more of resource 2 than Mary does." In the example, Jane has less of the ability resource than Mary, and so resource-equality entails that she have more of the corn resource than Mary.

Indeed, I would more generally say that the path to what should be conceived of as resource egalitarianism will not be the outcome of contractarian, veil-of-ignorance, thought experiments, a view to which I alluded in my discussion above of Rawls. Arguing that claim is, however, beyond the scope of this article.

What should Dworkin recommend as the proper, resource egalitarian allocation in the Mary-Jane example? I claim: that distribution which equalizes the welfares of Mary and Jane. For, in this example, the issue of responsibility does not appear. These two souls have the same life plans and the same ambitions. None of the arguments Dworkin brings to bear against welfare egalitarianism bite here. Thus, if the welfare measured by the stated utility functions is postulated to be interpersonally comparable, then Dworkin should recommend that the able person (Mary) transfer $6000 to Jane, for that would equalize their welfares. This is a transfer of the same magnitude, but in the opposite direction, of the transfer recommended by the Dworkin insurance mechanism.

It is perhaps worthwhile to note that the resource allocation recommended by the Dworkinian insurance market is, in general, *not even prioritarian.*[8] A prioritarian favors the worse off over the better off – not, perhaps, to the point of advocating equality, but

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[8] On prioritarianism, see Parfit 1997.

of advocating some transfer from the better off to the worse off. But here, Dworkinian insurance transfers resources from an initial equal provision, from the worse off (Jane) to the better off (Mary). Because the prioritarian class of views is a large one – ranging all the way from 'maximin' to utilitarianism (which is on the boundary of prioritarian views) – it may be of some surprise to note that Dworkin's view falls outside that class.

How does this analysis apply to the question of law pertaining to resource distribution? There are two ways that lawyers might be guided by Dworkin's theory: The first, which one might call quali-tative, is to take the cue from Dworkin that persons should be held responsible for their preferences, but not for their resources, and to guess at what that entails for resource distribution. (They might well guess that disabled persons should receive transfer payments from able persons.) The second, quantitative approach is to try to compute what allocation would be recommended, in the case at hand, by calculating the equilibrium in an insurance market for contingent claims behind Dworkin's veil of ignorance. Obviously, the danger, from an egalitarian's viewpoint, is that lawyers would use the quantitative method, for, as we have seen, that method can recommend regressive transfers. Surely, if Dworkinian equality did become a guiding hand in the law, conservative jurists would learn about the potentially regressive recommendations of the Dworkinian mechanism.[9] They would then only have to establish that the prefer-ences of the persons involved were of the Mary-Jane type, to justify regressive or, less radically, laissez-faire distributive policies.

For completeness, I now provide an example of the Mary-Jane problem in which the insurance market recommends 'progressive' transfers. Suppose the utility function of the two individuals is:

$$(2) \quad u(I, A) = (I + 1000A)^{1/2}.$$

Then we must solve:

$$\underset{x}{Max} \, \frac{1}{2}(10000 - x + 4000)^{1/2} + \frac{1}{2}(10000 + x + 1000)^{1/2}.$$

The solution is $x = \$1500$; so equilibrium in the contingent claims markets entails that each soul promises to deliver $1500 if it should

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[9] In fact, they might well cite this article.

be born as Mary (able), and collect $1500 if it should be born Jane (disabled).

The qualitative difference between the two utility functions I have used is that, in the first one, money and ableness are complements (one needs both to enjoy life), and in the second one, they are substitutes (money can fully substitute for lack of ableness).

Surely, Dworkin cannot advocate the insurance mechanism on the psychological contingency that people have preferences as in (2), and not as in (1).[10]

In the last paragraph of the introduction I said that, in addition, it is possible that Dworkin errs in holding persons responsible for the wrong things. I meant that it is not obvious that a person should be held fully responsible for his preferences, even if he is glad he has them. I will pursue this point in the next section.

