SOCIAL SCIENCE AS SCIENCE: WAY OF LIFE THEORY[1]

Mike Pepperday

Abstract. What are the theoretically possible ways for people to live socially? What coherent moralities and what social arrangements are available? Applying the hypothetico-deductive approach of the natural sciences to value preferences reveals the inherent structure of social relations, resolving social science's biggest question: the connection between the individual and society.

Way of life theory (WOLT) finds four moralities connected via three "dimensions" which contain all matters which need to be regulated in order to live socially. WOLT relates every rational, social value to every other rational, social value in a strict, falsifiable theory. Only conventional scientific procedures of hypothesis, deduction, logic, and idealisation are employed.

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1. Introduction—the problem

Physics has its laws relating matter and energy, biology has its systems of cooperating organs, ecology has its interactions between species and environments. What are the parts of society and how do they fit together?

In view of the efficacy of natural science (physics, geology, medicine, etc) thinkers have long advocated the use of scientific methods in social science.

[1] I am indebted to Angus Algie for his comments on several drafts of this paper. Many clarifications and other improvements resulted.

Auguste Comte (1896 [1853]: 455) called for a "physics" of society: "there is no chance of order and agreement but in subjecting social phenomena, like all others, to invariable natural laws."

After a century of intense academic effort, no social laws have been found. With the exception of economics, and perhaps of linguistics and jurisprudence, the social sciences have failed to build a body of theory.

Numerous scholars have lamented the lack of any theory systematising values and culture. Political scientist C Wright Mills (1963 [1939]: 424): "A theory of mind is needed which conceives social factors as intrinsic to mentality." Psychologist Floyd Allport (1962: 7) called this "the 'master problem' of social psychology." Pioneer values researcher Milton Rokeach (1973: 168) wanted "to envision the kinds of ideological orientations that are theoretically possible in the future or even in some unknown social system on some other planet." Anthropologist Mary Douglas (1982 [1978]: 183) complained that "Culture is a blank space, a highly respected, empty pigeonhole ... a reproach to anthropology."

Some assert the science approach does not suit social science, some deride the quest as "physics envy" and some call it hopeless. Professor at The New School, Simon Critchley (2015): "There is a gap between nature and society. The mistake, for which scientism is the name, is the belief that this gap can or should be filled." Oxford sociology professor, Bent Flyvbjerg (2005: 38) is adamant: "The natural-science approach simply does not work in the social sciences. No predictive theories have been arrived at in social science, despite centuries of trying. This approach is a wasteful dead-end." Philosopher Charles Taylor (1971: 48) says bluntly: "a valid science of man [is] impossible."

Way of life theory (WOLT) does apply the "natural-science approach" to identify the parts of society and their interrelationships, and it does arrive at a predictive theory. Let us assume that society is part of nature and see where traditional natural-science theorising leads.

2. Values hypotheses and their social consequences

2.1. The usual science procedure is to *hypothesise* a relationship between two or more theoretical concepts and *deduce* its consequences. Reality can then be examined to see if the consequences are confirmed or refuted. For example, Newton's gravity theory interrelates two masses and their distance apart (F=m1.m2/d/d). From it, orbit positions can be deduced which can be compared with actual orbits of heavenly bodies.

To apply this "hypothetico-deductive" approach to society, let us hypothesise a relationship between *competition* and *cooperation*. These two

concepts seem to exist and seem important. As we will later see, choice of concepts is not critical.

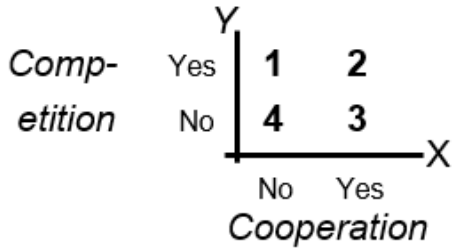
To interrelate concepts requires measurement of them. If we had measurement units, we could show the relationship as a graph. We could plot the number of kilograms of competition on the Y axis against the litres of cooperation on the X axis.

