THE POLITICAL PHILOSOPHY OF BIOLOGICAL ENDOWMENTS: SOME CONSIDERATIONS*

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Is a government required or permitted to redistribute the gains and losses that differences in biological endowments generate? In particular, does the fact that individuals possess different biological endowments lead to unfair advantages within a market economy? These are questions on which some people are apt to have strong intuitions and ready arguments. Egalitarians may say yes and argue that as unearned, undeserved advantages and disadvantages, biological endowments are never fair, and that the market simply exacerbates these inequities.1 Libertarians may say no, holding that the possession of such endowments deprives no one of an entitlement and that any system but a market would deprive agents of the rights to their endowments.2 Biological endowments may well lead to advantages or disadvantages on their view, but not to unfair ones.

I do not have strong intuitions about answers to these questions, in part because I believe that they are questions of great difficulty. To begin, alternative answers rest on substantial assumptions in moral philosophy that seem insufficiently grounded. Moreover, the questions involve several problematical assumptions about the nature of biological endowments. Finally, I find the questions to be academic, in the pejorative sense of this term. For aside from a number of highly debilitating endowments, the overall moral significance of differences between people seems so small, so interdependent and so hard to measure, that these differences really will not enter into practical redistributive calculations, even if it is theoretically permissible that they do so.

Before turning to a detailed discussion of biological endowments and their moral significance, I sketch my doubts about the fundamental moral theories that dictate either the impermissibility or the obligation to compensate for different biological endowments.

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The fullest egalitarian argument for counterbalancing differences due to natural endowments is provided by Dworkin, and I shall discuss it at length below. But it is worth noting that Dworkin's results rest on the assumption that equality of some kind is morally obligatory, yet Dworkin does not even argue that equality is morally desirable, still less required. And this is typical of many treatments of the demands of equality. As Nozick has noted, however, "it cannot merely be assumed that equality must be built into any theory of justice." I share with Nozick the desire to see a good argument for this presumption.

The best libertarian arguments against equalizing for different endowments are disarmingly simple: people have natural rights, among which are the ownership of their bodies and whatever they acquire and transfer in permissible ways. Advantageous biological endowments fall under the first of these headings and so cannot be expropriated, even to compensate the biologically disadvantaged. To this point the libertarian may, like Nozick, add arguments against versions of the claim that biological endowments are morally arbitrary and therefore should not determine people's "holdings." The trouble with these arguments is that they start too late in the game: they leave unfounded the notion that people have natural rights to anything, including their bodies. Nozick is guilty of a charge of the same gravity as he lodges against egalitarianism: one cannot merely assume that natural rights must be built into any theory of justice.

Yet these notions are crucial to the question about biological endowments in the market. On one side, it is held that only the market can respect the natural rights to endowments that each individual possesses, and that trade which respects these rights is the only fair way, or is the optimal way to distribute the goods and services each agent disposes. On the other hand, it is the inequalities and inefficiencies of markets that lead some to advocate redistribution in the direction of greater equality. Just as monopoly and oligopoly constitute inequalities that destroy the allocative efficiency and welfare-optimizing properties of a market, so too individual differences in biological endowments distort markets unfairly. Accordingly, they must be equalized. Both of these prescriptions accord the market at least the standing of a morally permissible institution, and so will I in what


5 See *ibid.*, pp. 213-227.
follows. But neither has much force in the absence of prior arguments, either for the existence of natural rights or for the claims of equality in endowments and their effects.

But, as I said, it may turn out that these fundamental moral problems about biological endowments are too academic to be very pressing. To see this, we need to examine the notion of biological endowment itself.

I

Three preliminary questions suggest themselves immediately: What exactly are biological endowments? Are there significant differences among them? Do such differences have moral ramifications? The first two of these questions have been pretty widely ignored by those who have discussed this subject, in the strong conviction that the nature of such endowments is clear and their existence beyond any doubt. Who could deny that there are talents and disabilities? And these are just what we call advantageous biological endowments and disadvantageous ones. (A semantic digression: I say “disabilities” instead of “handicaps,” which suggests that disabled persons have their caps in hand.) I believe that the first two questions are complex, and that the complexities always affect, and sometimes will bedevil, answers to the third question.

Let us begin with the problem of what a biological endowment is. There may be a presumption that the kind of biological endowments at issue here are hereditary ones, genetically programmed traits that are immutable and inevitable. The trouble with this conception is that there is no biological endowment of Homo sapiens that is purely under the control of the genome, not even the DNA’s own molecular structure. All so-called hereditary endowments are the result of interaction between the genome and its environment. A simple example is PKU disease, an inability to metabolize phenylalanine, which is caused by a small number of defects in the genome and results in mental retardation. But this effect obtains only when phenylalanine is present in the diet. Where it is absent, through planning or accident, there is no such disability. In general the genome interacts with the cellular, tissue, organ, whole body, and ecological environments to produce the kinds of endowments we are interested in—talents and disabilities. In different environments, even slightly different ones, the

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same gene sequence will produce different traits. And, of course, this result is not restricted only to prenatal environments. The genome interacts with the environment throughout life. To the extent that the environment changes, biological endowments will vary. Moreover, our environment is not just biological: it is social, and it can be manipulated not only by other people, but by the agent himself. Thus, some biological endowments will not be under any agent’s control, others will be the responsibility of those who nurture the agent, and still others will be the responsibility of the agent himself.

Let us distinguish these three types of endowments as, respectively, hereditary traits, domestic traits, and acquired traits. Examples of each of these may be helpful. Exceptional eyesight is a hereditary trait on this scheme. It may not be coded by the genome, but it is produced by the genome’s interaction with the environment in ways we do not understand and do not attempt to control (as yet). A talent for the violin is, on the other hand, presumably the result of genetic factors and a great deal of parental intervention (“practice, practice!”) at an age before the child can take credit for developing the talent in question. Finally, the adolescent’s scholarship-winning talent for basketball is often developed as a combination of genetic endowment and long hours of practice chosen freely by the young person in question, without the encouragement, sacrifice, or even approval of any adult.

Similarly, we may identify disabilities of all these three types. Sickle-cell anemia is a good example of a hereditary disability. PKU disease can be the result of parental failure to monitor diet. Permanent brain damage may be the result of choosing to ride motorcycles without a helmet.

Now we may ask the following question: do all or any of these three types of traits generate unfair advantages or disadvantages in a market economy, or in any other type of social arrangement? That they provide advantages and disadvantages is evident. That they should all be the bases for special charges or compensations is less so. One plausible view is that “society” should compensate individuals for hereditary disabilities, their parents should do so for domestic disadvantages, and no one is obliged to succor those who voluntarily disable themselves. The reasons reflect our beliefs about where responsibility is to be attributed for the causes of these disadvantages. Similarly, it may be thought, self-made talents should not be “taxed” the way we might deal with large inheritances. Those advantaged by the sacrifice of parents or others owe them a debt, but they do not owe “society” one. And those endowed with seven feet of height plus coordination and reflexes seem more subject to redistribution of their gains than others. The reason behind these intuitions appears to be that acquired talents and disabilities are “earned” or “deserved” while hereditary traits
are not, and domestic traits are somewhere between the two extremes.\footnote{As noted below in Section V, Dworkin for one would reject this line of reasoning. See Dworkin, “Equality of Resources,” pp. 308–310.}

We will have to take this view seriously if it turns out that most of the talents and disabilities that affect (dis)advantages in the market are of the acquired or domestic sort. If this is the case, then the revenue from any charge on undeserved hereditary endowments would be small, and the total transfer-expenditure on compensation for disadvantageous ones might also be small. What would make the issue of unfairness serious is the notion that, earned or not, biological endowments are subject to charges and compensations. Without it, the egalitarian claim loses much of its bite. Moreover, to admit that many or most inequalities are earned or deserved, and yet still should be expropriated in the interests of equality, requires a very strong argument in favor of equality as an overriding ethical good.