IV. EQUALITY OF OPPORTUNITY

Richard Arneson (1989), while agreeing with the importance of injecting responsibility into egalitarian theory, argued that Rawls, Sen (1980), and Dworkin were wrong to change the equalisandum from 'welfare' to some more fundamental input into welfare, like primary goods, functionings, or resources: the right move is, he said, to replace welfare with "opportunity for welfare." He, and G.A. Cohen (1989), argued that, in addition, Dworkin was incorrect to put 'preferences' in the set of things people should be held responsible for. The set of responsible aspects of a person should be those over which he has control, and preferences are often beyond a person's control (if, for example, they are imprinted during childhood, before the age of consent at which we deem a person to be responsible for her choices).

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[10] Several times, when I have discussed this matter with Dworkin, he has said, "If preferences were as in (1), then I wouldn't use the insurance mechanism." We can infer that Dworkin means he would use the insurance mechanism precisely in those cases in which the outcome agrees with his (progressive) intuitions about resource allocation. This is, first of all, ad hoc, and secondly, probably means that he would never use his mechanism, because with large and heterogeneous populations, there will almost surely be people who would contract to deliver resources in states in which Dworkin feels they should receive additional resources.

Arneson formulated a rather complex test for ascertaining when opportunities for welfare among a set of persons are equal. I have argued that, first, it is probably impossible to equalize opportunities in any real-world situation, according to his test (that is, there is an existence problem), and second, it would be, in any case, extremely difficult to carry out (because the informational demands of the test are too great) (see Roemer 1996, Chapter 8 for a fuller discussion). In the spirit of Arneson's proposal, I have proposed a way of conceptualizing equality of opportunity that is almost algorithmic. Given any particular problem, my method enables one to compute, with data that are in many cases available, what precise policy constitutes the equal-opportunity policy (Roemer 1998).

There are five key words in the language of my proposal: objective, circumstances, effort, type, and policy. The *objective* is the 'opportunity equalisandum,' the thing we wish to equalize opportunities for (e.g., acquisition of wage-earning capacity, or longevity, or welfare). *Circumstances* are aspects of the situations of persons that are beyond their control, *and* the effects of which society believes individuals should not be held responsible for (e.g., their race or sex, or the socio-economic status of the family in which they grew up). A *type* is the set of all persons with the same circumstances. *Effort* is that constellation of behaviors that society wishes to hold persons responsible for. The *policy* is the intervention to be used to equalize opportunities for acquisition of the objective. Equal opportunity policy aims to 'level the playing field' in the precise sense of compensating those whose circumstances are disadvantageous with respect to realizing the objective, so that, finally, the extent to which persons achieve the objective will depend only on how much effort they expend, not on their circumstances. To be slightly more precise, we aim to make it the case, by the use of policy, that, holding constant the degree of effort expended, the realized value of the objective be *equal* across types. This is an informal statement: a mathematical formulation makes the statement precise.

Although I will not explain that formulation here, it is important to go into some detail about the way effort is measured. For the sake of concreteness, let us fix an example: the objective is wage-earning capacity, the population consists of students, circumstances are family background, and effort consists of all those aspects

of behavior and environment that positively affect wage-earning capacity, given family background and a school system. To be still more concrete, think of effort as 'how hard one works in school.' The policy is a system of educational finance. With a moment's thought, the reader will see that the distribution of effort, within a type, will *depend* upon the type: that is, the distributions of effort will usually be quite different across types. Now the *distribution* of effort is a characteristic of the type, not of any individual, and since our aim is to compensate persons who are disadvantaged by their circumstances, we should not count it against a person that his effort is low because, inter alia, he is in a type with a low average effort. Thus, to compare the efforts expended by people of different types, something we need to do to calculate the equal-opportunity policy, we must use a measure of effort that factors out the goodness or badness of the distribution of efforts of the various types. We adopt as this measure the quantile of the effort distribution of his type at which a person sits. Thus, for example, individuals from different types each of whom expends *median effort* within his type will be deemed to have expended the same degree of effort. Our policy aims to make it the case that all those at the same effort levels, within the various types, achieve (on average) the same value of the objective.

