

Another Look at the Subjectivism of Costs

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ANOTHER LOOK AT THE SUBJECTIVISM OF COSTS

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The insight that the cost associated with an item must reflect all the opportunities sacrificed in order to obtain it, has long been fundamental for economists. This "opportunity cost doctrine", (perhaps the earliest statement of which was in an 1876 paper by Wieser)¹ is one of the contributions of the Austrian School which has come to be fully absorbed into the contemporary neo-classical orthodoxy. Since Professor Buchanan's incisive treatment of the entire subject,² however, economists have learned to appreciate the subtlety of the opportunity cost concept, once its subjectivist implications have been fully drawn, and to recognize the pitfalls which await those who wield the opportunity cost notion without awareness of these implications. A number of recent papers have further explored various aspects of the subjectivism of opportunity costs and have drawn our attention to additional important and valuable insights.³ The present paper seeks to tidy up some remaining issues that appear, perhaps, to warrant further clarification. In attempting this task we will have to review some very elementary and obvious ideas; the need for some tidying up arises from the apparent ease with which these ideas are lost sight of as soon as economists move beyond the most elementary of contexts.

Costs and Costs

Let us first review a number of -- admittedly related, but nonetheless quite distinct -- concepts for which the term "cost" might be (and often has been) applied. (Of course the term "cost" has also been used with other meanings as well, but present purposes do not require our attention to more usages than those listed here.) It will be convenient to employ an example introduced by Alchian,⁴ in which a homeowner builds a swimming pool; we are inquiring into the cost of the building of the pool.

A One concern (in seeking the "cost" of the pool) may be to establish the array of disadvantages that result from building the swimming pool. Presumably the attendant reduction in the homeowner's bank balance would be one of the disadvantages, and thus a component in cost (in this sense). But other disadvantages would have to be included as well, e.g. the "nuisance of noisy, disobedient neighborhood children and uninvited guests".⁵ If cost is to be understood in terms of "disadvantages", it will clearly be necessary to distinguish between the sum of the disadvantages that accrue to the homeowner himself (the "private cost" of building the pool) from the disadvantages that may accrue to others (e.g. the nuisance to neighbors of noisy visitors to the pool, invited or not). Or one may seek somehow to assess the sum of disadvantages to everybody (the "social cost").⁶

B A different focus of concern may inspire the search for the swimming pool's "cost". One may wish to know what alternative goods that might otherwise have been forthcoming, have been precluded through the building

of the swimming pool, Here one must consider not so much the disadvantages associated directly with the pool (money subtracted from cash holdings, noise, etc.), as the alternative goods (which may have their own disadvantages) that would have been possible instead of the pool, Thus the homeowner might have purchased a car instead of the pool. The pool has "cost" him the car.

This notion of cost is often considered to be an "opportunity cost" notion, since it refers to the alternative opportunity that the swimming pool has precluded. However, in order to distinguish it from the "subjective" version of opportunity cost (to be discussed below under C), we will call this present notion of cost the "objective opportunity cost" notion. It is objective in that the cost of the pool is taken to be a definite good (in this case a car) that might have been enjoyed had the pool not been built. What "might have been enjoyed" in the present context is understood as being a matter of fact, objectively determinable, quite apart from anyone's judgements or expectations. It is for example held to be an objective fact that the \$10,000 expended for the pool, could have (under given factual market conditions) purchased a car.

It should be noticed that the car is the private (objective) opportunity cost of the swimming pool, in that it refers to what the homeowner might have acquired instead of the swimming pool. But someone might be interested in the objective opportunity cost of the pool in a different sense. Someone might ask about the alternative goods which might have been produced instead of the swimming pool. (If the homeowner built the pool with his own labor,

tools and materials this cost would of course also be the private cost of the pool.) One may ask, where the homeowner had the pool built by a contractor (who hired labor and tools, and bought the materials), what alternative output might these inputs have produced -- possibly in other industries altogether. Suppose they could have produced a summer cottage (in which, let us say, our homeowner has absolutely no interest in using at all) then it might be held that the (objective) opportunity cost of the pool is the summer cottage. The cottage is the potential output "displaced" by the pool. Since our homeowner never did himself possess these physical resources, and since, moreover, he has no interest whatever in the cottage, this cost notion is clearly not the private cost to him of his pool. It would presumably be considered a "social opportunity cost" in that the total output obtained by adding together all the goods and services produced in a society with its available resources, including the pool, might have been a different one in that, instead of the pool, it might have contained one more summer cottage. This is the objective social opportunity cost of the pool in that the capability of the labor, tools and materials (that produced the pool) to have produced the cottage instead, is viewed as a matter of objective fact (given the physical requirements for the production of the pool and the cottage respectively).