I hazard a guess that many or most of the endowments that make a difference in the market are of the domestic or acquired sort: intelligence, self-discipline, the ability to get on with others. What is clear is that medical technology can in the long term reduce the level of hereditary differences far enough to increase further the proportion of earned to unearned advantages and disadvantages. This will make the need for arguments for equality despite unequal desert still more pressing.

There is another serious complication facing any attempt to identify biological endowments. We have introduced the notions of talent and disability to describe biological endowments. From a biological point of view, a talent will be some feature that is adaptive for the organism, either in the evolutionary sense or in some kindred sense of the term. A disability will be some maladaptive trait. But these traits will have to be divergences from the normal or typical endowments of members of the species, for they are supposed to be differences that produce advantages and disadvantages by comparison to normal individuals. This will require some base-line repertoire of abilities common to normal agents. One trouble with this strategy is that modern biology suggests that variation of many endowments within a species is not a matter of normality and disturbances from it, but of the random distribution of relatively discrete traits. Accordingly, there is no “basic” specimen range of endowments to serve as a bench mark in any such assignment of disabilities and talents. Population averages will not enable us to identify base-line levels of talents and disabilities, for there may be no member of the population that is anywhere near the average even when it makes sense to compute one. In such cases, the average is a statistical artifact that may have no implementable significance. The point is not just that for some average level of a trait no individual may actually
have exactly that much. Rather, contemporary biological theory does not identify the average value as the normal or natural level. There is no such thing. There is, instead, a range of variation in the incidence of a trait on which selection works. The upshot is another serious problem for any attempt to identify biological endowments: we cannot look to a purely positive and relatively well established theory like biology or any of its compartments to identify the base-line level of biological endowments, nor can we look to it for an identification of what counts as an exceptional disability or talent. In fact, a little further biological reflection shows that the problem is even more serious.

Biological endowments are "relational" in at least two respects. As we have seen, a "hereditary trait" is in fact always the result of interaction between the genome and the environment. The same genetic information will produce an utterly different phenotype in only slightly different environments. Additionally, identifying a biological endowment as advantageous or disadvantageous is also a matter of interconnection between the trait and the environment in which it figures. In and of itself this relational feature of biological endowments is no problem. Biologists recognize that one environment's adaptation is another one's maladaptation. For instance, the hereditary sickle-cell trait is an adaptation in a malarial environment and a maladaptation in a malaria-free one.

But the relational character of disabilities and talents makes a special complication for our question. Whether an agent's endowment is a talent or a disability will hinge on the distribution of other talents, disabilities, and preferences among other agents in the society. Thus, being colorblind will be an advantageous biological endowment where there is a high demand for photoreconnaissance experts, and a seriously disadvantageous endowment in a society where everything is color-coded. Accordingly, no theory will enable us to determine whether certain endowments are advantageous or not without a great detail of information about the society as a whole. This is a serious problem for any centralized determination of charges and compensations for disabilities and talents. To know whether a certain trait is a disability may require an impossibly complicated census of the whole society and a good prediction about the future course of its members' tastes, preferences, and technological possibilities.

What is more, since preferences vary over individuals even in the same circumstances, whether a biological endowment turns out to be a disability or a talent will vary from individual to individual and will hinge on preferences. Colorblindness may have been more valuable to those with a

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preference for draft dodging than to those who yearned to be photointelligence experts, and still more valuable to them than to the aspiring fighter pilot. Accordingly, the census of talents and disabilities we need must somehow reflect or record the preferences of all members of society. The more dissimilar people’s preferences are, the harder it will be to assemble useful aggregate data and employ them to make sensible identifications of what count as talents and disabilities. It will turn out to be difficult to treat people of biologically equal endowments equally. For given differences in their own and other’s preferences, one man’s talent will be another’s disability. We shall return to the problem of the interaction of endowments and preferences below. For the moment it is enough to see that the identification of these endowments as talents or disabilities is a very complex matter. Of course, there are some clear cases of talents and disabilities: blindness, paraplegia, sprinter’s speed, artist’s creativity, and so forth. But behind the identification of each of them lie theoretical presuppositions of a very complicated nature, complicated enough to reduce our confidence about our ability to identify the incidence and magnitude of talents and disabilities beyond these most evident sorts.

II

Let us turn now to the question of the morally relevant advantages talents and disabilities provide. Usually, the advantages that concern people who deal with this question are advantages of wealth and the disposition of other resources, such as power. But some of the advantages biological endowments provide are not fungible, and some are entirely, “monadic.” That is, they can advantage only their “bearer,” and never at the expense of others. An extreme case might be the production of natural opiates that provide a high level of ambient pleasure, no matter what the external conditions of the agent. These advantages will obtain under any social arrangements. Those who hold that such natural advantages are not unfair, while others are, will have to provide a sound basis for this moral distinction. An unusually high level of endorphins seems no different in its hereditary basis than, say, great height plus coordination. It is equally undeserved. If an agent cannot be “charged” for this undeserved advantage, what exempts it from a principle that unearned advantages are unfair? Is it the mere fact that he does not use the advantage to gain money, but rather some other, more desired benefit?

Though hereafter we shall focus on economic advantages and disadvantages that biological endowments generate, it is worth reminding ourselves that these are not the only sort there are. Dworkin makes this point eloquently:
The assumption that a life dedicated to the accumulation of wealth or to the consumption of luxuries . . . is a valuable life for people given only one chance to live . . . comes as close as any theory of the good life can to naked absurdity.9

The ability to enjoy tranquil contemplation of a pastoral scene, whether inborn or acquired, is an advantage. The rewards of uncompensated scholarship, as we all know, are a nonmonetary advantage provided by our talents.

But, adopting for the moment the narrow view of pecuniary advantage, what sort of advantages and disadvantages do talents and disabilities provide? Let us focus on talents for the moment. To determine the pecuniary advantage of a talent, it is useful to think of talents as capital goods. There is something of a theory already available about capital goods. And the question of whether such goods provide unfair advantages in a market economy is certainly a prominent one. Accordingly, we may be able to take advantage of this discussion in answering our own question. The analogy is not perfect, for several important reasons, but it certainly helps motivate the problem of whether talents make for unfair advantages in a market or, for that matter, any other sort of economy. Moreover, the disanalogies may shed as much light as the analogies.

Economists define capital goods as man-made ones which usually increase the efficiency of, decrease the cost of, or otherwise further production. Capital goods can either be substituted more cheaply for other factors of production, i.e., labor and land, or they can be combined with labor and land to produce more goods than would be otherwise produced, or goods that otherwise would not be produced at all. One thing that is crucial about capital goods is that they typically satisfy consumer wants "indirectly" in "subsequent periods." That is, they are not immediately consumed but have a return in the future. Of course some goods can be consumed immediately or employed in a time-consuming productive process. The economist's classical example is grape-juice, which may be consumed when young or laid up to age and thereby improve into wine. But the usual case of a capital good is one that has a future use and is not the object of present consumption. Most talents have both of these features. They improve the productivity of their bearers in the provision of consumption goods, but are not themselves directly consumed. Of course, persons may derive pleasure from knowing they have a talent, but most often they "consume it" only indirectly through its products. And, in general, talents enable their bearers and others to produce the same output

more efficiently, or to produce more of the output, or to produce a new product that would be otherwise unattainable.

