

A GENERAL THEORY OF VALUE

Appendix Five: In Defense of Utilitarianism

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Many would think that ascribing utility to such ephemera as tokens tends to undermine the whole doctrine of utilitarianism. Others would see this ascription as a way to answer some of the objections raised *to* utilitarianism. Which shall it be?

Utility (or usefulness, or "use-value") might be defined as measure of the effectiveness of a good or service in respect to specific human purposes. Water is good for quenching thirst; hammers are good for fastening nails. Utility is most easily ascribed to material *goods* such as food, shelter, tools, furniture, and machines. It is only slightly less felicitously ascribed *services*, such as legal advice, pizza delivery, interior design, and so on. Although both of these uses of "utility" have the merit of taking into account the good or service's reception by human beings in human situations, universalizing the idea of utility to apply to all things has two inherent problems, just as the critics say it does: first, that of *instrumentalizing* the value of everything, and second, that of ascertaining the value of things *humans* don't find useful or enjoyable or even come in contact with. As a moral system, utilitarianism also seems to eclipse concern with commandments, traditions, character, and virtue as well as with intuitions as to the nature of the Good in itself, for "its own sake."

To posit, therefore, that tokens like promises, certificates, kisses, permissions, whatever...have utility like a bag of coal, a banana, or a faucet washer, is, to the critics of utilitarianism, to add insult to injury. It is to admit the ogre of pragmatism— "whatever works" — into the most intimate and secret processes whereby we seek happiness and merit.

But positing that tokens have utility also undermines the worst of doctrinaire economic utilitarianism: first by extending its terms into the "gray area" of what human beings exchange with each other when neither material goods nor money passes hands, and second, by dealing rather searchingly with what is, after all, both philosophical utilitarianism's and psychological economics' end, namely, the happiness and satisfaction of all. To mark this expansion of domain, to allow me more care in ascription, and to avoid the "merely utilitarian" popular meaning of "utility," I have chosen to use the words "satisfaction/well-being" and "value/happiness" in places where most economists would use, respectively, "utility" and "marginal utility."

Happiness and satisfaction, looked at as closely as psychological economics demands that

we look at them, happiness and satisfaction are two, very abstractly conceived and thoroughly psychological goals that can easily be associated with such desiderata as meaningfulness, beauty, truth, power, love, and so on, as conditionals, as constituents, as structural properties of "profitable" exchange, and so forth. Indeed, if psychoeconomics can lead us to focus on that part of economics which is intrinsically about people, their interaction and their work, their needs, desires, and their noblest goals, rather than on the production of chairs, machines, margarine, electricity, courier services, interest earnings and export-import figures, *then...then*, one might say (and not without some irony) that psychoeconomics will have served a good purpose. For example, psychoeconomics ought to lead us to think of quality-of-life issues before quantity- or quality-of-product issues (which is not to deny that the latter has some influence on the former), to thinking about "participationism" rather than "consumerism," to think of the joy of work before the "affordability" of its products, and to look at conventional goods and services in terms of how exactly they promote, or fail to promote, our happiness and the satisfaction of *all* of our needs.

In all, and as I mentioned in my remarks about Lux and Lutz in Chapter Three, Note 6, psychological economics springs from a humanist line of thought. Humanist also was the utilitarianism of J. S. Mill and G. E. Moore. The fact that "utility" turns out to remain a helpful concept at a time when utilitarianism is under some disfavor by modern philosophers should not lead us to throw out the proverbial baby with the bath water of its textbook applications to "explaining" the relative prices of beef and corn.

The Greatest Happiness Principle appears in Bentham's *An Introduction to the Principles of Morals and Legislation* of 1789. Note that my re-statement of it here interprets "happiness" in the more Spinozistic terms I outline in Chapter Four (p....), namely, that "happiness" denotes the feeling that accompanies an *increase* in satisfaction rather than the feeling of satisfaction itself. This lends a somewhat more dynamic thrust to the Greatest Happiness Principle, since it now calls not for the greatest number to feel (maximally) satisfied with what they have, do, etc., but calls rather for the fortunes of the greatest number to be *improving*. Aldous Huxley's prescient novel *Brave New World* portrayed well the dangers of constructing a social system based on making everyone feel satisfied with their lot in life, with their role in society, their material state.