C The final concern which may inspire attention to the cost of building the swimming pool, may be to understand why the homeowner in fact decided to build the pool. We know that, in considering whether or not to build the pool, the homeowner was aware that building the pool must entail some

sacrifices on his part. Were these sacrifices too great, the homeowner would, it is clear, have reluctantly decided against the pool. To explain economic phenomena, arising as they do out of individual decisions, it is necessary, for each decision taken, to be aware that the relevant sacrifices to the decision-maker were considered worthwhile by him. To acquire a swimming pool (to follow Alchian's example again) called for a decision not to buy a car. Only the homeowner himself, however, can know how likely it is that a car would, in fact, have been the alternative enjoyed (if the pool were out of reach); only he can know how intense a sacrifice the "loss" of the car means to him. The cost of the pool to the homeowner, then, represents his assessment at the moment of his decision regarding the pool, of what he would be giving up in order to acquire it. The emphasis (in this subjective opportunity cost notion) is upon the moment of decision, and upon the way in which the decision maker himself sees the alternative opportunity which he must sacrifice.

The subjectivity of this notion of opportunity cost flows, of course, directly from its exclusive relevance to the decision. Economists learned long ago that demand behavior cannot be understood without probing beyond the physical objects purchased by the consumer, to the prospective utility which these objects represent for him. In exactly the same way the subjective opportunity cost concept permits us to recognize that costs help explain economic behavior not because costs represent definite objects "displaced", but because they represent perceived utility prospects deliberately sacrificed,

On The Costs of Wives and Children

A clear understanding of the differences between these cost concepts can help elucidate various points that have sometimes occasioned confusion.

a) The Noisy Neighborhood Children: Alchian is one writer who has emphasized the sharp difference between (i) the disadvantages of, or the undesirable attributes inherent in a swimming pool, and (ii) its opportunity cost. The decision maker must choose among events. Each event is an amalgam of "goods and bads". The opportunity cost of the chosen event is the next most highly valued event -- not the undesirable attributes of the chosen event. The nuisance of noisy neighborhood children, Alchian emphasizes, is an undesirable attribute of the pool -- not part of its opportunity cost. Our discussion may shed a somewhat different light on the matter.

If the opportunity cost notion is understood in its subjective version, it may be possible, surely, to find an opportunity cost counterpart for the disadvantages inherent in a chosen event. If a homeowner is choosing between building a swimming pool and purchasing a car, then it is very likely that the noisy neighborhood children that will be attracted by the pool enter very definitely into his cost calculations; they may well affect the decision taken. The options considered by the homeowner are, after all, whether to enjoy a car, together with a peaceful backyard, or whether to enjoy the swimming pool, without such a peaceful backyard (because of the noisy children.) So that in choosing the pool, the homeowner is consciously sacrificing the peace and quiet which he recognizes will be destroyed by the noisy children. From the subjective point of view any disadvantage associated with the chosen event (and not with its rejected alternative)

represents the sacrifice of the corresponding advantage (or at least the absence of disadvantage) contained in the rejected alternative.⁷ (Of course, if a given disadvantage is common both to the adopted option and to its alternative, it cannot enter into the opportunity cost of the adopted option).

In insisting that for the opportunity cost concept the noisy children represent only one of the undesirable attributes of the pool, not part of its cost, Alchian appears to be understanding the notion of opportunity cost in objective terms. From this point of view the availability of one chosen object may be seen as displacing another definite object. The latter is the cost of the former. In this view each object is seen as an amalgam of desirable and undesirable attributes. In order to perceive that the adoption of the undesirable attributes of one option entails a felt sacrifice (of the absence of these attributes in the alternative option), it seems necessary to emphasize, not displaced physical output, but perceived prospects deliberately sacrificed.

