Incommensurability (and Incomparability)

Ruth Chang

When two items are incommensurable, they "lack a common measure." There are, however, many ways in which two items can be said to lack a common measure and, correspondingly, philosophers have used the term "incommensurable" to cover a jumble of loosely related ideas.

These ideas divide into two clusters. The first cluster, relatively underdeveloped, matters mostly in epistemology and the philosophy of science. Thomas Kuhn (1977), Paul Feyerabend (1978), and their followers suggest that different theories of the natural world often presuppose "incommensurable" conceptual schemes and thereby represent "scientific paradigms" that can only be properly understood or justified within their own presupposed conceptual framework. For example, while both Aristotle and modern-day physicists offer theories explaining the behavior of objects like rocks, trees, and pitchers of wine, Aristotelian physics explains why a rock rolls down a hill in terms of the telos or purpose of its matter, and contemporary Newtonian mechanics explains the rock's behavior in terms of gravitational force (see ARISTOTLE). Given that each theory has its own "incommensurable" conceptual presuppositions, neither theory can be understood or evaluated by the other. Exactly what it is for two conceptual schemes to be "incommensurable" remains somewhat obscure, but the basic idea seems to be that they "lack a common measure" in the sense of not having a sufficient overlap in concepts. Incommensurability among conceptual schemes, in turn, is thought to support a form of relativism about the given domain (see RELATIVISM, MORAL), though this is controversial.

The second cluster of ideas matters mostly in value theory, normative theory, and the philosophy of practical reason (*see* NORMATIVITY; REASONS; RATIONALITY; PRACTICAL REASONING). These are the ideas that will be the focus of this essay.

There are *six* central – and distinct – ideas in this second cluster. Given that the term "incommensurability" is multiply ambiguous, this essay not only describes the six main ways in which the term has been used, but also recommends a particular way in which it is most sensibly used. Five of these uses concern a relation among abstract values and are discussed under the heading "the incommensurability of values." The fifth use, it is proposed, is the proper use of the term. "Incommensurability," then, most appropriately applies to abstract values, and the incommensurability between *bearers* of value should be understood derivatively, in terms of the incommensurability between the values they bear. The sixth use, arguably the most significant, covers an idea that is better known as "incomparability" and most naturally applies not to abstract values but to bearers of them. Although some philosophers treat "incommensurability" as synonymous with "incomparability," "incomparability" already has a firmly

The International Encyclopedia of Ethics. Edited by Hugh LaFollette, print pages 2591–2604. © 2013 Blackwell Publishing Ltd. Published 2013 by Blackwell Publishing Ltd. DOI: 10.1002/9781444367072.wbjee030

established use, which is not synonymous with "incommensurability," and it is generally unwise to duplicate multisyllabic terms of art. On the recommended terminology, "incommensurability" is one thing and "incomparability" another.

History

"Incommensurability" was first used by the Pythagoreans, to describe the relation between the lengths of a side of a unit square and its diagonal. (We don't know the ancient Greek word first used to denote the idea, but it was likely either alogos or arrhētos, both of which are often translated as "inexpressible" or, in mathematics, "irrational.") The Pythagoreans noted that the length of a side of a unit square could be measured by the integer 1, while the length of its diagonal could not be represented by the ratio of integers but was instead given by the square root of 2. The thought that these two lengths could not be measured by a single scale of integers was of scandalous significance for the Pythagoreans because, as one commentator put it, "[the discovery] destroyed with one stroke the belief that everything could be expressed in integers, on which the whole Pythagorean philosophy up to then had been based" (Fritz 1970: 407). Its discovery was credited to the mathematician Hippasus of Metapontum, who, as legend has it, was drowned by the gods - or, some say, by his fellow Pythagoreans - for making public his finding. Of course, today we know that, while rational and irrational numbers cannot both be measured by integers, they can be put in a single scale of real numbers. Thus the supposed first instance of incommensurability was not itself a true instance of items that lacked any common scale of measurement.