This is as good place as any to acknowledge and comment upon John Rawls' *A Theory of Justice*, perhaps the clearest and most comprehensive critique of utilitarianism as a moral philosophy offered in recent times.¹

Rawls finds particular fault with Bentham's Greatest Happiness principle and seems

unappeased by attempts to introduce *social equality* as itself a desideratum, a happiness-producing value.² Rawls' concern is to give moral priority to the *right* over the *good*, to justice *per se* over efficiency—efficiency, Rawls says, being what all utilitarians are really after. He concedes that on most practical matters of judgment, utilitarians who use a common-sense notion of the right and the good can and will arrive at similar judgments to those recommended by Rawls's own "justice as fairness" principles. And what are these principles? Simply those which would be arrived at by a group of rational negotiators negotiating under the condition of "the veil of ignorance" (i.e. not knowing anything of their *own* or each others' backgrounds, wealth, or social status) in order to decide upon a set of laws and rules that would *thenceforth applicable to all people, including themselves*. Under these circumstances, it would be in each and every negotiator's selfish interest (if, we should note, he or she were also strongly risk-averse) to devise laws and distributions of wealth that guaranteed him or her a tolerable life in the future. It follows, for Rawls, that *that society is most just in which it least matters who you happen to be*, as if who-you-happened-to-be—what job you did, what position you held, what your name or skin color was—were a random matter. Rawls' system of justice is "contractarian" in that it depends on appeal to the *rights* and *duties* delineated by legitimate and legitimating institutions employing justice-as-fairness principles (rather than justice-as-utility or justice-as-virtue principles). In his system, inequalities are acceptable only if it can be shown that without them the least-advantaged would be worse off. Similarly, liberty is a basic right to be "given" equally to all and diverged from only with the consent of those who will receive less of it (*A Theory of Justice*, p. 302).

Now, from our point of view, Rawls's system presupposes a rather advanced stage of social development, one in which there is already a robust economy of legitimacy tokens whose warrants are rarely invoked, and one in which this idea is honored: that personal identity is simply the result of chance ("there, but for Fortune, go you or I") rather than of God's will or of hard-won virtue. This is a society already secure, and one in which issues of survival are moot. Indeed, it is a society in which large numbers of people approve of each other and feel confident enough to make and submit to universal rules of conduct which are deliberately blind to individual circumstances, birthplace and position, race, power relations, history, motivations, and the benefits of outcomes. Rawls's thought experiment begs the question, we see: *for any negotiators willing to submit to the rules they would devise under "the veil of ignorance" would be people with a deep belief in the justice-as-fairness principle already, and would not need to engage in Rawls's procedure.*

We might also note that Rawls' system, on our perspective, begins and ends in the

legitimacy stratum of the psychoeconomy, the stratum whence, upward and downward, its influence is felt. This perspective is understandable since, after all, Rawls is proposing a classical liberal theory of *justice* and not a theory of happiness or psychological development or economic growth.

In his critique of (classical) utilitarianism, Rawls makes two points familiar to critics since Sidgwick's *Methods of Ethics*—namely, (1) that the quantities "average-" and "total-utility" are technically difficult to determine and value-system-sensitive in the initial measurement, and (2) that average or total utility (the Greater Happiness...), even were they easily measureable, would by themselves permit of unconscionable inequalities and sacrifices at the individual level.

Fair criticism. However, Rawls also claims that his justice-as-fairness precepts, while avoiding the problems of utilitarianism, are easier to accept as such as well as apply. Here, it seems to me, Rawls may have a point, even though he arrives at it first by not allowing utilitarian thought to include the optimization of *multiple* human needs which are interactive with one another, and second, by not allowing for a "contractarian utilitarianism" of the sort proposed here, having to do with *exchange* systems that could result, in their complexity, in a social self-organization that would generate a culturally held positive value for distributional fairness. Rawls assumes instead that the Greater Happiness must constantly be calculated by some God-like, impartial Administrator (*A Theory of Justice*,. p. 22 ff.).

How to conclude all this? If one's concern is with "value" in the largest sense and its relation to economic value, and if one's concern is with economic growth and development (dare I say psychoeconomic growth and development?) rather than with justice *per se*, then the utilitarian approach, suitably modified, seems to me to be a better overall approach. For all of its problems, it has the merit of not *assuming* prosperity and the concomitant spiritual largesse which *permits* questions of perfect fairness *per se* to become central. And it is still not clear to me that a utilitarian *modus operandi* would not develop a system of justice quite similar to Rawls's. After all, as I noted earlier, is not the person who decides upon laws that would apply to himself were he to be reborn at any moment as anybody else, following his self-interest? Is he not maximizing his expected utility (assuming, of course, that any sense at all can be made of one's unique identity surviving the transition)?