b) The Expensive Wife: In 1969 no less serious a scholarly journal than the Journal of Political Economy published a semi-humorous "Note on the Opportunity Cost of Marriage" by Gary North. This note was remarkable not so much for the very obvious fallacy it contains -- which it is very likely that the author deliberately introduced as part of the attempted merriment -- as for the fact that several of the subsequent (serious) comments it elicited utterly failed to take notice of the fallacy.⁸ North considered the situation of the man who contemplates marriage to a highly educated woman able to earn a high salary on the professional labor market. Taking it for granted

that, after marriage, the wife will give up outside job opportunities and concentrate entirely on running the household, North refers to her shockingly high opportunity costs. A man of modest means, North argues, should never consider courting a woman of such talents; she is simply too costly. "The best kind of wife, from the point of view of contemporary economics, is obviously an uneducated woman... [for whom] a man...forfeits a small opportunity cost in her lost salary...".

This note succeeded in drawing comment from several economists, one of them George Stigler,⁹ Stigler accepted without question North's analysis to the effect that the opportunity cost of marrying the educated woman is a high one. His criticism of North's conclusion was confined -- apparently altogether seriously -- entirely to pointing out that if the wife in question indeed stays at home as housekeeper, this demonstrates that the minimum estimate of her revenue - equivalent as housekeeper must outweigh the high cost of the foregone professional income.

But this clearly concedes the obvious fallacy in North's tongue-in-cheek story -- which incorrectly counts the foregone professional income as the opportunity cost of the decision to marry the educated woman rather than her uneducated sister. Before this marriage decision the prospective groom had no alternative prospect whatever of enjoying the woman's high professional income; his decision to marry her involved no sacrifice by him of her income at all (even if it is understood from the start that marriage calls for her staying at home), To be sure once the two have married, a subsequent decision that she stay at home carries with it the cost of her foregone income -- but this is irrelevant to North's injunction

to the would-be groom to marry the uneducated girl in order to avoid high costs. Again, if it is understood that marriage necessarily involves forsaking outside employment, then the educated girl's decision to marry carries with it a cost to her of the lost professional income -- but this is again irrelevant to North's matrimonial advice to the fellow.

That so eminent an economist as Stigler should have failed to point all this out appears to suggest an extreme version of the objective approach to the notion of opportunity cost. Such a version apparently divorces the notion of opportunity cost entirely from the context of the decision. Instead of considering the costs deliberately assumed at the moment of a particular decision, this version focuses on that which has been displaced as a result of a given state of affairs. In this fashion, apparently, it is somehow conceivable to see the educated-wife-in-the-kitchen as bearing a cost tag on which is inscribed the professional salary which she might have commanded in an alternative state of affairs. To marry her rather than her uneducated sister is to assume a high-cost option rather than a low-cost one.

That the subjective version of the opportunity cost doctrine is invulnerable to seduction by such a fallacy must surely be counted as one of its merits.

On The Subjectivity of Costs

There are several sources for our emphasis upon the subjectivity of opportunity cost (in the context in which cost helps us understand decisions taken). It will be helpful to spell these out. Let us consider a case in which two homeowners in two different (but similar) towns decide to build similar swimming pools in their backyards. To the outside observer it may

appear that the two face similar sets of circumstances, that they are called upon to make similar sacrifices, in short that the two pools are built at "equal cost". For the subjectivist view of cost theory, however, this conclusion cannot be accepted,

1. While the situation which the outside observer perceives in each case as facing the homeowner appears identical with that which confronts the second homeowner, we have no assurances that this identity exists in anyone's perception other than that of the observer. An outside observer may presume that the prospect of noisy children from the neighborhood, which faces each of the prospective poolowners, is taken account of by each of them correctly and equally. But in fact it is possible that one homeowner forgets altogether to consider this undesirable attribute of the prospective pool. In other words two decision makers may "see" different things -- despite the fact that they "really" confront the same objective situation. The costs which enter into the respective decisions can clearly in no sense be said to be equal.

2. A somewhat different (although closely related) source for the incorrectness of any conclusion by the outside observer that the two homeowners face equal costs, is provided by our understanding of the role of entrepreneurship in decision making. Even if two decision makers do see present realities in identical fashion, there is no reason to assume that they will assess future prospects equally. In one sense the preceding case (in which one homeowner forgot about the prospect of a noisy backyard) represents such an entrepreneurial lapse. A clearer example of the importance of the entrepreneurial element is perhaps provided by the

case where the two homeowners each carefully take account of the prospective disadvantage of the noisy children, but reach different conclusions concerning its likelihood. Perhaps one homeowner predicts more accurately than the second what other future neighborhood attractions are likely to "compete" with a backyard pool. Both homeowners see present circumstances identically -- but they "see" the future differently. The respective costs of the pool are as different as the two assessments of the future.