It turns out that, when we measure effort in this way, we can deduce a person's degree of effort without ever having to measure it. The argument is as follows. The value of the objective is a function of circumstances, effort, policy, and luck. Suppose that all individuals in a given type are exposed to the same policy. Then, averaging over good and bad luck, it will be the case that the quantile on the distribution of the *objective* at which an individual sits is precisely the quantile of the *effort* distribution at which she sits – because, holding constant circumstances and policy, the attainment of the objective will be an increasing function of effort (averaging out the effect of luck over many people). Thus, we can assign an individual a degree of effort simply by observing where she sits on the distribution of the objective of her type.[11]

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[11] The argument of these last two paragraphs is rapid and telescoped. The reader who wants a gentler development should consult Roemer 1998 or Roemer 2000.

Notice that, when defining circumstances and effort, I used the terms 'society believes' and 'society wishes.' Thus, the equal opportunity policy, as I have defined it, is one consonant with the particular society's views about responsibility, and as such, it is one that might well be encapsulated in law. One might also use the theory to produce the equal-opportunity policy that corresponds to the correct view concerning individual responsibility – whatever that is. My point here is that the theory is a tool that *any* society can apply, to compute the equal-opportunity policies consonant with its own views of responsibility.

Julian Betts and I (1998) have applied the equal-opportunity theory (EOp) to the calculation of the optimal educational finance policy. We partition the set of students in the United States into four types, defined by a single circumstance: the level of education of their parents.[12] The most disadvantaged type consists of those whose more educated parent has eight or fewer years of education, and the most advantaged type consists of those whose more educated parent has at least some tertiary education. Our objective is wage-earning capacity. Our policies are distributions of educational finance: a typical policy is a vector (m_1, m_2, m_3, m_4), where m_i is the per capita expenditure of educational monies on students of type i. Each policy must be feasible, in the sense that the total budgeted by the policy sum to exactly the educational budget of the country.

In the late 1960s, the per capita expenditure on students K-12 in the US was approximately $2500, in 1989 dollars. We compute, using the algorithm that I have referred to, that equalizing opportunities among men for the acquisition of wage-earning capacity would have required spending that budget in the following way:

$$(m_1, m_2, m_3, m_4) = (\$4770, \$3030, \$2200, \$530).$$

That is, we should have been spending about nine times as much on each most disadvantaged child as on each most advantaged child. Evidently, the recommendation is quite compensatory, even though the only circumstance of which we have taken account

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[12] The education of the mother is the best single predictor, among socio-economic characteristics of the family, of the future earning capacity of the child.

is parental education. This means that our calculation implicitly assigns all other aspects of the person's performance to effort – including the effect on his future wages of his race, his natural abilities, his family's wealth, and so on. Of course, parental education is correlated with these other 'circumstances,' but far from perfectly. That such compensatory spending is recommended at the EOp policy, with only parental education as a circumstance, shows that parental education is a massively important influence on the future wage-earning capacity of the child.

Thus, even with a fairly circumscribed – one might say conservative – delineation of what constitutes circumstances, the policy recommended by the EOp theory can be highly compensatory. In particular, the educational policy just described is a far cry from the 'equal resource' policy, in which all children receive the same per capita funding. That equal resource policy is commonly characterized as the equal-opportunity policy, but we have argued this is far from the case.

It is, however, also the case that the EOp policy is far from an 'equal outcome' policy. We predict that, were the EOp policy enacted, there would still be substantial differences in wages earned by men; those differences, however, would mainly be attributable to 'effort', not to the circumstance of parental education. Of course, one may well argue, as I have above, that much of what we here deem to be effort, with the spare conception of circumstance as consisting only of parental education, is in fact the consequence of other circumstances, and hence advocate a policy that is more compensatory, in the sense of taking account of more circumstances than parental educational levels.