For many, attempts at better understanding the human experience through quantification seem both doomed and regrettable—doomed, because human experience is too complex and too subtle to be captured by unifying mathematical models, and regrettable because to the extent that the project of mathematization *succeeds* we feel demeaned. Why do we feel demeaned?

Because we are (supposedly) turned thereby into automatons. We lose the very possibility of a personal freedom based—as much of it *is* based, many feel—on the non-understandability and therefore unpredictability of our actions to others. In particular, under Bentham's stern utilitarian gaze, we seem reduced to even less: to mere *pleasure-seeking* automatons. Justice becomes an objective calculation, the calculation of amounts of pleasure fed into the machine of "the Greater Happiness..." Indeed, how the greater happiness is best served *is*, for Bentham, the problem of justice. For Bentham, tradition, moral standards, virtue, religious teachings, personal feelings, goodness *per se*...are all, if not irrelevant, then subservient to the objective of achieving the greater happiness as measured by the hedonic calculus: the adding and subtracting and totalling of the actual happiness of living individuals.

This, at least, is the rendition of Bentham's thought that allows contemporary metaphysicians, theologians, and social thinkers of the humanist, Romantic stripe to regard him with distaste, as a pragmatist, in the very worst sense of the word. But nothing could be further from the truth about the man and his ideas.

Bentham was a brilliant legal scholar. As a very young man he found himself thrown into a legal system where punishment was commonly meted out not on the basis of a reasoned assessment of the harm done to society by this or that action by an individual, but on the degree of moral revulsion felt towards the action (and the individual) by a judge under the influence of religious zealots and/or in service to various forces of political expediency. Bentham wanted nothing more and nothing less than to establish a humane and rational legal system. He wanted a new class- and income-blind system (*pace* Rawls) which maximized the freedom and liberty of citizens under its jurisdiction. Bentham's hedonic calculus was never intended to be a substitute for human judgment. Nor was it intended to become a practical system for making decisions, even though in the 20th Century this is precisely what has been seriously attempted by certain utilitarians. It was to stand, rather, as a demonstration of the *principles* involved, principles that were themselves precise and therefore rationally arguable: that it was every person's right to maximize his or her happiness *if*, as Mill would make clearer later, it could be done at no harm to others, and that no society could be judged "good" that did not strive to maximize the sum of individual happinesses of its citizens. Aristotle's *summum bonum* redux. Aristotle to the contrary, however, in Bentham's view the state had no right to judge or to form a person's *character*, only to reward good-*doing* and to punish harm-*doing*, and this only in proportion to the good or harm actually and demonstrably *done* to the community.

As regards Bentham's hedonic calculus as such, and as regards all efforts since towards the quantification of value, emotion, experience, feeling, and so on, one might say this: that it is

too easy for metaphysically inclined philosophers to be disdainful of attempts to weigh the pleasures and pains of people in actual situations just because it is a matter about which we cannot be utterly precise (as Bentham was the first to admit); easy and also disingenuous. For it is clear that as a matter of course, in everyday life, all adult human beings, even anti-utilitarian philosophers, engage in just the sort of arithmetic Bentham dared to formalize. We certainly "weigh" our options as to their potential benefit—for ourselves, for a group, or both—many times a day; we certainly assess the outcomes of decisions—our own and others'—as having been for the better or for the worse; and we certainly compare happinesses and sadnesses—past and future, yours and mine, an individual's and a community's—fully cognizant of how these have degrees of intensity and duration. All of this is *quantification*, all of this is *calculation*, and there is nothing in it of which to be ashamed. (Eugen Böhm-Bawerk makes some of these same points. Cf. Böhm-Bawerk, op. cit. p. 197). Certainly judges, law makers, managers and social scientists to this day *must* "put numbers" to the notion of the good, to the concept of value, and to the happiness of real people, as a matter of professional duty. How is one to devise a new law without calculating the likely benefit of it? How is one to match a punishment to a crime if one does not have some way to assess the magnitude of the harm done by the crime? How is one to match a reward to a deed if one does not have some way to assess the magnitude of the good done by the deed? To declare that we *ought* to live without rewards or punishments, and therefore also without this faulty "calculus," is to imagine that God's Kingdom has already arrived.