Measurement units are not natural; they are man-made and must be agreed. Since we have no agreed units—here or anywhere in social studies—let us agree on the dichotomous measure of *presence versus absence*. That is, competition and cooperation are either there or they are not there. Adopting such extremes may seem simplistic but we have no alternative. Economics theory also employs this tactic.

This all-or-nothing "measurement" reduces the Y and X axes to a single interval and the graph becomes a table showing the four possible combinations, numbered 1 to 4 in Table 1. In philosophical logic these are known as the four "truth values" and are expressed as: **1:** Y not X; **2:** Y and X; **3:** X not Y; **4:** not Y not X.

In effect, we have four hypotheses. What consequences might we deduce from them?

Table 1. Views of competition and cooperation on Y and X



2.2. The only place competition and cooperation exist in an objective sense is as thoughts, as patterns of neurons firing in brains. Let, then, four theoretical people take these four extreme positions. The Type 1 person accepts competition and rejects cooperation; Type 2 says yes to both; Type 3 accepts cooperation and rejects competition; the Type 4 rejects both.

Everyone is included and no one is counted twice. That is, everyone with a view. To cover all theoretical possibilities let us allow for a Type 5 who has no view of competition and cooperation. This person must be non-social—a hermit.

Assuming these four theoretical persons think logically and consistently, what sort of society would each type prefer?

The **Type 1**, who wants people to compete but not cooperate, must fear cooperation will undermine or interfere with competition. Cooperation must be some sort of crafty coercion such as favouritism or collusion for competitive advantage. To compete and not cooperate, individuals must interact warily, negotiating one-on-one, competing for advantage.

The **Type 2**, who accepts both competition and cooperation, must reconcile significant contradictions. This will require rules setting out when to compete and when to cooperate. Rules must be enforced which requires a command structure, so society needs to be hierarchical, where people compete with those of the same rank, cooperate with superiors and coerce subordinates.

The **Type 3**, who wants cooperation and rejects competition, must fear the latter will undermine the former, must be objecting to the struggle, worried the consequent inequalities would give rise to a coercive, dog-eat-dog society. Type 3s must want everyone equal, where people harmoniously cooperate with each other.

The **Type 4**, who rejects both competition and cooperation must see them as pointless or dangerous. This would restrict social relations to the random or the coercive. Type 4s must feel delivered up to a capricious world.

Those are some consequences of the four relationships between extreme views of *competition* and *cooperation*. From individual preferences for two presumed values, we have deduced four mindsets and four preferred social structures—four moral positions. A possible **Type 5** who has no preferences regarding competition or cooperation must be non-social and we cannot infer a moral stance.

2.3. I contend that the consequences deduced in §2.2—the four types of mindset and social structure—are unambiguous. Any ordinary understanding of *competition* and *cooperation* deductively yields those four types of person and no others. That is, the deductions are genuine: they are not possibilities and not probabilities but theoretical inevitabilities. Many more consequences may be deduced but, unless extra assumptions are made, no deduction will contradict the five WOLT types.

The unambiguousness relies on the contrast between the two concepts which renders their inherent vagueness immaterial. Had the two been similar or had they been unrelated, unequivocal deduction would have been difficult.

2.4. Philosopher Alfred Schütz (1963: 246) thought that, “The most serious question which the methodology of the social sciences has to answer is: How is it possible to form objective concepts and objectively verifiable theory of subjective meaning-structures?” The answer, evidently, is to use the methodology of the *natural* sciences. Here, the standard scientific approach has produced, in a few short paragraphs, an objective theory of subjective views.

Clifford Geertz (1964: 47) tells us that Karl Mannheim sought in vain to derive a "non-evaluative conception of ideology." The hypothetico-deductive method used above imposes no evaluation on the four (or five) conceptions of ideology derived by it.