Like other factors of production, capital goods cost money to acquire and to maintain, and they get used up: they wear out or depreciate. Moreover, producing them requires shifting goods out of immediate consumption, in the expectation that once completed and installed the capital goods will increase production (or its value) sufficiently to repay those who sacrificed consumption in order to produce the capital goods. Some talents, such as the ability to play tennis, are just like capital goods in all these respects: they cost money to acquire (e.g., the cost of lessons), involve the sacrifice of current consumption (of leisure or fattening foods, for instance), and they can even wear out with a great deal of use (tennis elbow). Other talents, especially those we have called hereditary traits, are less like capital goods: they cost their bearers nothing to acquire, involve no sacrifice of consumption, and may never be depreciated by employment. Chuck Yeager's phenomenal eyesight at 70 years of age is a good example of a costless, undepreciating capital good. Other potential disanalogies involve talents that have become obsolete but, unlike obsolete capital goods, incur no storage or disposal charges. But this is a minor disanalogy at worst. Domestic talents may cost their bearer relatively little, while costing parents a great deal in time, money, and unpleasantness, like the skills of the musical prodigy acquired through years of expensive and annoying lessons and practice.

The biggest difference between capital goods and talents is that the latter are not transferable or tradable. At least for the moment, no market in alienable talents exists. What technological changes enabling organ transplants will do for the transferability of talents cannot yet be fathomed. On the other hand, it is because normal capital goods are transferable that they give us a handle on understanding the way in which talents provide advantages, for their transferability enables us to put an exchange value on capital goods which we can then in principle extend to talents. If we can assign a value to capital goods just because they are tradable, we may be able to assign a shadow price to untradable commodities with the same productive efficiency. Such a valuation might provide egalitarians a basis for charging the bearers of talents and compensating the bearers of disabilities.

How do we determine the value of a capital good? Once in place, a capital good provides a stream of returns in the form of increased output. Suppose a capital good wears out in \( t \) years but provides return (positive or negative) each year measured, say in dollars, \( s_0, s_1, \ldots, s_t \). These are the annual payments to the capital good. If the annual interest rates are \( i_1, i_2, \ldots, i_t \), then the value of the capital good at the beginning of production is given by:
Present value = \[ s_0 + \frac{s_1}{1 + i_1} + \frac{s_2}{(1 + i_2)(1 + i_1)} + \cdots + \frac{s_t}{(1 + i_2)(1 + i_1) \cdots (1 + i_1)} \]

Thus, the present value of a capital good is the sum of the annual returns discounted by the interest rates in force in each period. If these returns are negative, then the capital good is a liability. Given the rate of interest for each period, it is a relatively simple matter to decide whether to acquire a capital good offered at its present value: if the return on a security or a savings account bearing the prevailing interest rate is below the present value, then the capital good is a rational purchase. Otherwise, it is preferable simply to deposit the money in an interest-bearing account.

In an efficient economy the annual payments to a capital good, \( s_0 \), \( s_1 \), \ldots, \( s_n \), reflect its marginal productivity, that is, the amount of output that can be "credited" to it. Marginal productivity is a superficially tempting basis on which to erect a theory of justice in returns to capital, and to labor and factor inputs, for that matter. Since in a perfectly competitive market the wage rate and the rate of return to capital are equal to their marginal productivities, it might be held that the fair return to labor and capital equals their marginal productivities. For they reflect the respective causal contributions to production, how much of the output each supplier of labor or capital or factor inputs is "responsible" for. This is, of course, a misunderstanding. Marginal productivity does not measure separable portions of the productive process. Each input is causally necessary: none is sufficient for any part of the output, and so none can claim the causal responsibility for a portion of it. Rather, marginal productivity serves as part of a solution to a bargaining problem. Each agent providing a factor has an incentive to withhold the factor for any payment below its marginal productivity, since other agents have an incentive to pay that price or forgo gains themselves. The annual payment to a capital good reflects its marginal productivity, and the present value represents the discount on this productivity over the future. The present value reflects the amount of money or other resources required in order to build or buy the capital good. The seller of capital will forgo gains at a lower price for the good, and the buyer of capital will forgo gains at a higher price. From the fact that present value measures increased productivity, it does not follow that the rightful owner of the capital good has a right to the proportion of increased annual output that it enables the user of capital to produce. For even if causal responsibility were a basis for compensation, it is no more the cause of this increased output than any of the other factors, including labor which is required to produce anything.

The formula for present value gives the annual interest rate a crucial role in determining the present value of a capital good. As the interest rate
increases, the present value of a future payment decreases, and vice versa. But why is this the case, and what determines the rate of interest anyway? The latter question is a much vexed one in economics. One thing all seem to agree on is that in the pure case, the interest rate reflects the degree to which individuals discount future payments as against current ones: given the choice between a dollar today and a dollar next week, the rational agent chooses a dollar today just because of the uncertainty of getting that dollar next week. To get him to take a payment of one dollar next week instead of today requires that we offer a premium, say, one dollar and fifty cents. The interest rate measures the premium required to get agents to abstain from current consumption. The amount of premium we must pay will vary from individual to individual, as a function of preferences for present and future consumption and, in a situation of uncertainty, for risks. Frugal people will postpone consumption at a lower rate of interest than spendthrifts, as will gamblers.

In addition to reflecting the preferences of those who choose between consuming present goods and investing them, the interest rate reflects the opportunities producers foresee to expand production by the use of capital goods. Given their beliefs about the demand for commodities, and the present value of the capital goods needed to produce them, they will borrow funds at interest, hoping to make a greater return than the rate at which they must pay off the loans. The supply of lendable funds, reflecting consumers’ time preferences, and the demand for such funds, reflecting capitalists’ expectations about consumers’ preferences, together determine a market interest rate. For our purposes, what is crucial about the interest rate is its dependence on the tastes and preferences of economic agents for present and future goods. Exactly how individuals’ preferences and expectations aggregate into a market interest rate need not concern us.

The return to the owner of a capital good reflects the preferences of agents who consume its output, but it also reflects the number of other owners of capital goods of the same type. Assuming a downward sloping demand curve for a type of capital good, the return to the owner is a negative, positive, or zero “economic rent.” In the present context, this is a crucial notion because such “rents” are often viewed as an economically unwarranted return to capital. Sometimes the owner of a capital good will be paid more than the minimum needed to prevent its transfer to other users. This excess is its economic rent. Whether the owner of a capital good receives economic rent depends on the shape of the supply curve for that type of capital good.

In a perfectly competitive setting, in which there are indefinitely many suppliers of a commodity, say a capital good, no individual supplier can affect the market by withholding or increasing supply at the going price;
and if he sells at a price above the market price, he will have no buyers, while if he sells below, he will simply forgo income he can gain without any further effort. If the price paid for a unit of the capital good is the long-run price under perfect competition, then a drop in the price will simply result in all suppliers shifting their capital goods to other uses, for otherwise they would be supplying their goods at a lower price than they could earn elsewhere. Here, the return to any one supplier is just the amount needed to prevent transfer to another use. There is no economic rent being paid.

Suppose, however, that the supply curve is perfectly vertical: the same amount of the good will be offered no matter what the price. In this case, the entire return to any individual supplier of the capital good is rent, for there is no alternative use for the capital good, and so no need to pay to keep it employed in its current use. The third and more usual alternative is a supply curve sloping upward to the right, intersecting the demand curve at some quantity of capital $q$ and some price $p$ that equilibrates supply and demand. At this point, every supplier of capital is paid $p$ per unit of capital he supplies. But presumably most suppliers would have been willing to supply at a lower price. It is only the price demanded by the "last" supplier needed to equate demand and supply that actually equals $p$. But all suppliers receive $p$. Accordingly, each of the suppliers who would have been satisfied with less than $p$ per unit of capital receive an economic rent equal to the difference between $p$ and the price at which they would have supplied a unit of capital. The diagram below reflects the three different alternatives:
The shaded area represents the economic rent of capital when the supply is elastic.