After the Pythagoreans, Aristotle referred to *values* as "incommensurable" if they lacked a common unit by which they could be measured (he used the adjective *asummetros*, by then the established term for "irrational" or "incommensurable" magnitudes in Euclidean mathematics). He suggested that some values were "so different" that they might not be measurable by a single unit of value, such as that given by money (*Nicomachean Ethics* [*NE*] 1133^b15–25). As we will suggest, it is this Aristotelian idea of the lack of a unit of measure of values, with roots in the Pythagorean discovery in mathematics, that is properly referred to as "the incommensurability of values."

The Incommensurability of Values

There are five main ideas that philosophers have discussed under the label "the incommensurability of values."

Incompatibility

One of the first contemporary uses of "incommensurability" was mooted by Isaiah Berlin, who applied the term to abstract values that were incompatible, that is, could not be, together, fully realized in the world (1969: 49–50, 53–4). Berlin suggested that fundamental values such as happiness and knowledge, or justice and mercy,

were "incommensurable" in the sense that the achievement of one value could be had only at the cost of the loss of another. Knowing that one's spouse has been unfaithful can come at a great cost to one's happiness, and justice might require that a criminal be punished when mercy counsels forgiveness. This incompatibility among values showed, Berlin thought, that political ideologies that are focused around a single fundamental value were bound to sacrifice realization of other fundamental values if their single aim was to be achieved. Modern-day liberal political theory can be seen to derive some of its motivation from this conviction that not all fundamental values can be fully realized together; the correct political theory, then, has as its aim some balance or function of all fundamental values.

Pluralism

Sometimes two abstract values are said to be "incommensurable" if they can't be "reduced" to any single value (*see* VALUE PLURALISM). One value reduces to another if there is nothing more to having the one than having the other. For example, the beauty in a painting reduces to pleasure if there is nothing more to the painting's being beautiful than its providing pleasure to those who view it. If beauty and pleasure are incommensurable in this sense, they do not reduce to any single value; there is no "supervalue" of which both beauty and pleasure are aspects or instances. Both Bentham's hedonistic utilitarianism, which holds that all values are quantities of the supervalue pleasure, and Mill's eudaimonistic utilitarianism, which holds that all values are qualities or quantities of the supervalue happiness, deny that any values are incommensurable in this sense (*see* BENTHAM, JEREMY; MILL, JOHN STUART; EUDAIMONISM; UTILITARIANISM; WELL-BEING).

Some philosophers have argued that, if all values reduce to a single supervalue – if value monism is correct – then conflicts between values are only apparent, since a choice between two values is ultimately a choice between amounts or instances of the single supervalue (*see* HIGHEST GOOD). Other philosophers have argued that even a single value, such as pleasure, can have irreducibly distinct aspects, and so there can be genuine conflict between, say, the sharp rush of pleasure in hearing some welcome news and the long, languorous pleasure of spending an afternoon on the beach (Stocker 1990). If this is right, then value monism – complete "commensurability" of value – is compatible with *akrasia* ("weakness of will") and with rational regret over a forgone lesser good (Stocker 1990: 230; Hurka 1996; *see* WEAKNESS OF WILL). Most philosophers find value monism implausible, and in any case the debate between monism and pluralism plausibly turns on the prior issue of how values are to be individuated – a matter on which philosophers have made little progress.

Trumping/discontinuity/threshold lexical superiority

Some philosophers have claimed that two abstract values are "incommensurable" if any instance of the one value is always as good as, or better than, any instance of the other. This phenomenon is also sometimes called "trumping" (Dworkin 1977: xi; see RIGHTS). The abstract value of having the use of one's limbs, for example, might be

in this sense incommensurable with the value of eating chocolate: no instance of eating chocolate, however great, could ever equal or outrank any instance of the value of having the use of one's limbs, even if it's just the use of one's pinky finger (Tribe 1972).