There are two senses in which 'equal opportunity' is used in common parlance: one is the sense of 'leveling the playing field,' and the other is of 'non-discrimination' or 'meritocratic.' The meritocratic view is that equality of opportunity has been realized when all those eligible for a position (a job or place in a school, for instance) have been evaluated, and the ones most able to perform well in the position are chosen. Although we use equality of opportunity in both senses in the United States, these are really two very different concepts.

Consider affirmative action, a policy many interpreted as an equal-opportunity policy in the level-the-playing-field sense. Affirmative action policies usually involve choosing persons from disadvantaged types to fill positions who would not have been chosen solely on their merits.[13] In the language used above, the policy was to choose the high effort individuals from each type to fill positions, rather than choosing the persons with the highest qualifications independent of type. This can be viewed as an instance of EOp policy, as I have defined it. There was not surprisingly, a backlash from people from advantaged types. This backlash took different forms: sometimes the challenger of the policy maintained that he had greater merit than someone chosen did, and therefore should have been chosen for the position. Such a challenger was implicitly maintaining that the meritocratic approach is the correct conception of equality of opportunity, not the level-playing-field conception. Of course, this challenge was admissible due to the duplicity commonly practiced (see the last footnote) in justifying affirmative action. Sometimes the challenger maintained that he was just as disadvantaged as the someone who got the position, *and* just as deserving (read: expended as high an effort): this challenger was maintaining that the delineation of circumstances was incorrect (e.g., race does not properly capture disadvantage, but family background does).

It is interesting to observe the way in affirmative action policy is being modified in different settings. I think there is a pattern that differentiates these amendments in two cases: first, where the positions in question are jobs, and second, where they are places for students in universities.

In the first case, affirmative action policies are being abandoned, and equality of opportunity is being reinterpreted in its meritocratic form. ("We hire the most qualified person for the job, regardless of ascriptive characteristics.")

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[13] Often, the public gloss on affirmative action policy asserts the contrary. In other words, it is claimed that affirmative action policy is meritocratic. This dishonesty has come home to roost. The public might have been educated about the desirability of a level-the-playing-field policy, had those implementing such policy argued for it instead of misrepresenting it.

In the second case, race as a measure of disadvantage is being abandoned. But college admission procedures are not reverting to the merit criterion. Texas, Florida, and California, in which affirmative action is no longer predicated on race, have all adopted a policy of the following form: admit the top p % of high school students from *each high school in the state* to the public university. Now, de facto, because of residential segregation, high schools are often homogeneous with respect to type, where type is 'socio-economic status of the family.' Thus, this policy will (approximately) admit the high effort individuals from each type to university. (In Florida, $p = 20$, in Texas, $p = 10$, and in California, $p = 4$. The California system is mandated to admit the 'top 12%' of high school students in the state to the university; thus, fully one-third of undergraduate admissions will [potentially] be equal-opportunity, in the sense of level-playing-field, admissions.)

Thus, with respect to filling jobs, American society is (implicitly) deciding that the appropriate model for equal opportunity is the meritocratic model, but with respect to providing public tertiary education, it is deciding that the level-playing-field model is appropriate – however, race is not a good measure of circumstance.

I now take up the promised second criticism of Dworkin's view, that preferences are considered aspects for which the person should be held responsible. The problem, as I wrote, is that a person's preferences may be in large part imprinted in him by his circumstances. Generically, we must be concerned with preferences that are adopted as a strategy to minimize cognitive dissonance. Suppose that there are poor people who can only afford to purchase real estate in the flood plain of a river. They adopt (through some mental process whose precise character we do not contemplate here) preferences that minimize the subjective cost of the risk. These people are not addicted to risky behavior: they do not wish they had different preferences. In the event, these people do not purchase insurance. If a flood occurs, they suffer what Dworkin calls bad option luck: they had the choice to insure, but did not, and so society, following Dworkin, owes them nothing.