The connection between individual and society is social science's greatest mystery. Evidently, elementary deduction solves it—at least regarding *competition* and *cooperation*. This is the beginning of *Way of life theory*. No induction was applied, no authority was called on (those quoted are either wrong or puzzled), and no other bias played a role.

3. Real-world correspondences

3.1. WOLT is purely theoretical. Using the natural-science theoretical approach ensured that reality played no role. Can it, like natural-science theories, be applied to reality? Do the five theoretical WOLT types correspond to real people or real organisations?

If concerns for *competition* and *cooperation* exist and must be dealt with in order to live socially then, to the extent real people think in extremes, the five types must exist: mistrustful, **individualist 1s** who want to negotiate with each other, competing to win; measured, **hierarchist 2s** who value propriety and require a rule-bound command structure; trusting, **egalitarian 3s** who seek harmonious interaction among equals; spontaneous, **fatalist 4s** interacting without pattern in a world governed by luck and imposition; and the **autonomous Type 5** who is detached from social engagement.

Though theoretical, those descriptions seem lifelike and, indeed, approximate examples are plentiful. **Type 1**: Alexander the Great, Machiavelli, Locke, Dale Carnegie, Ayn Rand, Donald Trump, Richard Branson, Elon Musk, Adam Smith, Milton Friedman, Dirty Harry, Bart Simpson; **Type 2**: Confucius, Plato, Catholic church, Edmund Burke, Bismarck, Lee Kuan Yew, Kissinger, William F Buckley Jr, Sir Humphrey Appleby, Judge Dredd, Marge Simpson; **Type 3**: Jesus, Gandhi's salt march, the civil rights marches, feminism, Marxism, most political cartoonists, St Francis, Rousseau, Veblen, Chomsky, Keynes, Krugman, Atticus Finch, Lisa Simpson; **Type 4**: Lumpenproletariat, Chaplin's Tramp, Steptoe and Son, Jerry Springer's guests, Li'l Abner, Homer Simpson; **Type 5**: Taoism, some Buddhism, Diogenes, Lao-Tzi, Thoreau, Garbo, Howard Hughes, Whitman, Steppenwolf, Ignatius J Reilly.

Such naming of real people and organisations is not done in social science scholarship. Psychology, sociology, etc have many schemes setting out types of people (Appendices 4 and 5) but none ever gives real names in illustration. The WOLT types are purely hypothetical yet real examples are readily given.

3.2. The types are also recognisable at the social level, especially their difficulties with disruptions by unruly, illogical human beings. For example, the competitive **Type 1** way of life fights a never-ending battle with the menace of cooperation. Laws against it are passed, large firms are broken up and fined for price fixing, and personnel are arraigned for nepotism and bribery. **Type 2** discipline, honour, and information restriction, indispensable for armies and bureaucracy, struggles with gossip, intrigue, turf wars and mutiny, while its attempts to regulate sex generate prudery and bizarre practices. The **Type 3** requirement for harmony, and the impossibility of disciplinary action among equals, can lead to public confession of sins, charismatic leadership, cultism, and schism. The **Type 4** may find relief from uncertainty, mistrust, and short-termism at the bottom of a 2-ist hierarchy. Lashing out when blows outweigh windfalls will be ineffective and often self-destructive.

3.3. Values are not just individual: a chamber of commerce would have a Type 1 outlook, a Freemasons lodge would be 2-ist, a greens party 3-ist, and a rioting mob 4-ist. Such groups should be more true to the theoretical type than individuals since the common cause would smooth out the idiosyncrasies of their individual members.

In terms of political right and left in the world's democracies, the right consists of free-market 1-ism and traditionalist 2-ism, usually in an uneasy alliance, while 3-ism forms the left. The 4s are where others put them: right if populist, left if unionised.