3. Yet a third circumstance renders it an error to conclude that the cost of a pool is the same for each of the homeowners. Even if the two arrive at exactly the same predictions concerning the noise to be expected in the respective backyards, they may attach different degrees of significance to this prospective disadvantage. For one homeowner a noisy backyard may be perceived as a minor irritant, for the second it may loom as a major discomfort.

4. Our discussion thus far in this section might suggest that the subjectivity of opportunity costs merely makes it impossible as a practical matter to rank costs faced by different decision makers. This would be a serious misunderstanding of the position being taken. The truth surely is that costs, as understood in the subjective version, enter into decisions in a strictly private manner. To rank the costs faced by different decision makers is as conceptually impossible a task as is that of comparing utilities interpersonally. (In fact, of course, these two tasks are merely variants of a single impossible undertaking.) Both costs and utilities enter into decisions in a private fashion -- they are essentially without meaning except within the context of the private decision.

Subjective Costs, Objective Costs and Equilibrium Prices

The foregoing has important implications for an often-discussed question: whether the private money outlays made by an entrepreneur in the course of producing output, can serve as a correct, objective, measure of the entrepreneur's subjective opportunity costs of production?

Some recent contributions to the literature on the subjectivity of costs¹⁰ have discussed how, under specified conditions (chief among which being the equilibrium state, and the absence of non-pecuniary motivations) money outlays do provide an objective representation of subjective costs. This position reflects the line of reasoning lucidly articulated by Professor Baumol in his 1970 review of Buchanan's book.¹¹ Baumol's exposition deserves verbatim quotation.

"There surely is a wide variety of circumstances in which the objective cost data do constitute a reasonable approximation to the subjective opportunity costs. This is brought out clearly by the famous argument of Adam Smith, about which Buchanan builds much of his discussion: 'If...it usually costs twice the labor to kill a beaver which it costs to kill a deer, one beaver should naturally exchange for or be worth two deer.' This is plausible even if cost is interpreted as subjective opportunity cost because in Smith's economy hunting is carried on more or less continuously. Assuming that hunting is not done for pleasure, if the objective cost of beaver - the payment to the hunter-were less than twice as high as that of a deer, more hunters would turn to deer slaying and away from beaver trapping until the market costs (prices) were modified to reflect the relative outlay of time involved. The relative marginal valuations of beaver and deer meat by each and every consumer would then also be driven to the same two-to-one ratio, so that to each person the subjective opportunity cost of a pound of deer flesh would be the same, and would be represented correctly by the objective relative cost figure."¹²

For Baumol, then, the result of the market process is (a) that for all consumers "the subjective opportunity cost of a pound of deer

flesh would be the same" (since each consumer would face - and would have adjusted the margins of consumption to - the same one-to-two ratio between deer and beaver flesh prices), and (b) that this common subjective deer flesh cost would be correctly represented by the objective relative cost (of hunting deer as compared to that of hunting beaver). Or, as Buchanan sums it up, "marginal opportunity cost, measured in the numeraire, is equal for all suppliers."¹³

Now, there is nothing in these discussions themselves to which exception can be taken. It does, however, appear important to emphasize the limited sense in which it is correct to describe money outlays as constituting "objective costs", either (a) in the sense of somehow translating subjective, private, interpretations and valuations, into interpersonally visible, comparable and measurable terms, or (b) in the sense of being publicly observable cost to society (rather than merely a common representation of distinct private sacrifices.) Let us take up these limitations in turn.

(A) Comparing Costs Interpersonally: It would, for many economists, doubtless be highly desirable to be able to map the private, subjective costs perceived by different decision makers, upon an external and interpersonally valid scale. It is tempting, but of course quite wrong, to believe that money outlays - even under equilibrium conditions and without non-pecuniary distractions - constitute such a mapping.