Sometimes "incommensurability" is used for a variation on trumping, which is also called "discontinuity" or "threshold lexical superiority." Two values are discontinuous if there is some threshold amount of one value that trumps any amount of the other value (Griffin 1986: 85). The value of having the use of one's limbs would be discontinuous with the value of eating chocolate if there is some threshold of the value of the use of one's limbs – perhaps the use of one's large toe – above which no amount of chocolate-eating could outrank it, but below which some very large amount of chocolate-eating would outrank it. Some philosophers suggest that there is only discontinuity, but no trumping, among values (Griffin 1986: 85).

Trumping and discontinuity offer a way to characterize deontological ethical theories. The most extreme forms of deontology maintain that duties trump utility – one's duties not to lie, cheat, or steal always outweigh the utility of doing so, however great the latter may be. Moderate forms of deontology recognize discontinuities between duties and utility; duties trump utility up to a lower threshold; but if the utility is sufficiently great – if, for example, it consists in preventing global nuclear holocaust – then utility can outweigh doing one's duty (see DEONTOLOGY).

Nonsubstitutability/noncompensability

When one value is sacrificed, sometimes its loss can be made up by gain in another value. But when loss in one value cannot be compensated by gain in another, the values aren't substitutes for one another and are said to be "incommensurable" (e.g. Nagel 1979; Anderson 1997; Wiggins 1997; Stocker 1997; Lukes 1997; Sunstein 1997; Taylor 1982; D'Agostino 2003: 6, 42ff.).

Suppose you are offered a thrilling job in a city far away from your friends. If the value of challenging and exciting work is not substitutable with the value of intimate relationships with your friends, then, whichever option you choose, there will be a loss in value. In this way the nonsubstitutability of values can explain the possibility of genuine conflict, dilemmas, and tragic choices. Weakness of will also becomes explicable – one is attracted to the pleasant ease of watching television, which, although a lesser value, is not compensated by the greater value of a vigorous workout at the gym. Similarly, regret over a forgone lesser good becomes rational if the value one forgoes, although lower, cannot be substituted by the greater value (Wiggins 1987b: 258ff.; Williams 1973: 175).

Values are thought to be nonsubstitutable because some values have special "status" (Anderson 1993) or are "sacred" (Lukes 1997). The value of human life, for instance, is thought to have a special status, so that its loss cannot be compensated by economic gains. Moreover, the idea that some values cannot be substituted for

others underlies John Rawls' famous doctrine of the "separateness of persons." Rawls suggested that one person's hardship cannot be compensated by another person's benefit, and that failure to recognize this lies at the heart of what is wrong with consequentialism (see RAWLS, JOHN; CONSEQUENTIALISM).

Incommensurability

Perhaps the most frequently recurring idea that falls under the label "the incommensurability of values" is that values lack a common unit of measurement (Wiggins 1987a, 1987b, 1997; Stocker 1990: 175ff. and 1997; Chang 1997; Finnis 1980: 113ff., 1997; Stocker 1990, 1997; Sunstein 1997; D'Agostino 2003: 6, 35; cf. Richardson 1994: 104). Two values, such as pleasure and fairness, are incommensurable if there is no cardinal scale of value according to which both can be measured. This, it is urged, is the notion to which the term "incommensurability" properly refers.

A cardinal scale of value, such as that given by a thermometer for temperature or by a yardstick for length, allows the evaluative difference between items to be expressed in terms of a single common unit. The lack of a cardinal scale by which two values can be measured entails that there is no unit by which both values can be measured. Cardinal scales come in two main varieties. If the scale marks a meaningful zero of what it is measuring, then it gives the ratio differences between items on the scale and is called a ratio scale. If it doesn't mark a meaningful zero, then it gives only the interval differences between items on the scale and is called an interval scale. Fahrenheit and Celsius scales mark the interval difference between two temperatures but do not give a meaningful measure of the ratio of temperatures; thus the temperature of boiling water is 180°F greater than the temperature of ice, but 20°F is not twice as hot as 10°F. A yardstick, by contrast, measures lengths by a unit that also provides a meaningful measure of the ratio between lengths; a two-foot stick is both one foot longer than and twice as a long as a one-foot stick.