4. Other contrasting value pairs

4.1. Apparently, hypothetico-deductive theorising makes connecting mentality and society easy: just take the four truth values from a pair of contrasting social concepts and deduce the preferred social relations of four theoretical persons adopting those positions. Here the contrasting pair was *competition* and *cooperation*. Would it matter if we used a different pair of social concepts? Logically, it cannot.

The theoretical person who is consistent cannot have a different preferred society for every different pair of contrasting values, so the four mindsets and social arrangements should always be the four found in §2.2. No matter which pair of contrasting social issues form the four truth values, the results (if the deductions are unambiguous) must be the same four (or five) WOLT types.

4.2. Consider the perceptions *human nature is bad* and *human nature is good*. This matters as people's perceptions influence their social behaviour. If you form the four truth values from these two positions (set them on Y and X axes as in Table 1), you will find *bad not good* yields the same competitive Type 1; *bad and good* turns out to be the rule-dependent Type 2, *good not bad*

is the forgiving Type 3 and from *not bad not good* you will logically derive the Type 4's capricious society. The deductions are set out in Appendix 1.

We probably all ask ourselves, "What should I do?" and "Who am I?" The questions reflect a distinction dating to the 1930s in sociology (Merton 1957: 110, Albrow 1970: 21) and reflect two aspects of self-identity psychologists call *role identity* and *social identity*. These refer to whether you see yourself as performing a role complementary to others' different roles, or whether you feel you belong to a group of similar people. The concepts are explained in Appendix 1 and the consequences from the truth values deduced. They are the same go-getter 1s, order-loving 2s, concord-seeking 3s, and delivered-up 4s.

4.3. Taking a pair of concepts and examining their four truth-values is fairly obvious and academics occasionally employ it to consider the four possibilities arising from two concepts. I know of eight who did it to derive what might be called social types (Merton 1938, Swanson 1969, Marriott 1976, Douglas 1970, 1978, Ouchi 1980, Knoke 1990, Triandis 1995, Bowles 1998). Each theorist's issue-pair is unique—none overlap with pairs mentioned here—and, apart from a couple of mistakes, all find the same four types (Appendix 4).

4.4. We begin to see how values fit together. For example, the theoretical Type 1 believes in competition and in bad human nature and feels a role identity; that is, a preference for competition *requires* a belief in bad human nature and *requires* a role identity. Similarly, to prefer cooperation requires a belief in good human nature and a social identity. There is no flexibility.

4.5. Competition, cooperation, human nature and self-identity are surely important but weightier social issues are justice, freedom, and equality. These, too, deductively deliver the same types if the following contrasting pairs of preferences are allocated to the Y and X axes: *just process* and *just outcome* (a basic difference between political right and left); *freedom-from* and *freedom-to* (a distinction philosophy has pondered for over two centuries); and *equality of opportunity* and *equality of condition* (discussed for at least a century). The deductions are straightforward and are set out in Appendix 1 which also treats *equality under law*, *nature*, *risk*, and the most fundamental necessity of all living things: *managing needs and resources*.

4.6 No matter what the contrasting pair, all five types always come out the same. Is this a surprise? The natural world is as it is, so various theoretical premises should deliver the same outcome. Just as arithmetic using fractions, decimals or percentages always yields the same answer, no pair of social issues can unambiguously yield a social type other than the WOLT five. Were such a pair found, the theory would be falsified.

4.7. Reasoning from the positions of individual persons is known in social research as "methodological individualism" (not to be confused with ideological

individualism, i.e., 1-ism). It conforms to theorising in the natural sciences where the parts are interrelated to make up the whole.

The deduction *from* personal axial values *to* types does not imply causal direction. Values do not necessarily *cause* worldview, nor policy preferences social structure. Causes might go in the opposite direction. To be social means to justify yourself to others and to hold others to account so in the real world, too, social interaction should go in both directions, making personal beliefs and social practices mutually reinforcing and mutually correcting.