For our purposes, it is important to note that economic rents have long been viewed as especially suitable targets for taxation. Sometimes this is defended on the ground that they are unearned: all but the "last" supplier would have supplied output at a lower price or, if the supply curve is vertical, at almost any price. Moreover, taxing rents will not deflect the allocation of capital from its most efficient uses, and so provides no disincentive to efficiency, unlike other taxes. As the diagram shows, there will be at least some economic rents in all but cases of perfect competition—in other words, in all actual cases, since perfect competition is nonexistent. Further, the phenomenon of economic rent is by no means restricted to capital, but will arise for labor or any other factor input with an upward-sloping supply curve.

III

Let us now apply this theoretical machinery to talents and disabilities. Most talents are arguably not objects of immediate consumption but, rather, may be employed to produce goods for immediate consumption. People do, of course, take pleasure in some of their talents, even when they are unexploited. And disabilities are sources of profound displeasure, because the disabled feel keenly the opportunities of which their disabilities have deprived them. But by and large, talents only provide fungible advantages when they are put to use in producing consumption goods, and disabilities fungible disadvantages because of the extra costs they impose on the production of immediately consumed goods. The increased production a talent permits should, in principle, enable us to associate a present value with it, one which reflects the stream of annual payments in additional consumption goods it can secure as a result of its role in increasing production or lowering its cost.

Similarly, a disability will have a negative present value because of the annual extra costs it will impose on production or the reduced production it will cause. But determining the size of this present value requires, first, that we assign a fungible value to the annual returns and, second, that we determine an interest rate. In some cases, conventional, transferable capital goods might just conceivably provide a surrogate measure of present value. For example, the present value of the talent to calculate vast sums in one's head may be set equal to the present value of an electronic calculator with equivalent powers. Other talents, like Mozart's, are beyond price. But for our purposes, solving this problem of assigning present values is irrelevant.
Rather, the point of the comparison of talents and disabilities to capital goods is to show in theory exactly what it is about a talent that makes it an economic advantage. It will also make evident how fiercely complicated it would be even in principle to secure the information needed to show that any type of biological difference was an advantage or a disadvantage for any given individual, let alone across the society as a whole.

A disclaimer: My skepticism about our ability to identify and price talents and disabilities is not meant to blind us to the great hardships and suffering borne by people afflicted by obvious disabilities, as well as unobvious ones. Rather, it serves as a caution against our hopes to be able to fine-tune social institutions that charge and compensate for talents and disabilities.

Whether a biological endowment is a capital asset will evidently depend on the tastes and preferences of agents for consumer goods and their time preferences, as well as the state of technology in the society. Moreover, unless the supply and demand for all goods in the market is equilibrated by tatonnement in a Walrasian auction (where no bids are accepted until all prices offered perfectly balance supply and demand for every commodity) or by some other kind of recontracting that in fact never obtains in any real economy, then the return to the very same biological endowment will vary from person to person in a given economy. Let us see why.

Present value is a direct function of annual returns and an inverse function of the interest rate. What factors determine annual return? This figure is the amount of income from sales of a consumer good that can be imputed by a marginal productivity analysis to the capital good. This amount will vary with the demand for the consumer good, and also with the supply of capital goods of this type. The more scarce a capital good is, the more economic rent it can earn, and the greater is the portion of the return on sales for which its owner can bargain.

Thus, in a population of Polynesians with no interest in coconuts, an agile tree climber will have no capital advantage. And in one in which all crave coconuts and can climb equally well, he will have no advantage either, though in both cases his biological endowment remains unaltered. Suppose, further, that among Polynesians there is only a very low time preference. Most are perfectly happy to postpone immediate consumption of, say, sugar canes in order to use them as pruning hooks to reach the coconuts. Thus, the interest rate, measured in sugar cane, is so low as to make tree-climbing ability a relatively worthless talent, whether widespread or not. Under these circumstances it does not appear that the talent to climb trees bestows any economic advantage, and its present value is quite small at best. But things might be quite different. Suppose the coconut trees are too high for any method but climbing, and there is nothing to eat...
but coconuts. And suppose that time preference is quite high because, lacking coconuts today, the population will starve to death tomorrow. And suppose, finally, that everyone has acrophobia and only a handful have a talent for climbing. Here, the present value of the talent becomes extremely high, and much of its return is in the form of economic rent as well.

There is another scenario worth contemplating for a moment. Suppose all can climb equally well but, while most have acrophobia, a few have acrophilia – the love of high places. Is the preference for low places a handicap? It clearly has a negative present value, since it requires individuals to pay more for coconuts in each period than they would if they lacked this preference. (Recall that both annual payments and present value can be negative amounts – costs instead of payments.) Is the preference for high places a talent? It certainly pays. What this case shows is that the economic effects of a talent or a disability may be exactly the same as those of a preference or taste. This is important, because some writers\(^\text{10}\) have argued that individuals ought not to be compensated when their tastes make them do something or forbear from doing it, but should be when their disabilities do the same. If we cannot distinguish disabilities from tastes, say, the inability to climb from acrophobia, or distinguish those agents with the latter from those with the former, we will be unable to effectively compensate only for real disabilities and avoid compensating those whose preferences lead them to feign disability, or even those who sincerely believe themselves disabled. In a parallel fashion, we may end up charging someone for his acrophilia just because he climbs the tree with no more talent than an acrophobic. Of this problem about tastes and preferences, more later.

The real problem about identifying the present value of a talent is the unevenness of preferences and opportunities characteristic of any real society changing in real time. Even the frictionless world of rational economic men needs a special device to find the market price of goods that equilibrates their supply and demand: the mechanisms of tatonnement or recontracting. Once everyone’s endowment of commodities and capital goods (talents and disabilities) is given and trade begins, many factors will determine the estimates people make of the present worth of a talent or disability.

Thus, if acrophobics are concentrated on the eastern part of the island, while agile tree climbers are in the west, the odd eastern tree climber will find that his talent earns him far more than a western climber. As news travels to the west of the demand for climbers in the east, and as news travels to the east of the surfeit of climbers in the west, the estimates of the

\(^{10}\) See *ibid.*
present value of tree-climbing ability fall in the east and rise in the west. If enough tree climbers are found, the component of present value attributed to economic rent instead of allocative efficiency declines, and it may even reach a point at which tree climbing for coconuts becomes a sport no one is paid to perform. But even the real world of the Polynesian islands is not so simple, and it is doubtful that talents ever fetch their equilibrium prices. For this we would require perfect information about the present and future, perfect rationality, and an auctioneer who will allow no exchanges of goods and services until the parties to the exchange, by successive approximation, hit on a schedule of prices that equilibrates supply and demand in all markets.

Only at this point can the present value of a talent or disability be determined. Since in the real world information about the present is imperfect and about the future unavailable, the best we can do is make rough guesses about future payments and interest rates. Now, for economic purposes such guesses may suffice, and the better they are, the more money an individual can make. But return to our colorblind draft dodger in peacetime, or consider the well-coordinated seven-footer in a society that despises basketball. Are these persons differently endowed from those for whom colorblindness and great height have substantial present value for themselves and/or others? Might not my gifts be substantially rewarded by the market if only I had found myself among people with different tastes and a different level of economic development, people who may even actually exist but, alas, elsewhere? Are not most of us in this situation? On the other hand, most of us have biological endowments that would be severe handicaps were the tastes of others very different from what they are. My excellent hearing would be a grave disability if I lived among adolescent aficionados of rock music. Unfortunately, except in the economist’s ideal world, it is quite impossible to tally the payments and costs, and the local rates of interest, that would enable us to set a present value on our talents and disabilities. In the real world, most of our talents do not receive the return that they would earn in an economist’s perfect one.