If there is no cardinal scale by which two values such as pleasure and fairness can be measured, there are no interval or ratio differences between these values. We cannot say that fairness is 20 units more valuable than pleasure, or that the particular fairness of progressive taxation is three times more valuable than the particular pleasure of eating blueberry pie à la mode.

The claim that values are incommensurable in this sense comes in weak and strong forms. Weak incommensurability claims that there is no single unit by which *all* values can be measured. That is, there is no single cardinal scale by which every value can be measured. Strong incommensurability goes further; not only is there no single unit by which *all* values can be measured, but, between *any two* particular values, there is no single unit by which they can be measured. (See Wiggins 1987b: 259; cf. Richardson 1994: 104–5.)

If there is no single unit by which all values can be measured, then it is a mistake to think that all goods can be valued by some common unit, such as dollars. Aristotle, who denied that money was a currency for all value, was perhaps the first proponent of weak incommensurability ($NE 1104^{b}50-5^{a}1$). Weak incommensurability

entails that cost-benefit analysis, long a mainstay of economic theory and governmental policy, cannot be an accurate method for evaluating goods or their relative merits. Thus a government deciding whether to regulate risk in the workplace by imposing health and safety standards cannot measure the value of the human lives saved against the monetary costs of new safety equipment. Nor can the value of a woman's right to control the use of her body be measured by the market value of spending nine months as a surrogate mother (see Sunstein 1997; Anderson 1993: 190–216; Radin 1987; see COST-BENEFIT ANALYSIS; LIFE, VALUE OF). In general, decisions about how to apportion costs and benefits, if they are to be based on accurate measures of the value of what is lost and what is gained, cannot be a matter of maximizing a single unit of value, since not all costs and benefits can be so measured. Somewhat surprisingly, Aristotle, a proponent of weak incommensurability, hinted that, although values are "incommensurable," using a stipulated unit of currency – such as dollars or fistfuls of salt – might serve to measure the value of goods in a way sufficient for "practical purposes" (NE 1133b15–25).

Weak incommensurability holds, philosophers suggest, because some values, such as human life and rights, have a special "status" or are "sacred," and thus they cannot be put on the same scale as "commodity" values like pleasure and economic efficiency (Anderson 1993: Chs. 7-9; Radin 1987; Lukes 1997). Indeed, if all values were ultimately commodity values measurable by a market price, then many of our most cherished and fundamental attitudes would require radical revision. For example, if the value of one's child can be measured by the same unit that measures the value of a beach vacation, then our attitudes toward the loss of value of each should be a matter of degree. Insofar as our practical attitudes are driven by the value of their objects, our attitudes toward our children should differ from our attitudes toward beach vacations only in quantity, not in quality. In this way, if all values could be measured by a single unit of value, our emotional lives would require "flattening" (Nussbaum 1990: 116-20; Anderson 1993). Kant was one of the first philosophers to insist upon a distinction between values with "dignity" and values with "price," only the latter of which admit of cardinal measure (see KANT, IMMANUEL). If Kant is right, then the proper valuation of goods requires a recognition that status goods cannot be measured by the same unit as commodity goods.

Weak incommensurability also entails that any theory that supposes that all values can be arrayed on a single cardinal scale of value, such as "utility," must be rejected. Traditional forms of both Benthamite and Millian utilitarianism are thought to involve this assumption; according to Bentham, we should maximize units of pleasure in terms of which all other values could be measured, and according to Mill, we should maximize units of happiness – given by informed preference – in terms of which all other values could be measured. Some philosophers have tried to yoke the denial of weak incommensurability to consequentialist theories in general (Finnis 1980: 113; Wiggins 1997; Stocker 1997). If there is no common unit by which values can be measured, then there is no rate of substitution between them and no general maximizing principle that can guide action. But, insofar as what constitutes the "best consequences" can vary from choice situation to choice situation, bringing

about the best consequences across choice situations need not presuppose a single unit by which all values can be measured.