4.8. Says sociobiologist EO Wilson (1996 [1989]: 111), "...in the study of culture there are no 'natural kinds' ... Most scholars appear to believe that such units either do not exist or, if they do exist, cannot be derived by any means currently available." We see, however, that natural kinds can be derived (or discovered) by means of science theorising, available for four hundred years.

The parts of society are now found—four ideologies or moralities plus one non-social stance; we are only just beginning to see how these parts fit together.

5. Scope and connections

5.1. There is an unknown number of contrasting concept-pairs which yield the four WOLT types. There are also many pairs too specialised, or insufficiently extreme or contrasting, to unambiguously deduce the types—but which fit. Everything must fit. Whatever does not fit cannot be a valid concept within the WOLT domain.

WOLT is premised on sociality so the purely personal is outside its scope. It is also premised on rationality so it can hardly apply to animals as their social relations are emotional. The WOLT domain includes all concerns that reasoning, talking beings must take a position on in order to live together—the gamut of social psychology, ethics, and policy making. The five ways of life are purely rational and where people emotionally support their way of life (as is common), passion is serving reason.

Some examples of contrasting Y and X issue pairs are: self-reliance and inter-dependence, invite and avoid material risk, avoid and invite social risk, pursue happiness and pursue misery, vengeance and forgiveness, power-to and power-with, phonics and whole language, scarcity value and labour value, shame and guilt, deeds and words, language substance and form, rights and obligations, polytheism and monotheism, integrity and sincerity. Most of these are vast fields and discussion of them in the WOLT context takes pages, however for most pairs the *fit* to the four types may be seen by reflecting on the four truth values: Y not X, both, X not Y, neither. (For more pairs see Appendix 2.)

The same goes for specialist YX pairs such as Kant's price and dignity, Kissinger's conqueror and prophet, Hirschman's exit and voice (his "loyalty" is Type 4), Schütz's Um-zu and Weil. That they fit, as do the two concepts of liberty, two of justice and three of equality (§4.5), confirms their validity, sharpens them, extends them, and relates them to the rest of the rational, social universe. Ordinary science theorising has revealed a law which integrates disparate philosophical esoterica into an overall framework of moralities.

The above listed concepts are well known in their various fields and countless billions of learned words discuss them. But scholars do not *interrelate* the concepts, so no progress is made.

5.2. The axes connect social preferences. For example, all social persons (non-hermits) either accept all, or else reject all, the Y issues. That is (referring to §4.5), either accept or reject all of: competition, bad human nature, freedom-from, just process, equality of opportunity, and all the Y values listed in §5.1 (and many more). The theory is strict: believe one, believe them all; oppose one, oppose them all. Theoretically, to know a person's view on one Y issue is to know their view on all Y issues. The same applies to the X values.

5.3. It also applies to a third set of issues we can call Z. The Z axis exists because there are three possible pair-wise divisions of four types. Consider *coercion*. According to §2.2, Types 1 and 3 reject coercion and Types 2 and 4 accept it. Table 1 shows the Y axis distinguishes 1+2 from 3+4 and X divides 1+4 from 2+3. Thus coercion, which divides 1+3 from 2+4, is on Z. Each theorist listed at §4.3 used two axes but between them they used all three (Appendix 4).

Deduction from coercion and competition, or from coercion and cooperation, will also unambiguously yield the four types. (Try it!) The Z axis is perpendicular to Y and X, and in Table 1 it lifts Types 2 and 4 above the page surface. (If Y and X are length and breadth, Z is height. If the four types were at the corners of a room on the floor, Z now raises Types 2 and 4 to the ceiling corners.) Z issues are fewer; they include prescription, authority, power-over, deference, rules, ritual. Z values are also ideologically neutral.

The parts and connections of the rational, social world are now identified. WOLT states that *there are four social ways of life interrelated by three axes which contain all social values*. Each extreme position on any social issue has a fixed relationship to each position of every other issue.