In equilibrium output and consumption decisions with respect to pairs of products have been adjusted to bring both marginal rates of substitution and of transformation into equality with relative prices for each consumer and producer. It may even be (loosely) claimed that for

each consumer a dollar's worth of each commodity at the margin provides the marginal utility of one dollar. In this special sense, then, it is not incorrect to say that both utilities and subjective costs are the "same" for all consumers. But all this does not, of course entitle us to view a dollar as an objective, interpersonally valid yardstick of utility. For you, as for me, a marginal dollar's worth of bread provides approximately the same utility as does a dollar. This does not mean that you and I attach equal "significance", in any absolute sense of the word, to the given physical quantity of bread. It is certainly highly important to understand how, under equilibrium conditions, rankings at the margin are, for all market participants, brought into uniformity. But this does not imply that private, subjective appraisals have been rendered publicly visible.

Quite similarly the subjectivity of costs has not been magically suspended merely by the circumstance that, both for you and for me, a pound of deer flesh can be acquired only at the same dollar outlay. What I believe that I must sacrifice for deer flesh is a mental picture which I have of possible future enjoyments - a picture which is inaccessible to anyone else. There is no straight forward meaning that can be attached to the question whether or not this picture is the same as that which for you constitutes the subjective cost of similar deer flesh. And this is not affected by the feeling that each of us may have that the sacrificed prospect is identical in significance with that which would be made possible by the expenditure of a marginal dollar.

Now one can readily understand a tendency to shrug off this kind of purism. For you as for me, the sacrifice called for in order to enjoy a unit of deer flesh is a given quantity of beaver. Then surely it is the case, it may be objected with some impatience, that for you the opportunity cost of deer is the same as it is for me. You must give up exactly what I must give up. A prospective marginal unit of beaver may be associated with a private picture for you; it may be associated with an equally private prospective picture for me. But since for each of us these (admittedly incommensurable) pictures are mental representations of the same physical object (a given quantity of beaver), it may seem unfruitful pedantry to insist on reserving the term "opportunity cost" for the incommensurable subjective mental representations of a given commodity sacrificed, rather than for the objective commodity itself. And if a given outlay of money might have purchased that commodity (both for you and for me), why should that sum of money not be recognized as the objective measure of the common opportunity cost to each of us of what we buy with that outlay?

The recent writers on subjective costs (cited above) have valuably emphasized the unrealism of the equilibrium construct, as thoroughly undermining the suitability of money outlays for service as such as objective measure of opportunity cost. Here we wish to draw attention to one aspect of equilibrium which is particularly important for understanding the unsuitability of money outlays for such service. In equilibrium analysis it is taken for granted that, while you and I may differ about the significance of a given objective prospect, we are nonetheless disagreeing

about what we both recognize as being the same object, In other words the state of equilibrium is one in which all market participants correctly perceive that which is objectively perceivable. It is precisely this aspect of equilibrium to which we wish to draw critical attention.

As discussed in an earlier section, the subjectivity of opportunity costs derives, in part, from the circumstance that different individuals "see" different things even when they are looking at the same object. If two individuals were always to "see" correctly the given object (or prospect) that is before them, then we might indeed wish to replace discussion about differing prospective utilities to be sacrificed, by reference to the identical object (the prospective sacrifice of which is at issue.) But wherever we wish to take into account the extent to which decisions reflect highly personal views not only concerning the significance of the facts before one's face, but also concerning the very facts themselves, - we dare not talk of sacrificed objects apart from the private perceptions of these objects. A given amount of money does not, except under highly artificial assumptions, represent the same purchase possibilities to two individuals exploring the same supermarket. It is certainly unhelpful to focus on analytical models in which such artificial assumptions have been made, to an extent that permits us to overlook the crucial difference between the statements: (a) you and I have expended equal amounts of money, and (b) you and I have sacrificed the prospective utilities which we respectively attach to the given sum of money. Statements (a) and (b) are simply not completely interchangeable statements. There may, it is true, be imaginable sets of circumstances under which some might be content to use statement (a) as a workable (and more easily manageable)

substitute for statement (b), Our point is that, if the cost notion is to serve as an explanation of why a person made the decision he did, it will not do to invoke a statement such as (a), as such a "short" explanation (in place of the more complete statement (b)) unless we can rely on the assured, complete awareness of the objective facts that enter into (a). Most economists would agree that such complete awareness is likely to be achieved, in general, only through learning process which involve decisions based on faulty awareness. If these decisions are to be explained, as they surely can and must be, on the basis of relevant costs, we dare not confine discussions of cost to contexts in which the possibility of faulty (or otherwise idiosyncratic) awareness of facts has been assumed away. The use of money outlays provides no justification for so confining discussion.