It is equally difficult for observers to distinguish many agents’ talents from their tastes and preferences. Indeed, we may be unable to distinguish our own as well, because of fearful thinking that conflates a phobia with a disability and wishful thinking so strong that it compensates for lack of talent.

To sum up, then, biological endowments are difficult to identify even biologically, and differences among them are distributed in ways that are difficult to summarize in terms of normality and abnormality. The role of environmental factors in the fixing of biological endowments is so great that
to call such endowments hereditary may be seriously misleading. Some of these environmental factors may be under the control of no agent, others under the control of parents, and others under an agent’s own control. In the latter two cases, which environmental factors are brought to bear reflect both the resources and the preferences of agents or their parents. But whether an endowment is a talent or a disability depends on the preferences of those with whom the bearer comes in contact, and on how social institutions are arranged in the light of those preferences. The market value (or disvalue) of talents and disabilities will reflect the strength and distribution of preferences and tastes within the society: the more varied those tastes and the more complex and larger the society, the less likely it is that a talent will fetch its equilibrium market price. It is similar for a disability. Moreover, in the case of a talent, the amount of the advantage that comes in the form of economic rent unnecessary to insure allocative efficiency will be a function of the number of individuals who bear the talent.

Talents and disabilities can provide advantages and disadvantages in any society in which returns to factors of production reflect their marginal productivity, whether such societies are market economies or not (though in a nonmarket economy it may be physical marginal productivity that such returns reflect). This is because talents and disabilities, unlike transferable capital goods, cannot be expropriated. A society can nationalize a productive capital asset or an unproductive capital liability, and thus deprive its owner of the associated advantage or disadvantage, but it cannot do so to a talent or a disability. It can, of course, attempt to coerce a talent into employment, and subsidize a disability, but in both cases it faces the problem of incentives and disincentives: the undischallenged will have incentives for pretending to be disabled to some degree, and the talented disincentives for employing their talents at optimal levels, unless, of course, the costs of employing a talent are nil or are outweighed by the benefits at any level of remuneration. Thus, we need not pay the bearer of a talent anything to exercise his talent, if he gets enough sheer pleasure from doing so, and whatever we pay him will be an economic rent. Of course, any one entrepreneur will have to outbid others to get the services of a talented agent, if there are other entrepreneurs. If all talents are like this, the incentive problem does not arise, and the advantages a talent provides can be eliminated by nationalizing all the returns to its employment. Similarly, we can imagine a society in which there is no incentive to pretend to a disability because there is no productive liability associated with it to subsidize. For example, a person confined to a wheelchair in a society in which even ambulatory persons prefer always to sit is not economically disadvantaged, and no one who can walk has an incentive to pretend otherwise.
IV

With this brief sketch of the problems surrounding the identification and measurement of talents and disabilities behind us, let us turn to the problem of whether or not these differences make for unfair advantages. It will be both convenient and illuminating to examine the question in the company of one who has studied it extensively, and come to definite conclusions on the matter: Ronald Dworkin.

Dworkin has argued at length that the most adequate conception of equality is that of equality of resources, and that equalizing resources requires compensation for disabilities and charges for talents. According to Dworkin, equalizing resources also requires a free market. Accordingly, the charges a political authority fixes for talents, and the compensations it makes for disabilities, in pursuit of a policy of equality must be consistent with market mechanisms. Before considering Dworkin's argument for these views, some stage-setting is required.

Why equality? As I noted at the outset, Dworkin explicitly abjures any argument for equality as a requirement for social organization. His stated aim is simply to determine which definition of equality is most adequate. But unless some justification for equalizing is offered, the entire exercise is too abstract to have any practical bearing. If each moral agent had a natural right to equality (of whatever kind is most adequate), the justification would be obvious. But if there are no natural rights, the claims of equality need some other foundation. The only one that seems to me remotely plausible is a contractarian one. We agree to mutually enforce equal treatment because that is the best each of us can do given the demands and the capacities of others. If this contractarian or bargaining view cannot be fleshed out, then there seems to me to be no compelling argument whatever for equal treatment, no reason to secure or sustain equality beyond our sheer noncognitive preference for it. In what follows, I shall assume that some such argument is forthcoming and that the grounds for equality have been secured. Without it the exercise is idle.

Equality of what? Dworkin argues that equality of welfare, satisfaction, utility, or similar matters of preference, is unsatisfactory for a variety of reasons, and that the most adequate kind of equality is equality of resources; and the test of equality of this kind is the absence of "envy," defined as the preference of any one agent for the resources of another. Among rational agents, no envy will be evinced when all resources are equally divided. This division, Dworkin holds, "presupposes an economic market of some form, mainly as an analytical device but also, to a certain
extent, as an actual political institution.” A market of some form is needed, Dworkin writes, but the kind he requires is the unrealizable recontracting market of Walrasian tatonnement, in which no trading is allowed until market-clearing equilibrium prices have been established for all resources. In a real market with finitely many traders who are relatively ignorant and capable of trading only with neighbors, envy can set in after the first free exchange. In fact, even where envy does not set in, the result of real trade can be far from optimal, even on so weak a criterion of optimality as Pareto’s. Dworkin avoids these problems of the real market. He notes, “I make all the assumptions about production and preferences” made in Gerald Debreu’s proof of the existence and Pareto optimality of a stable general equilibrium, the most abstract result in neoclassical economic theory.

Now talents are clearly resources, and disabilities are the lack of them, so any equal distribution of resources must take account of them; it must either distribute the benefits they provide to all equally, or charge and compensate those who bear them exclusively. This is evidently because talents and abilities are not distributed in accordance with desert, nor are they earned, but they are distributed by brute luck. And distribution should not be a function of brute, unearned luck.

As we have noted, however, this is not in general true of talents. At least some talents and some disabilities are not the result of luck; they are earned: the talent for tennis, the brain damage that comes from willfully riding motorcycles without helmets, and other personal endowments. To the extent these endowments are earned, many will hold that they may not be subject to charges and compensation. Additionally other endowments, like the musical prodigy’s gifts, have been paid for by parents (and not just in money, but in time, annoyance, and other inconveniences). Indeed, many of the most important talents individuals bear may have been earned by them or by others who have transferred these advantages in morally unquestionable ways. I dare say, the most significant advantageous endowment we have, intelligence, is thus secured not by random luck but by parental investment (and again, not just of money). Much the same may be said of intellectual disabilities. They are often the products of parents with enough resources to prevent them, and after a certain point are the responsibility of their own bearers. As for disabilities, we earn and deserve many of them, by drinking, smoking, overeating, and the like. To many,

11 ibid., p. 284.
there seems little reason to suppose such disabilities require compensation of any kind.

Naturally, if we hold this view firmly, we will want to exclude at least some earned and deserved talents and disabilities from any scheme for equalization. But what if the biological endowments which provide the most widespread advantages and disadvantages are those which are earned. If this is indeed the case, then beyond succoring a small number of victims of brute bad luck, and charging an even smaller number of coordinated seven-footers who happen to live among people with a liking for basketball, the whole question of whether biological endowments make for unfair advantages will be academic.

So, focusing on the subset of talents and disabilities acquired through brute luck, the envy test for equality of resources requires that such endowments be equalized through charges and compensations. The aim of these charges, and especially of the compensations, is not to make up for having a talent or a disability. As Dworkin notes, no amount of money will compensate someone for blindness, i.e., make him the equal of a sighted person. But, according to Dworkin, given the chances of blindness striking through brute luck in spite of normal precautions, there is some amount of insurance each of us might pay a premium to receive in the event that we were struck blind. Our conception of talents and disabilities as capital assets and liabilities underwrites this. Insofar as a biological endowment is a productive factor, either asset or liability, the amount a rational agent might be expected to pay in premiums for insurance against disability, or the chance to own a talent, is the expected present value of the talent or disability, i.e., the product of its present value and the brute-luck probability of being afflicted by the talent or disability. Of course, these calculations must be made by a rational agent who does not already know the value of the untransferable talents and/or disabilities he does or does not have. Otherwise, agents have incentives to hide talents and feign disabilities. A veil of ignorance is required to make the rational agent state his actual level of willingness to pay for protection from a disability or for the use of a talent.