While weak incommensurability makes a claim only about a single unit measuring all values, strong incommensurability makes the further claim that between any two values – or between any two instances of value – there is no single unit of measure. Accordingly, strong incommensurability has further significance for decisionmaking in particular choice situations. If, for example, the instances of two abstract values in a particular choice situation cannot be measured by a common unit, then it follows that they cannot be substituted for one another without remainder, and thus, no matter which alternative one chooses, some value will be lost. This is so even if, all things considered, one alternative is better than the other. By implying nonsubstitutability in each choice situation, strong incommensurability can help to explain the possibility of akrasia (Wiggins 1987b: 239; Stocker 1990: 230ff.), dilemmas, and tragic choices (Nussbaum 1990; Harris 2006; see DILEMMAS, MORAL), and rational regret and emotions in the face of value conflict (Stocker 1990, 1997). In response to the specter of strong incommensurability, some philosophers have suggested that agents have deliberative strategies at their disposal that either preclude strong incommensurability or ensure that they can reach an all-things-considered best choice in the face of it. These strategies include making the values at stake more specific (Richardson 1994), bringing to bear practical experience with the values (Millgram 1997), and viewing the values through the lens of the "shape" of one's life (Taylor 1997) - all strategies for arraying the values at stake in a way amenable to rational choice.

Incomparability

Now it is easy to think that, if the instances of two values in a particular choice situation cannot be measured cardinally, then they cannot be compared. This slide from the lack of a cardinal measure of two values or their instances to their incomparability helps to explain how the term "incommensurability" has sometimes come to signify incomparability.

The lack of a cardinal scale of measure, however, does not entail incomparability. Two values or instances of value can lack a common unit of measure; nevertheless, one might be better than the other in one of two ways. First, the values might be ordinally compared; though there is no unit that measures the difference between them, they can be ordinally ranked as first, second, third, and so on, as in a list of priority or importance. Second, one item might be better than the other, but the values of the items might be measurable only by an "imprecise," not a precise, unit. Thus, while we cannot say that one item is 20 units better than the other or twice as good, we can give an "imprecise" unit – perhaps a rough range of precise cardinal values – by which it is better. Derek Parfit has suggested that goods bearing similar values, such as two poets, can be cardinally compared more precisely than goods bearing different values, such as a poet and a historian. The cardinal measure of the values of a poet and a historian, then, will be more imprecise than the cardinal

measure of the value of two poets (Parfit 1986: 431; 2011). In any case, items measured by an imprecise unit may nevertheless be comparable.

But what is it for two items, be they values or bearers of value, to be incomparable? We can start with the idea of comparability. It has two central features. First, two items are comparable if there is some *positive* value relation according to which they can be ranked. Intuitively, a value relation is positive if it describes a way the world is rather than a way the world is not. "X is better than Y" ranks X above Y, while "X is not better than Y" doesn't give a ranking of X and Y – X may be worse than Y, or X and Y may be equally valuable, and so on. Traditionally it has been assumed that three positive value relations exhaust the conceptual space of comparability between items – "better than," "worse than," and "equally good." But some philosophers have thought that there is a fourth basic value relation that can hold between items: "parity," which becomes possible once we reject the assumption that evaluative comparisons are modeled on the relations among real numbers, which can only be greater, lesser, or equal to one another (Chang 2002).

Second, comparability always proceeds with respect to an evaluative "covering consideration." X cannot be better than Y, full stop, but it can be better than Y only with respect to, say, well-being, or beauty, or morality, or making one's mother happy. Just as it makes no sense to say that one stick is greater than another, full stop, it makes no sense to say that one item is better than another, full stop. Thus one stick can be greater than another with respect to length but not to mass, and one item can be better than another with respect to beauty but not to morality. Comparability is a three-place relation: X is comparable with Y with respect to V, where V is a covering consideration (Chang 1997). When X is better than Y, all things considered, there is some set of values that are the things considered.