(B) Money Outlays as Measuring Costs to Society: The use of money outlays to serve as "objective" measures of cost is often suggested in order to assess the "social cost" of a particular undertaking. It is useful to emphasize that, strictly speaking, such attempts can have nothing at all to do with the subjectivist notion of opportunity cost. For the subjective notion of the term "cost" is necessarily always private. It has no meaning outside the context of a decision. All decisions are made by individuals; hence all costs (in this usage) are private costs. While decisions may be made that affect society, or even be made "on behalf" of society - they are nevertheless made by individuals (whether as private citizens, voters, public officials, or members of governing groups) and hence involve only private costs, that is, sacrifices which

the decision maker sees himself to be making. (Of course a public official may consider the effect of a course of action upon the public, but such considerations enter into his decision, after all, only to the extent that he considers them to be important.) For us to be able to talk of the (subjective) social opportunity cost of a decision, it would be necessary to imagine society as a whole making decisions. In any but a metaphorical sense a society simply cannot make decisions. Hence there can be no notion of social cost (in the sense of subjective opportunity cost.)¹⁴

One may indeed wish to discuss the alternative volume of goods that might have been forthcoming in a society, had resources been allocated for purposes other than those in fact pursued. It may seem not inappropriate to describe these goods as the social cost of the project pursued. And, if money outlays might have commanded such a volume of goods, it seems natural to see these outlays as being but the monetary expression of this social cost. But the truth is that for no individual entrepreneur was this volume of goods, the subjective opportunity cost of his decision to acquire the resources for the purposes pursued. If these alternative goods are described as social cost, this can only be in a sense for which no actual decision can have been relevant. If such social cost is held to be an opportunity cost, this can only be in a non-subjectivist meaning of this term. Money outlays may, under assumed conditions of equilibrium, measure this quantity of alternative goods that might have been produced. But to use such outlays as a measure of "social cost" cannot, even though these outlays are made by individuals, succeed in erasing the conceptual gulf that separates the objective notion of social "cost" from the subjective, private, notion of opportunity

cost. Even under equilibrium conditions the money outlays of individual entrepreneurs cannot at the same time represent both private and social "costs"; money outlays may indeed be taken to represent alternative outputs (and hence social cost (in the objective sense discussed above), but private (subjective) opportunity costs are not these alternative outputs, and certainly not these money outlays - they are the significance of the perceived purchases foregone by these outlays.

We may put the matter quite briefly. Money outlays for a particular project, are of course objective. They may, under specified conditions, be held to represent the "objective" opportunity costs to society of that project. But money outlays cannot serve as an "objective counterpart" for any subjective notion of social cost - simply because, in strict terms,¹⁵ the notion of a subjective social cost is without meaning.

One may, as noted, wish to use the term "cost" in an objective sense, or, with Professor Buchanan and the Austrians, one may wish to reserve the term to refer only to subjective sacrifices. If it is the latter usage which is being followed then money outlays are simply not, in and of themselves, costs; they certainly do not "translate" subjective costs into objective costs.

Choice, Hypothetical Choice, and Social Cost

We may in fact go further in our contention that money outlays cannot provide an objective translation of subjective opportunity costs. Thus far our discussion has left unchallenged at least the insight that money outlays may be seen as an objective expression of social opportunity cost.

We merely pointed out that the latter term must itself then be referring to costs in an objective, decision-irrelevant, sense. But in fact, we will now argue, there are grounds for the assertion that the term social cost as widely used does indeed imply a true opportunity cost in a decision context, (and thus ultimately in a quasi-"subjective" sense), albeit in very limited and special terms. So that, we will point out, if money outlays are indeed held to measure social costs, we shall have to reinterpret these outlays as costs in a less than completely objective sense. All this may appear to be quite confusing and paradoxical, and indeed to involve an abrupt about-face from our earlier insistence that social cost can under no circumstances be recognized as cost in the subjective opportunity cost sense of the term. These matters do deserve elucidation.