But Dworkin holds that rational agents must at least know what talents they have. Otherwise, we have stipulated away too much of his personality to leave any intelligible base for speculation about his ambitions, even in a general or average way. The connection between talents and ambitions...is much closer than that between ambitions and
handicaps—it is, for one thing, reciprocal—and much too close to permit that sort of counterfactual speculation.\textsuperscript{14}

Without knowing both an agent’s biological endowments and his ambitions, i.e., his tastes and preferences, we cannot tell how much a talent or a disability is “worth” to him. Moreover, as we have seen, a preference may have exactly the same consequences for an agent as a talent or disability. Recall the effect of acrophobia and acrophilia among our Polynesian islanders above. This raises a serious problem for a scheme like Dworkin’s.

According to Dworkin, we need not treat tastes and preferences on the same footing as biological endowments. Though some preferences are debilitating enough that a rational agent might take insurance against them, in general preferences ought not be subject to compensation, or for that matter to charges, and this for two reasons. First, “we cannot state . . . what equality in the distribution of tastes and preferences would be.”\textsuperscript{15} Second, preferences, unlike mental or physical powers (or their absence), are not parts of an agent’s “circumstances.” Rather, they are parts of his definition of “what a successful life would be like”;\textsuperscript{16} they are “features of personality”;\textsuperscript{17} they are assigned to the person. Accordingly, equality of resources need not take into account differences in ambition, even though they may have the same effects as differences in endowments. This is troubling because, as we have seen, preferences can have exactly the same effects as talents and disabilities.

Moreover, the two differences Dworkin cites do not suffice to justify such different treatment. First, it seems no easier to determine equality among bundles of talents and disabilities than among sets of preferences. Is nearsightedness plus manual dexterity equal in present value to mild deafness plus foot-speed? We can answer this question only if we know more about the market for these bundles than we can in practice ever know. But is the problem of equating preferences any more difficult than this? The envy test might help us determine whether these two bundles were equal in preferability \textit{modulo} our preferences, though I for one cannot tell how it would come out. But such a test might also enable us to equate different bundles of preferences \textit{modulo} opportunities to satisfy them. If not, the difficulty of stating what equality of preferences would be is no reason to treat them differently from talents and disabilities.

The second reason for different treatment of preferences and talents is

\textsuperscript{14} \textit{ibid.}, p. 316.
\textsuperscript{15} \textit{ibid.}, p. 302.
\textsuperscript{16} \textit{ibid.}, p. 303.
\textsuperscript{17} \textit{ibid.}, p. 304.
that the latter are parts of the person, while the former are parts of his circumstances. I confess I do not see what difference this makes, to the extent that I understand it. For one thing, powers and abilities are not parts of the agent's environment, which he can change just by moving away or outwaiting their change. It is true that the powers I was born with, or endowed with by others, are parts of my circumstances in the respect that I did not choose them, may not deserve them, am not responsible for them, and can alter them only by great effort. But exactly the same is true of my preferences, my ambitions, and my definition of what a successful life would be like. For they are determined by factors beyond my control as much as my endowments are.  

Moreover, whether an agent's biological endowment is a talent or a disability, we have seen, depends crucially on his own preferences and on those of others among whom he finds himself. To the draft dodger colorblindness is a godsend. To the would-be jockey great height is a disability. So it goes for every biological endowment. To charge for talents and compensate for disabilities is *ipso facto* to do the same for preferences. For talents are complexes of endowments and preferences — preferences of the bearer of the endowment, and of others as well.

This makes a problem for Dworkin's approach, for he argues that justice requires us to equalize for talents but not for preferences. Our test should be sensitive to ambition but not to resources. "On the one hand we must, on pain of violating equality, allow the distribution of resources at any particular moment to be... ambition-sensitive.... But on the other hand, we must not allow the distribution of resources at any moment to be endowment-sensitive, that is, to be affected by differences in ability of the sort that produce income differences in a laissez-faire economy among people with the same ambitions." But to allow the distribution of resources to be ambition-sensitive makes them resource-sensitive, since an endowment is a talent or a disability only *modulo* an ambition, a preference. If we deprive someone of the gains of a certain ability, we are depriving him of gains due to his ambitions and others' preferences, for those are what turn his endowments into abilities and talents. To charge or compensate on the basis of brute biological endowment, with no eye to ambitions, on the grounds that these are not subjects for equalization is an impossibility.

On Dworkin's view, we have no idea of what equality in the distribution of tastes and preferences would be. If so, we have no idea of what it means

18 Nozick, *Anarchy*, p. 214. He makes this same point eloquently for quite a different purpose.

for people to have the same ambitions, unless it means simply for everyone
to have exactly the same preference ranking over all possible bundles of
commodities, occupations, leisure vs. working hours, and so forth. This
sort of equality of ambition would, together with a distribution of biological
endowments, fix talents and abilities in a way that exactly mirrors the
distribution of the endowments. Then, provided we can solve the problem
of the incentive to hide talents and magnify disabilities, we could charge
and compensate to equalize the outputs of production. But the slightest
differences among people in preferences destroys this result. Given
anything other than this abstract possibility, no distribution can be
endowment-insensitive while at the same time being ambition-sensitive.

One difference that distinguishes at least some of both the most well-off
and the least well-off from the median in any society is divergent
preferences and antipathies towards risk. Some individuals have a taste for
high-risk gambles with large stakes and vast payoffs, and others do not. A
majority of the members of the former class are likely to end up poor and a
minority quite well-off. If the quantum of risk preference or aversion an
agent has is a matter of brute luck, and untransferable luck at that, then
individuals with the same endowments, say a head for figures, may end up
quite differently advantaged as a result of preferences only. The risk-
preferring lightning calculator will probably end up at a wealth level quite
far from the median, one way or the other, through the undeserved,
unearned, brute luck draw of a high risk tolerance. Ambition in this case
has had the same effect as a talent or a disability. For it will turn an
endowment into a disability in all but a minority of cases – the lucky
winners who break the bank at Monte Carlo.

This, of course, may be taken as an argument that we should equalize
for ambitions and preferences, as well as for talents and disabilities.
Indeed, Dworkin should in all consistency so treat it. Aside from the
conceptual problems with doing so that Dworkin itemizes in “Equality of
Welfare,” there may be moral objections as well to the notion that someone
should get less or more of a scarce commodity solely as a function of his
desire for it. Additionally, this argument suggests that equalizing for talents
and disabilities is no easier than equalizing for preferences. We can show
this in another way by following Dworkin’s ideal means of implementing
the insurance mechanism for protecting ourselves against brute-luck
disabilities and paying for talents.

The premiums we should pay, and the insurance benefits some of us
would receive, can be extracted in the form of a redistributive income tax.
Such a tax is ambition-sensitive because it allows those with the ambition
to be rich to amass wealth by the dint of extra labor and greater savings,
while enabling those whose ambition is leisure and immediate consumption
to acquire them at the expense of future wealth. By taxing income instead of wealth it leaves ambitions alone, and by taxing it in a graduated way it may enable us to equalize income between the talented, the average, and the disabled. Dworkin recognizes the difficulty of this proposal:

[T]he appeal of a tax depends on our ability to fix rates of taxation that will make the compromise between talent and ambition accurately. It might be helpful, in that aim, if we were able to identify in any person’s wealth the component traceable to differential talents as distinguished from differential ambitions. We might then try to devise a tax that would recapture, for redistribution, just this component.\(^{20}\)

I have argued that this cannot be done, because biological endowments and ambitions are equal determinants of talent and disability. Dworkin comes close to recognizing this point. He continues the passage just quoted:

But we cannot hope to identify such a component, even given perfect information about people’s personalities. For we will be thwarted by the reciprocal influence that talents and ambitions exercise on each other. Talents are nurtured and developed, not discovered full-blown, and people choose which talents to develop in response to their beliefs about what sort of person it is best to be.\(^{21}\)

The situation is even more complicated than this passage suggests. No biological endowment is a talent or a disability except modulo ambitions. And the genetic luck that makes for “unfair” differences in talent,\(^{22}\) also produces differences in ambitions with exactly the same effects on prosperity. Shall we tax both or none?