Nor did Bentham overlook the fact that pleasures vary in quality and in apparent "height." These factors he reduced to their varying "intensity," "duration," "certainty," "propinquity," "fecundity" and "purity." The reader may have already detected many of these terms, in new clothes, throughout this text. Like Bentham, I will ultimately try to show that the "higher pleasures" (the satisfaction of our higher needs) and "lower pleasures" (the satisfaction of our lower needs) are continuous in some sense, that they are made of the same "stuff." Bentham did not want to distinguish higher and lower pleasures by some *a priori* moral evaluation, and nor do I. Rather, I am trying by degrees to explain to myself—and to the patient reader—how the notion of value in the moral sense arises from the machinery of value in the pleasure/satisfaction sense—from economics—and how it then enters into our understanding of the very "machinery," that is, of psychoeconomics.

Finally, one need not be an *absolutist* as a utilitarian. The calculation of benefits, happiness, pleasures—call them what you will—with due regard to their costs and to the fairness of their distribution, is not something that *precludes* reference to safeguards such as guaranteed

human rights, time-honored moral maxims, traditional virtues, or God-fearing obedience to the Ten Commandments. These are like landmarks to navigate by. Indeed, "practicing utilitarians," being themselves generally decent and honorable people raised in some ethico-religious tradition, take obedience to such basic rights and obligations as *givens*, as preconditional, historically if not logically, to the establishment of a civilization sufficiently civil to engage safely in utilitarian speculation in the first place. These maxims, virtues, and commandments are the moral buoys by which utilitarians navigate and check their progress. The persecution of scapegoats is no less morally repugnant to a utilitarian than to a devout Christian or Jew just because he, the utilitarian, is clear-eyed enough to see that the Greater Happiness can be served in this way. He is obliged, in fact, to *improve* upon the calculus until it supports his better judgement and is still a "calculus." After all, "love thy neighbor as thyself," and "do unto others as you would have them do unto you" are both utilitarian rules (and *exchange* rules to boot) which most "rule-utilitarians" and "act-utilitarians," as they are called, would happily support.³

Utilitarianism is an ongoing project. It is a project to which I am attempting to make four contributions:

- (1) an expanded understanding/definition of happiness as something derivable from the satisfaction of many needs, and not as some isolated/isolating emotion,
- (2) a calculus that begins in making the satisfaction of basic needs preconditional to the satisfaction of higher ones (and thus interferes with too simple a computation of the "total satisfaction" of an individual),
- (3) a calculus in which the happiness of others is also by degrees preconditional to one's own happiness, and this across the full range of needs (see Note 64 below), and
- (4) the beginnings of a way to understand happiness in its broadest evolutionary terms as *value*, as life's growing complexity-and-organization in all circles, but reflected in this one, our human world.

One of the frequent critiques of Bentham, and of utilitarianism in general, is its "egoism." To wit: while *I* might willingly endure sadness $\Delta S(X) < 0$ to secure a greater happiness $\Delta S(Y) \gg 0$ for myself later on, is it ever right for anyone else to decide that the sadness *X* had by person *A* is justified by the happiness *Y* had by person *B* just because the sum $\Delta S(X)_A + \Delta S(Y)_B$ happens to be positive? Most people would say no: no one should have to suffer involuntarily for someone else's happiness, and it was to Pareto's credit to re-establish the principle that the "greater happiness of the greater number" be achieved only with *unhappiness*,

or sadness, to *none* (as Bentham himself actually often put it).

Our formula for S can deliver a similar message if we allow *other* individuals' satisfactions to count towards, or to precondition, our own satisfactions (and this for not purely altruistic reasons either, since, as we have mentioned, the continued functioning of the psychoeconomy depends on the happiness generated in all exchange partners). In other words, in the expression for S , each Satisfaction level, S_{N_L} , might become

$$1/M \sum_{j=1}^M (S_{N_L})_j \text{ where } M \text{ is the number of people in one's circle of concern,}$$

or, more stringently,

$$\left[\prod_{j=1}^M (S_{N_L})_j \right]^{1/M}$$

In this second formula, the failure of a *single* member of the community within one's circle of concern to achieve sufficient satisfaction of the need beneath the need one is aspiring to satisfy for oneself, is enough to scuttle one's efforts. The use of this more stringent, multiplicative equation would preclude the organized sacrifice of a single individual, as scapegoat, to benefit the good of the whole, no matter how great that good, and thus help defeat one of the usual criticisms of utilitarianism, namely, that it must favor arrangements wherein the unhappiness of minorities can serve the "greater" happiness of the whole.

More elaborately yet, we can redeploy the form of the expression for S so that it consists of the *total* satisfaction levels of successively more remote individuals in our circles of concern, as well as one's own.