Under the EOp view, however, we ask, is it the case that people with certain disadvantaged circumstances (low education, poverty) have a higher frequency of risk-loving preferences than other people

do? If so, that higher frequency is a characteristic of their type, and something which, a priori, leads to harms that are compensable. In other words, individuals of that disadvantaged type who live in the flood plain would be compensated to the extent that people of that type tend to have preferences that are more risk-loving than normal, but not to the extent that, *within* the type, they are more risk-loving than others. (The latter deviation from the norm will be accounted, in the EOp calculus, as due to 'low effort.') The EOp algorithm sorts out these two effects, if we have the data to evaluate the distribution of risk-lovingness in the various types. And economists are good at finding 'natural experiments' that produce such data sets.

Now there is a cost to viewing preferences as being influenced by circumstance and therefore not within the ambit of a person's responsibility: we are travelling down the path of saying that people should not be held responsible for their voluntary choices, those that emanate from their preferences, with which they identify. Many will be quick to point out that this is a slippery slope, and it is surely fear of losing his footing on that slope that moved Dworkin to hold persons responsible for their preferences. I respond that it is better to dare to traverse that slope. For it is surely wrong to hold people accountable for actions that were induced by preferences that were adopted to make survival psychologically possible in environments of poverty and disadvantage.[14] And, with good data and analysis, we can, I claim, traverse the slippery slope.

This issue is sufficiently important that I shall give a second example. Suppose we wish to use a policy of targeted state subsidized health insurance to equalize opportunities for longevity in a population, in a society like the US, where there is incomplete national health insurance. For the sake of argument, suppose we partition the population into types defined by their education levels – I say 'for the sake of argument,' because one could say that a person's level of education is in part due to his responsible choice,

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[14] There is an example, due to Sen (1987), with a similar flavor. Consider, he says, the 'tamed housewife,' who has adopted preferences for being, as they used to say, barefoot, pregnant, and in the kitchen. She has learned to enjoy this truncated life, for to do otherwise would lead only to frustration and, perhaps, divorce and poverty. Should we rate her life as going well? Sen says no: the general argument is that a person's own *preferences* cannot in general be used to measure his *interests*, if they were adopted to make the best of a bad situation.

and should not be considered a circumstance.[15] We observe that
the distribution of longevity is quite different for different types,
so defined, in the US.[16] Much of the difference is due to what is
called life-style – the pattern of smoking, eating, exercising, and
sexual behavior of the individual. In the EOp view, the effect of
differential life-styles on longevity will be accounted as differences
in effort, if we say that circumstances are defined simply by educa-
tional attainment and, say, race. The EOp policy would, in this case,
be one that subsidizes the purchase of health insurance to different
degrees for individuals of different types, with an aim to reducing
the differences in longevity *across types* at any given quantile of the
type-distributions of longevity. The amount of subsidy will depend,
inter alia, on the budget available for the purpose. (Another EOp
– type of expenditure would be one to 'improve' the life-styles
of people in disadvantaged types. I do not wish to imply that the
'micro' policy of targeted subsidy is necessarily superior to the
'preventative' policy: the question of the *efficiency* of a policy is
important as well, but will not distract me here.)

What is notable about the EOp policy is that it will tend to
subsidize more generously types whose *distributions* of life-style
practices are worse (in the sense of less healthy): for the distribu-
tion of life-style practices is a characteristic of type, and therefore
compensable under the EOp view. To the extent that smoking
is associated with poor education, for example, the policy will
subsidize the treatment of lung cancer in poorly educated people
more than it would in well-educated people.

Dworkin's proposal, in contrast, would hold people respon-
sible for their preferences – in this case, preferences for exercise,
smoking, and so on. It would not subsidize people who engage
in 'risky' behaviors, unless those behaviors were judged to be
addictive. The only escape clause which would permit a Dworkinian
practitioner to compensate types with poor life-style characteristics
would be a declaration that their smoking behavior and high-caloric

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[15] It would be better to use the level of education of the individual's parents to
define his type. Unfortunately, there are no data sets (at least in the United States)
which allow us to compute longevity and contain information on the education of
the parents.