Because talents cannot be distinguished from ambitions for purposes of determining the level of redistributive taxation, Dworkin suggests the following idealized mechanism for calculating rates of taxation that will simulate an insurance system against unfair advantages. He begins with the assumption that agents know what talents they have but do not know either the demand for or the supply of any talent in the society – he expresses this point in terms of agents’ ignorance of the economic rents of their talents. I have already argued that this level of ignorance precludes anyone’s knowing whether he has a talent or disability at all, since whether a biological endowment is a talent or a disability depends on the bearer’s preferences and those of the other agents in the society. To know that you

\(^{20}\) ibid., p. 313.
\(^{21}\) ibid.
\(^{22}\) ibid., p. 314.
have a talent, as opposed to an endowment, requires knowledge of your own preferences and those of other agents in the society (and among rational individuals this knowledge induces an immediate motive to understate or overstate the minimum income level he will insure against).

We shall see how this consequence blocks Dworkin's proposal. Given this knowledge of individual talents and ambitions by each agent, Dworkin introduces a computer into which data are stored about

tastes, ambitions, talents, and attitudes toward risk . . . as well as information about the raw materials and technology . . . . It then predicts not only the results of the [Walrasian tatonnement type] auction but also the projected income structure — the number of people earning each level of income — that will follow the auction once production and trade begin, on the assumption that there will be no income tax.

Now the computer is asked a further . . . question. Assume each [agent] . . . knows the projected income structure but is ignorant of the computer's data base . . . and is therefore . . . uncertain what income level his own talents would permit him to occupy. . . . How much . . . insurance [against being locked into an unacceptably low level of income] would the [rational agent] . . . buy, . . . and at what cost?23

The answer to this question provides the minimum level of positive taxation for talents, via obligatory premium payments, and negative taxation for disabilities, via insurance payments, that equality of resources sanctions. Dworkin suggests that the rational choice will be a minimax strategy: agents will not insure against extremely high minimum incomes, because the premiums would be so high that the "fortunate ones" who through brute luck bore the talents to earn such incomes would have to devote most of their gains to paying the premiums. They would therefore be "slaves to their talents," unable to afford to take less remunerative jobs or produce at lower levels of output, because they could not then pay their premiums. Those who, on the other hand, were unlucky in the lottery for talents would not be burdened by a staggering debt they could never hope to discharge. But for lower levels of talent it becomes more and more rational to purchase insurance, because its cost will decline more rapidly than the minimum earning level insured. So, there is a graduated level of payments that rational individuals will be willing to make for insurance against having less than a certain earning power as a result of having less than a certain level of talent. Taxes pitched at the level of these payments come as close

23 ibid., pp. 316–317.
as we reasonably can to equalizing resources, given inequalities in talents.

It is worth pausing for a moment to ask what is wrong with slavery of the
talented to the taxing authority. The answer that springs immediately to
mind reflects the intuition that making them work harder than their
preferences dictate violates their rights: people have a right not to exercise
their talents to the fullest. But this right is empty if they must do so willy-
nilly in order to meet their financial obligations to the state. Unless rights
at least sometimes "trump" equality, the enslavement of the talented is
required by equality of resources. And anything less than compensation
equal to marginal productivity looks like at least some degree of slavery. As
Nozick says, "Taxation of earnings from labor is on a par with forced
labor."24

Dworkin's prescription means, of course, that some individuals will find
themselves having paid taxes equal to a small premium for insurance while
being endowed with very great talents. The trouble with this outcome is
that it fails the envy test, as Dworkin notes. An agent not so advantaged will
envy people who are taxed below a level that equalizes income, even though
the envious agent has the level of talent or its financial equivalent that the
rational agent would bargain for in an ideal situation. To cite Dworkin's
example: Claude may point to the movie star and argue that his after-tax
income violates equality of resources and is therefore envied by Claude,
even though the level of taxation is the progressive one the computer found
for the whole society on average, given data about talents, ambitions, tastes,
risk preferences, and the sort.

Claude may truly say that the difference between him and the
movie star does not reflect any differences in tastes or ambitions or
theories of the good, and so does not in itself implicate our first,
ambition-sensitive requirement of equality in wage structure....

[Nevertheless,] Claude needs some argument in favor of [a]
change... which is independent of his own relative position. It is
not enough for him to point to people, even those of the same
ambitions... as himself, who do better as things are.25

The closest we can approach equality of resources leaves some envious of
others, because it does not equalize incomes entirely. We cannot more
closely approach equality, Dworkin speculates, because of "the wholesale
effects of any scheme of distribution or redistribution on the lives which
almost everyone in the community will want and be permitted to
lead. Equality of resources is a complex ideal... an indeterminate

24 Nozick, Anarchy, p. 169.
ideal that accepts, within a certain range, a variety of different distributions.\textsuperscript{26}

But now suppose we substitute for Claude’s complaint that the rich movie star has his ambitions and the brute luck of movie-star talents. Now the complaint is that while both have the same endowments, the movie star has great wealth and Claude does not, because they have different ambitions and tastes, different attitudes towards risk. Claude envies the movie star his income, and complains that brute luck dealt him short in ambitions and tastes of a kind which would have given him an equal chance at the movie star’s income. By parity of reasoning to Dworkin’s treatment of identical ambitions and differential brute-luck talents, there ought to be an insurance-based tax scheme to equalize the effects of ambitions and tastes. Why, after all, should Claude suffer because his tastes and other peoples’ tastes do not mesh in a way that provides him with a large income? No more reason than that he should suffer for his endowments not meshing with his own and others’ preferences. And no less.

Unless, of course, ambitions and tastes are essentially different from talents and disabilities. And this, I think, is a crucial issue for those who claim we should compensate and charge for talents and disabilities. For they demur at the prospect of doing so for preferences and tastes. As Dworkin says, the latter define the person. What this means, I think, is that we tend to be determinists about talents and disabilities, and libertarians about tastes and preferences. People are not responsible for the former: they are a matter of brute luck – we could not have done otherwise than end up with the talents and disabilities we have. So they should not enter into calculations about desert, praise, blame, reward, punishment, and so forth. The same is not said for preferences and tastes. The Kantian idea that motives are what morally count stands behind our attitude towards preferences. For motives are just combinations of wants and beliefs, and beliefs can only be true or false, not moral or immoral.

Is this double standard of moral responsibility for preferences and not for talents and disabilities consistent? It cannot be to the extent that talents themselves are composites of endowments and preferences. On the other hand, preferences are themselves contingent on biological endowments, as Dworkin recognizes. (My point here is different from John Roemer’s argument\textsuperscript{27} that preferences are based on talents, and so must be taken into account. To the extent that differences in preference can be determined by differences in talents and disabilities, any compensation or charge for them will simply be a side effect of charges and compensations due directly to

\textsuperscript{26} ibid., pp. 333–334.

the talents and disabilities that underlie them.)