5.4. Three dichotomised axes imply eight types (a room has eight corners) but the other four contradict the premise of consistent preferences and cannot exist. Putting + and – for *present* and *absent* (or yes and no, accept and reject), the valid positions on the X, Y, Z axes are: **1**: – + –, **2**: + + +, **3**: + – –, **4**: – – +

(this is readily seen by reflecting on their stances on cooperation, competition, and coercion) and the antipodes, + – +, – – –, – + +, + + –, do not exist.

5.5. Any issue—hence any axis—has two types for it and two against (Table 1). As the plus and minus signs in §5.4 show, each type agrees with each other type on one axis and disagrees on two axes. So regarding any issue, each type has one ally and two adversaries. From the perspective of each type, all axial *issues* are meaningful but the three other *types* are not meaningful and are in error—either foolish or wicked. The non-social fifth type, where recognised, might be respected for having escaped worldly stresses, for knowing a higher reality.

5.6. Values on an axis must be either all accepted or else all rejected and, in addition, because there are only four types and it takes only two axes to determine a type, the consistent combinations from three axes are constrained in accord with §5.4. For example, someone who accepts Y must either *accept* all the values on *both* X and Z (and thus be Type 2 + + +) or else *reject* all the values on *both* X and Z (Type 1 – + –). If, say, you accept *competition* then you can accept *forgiveness* (§5.1) providing you also accept *ritual* (§5.3) but if you reject forgiveness you must reject ritual. This relationship is not known to sociology.

Theoretically, if a person's preferences for two issues on two axes are known, then all preferences are known. If we assume only twenty relevant social issues, the predicted coherent and incoherent relationships number in the thousands. Appendix 2 lists dozens of axial issues.

5.7. The constraints of §5.4 mean that a consistent person who switches preference on one single issue must change type. To change type requires a reversal of all preferences on two axes. So the consistent person who admits to being wrong on one thing must admit to being wrong on most things. A single error augurs total conversion.

Thus WOLT shows that we might know a lot about a person on quite brief acquaintance and explains why people find it hard to change their minds. It also sets out the possibilities of epiphany and surprise; since any social type might convert to three other social types, it allows twelve permutations for radical conversion, in addition to the possibility of withdrawal to 5-ism (see page T7 of Appendix 3).

We have found that humans naturally divide into four social moralities. Therefore, the universal, binary, left-right polarisation in the democracies is artificial, a distortion imposed by the power incentives of the party system. In Switzerland, where party size is of little power advantage, artificial alliances do not form, resulting in four, not two, major parties corresponding to the WOLT four. Switzerland is, by every measure, the world's most successful country.

6. Relationality

6.1. Social scientists long for agreed definitions (e.g., Ostrom, 2006: 4, Oyserman, 2002: 44) but definitions can only decide meaning in legal instruments and other man-made situations. In nature, meaning comes from context, and a science theory makes the context explicit. Concepts exist in relation to other concepts; lone concepts do not exist. Scientific meaning lies not in a concept's purported properties but in its "relationality," its relationship to other concepts.

Concepts agreed but not defined will tend to be very distinct. Science theory has no room for nuance: no one confuses mass and distance with each other. WOLT achieves distinctiveness by interrelating concepts which are intrinsically contrasting.

6.2. From the relationality of preferences we found that four types span the breadth of morality. The same relationality is also the key to depth, to refining or perhaps sub-dividing the types. If an axial issue is divided into two new issues these will be valid provided their four truth values are the four types. The new issues will, then, lie on two axes and that will prompt consideration of the third. For example, *just process* on Y (§4.5) can be split into English and Roman law as Y *adversarial* and Z *inquisitorial*, leading to *restorative* justice on X. (Pepperday 2009, 114).

In principle there is no limit to the depth or precision of type descriptions and their axial interconnections. Normally, to refine a concept the social scientist employs subjective, language-dependent argument. Refinement of a WOLT type is by interrelating concepts, not defining them, and the interrelation must satisfy objective, axial conditions.