Finally, let us note that these equations have no moral force of their own. They simply describe—or rather, attempt to transcribe—what we might think of as "good" by way of social principles and actions. In order for them to be anything more than this, we would have to develop a mathematical/computational model of human interaction in groups and show that *this* way of computing common benefit, *that* way of assessing other's happiness with ours, and so forth, did indeed lead to the "greater" good, defined in thus and thus a way. Why do I insist on setting "greater" in quotation marks? Because it is not clear that the "great" happiness of a single individual is not "greater" than the mild happiness of, say a dozen people (or vice versa), or that individuals are not dependent on one another for what happiness they get at all, that is, dependent on the very situation which makes *one of them* extraordinarily happy. Think of a child's birthday party, or an awards ceremony. These are not insurmountable difficulties for neo-utilitarian

theory; they are invitations to watch a more complex dance of variables.

With the postulation of an internal token economy that models itself on the outer token economy in Chapter Four (p...), utilitarians and virtue ethicists can meet on neutral ground. First, how do these two camps differ?

Virtue ethicists want to say that human actions are *not* directed towards maximizing pleasure, happiness, or satisfaction, as utilitarians claim they are, but are directed, rather, towards achieving some idealness of character, of *being* virtuous. People want to *measure up* and not just get ahead or have fun. To be sure, virtue ethicists concede, we feel happy when we *do* "measure up" and unhappy when we do not, but this is putting the cart before the horse. Happiness is not the *aim* of being of good character, although it might be a by-product. Happiness can be obtained far more easily than through virtuousness, the pursuit of which is apt to involve self-denial and therefore periods—and perhaps indefinitely long periods—of unhappiness.⁴ Being of good character is an end in itself. Virtue ethicists take utilitarians to be simplifiers of life, interested only in the pleasurable of outcomes regardless of their effects upon the qualities of people themselves.

Now, to such arguments, thoughtful utilitarians reply that happiness is no simple or crude emotion achievable at any moment by eating ice cream cone or getting tickled. As we have seen Bentham was well aware that happiness is always happiness-about-*x*, and is therefore a feeling with quite specific coloration and not a few grey clouds nearby having to do with long term consequences, consistency of beliefs, and so on. Happiness-at-successfully-exemplifying-a-virtue—say, courage, or kindness, or thrift...—is *that-kind-of-happiness*, but happiness, we would say: life enhanced, lengthened, enriched. Knowing oneself to be ethical gives satisfaction too, even though, or perhaps because, one has suffered to some degree in order to feel it. Why begrudge this satisfaction legitimate motivational power? One can also be happy for others. And so on.

For a utilitarian, to assert that "people seek happiness" is a powerful generalization about what people want and do, and is not intended as a slur upon people, or their character, or the importance of character per se.

Utilitarians would also say that it is incumbent upon the virtue ethicist to explain where "virtues" come from, how they are internalized as standards worth being measured up to, and why they are maintained over decades and centuries. I suggest that the process is best described by the modeling relationship between the internal and external token economies. In particular we should look to traffic in *legitimacy* tokens. Virtues (and "values," in the plural) are ideals that

are culturally evolved. They are memes. They are patterns of behavior that have become prerequisite to being granted legitimacy in certain society, important because without them that society would not function. Merchants need to be *honest*, soldiers need to be *brave*, mothers need to be *kind*, for *all* our sakes. Individually, we are virtuous in order to earn legitimacy tokens (and in the case of the minor virtues, like friendliness, approval tokens). We are virtuous also so that we can earn the right—have the authority—to offer and withhold legitimacy tokens to and from others. When this economy is modelled internally so that we reward and punish, legitimate and de-legitimate *ourselves* for meeting or not meeting standards of virtue, all that has happened is that the locus of control has shifted from the outer to inner economy.

Or rather, has apparently shifted. For consider: trade in tokens of legitimacy in the external economy is especially important for establishing and maintaining social order. This goes almost without saying. Then consider how much more *efficient* it is if people will control themselves, will strive without being goaded, will feel guilt without needing to be shamed, and so forth. To say that people strive to be (and feel) virtuous is only to say that they have successfully modelled the outer economy; it is to say that they have each become like holograms of the whole and will, therefore, in acting "self"-interestedly, act naturally in the interests of the whole.⁵ Programmed, we feel autonomous.