Incomparability is the negative of comparability. As such, incomparability is also a three-place relation: two items cannot be incomparable, full stop, but they can be incomparable only with respect to a covering consideration. If two items are incomparable with respect to V, there is no positive value relation that holds between them with respect to V. Just as it makes no sense to say that two items are comparable, full stop, it makes no sense to say that two items are incomparable, full stop. Two paintings may be incomparable with respect to beauty but comparable with respect to market value; two careers may be incomparable with respect to well-being but comparable with respect to economic security; and two lives may be incomparable with respect to happiness but comparable with respect to accomplishment. And so on. Similarly, if *values* are incomparable, they must be incomparable with respect to some evaluative consideration. Two values cannot be incomparable, full stop, but must be comparable with respect to some evaluative covering consideration.

That incomparability – whether between values or between bearers of value – must proceed with respect to a covering consideration is sometimes ignored. There are two explanations for this. First, it is easy to conflate incomparability with what some philosophers have called "noncomparability." Two items are noncomparable when the formal conditions required for there to be a claim of comparability or incomparability are not met. One of these conditions is that there be a covering

consideration that "covers" at least one of the items being compared – a consideration with respect to which the comparison either succeeds, in which case we have comparability, or fails, in which case we have incomparability. So, for example, the number "four" is *non*comparable – not *in*comparable – with dreams with respect to tastiness: neither the number "four" nor dreams have a taste, and thus comparing them with respect to tastiness can neither succeed nor fail. The failure of a covering consideration to "cover" items can easily morph into a failure of items to be covered by any consideration (Chang 1997).

Second, some philosophers think that, if there is a covering consideration with respect to which a comparison proceeds, it need only be given by a bare covering concept, such as value or goodness, and not by a substantive value that is common to the items being compared (Griffin 1997: 35-8; Wiggins 1987b; Richardson 1994; Raz 1986). According to these philosophers, values stand in normative relations to one another in the abstract, as it were, and not relatively to any substantive consideration. So, for example, the value of human life is greater than the value of delicious dessert with respect to "value," and accomplishment is more important than pleasure with respect to "prudential value," where both "value" and "prudential value" are not themselves values, but mere names for particular groupings of considerations. It is as if the heavens contain various books with abstract values listed in order of importance. The biggest book, entitled "Value," contains a ranked list of all the abstract values there are; another, slimmer volume, called "Prudence," contains a ranked list of all the values that make a life go well; still another, called "Aesthetics," contains an ordering of values having to do with beauty. And in the fine print of each book is a rank order of particular instances of these values. If values and their instances are ranked in the abstract in this way, there need be no covering value in terms of which one value or its instance is better than another; it just is better, full stop.

There is good reason, however, to think that values do not rank themselves in the abstract but are rather ranked by substantive covering values. Take, for instance, the prudential values of accomplishment and pleasure. It might look as if accomplishment is more important than pleasure, full stop; but whether this is so depends on one's substantive conception of what makes a life go well. If one's conception of the good life is sybaritic, then pleasure may seem generally more important in the abstract than accomplishment. Or consider the value of human life and gustatory pleasure. Surely human life is simply better than the pleasure of a good meal! But even this thought relies on certain substantive conceptions of value. In the most concrete cases we can imagine where one has to choose between human life and gustatory pleasure, the former outranks the latter. But not in all cases. An emergency-room doctor can efficiently spend 20 hours a day saving lives instead of only 16. If she spends only 16 hours at work and chooses to spend precious hours during which she could be saving lives having fine meals instead, she has not measured the values at stake incorrectly. This is because what matters in the concrete choice situations that make up a lived life are different substantive values, which, together, recommend the pursuit of a balance of values. Sometimes what matters in a concrete choice situation will make the value of getting a good meal more important than the value of human life.

If this is right, then values and their instances don't rank themselves but are ranked by substantive values that matter in the choice between them. The appearance of an abstract ranking of values, then, can be explained by the fact that, in most cases and for most substantive values, one value will matter more than another. Thus the covering consideration with respect to which both comparability and incomparability proceed is a substantive value (Chang 2004).