6.3. It is not so much that the social sciences are in error—indeed, WOLT often confirms their insights—but that they say so little about how the parts fit together. Oppositional pairs such as competition and cooperation, freedom-from and freedom-to, just process and just outcome, were worked out but not set in a relational framework. Instead of interrelating them in a theoretical framework, scholars described their properties. That is not science; that is inconclusive discussion.

Apart from ordinary language ambiguity, describing human preferences confounds mindsets because every value is supported (and rejected) by *two* mindsets. For example, *freedom-from* is accepted by both 1s and 2s. Wheeler-dealer, entrepreneurial, independent 1-ism is very different from formal, bureaucratic, authoritative 2-ism; discussion of freedom-from in isolation, or in simple comparison with *freedom-to*, can never distinguish those mindsets. This confusion afflicts all axial values—all moral positions—if they are analysed as lone, definition-dependent concepts.

Moral philosophy knows many oppositional pairs but, curiously, never sets out the four truth values. Apparently, for the last two centuries, philosophy students have learnt in the logic class that two concepts make four truth values, then in the moral philosophy class they discussed Kant's price and dignity or Berlin's negative and positive freedoms—and never put two and two together. What is the point of the logic if it is ignored? Without the interrelationships within each pair, there is no way to interrelate different pairs.

7. Idealisation

7.1. To assume theoretical people think in extremes with perfect consistency is to *idealise*. Science theory disregards reality and idealises by interrelating extreme, perfect, pure "ideal-types." Newton's gravity theory (F=m1.m2/d/d) interrelates two masses which are isolated, perfectly spherical, and of uniform density—conditions which nowhere exist. Galileo theorised gravity as a perfect sphere rolling on a perfect plane which it touches at a single point, not landslides. These idealised theories are needed to understand heavenly motion and landslides.

7.2. Idealisation has a long history. Plato's and Aristotle's "forms" and Kant's "thing-in-itself" are idealisations. Max Weber insisted on idealisation for social analysis but invented his *Idealtypen* ad hoc, describing their properties, not interrelating them. Ideal-types do not exist in reality yet they must be discovered; this can only be done via relationships.

Physicist-philosopher, Ernst Mach (1906: 192) thought that, "All universal physical concepts and laws... are achieved through idealisation." Numerous thinkers have made the point, e.g., Kaufmann (1944), Hempel (1965 [1958]). Galileo and Newton acknowledged that theory must deal with idealisations (Matthews, 2005: 219, 221) and launched modern science by subordinating reality to idealised relationships. Only categories established via relationships can be independent of language.

7.3. Economics, which rules the world, theorises (unlike other social sciences) by interrelating extreme, presence-absence idealisations such as perfect competition, perfect information, market clearing. No economist thinks this is reality. A relationship requires measuring but no social measurement units exist. Though economics has dollars, the extreme of presence versus absence is the theoretical measure—the only one there is. Economics has achieved a body of theory vital to modern government; WOLT shows its approach can work for other social sciences.

8. Falsifiability

8.1. No theory can be proved true but scientific theories are liable to being proved false. In social science almost nothing is falsifiable but falsifying WOLT is largely self-evident—as it usually is in the natural sciences. It is falsifiable theoretically by unambiguously deducing, from two relevant concepts, a social type which is not one of the WOLT four (a single instance would suffice), and falsifiable empirically by identifying people or organisations which contradict its types or whose preferences contradict its countless predictions (§5.6). Relevant is any issue (value, matter, concept, concern) toward which a stance or policy must be worked out in order to live socially.

8.2. Do social concepts exist? Since WOLT establishes relationships between perceptions of concepts, the perceptions exist in the scientific sense. In sociology studying perceptions is known as the *Verstehen* approach and is thought to be incompatible with science theorising (e.g., Schütz 1963: 246, Scruton 1983: 484). Perhaps, though, it is necessary.