And as for the political consequences of being a virtue ethicist or a utilitarian (and here the virtue ethicists like to claim the higher moral ground), we should note that snobs and fascists have as much reason to be attracted to character-based, virtue-ethical approaches to valuation as liberals do. Aristocrats and would-be aristocrats, sure of their own characterological superiority, are naturally attracted to education in the(ir) virtues, especially in those virtues that the disadvantaged-by -birth will find nigh-impossible to exemplify. The bourgeoisie have their favorite virtues too, as do the working classes. If we discount universal needs, if we scorn timeliness and independence in the judgment of usefulness and pleasure, if we look down upon our co-dependence in real trade, then deciding *which* virtues to promote and *which* behaviors will count as exemplifying them, becomes a serious matter indeed.⁶

If these are the dangers of building a social order that depends entirely upon training in traits considered virtuous, it does not follow that a society built entirely on utilitarian, free-trade principles and personal mercuriality would not also be an unpleasant and even dangerous one. It might well be.

But there is no need for utilitarians and virtue ethicists to fight on this score. They need each other's views to be true. And they agree, anyway, as to what would be best, namely, *happy people of good character everywhere*. Free, self-interested, happiness-seeking trade in goods

and tokens is essential to the formation of good character, i.e. virtue. Symmetrically, being of good character—e.g. trustworthy, enterprising, tolerant...—is essential to the successful carrying on of free, self-interested, happiness-seeking trade. Let each side claim that they are the end rather than the means, or vice versa. Does it matter to the increase of life's complexity-and-organization which comes first? I suggest not.⁷

¹ John Rawls' *A Theory of Justice* (Cambridge:: Harvard University Press, 1971)

² As provided by, for example, Nicholas Rescher's *Distributive Justice* (New York: Bobs-Merrill, 1966).

³ See J. J. C. Smart, "An Outline of a System of Utilitarian Ethics" in J. J. C. Smart and Bernard Williams, *Utilitarianism: For and Against* (Cambridge, U.K.: Cambridge University Press, 1993 [1963]), 49--53).

⁴ "Virtue ethics" is a noble theory, in case you were wondering. See Note 42 of Chapter Four.

⁵ For further remarks about virtue see Note 25 of Chapter Four, and about virtue as an issue in the locus of social control, see Note 33 of the same chapter.

⁶ Another problem with virtue ethics is the sheer *number* of virtues one ought to exemplify. Here is an incomplete list of them (gathered over a few months of reading on the topic and many years of writing letters of recommendation), divided into two groups, (1) "eternal" virtues, i.e. ones that always seem called-for and at least possible in theory to exemplify all at once, and (2) "circumstantial" virtues, i.e. ones whose value depends on circumstances.

The latter appear in pairs of near-opposites, either side of which could be valued positively at a given time. The virtues below are listed in no particular order within each category. As with "values," in real life "virtue conflicts" abound, both within and between categories. I admit to a Western, Judeo-Christian bias throughout:

Eternal virtues: temperance, moderation, patience, forbearance, forgiveness, hope, faith, optimism; kindness, hospitality, charity; lovingness, piety, compassion, nobility; wisdom, understanding, knowledgeability; creativity, resourcefulness, skill, vigor; fairness, honesty, courage, discretion; creativity, mindfulness, perspicacity, attentiveness, open-mindedness; scrupulousness, cleanliness, health...

Circumstantial virtues: Caution-daring; generosity-thrift; insistence-acceptance, persistence-tractability, commitment-renouncement, loyalty-autonomy; reverence-irreverence, obedience-rebellion, cooperativeness-competitiveness, humility-pride, propriety-effrontery, patience-alacrity, energy-restraint; justness-mercifulness; realism-idealism, skepticism-trust/belief; chastity-profligacy/fecundity; tolerance-strictness, firmness-flexibility, seriousness-playfulness, predictability-unpredictability; industry/zeal/ambition-relaxedness/equanimity/detachment; friendliness-alooftness; "earthiness"-gentility, "colorfulness"-elegance; forcefulness-gentleness, intensity-mildness; formality-casualness; passion(ateness)-reason(ableness), abstinence-epicureanism, plainness-sophistication, instinctiveness-studiousness, simplicity-complexity, plainness-fanciness; sincerity-diplomacy, bluntness(honesty)-tact, directness-indirectness; outspokenness-taciturnity...

See also my article, "Class Notes" in *Harvard Design Magazine*, Summer 2000, 5–9.

⁷ For a provocative discussion of the virtues in relation to interpretations of human economic behavior, see Dierdre McCloskey, *The Vices of Economists; The Virtues of the Bourgeoisie* (Michigan: University of Michigan Press, 1997).