Why is incomparability important? Some philosophers have argued that incomparability is important because it is constitutive of certain values. So, for example, it is constitutive of the value of friendship that friendships cannot be compared with money (Anderson 1993, 1997; Raz 1986: 345–57). But others have argued that such putative cases of "constitutive incomparability" are better understood as cases of discontinuity or "threshold lexical superiority" – it is at best constitutive of friendship that one would not trade a friendship for money up to a certain threshold, but if one could buy friendship for money, one would trade money for friendship. Since incomparability is a symmetrical relation and the relation between friendship and money seems asymmetrical, cases of constitutive incomparability are in fact cases of what might be called "emphatic comparability" (Chang 2001).

The main significance of incomparability is that it threatens the possibility of rational choice. If two alternatives for choice are incomparable with respect to the values that matter in the choice between them, then, it is widely believed, there can be no rationally justified choice between them. Suppose you must choose between becoming a lawyer and becoming a doctor. Suppose, too, that what matters in the choice you'll make is having a sense of accomplishment, good relationships with one's children, financial security, and so on. If the careers are incomparable with respect to these values, then it seems that there can be no reason for your choosing the one career that justifies choosing it over the other career. As some have put it, you can only engage in unreasoned "existential plumping" for one alternative over the other (*see* SARTRE, JEAN-PAUL). Some philosophers have noted that incomparability can be the source of "value pumps" (Chang 1997: 11; Broome 2000: 33–4), while others have suggested that incomparability gives rise to dilemmas and tragic choices (Sinnott-Armstrong 1988; Harris 2006).

Some philosophers have thought that incomparability is so widespread that it infects everything – from our most mundane choices, such as how to wear one's hair or what to have for breakfast, to our most profound ones, such as which career to pursue, with whom to make a home, and what kind of life to lead. Other philosophers, and most economists and decision theorists, think that there is no incomparability at all or that, if there is, it is of relatively limited scope and philosophical significance.

Those who think that incomparability is relatively rare tend to suggest that putative cases of incomparability are in fact cases of a rather different phenomenon. They have offered four grounds for this view. First is the idea that cases of incomparability are really cases in which one of the items is better than, or as

good as, the other (Regan 1997). Thus items are always comparable through one of the three traditional relations "better than," "worse than," and "equally good," but it is sometimes hard to know which. Second is the idea that cases of incomparability are really cases of imprecise cardinal comparisons (Parfit 1986: 431ff.). This idea turns on supposing that comparability is a matter of precise cardinal comparison. Third is the idea that items are related by a fourth positive value relation beyond the usual trichotomy of "better than," "worse than," and "equally good." Perhaps, when items are neither better than each other nor equally good with respect to some V, they are not incomparable with respect to V but rather on a par (Chang 2002). Fourth is the idea that items thought to be incomparable are really indeterminately comparable, that is, it is neither true nor false that they stand in a positive value relation. Sometimes this idea is (misleadingly) called "rough comparability" (Griffin 1986: 80-1, 96) or "vagueness" in comparison (Broome 1997). A general view of value that might explain the last three phenomena is that values are not determinate quantities but are metaphysically indeterminate or "lumpy" (Chang 2002: 143-5; Hsieh 2005).

Arguably, incomparability (and not incommensurability) is the philosophically more significant phenomenon, but research continues to be active in both areas. In this way what began as a technical term of art, "incommensurability," employed to cover a range of loosely related ideas, has led to two distinct research programs: one concerning what is properly called "incommensurability," or the lack of a cardinal unit by which values can be measured; and the other concerning "incomparability," or the failure of items to be ranked relatively to a covering value.

See also: Aristotle; Bentham, Jeremy; Consequentialism; Cost—Benefit Analysis; Deontology; Dilemmas, Moral; Eudaimonism; Highest Good; Hume, David; Kant, Immanuel; Life, Value of; Mill, John Stuart; Normativity; Practical Reasoning; Rationality; Rawls, John; Reasons; Relativism, Moral; Rights; Sartre, Jean-Paul; Utilitarianism; Value Pluralism; Weakness of Will; Well-Being

ACKNOWLEDGMENT

I am grateful to Alan Code for information concerning the ancient Greek terms mentioned in this essay.

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