Until now we have recognized (among the various meanings different economists have attached to the term "cost") objective as well as subjective opportunity cost interpretations. One might well question the felicity of using the term "cost" to denote the "objective" disadvantages or objective output losses in fact imposed on society by the construction of a swimming pool, whether or not these disadvantages were taken into account prospectively by the homeowner. But we did not question the possible interest and importance attached to the volume of such disadvantages or losses. Whether or not we wished to refer to the sum of such disadvantages or losses as the cost of the swimming pool, we recognized that it might well be important, for normative purposes, to take

cognizance of these disadvantages, or foregone social outputs - even if the homeowner himself did not do so. We wish now to argue, however, that, in referring to such disadvantages, or foregone alternative social outputs as "costs", economists are, in fact, whether they are completely aware of it or not, implicitly treating these disadvantages and lost outputs in the context of hypothetical decisions.

We maintain, that is, that all the cost concepts we have considered do ultimately depend upon the subjective opportunity cost notion (which we have endorsed as the only version capable of rendering individual decisions intelligible.) Even the apparently objective notion of social output foregone and the like, are treated as cost only because one is imagining a decision through which these alternative advantages are deliberately being sacrificed.

If the cost of a particular process of production is being discussed, this is presumably because the worthwhileness of the project is under examination. For the decision maker responsible for the project this is of course a matter of obvious and immediate relevance (and is the reason why we have emphasized the role of cost in explaining decisions.) For those other than the decision maker himself, consideration of the cost of a project is presumably in order to make a judgment on its worthwhileness, either from the point of view of the decision maker himself (i.e. a judgment by another of whether or not the decision maker made a wise decision), or from the point of view of "society" (e.g. whether the project's full "cost" to society is being taken into account).

These judgments may be either prospective or retrospective, but they are all judgments concerning efficiency. Such judgments, then, answer the following kinds of question: "Should this project be undertaken, or are its expected benefits outweighed by the costs?", or, "Should this project have been undertaken, or were its expected benefits outweighed by the costs?" These questions are questions about decisions, either actual decisions or hypothetical decisions.¹⁶ In reviewing hypothetical decisions the reviewer may imagine himself to be responsible only for himself ("If I were the prospective producer,..") or for society at large ("If I were in charge,..") or the reviewer may imagine a decision "by society" (regardless of whether he is aware of the strictly metaphorical character of "decisions by society") whether or not to permit a private entrepreneur to decide to initiate the project.

Into all these hypothetical decisions, then, costs enter in exactly the same way as they do into actual decisions by individuals. The "objective" social costs of a project enter into such hypothetical decisions in the following way. Let us imagine that a privately built swimming pool increases the noisiness of a neighborhood (a matter by which, let us say, the homeowner himself is unaffected). Then an economist may argue that, after taking the externalities imposed upon neighbors fully into account, the social cost of the pool renders its construction a mistake, from the point of view of society. This means that the economist is making the judgment that if "society" were choosing whether or not to have the pool, (or whether or not to permit the homeowner to build the pool), a negative decision would be in order, since relevant costs are held to outweigh relevant benefits. But all this

means that the so-called objective costs to society of the pool, are being imagined to be taken into account by a hypothetical decision maker. As such, such costs must be imagined to be perceived and evaluated by this hypothetical decision maker - so that these objective costs turn out to be at least quasi-subjective, after all.

Now we have indeed argued repeatedly, earlier in this paper, that actual decisions are made only by individuals, not by "society". It is for this reason that we have insisted that "social costs" (as something apart from private decision making) cannot be true subjective opportunity costs. We certainly still maintain this position. Nonetheless our present discussion is designed to emphasize that such social costs, while indeed not true subjective opportunity costs in the straight forward sense, can be imagined to be meaningful only in the context of imagined decisions, possibly by altogether imaginary decision makers. The cost notion, even in its apparently objective versions, ultimately expresses an implicit subjectivism.

So that while, for purposes of such discussions of social efficiency, economists may be indulging in questionably legitimate stretches of their imagination,¹⁷ we must understand them as after all implicitly treating costs as quasi-subjective. It follows, as stated earlier, that while money outlays may be used to measure "social cost" under relevant equilibrium conditions, the ultimate subjectivity that is inherent in the cost notion, cannot even then be thoroughly exercised.