I think there is no fundamental moral difference between tastes and preferences, and talents and disabilities. Either we are responsible equally for both, or for neither in the metaphysically interesting sense of responsibility, that is, the sense in which responsibility requires a will free from determining causes. Of course, many moral philosophers are compatibilists and want to consider moral questions on the assumption that the question of free will is neutral with respect to many of them. Though I do not think this is ultimately possible, let us proceed a bit further on the assumption that it is. Instead of viewing responsibility vs. determination as an all-or-nothing matter, they consider that there are a range of preferences, from those for which we have no responsibility to those which are entirely up to us. Now, as I have argued, there is in this sense similarly a range of talents and disabilities from those wholly hereditary to those we choose to acquire (at various costs) ourselves. Even if Dworkin does not expect that the latter sort of talents and disabilities should be taxed or subsidized, he should still be willing to countenance (positive or negative) taxation of those preferences over which the bearer never has any control, but which advantage him or disadvantage him.

For some egalitarians this might be a tempting suggestion: we should approach as closely as possible a scheme for compensating and charging agents to equalize for inequalities in advantageous and disadvantageous preferences. This course is not open to Dworkin, or to anyone who has thought about the problem of equality as thoroughly as he has. For, as Dworkin has shown at length, attempting to equalize for the satisfaction of preferences is a hopelessly incoherent idea. For all their impact on distributions, they are utterly intractable objects for measurement, and still less for counterbalancing against one another intra- or interpersonally.

The upshot is that any redistributive scheme will have to equalize for talents and preferences or for neither. Moreover, any very fine-grained scheme for redistributing will make for very heavy demands on the redistributor’s information about preferences. And since preferences are easy to hide, the redistributor will face serious problems of “incentive compatibility,” problems of inducing agents to reveal their actual preferences, not to mention their endowments, while imposing a cost on them for doing so. And in the end, because talents and disabilities cannot be separated from preferences and ambitions, Dworkin’s scheme will simply turn out to be an income tax which is not justified by the demands of equality of resources alone. As such, it will have to find a different justification, one which defends itself against Nozick’s charge that it is tantamount to forced labor.

Even leaving these problems aside, Dworkin must deal with the
problems facing anyone who hinges policy prescriptions on arguments from abstract general equilibrium considerations that are impossible to realize in nature. Considering the problems associated with drawing prescriptions about antitrust policy, for instance, from this theory, the tasks facing anyone ready to implement Dworkin's scheme will be daunting.

V

There are people with grave disabilities, and there are others with wonderful talents. Then there are the rest of us. We are doubtless all better off because of the benevolence of the latter to the former, and we would all be still better off if there were greater benevolence. The general obligation of those vastly enriched by their talents to those grievously deprived by their disabilities may well be agreed to by almost all, regardless of what moral theory they embrace and regardless of whether any moral theory is the right one. What seems to be more crucial for the character of society is whether those of us in between the most disabled and the most talented have a claim or an obligation in the light of our talents and disabilities. That talents and disabilities provide advantages and disadvantages in a market economy is palpable, especially on the analysis I have offered in terms of capital goods. Whether they are unfair is another question.

In considering whether or not these advantages and disadvantages are unfair in a market economy, we should bear in mind that if they are, they will probably be unfair in any other economic system, including the Nomenklatura of a centrally planned one. For talents are far more difficult to nationalize than observable and transferable capital goods. Even if we conclude that talents and disabilities make for unfairness in a market economy, the free marketeer’s breast beating must be tempered by the realization that things are no less unfair under other economic dispensations. This is not an argument for complacency about capitalism, just a reminder that the original question’s restriction to market economies may not be very significant, even if we decide that differences in biological endowments are unfair in a market economy.

But there is one thing about the market that suggests that, by and large, differences in talents and disabilities are not unfair. The market institutionalizes the idea that people have an effectively protected right to what they earn. For absent this assurance, there is no reason to accept the market as a mutually advantageous arrangement. If most differences in talents and disabilities are earned, as opposed to unearned, then agents have the right to the advantages that these earned differences provide. And
if they have the right to these advantages, they could hardly be deemed unfair in a market economy.

Of course, the question remains open whether people have a right to what they earn. Libertarians like Nozick certainly embrace this principle. And so do some of their opponents; Rawls, for example, argues that the returns to talents need to be redistributed just because the talents are unearned.\(^{28}\) The principle is certainly not unarguable: Dworkin rejects it because equality of resources requires continuous redistribution via an income tax. His rejection is reflected in his treatment of a principle of equality of opportunity as opposed to equality of resources. He calls this the starting-gate theory of fairness:

\[\ldots\text{if people start in the same circumstances, and do not cheat or steal from one another, then it is fair that people keep what they gain through their own skill. . . .}\]

The starting-gate theory holds that justice requires equal initial resources. But it also holds that justice requires laissez-faire thereafter...\(^{29}\)

Dworkin rejects this view on the ground that it is an inconsistent theory of justice requiring equal distribution at the outset, and permitting unequal distributions thereafter. He asks, if unequal distributions are permitted later, why not initially? And contrariwise, if equality is required at the outset, why not thereafter? "[T]he starting-gate theory, that...[agents] should start off equal in resources but grow prosperous or lean through their own efforts thereafter, is an indefensible combination of very different theories of justice."\(^{30}\) Dworkin’s theory, by contrast, requires continual redistribution at least of income, if not of wealth. Equality of resources must hold everywhere and always if it holds at the initial position.

I have said that Dworkin rejects the principle that earned advantages are fair, but this is not strictly correct. Rather, he rightly holds it to be incompatible with a principle of equality of resources, but he nowhere fully endorses this latter principle as more than the most coherent version of a principle of equality. Dworkin, we must remember, stops short of asserting the moral claims of equality.

However, rejecting this principle may be incompatible with the laissez-faire attitude Dworkin manifests with respect to preferences. These Dworkin will not factor into redistribution because they are part of the person, instead of his circumstances: they are truly "his," and, in a sense, they are "deserved" and must be respected. The advantages, if any, that


\(^{29}\) Dworkin, "Equality of Resources," p. 309.

\(^{30}\) ibid., p. 310.
they bestow Dworkin does not think unfair. Why? What is so special about preferences in contrast to talents? Could it be that they are, by and large, earned? If this is what stands behind Dworkin’s respect for them, then he does after all endorse the principle that earned advantages are fair ones. The alternative to embracing this principle is equalizing for preferences as well as talents and disabilities, as I have tried to show above.

Suppose, therefore, that we accept the principle that earned advantages are not unfair. Now add to it the claim that most talents and disabilities are earned, or at least that the most economically significant ones are: the ones that make the most difference to how much education we get, what kinds of work habits we can maintain, how well we can get on with others, and how healthy we can keep ourselves. Together, this principle and this factual claim suggest that most biological endowments do not generate unfair advantages in a market economy. If the principle that earned advantages are fair is accepted, and if the factual claim that most talents and abilities are earned is correct, then the question of whether we should compensate unearned disabilities and charge unearned talents becomes an academic one. For there are relatively few of either, and the amount of redistribution needed in a wealthy society to succor the former will go unnoticed when expropriated from the latter. The result for general distribution of income will be little different from the disparities which the market always generates. And the charge that these inequalities of income are unfair because they are due to a morally arbitrary distribution of biological endowments will not be sustainable.

Behind this conclusion stand several different considerations for which I have argued in this essay. First, the notion of a biological endowment is a complex one, covering widely different kinds of talents and disabilities. Second, insofar as we can treat talents and disabilities as capital assets or liabilities, preferences come centrally into their valuation - both those of the endowment owners and of everyone else. And third, equalizing for resources by compensating for differences in talents and disabilities requires treading on preferences as well. Those who deny the permissibility of equalizing for welfare because of difficulties in or the impermissibility of weighing interpersonal differences in preference cannot, mutatis mutandis, advocate compensation for differences in biological endowments either.

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