[16] Life expectancy is one summary statistic of the distribution of longevity.

food consumption was an addiction. Granted, there may some truth in this, but declaring these behaviors addictive traverses the slippery slope of declaring that any costly behavior is beyond the person's control, which is surely not a view held by vast majority of citizens, or one the law is likely to adopt.[17]

I have expressed skepticism that egalitarian distributions will ever result from veil-of-ignorance constructions, properly constructed, and I showed that neither the Rawlsian nor Dworkinian 'original position' constructions, properly amended, do. I now wish to argue that, even if my conjecture is wrong, original-position arguments are antithetical to legal practice. Suppose A is driving to a lawyer's office to sign a contract to purchase B's property. On the way, he crashes his car, and cannot make the appointment, which is put off until the next day. That evening, a hurricane destroys the value of B's property. No jurist would insist that the valueless property is now A's, and that A owes B the originally agreed upon purchase price.

The analogy to our problem is as follows. Before the birth lottery, an alter ego of someone like our Everest climber *would* have chosen not to receive income transfers, should his person be born poor. Let us suppose that he is born poor. The law will not say that he should not receive income transfers, because he would have chosen not to, had he had the chance to choose. In other words, individuals are not held accountable by the law for what they would have done, had they had the opportunity to do. It would therefore be extraordinary practice were jurists to use Rawlsian or Dworkinian arguments to justify egalitarian distributions..

Now it must be said that Dworkin (1989) used this very argument against the Rawlsian original position. He claimed that *his* veil of ignorance construction was immune from the criticism because he was only using it as a *definition* of resource equality, not as an argument for it. (In contrast, Rawls uses his original-position construction as an argument for equality.) But when it comes to implementation through law, I think Dworkin's claim to immunity

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[17] There are special, physiological reasons for viewing smoking as an addiction, and so Dworkin could arguably compensate persons for the harmful affects of smoking. It would be a stretch, however, to apply the same reasoning to exercise, diet, and risky sexual behavior.

fails. For the law must evaluate the fairness of the Dworkinian recommendations in regard to resource allocation by evaluating the attractiveness of the veil-of-ignorance construction. That is, it must consider the veil-of-ignorance construction an *argument* for the allocation that follows from it.

The calculation of the equal-opportunity policy does not rely on a veil-of-ignorance argument. It thus passes what I have claimed is one necessary condition for legal argument.

Let me conclude this section by observing how the equal-opportunity approach would solve the Mary-Jane examples of the last section. It would partition the society into two types, abled and disabled. Since the effort issue is degenerate in this example, it would simply assign the wealth to equalize the welfares of the two types. In other words, it would, in those examples, be welfare egalitarian. This, I claimed earlier, was also the proper resource egalitarian prescription in the Mary-Jane problem.

V. CONCLUSION

There are, I have suggested, three contemporary justifications of egalitarian resource distribution that jurists might well use in framing and interpreting laws pertaining to resource distribution: those associated with Rawls, Dworkin, and Arneson-cum-Roemer. The Rawls account fails because the original position, which is key to the argument, fails properly to model individual responsibility for plans of life. The Dworkin account uses a veil of ignorance argument not as justification for the insurance principle, but to compute what redistributive taxation should be; it may be independently attractive for its implementation of liberal principles, but it is should not be called egalitarian, for it fails a simple test: from an initial position of equal wealths held by an able and disabled person, it can advocate transferring wealth from the disabled person to the able one, something which an egalitarian – more precisely, a resource-egalitarian – should not agree to. The equal-opportunity theory of Arneson and Roemer allows each society to implement a degree of equality consonant with its own views of responsibility. Unlike the Rawls and Dworkin proposals, it does not invoke a veil of ignorance to calculate the recommended distribution, but proceeds directly

from the postulated (and hence unexamined) view that justice aims to level the playing field among citizens, by compensating them for disadvantageous circumstances that affect their prospects in a way that is beyond their control.

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JOHN E. ROEMER

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