Let us sum up our position. In explaining actual decisions the only costs that are relevant are private, subjective perceptions of required

sacrifices. Conversely, the use of cost in judging the actual efficiency (to relevant decision makers) of particular projects, can refer only to subjective costs as they appear to these decision makers. For costs in this ("true") sense, attempts to find objective measures or counterparts - whether in terms of money outlays or anything else - to subjective costs, are doomed to failure. Moreover, we have found, the subjective element is so deeply engrained in the notion of cost, that even truly objective versions of cost turn out ultimately to reflect an implicit quasi-subjectivism. Notions of social cost are, as has been amply demonstrated in the recent literature, totally illegitimate in the strict context of subjective cost. We have found that, in addition, such ostensibly objective notions of cost turn out to conceal a quasi-subjective element, after all.

FOOTNOTES

1. T. W. Hutchison, A Review of Economic Doctrines, 1870-1929 (Oxford: Clarendon Press, 1953), p. 156
2. J. M. Buchanan, Cost and Choice (Chicago: Markham Publishing Co., 1969). The numerous debts which this paper owes to Buchanan's discussion will be apparent to every reader of that book. A recent paper offering an excellent new exposition of similar insights, is J. Wiseman, "Costs and Decisions", in D. A. Currie and W. Peters (eds.), Contemporary Economic Analysis, Vol. 2 (Croom Helm, 1980).
3. S. C. Littlechild, "The Problem of Social Cost", in L. Spadaro (ed.), New Directions in Austrian Economics (Kansas City: Sheed, Andrews and McMeel, 1978); E. C. Pasour, Jr., "Cost and Choice - Austrian vs. Conventional Views," Journal of Libertarian Studies (Winter, 1978); E. C. Pasour, Jr., "Cost of Production: A Defensible Basis for Agricultural Price Supports?", American Journal of Agricultural Economics, (May, 1980); K. I. Vaughn, "Does it Matter That Costs are Subjective?", Southern Economic Journal, (March, 1980).
4. A. A. Alchian, "Cost", in Encyclopedia of the Social Sciences, 3, New York: MacMillan, 1969 (also in Economic Forces at Work: Selected Works by Armen A. Alchian, Indianapolis, Ind.: Liberty Press, 1977), pp. 404ff. (Page references are to Encyclopedia).
5. Alchian, Op. cit., p. 404

6. Of course such attempts may raise serious questions concerning the very meaning of such a "sum",
7. Let the advantages of the adopted and the rejected options be represented by A, C, respectively; and let the disadvantages of the adopted and rejected options be represented by B, D, respectively. Then one may say that the net utility of the adopted alternative is $A-B$, and its cost is $C-D$ (with the latter term not including reference to B at all, confirming Alchian's position). However it seems entirely in order to say that in choosing the first option the decision maker is embracing the utility A plus the "freedom from disadvantage D", and that the sacrifices called for are made up of the foregone utility C plus "freedom from disadvantage B." It must be readily conceded that such "accounting" considerations may sometimes appear arbitrary and even forced. If I choose to sit on a hard park bench rather than on the soft grass, it may seem artificial to say that the hardness of the seat enters into the cost of my decision (in the form of the sacrificed softness of the grass). It certainly may seem more natural to say that the hardness of the bench merely reduces its utility. But it should be emphasized that this is not because disadvantages cannot in fact be represented as associated sacrifices, but because they may under given circumstances not be perceived as such. Where such perception is not lacking, the point being made in the text comes back into full relevance.

8. This does not apply to the insightful (if perhaps somewhat rambling) comment by Madelyn L. Kaflogis, Journal of Political Economy, March/April, 1970, pp. 421-23.
9. Journal of Political Economy (September/October, 1969) p, 863.
10. See papers by Vaughn and Pasour, cited above, ftn. 3.
11. See, for a discussion of Baumol, in Vaughn, op. cit. pp. 709 ff.
12. W. J. Baumol, "Review of Cost and Choice", Journal of Economic Literature (December, 1970), p. 1210.
13. J. Buchanan, op. cit. p. 85.
14. See however the final section of this paper for a somewhat different way of stating this.
15. See the following section for a discussion in terms not so strict.
16. See S. C. Littlechild (cited above, ftn. 3), p. 85, for a discussion of the role of hypothetical choices.
17. E. g. there may be problems with the internal consistency of such imagined choice situations,