Because neurons fire, perceptions should be as real as breath or pulse. According to fMRI testing, competition and cooperation are associated with distinct brain regions (Decety, et al. 2004:744, Lieberman 2007: 275). WOLT says for both to occur, and for both not to occur, coercion must be present (§5.4, §5.6). Each occurs on its own only if coercion is absent. If a coercion region can be located, it should be possible to test these predictions. Is the competition region also the region of all Y values and the cooperation region that of all X values? WOLT might be a fruitful testing framework.

Neuron measurement would be the only prospect of developing units of measure, and of refining the theory by expressing interrelationships more precisely than accept/reject.

8.3. WOLT assumes absolute consistency so no real person or organisation will perfectly exemplify a WOLT type—just as no landslide perfectly exemplifies a sphere on a plane. WOLT might be judged empirically false if predicted acceptance and rejection of the axial beliefs, or adherence to the types, are not significantly different from chance.

Economic theory, too, assumes people are consistent, termed “rational.” But where economics assumes rationality and the individual, WOLT assumes rationality and society. Economics theorises perfect competition but not perfect cooperation or perfect coercion and thus finds only the Type 1 rationality—and that only as modern “homo economicus.” Where economics assumes the maximising of individual self-interest, WOLT assumes the maximising of social propriety. This yields a more complete image of homo economicus and also identifies the other homo types and shows the relationships between them. The

very limited falsifiability of economics might improve if homo hierarchicus, homo aequalis, homo fatalis, and perhaps homo solitarius were factored in.

9. Other (non-scientific) type classifications

9.1. Social scientists have thought up a couple of dozen social typologies without using dimensions. They usually specify two or three types which are in almost all cases WOLT types 1, 2, 3 (Appendix 5).

The only widely recognised classification divides humanity into political right and left. Though no one thinks it is satisfactory, one reason no better typology has been found is because left-right is seen as the ends of a single dimension. They are types, not dimensions or a dimension, so relevant academic research is foredoomed to incoherence; in particular, since the right consists of 1-ism plus 2-ism and some 4-ism, academic "scales" (e.g., Knight 1999) purporting to measure "right" are worthless.

9.2. The various personality classifications are based on observations and statistics and values are mixed with emotions and purely personal concerns. Personality research (which is enormous) investigates *real individuals* and finds a variety of fuzzy descriptions and no society. WOLT investigates *hypothetical social relations* and finds clear individuals and recognisable social structures. The WOLT descriptions of individuals could be termed social or ethical personalities.

10.Conclusion

Despite intense effort in psychology, sociology, political science, and anthropology, no social laws have been found. The normal practice of defining concepts based on reality and scholarly opinion yields concepts which are typical, ordinary, and average. Science theory does not define concepts but interrelates idealised (extreme, pure) forms of them. The key is relationships. Instead of interrelating concepts, social science counts (does not measure) its defined concepts and computes statistical correlations of their frequencies of occurrence. This theory-free induction has been going on for a century. Progress is imperceptible which has persuaded scholars that a science of society is not possible, even that it is not desirable.

Way of life theory demonstrates that the standard, 400 hundred year-old hypothetico-deductive method can work for social science. It consists of turning away from reality to deduce the consequences of a hypothesised theoretical relationship between measures of hypothesised, idealised concepts

WOLT applies simple deduction from pairs of personal values to yield an objective, predictive theory of morality which is readily compared with the real world. WOLT may be refuted by finding a theoretical inconsistency or by

showing it not to be empirically confirmed. It is the first and only falsifiable social science theory. Though it makes thousands of specific falsifiable predictions, theoretical refutation is highly unlikely; empirical confirmation is visible in our daily experience.

WOLT shows that society consists of up to four equally valid, mutually antagonistic ideologies interrelated via three dimensions which contain all social preferences, that is, all matters which must be dealt with in order to live socially. Standard science theorising has revealed a universal social law which must apply to prehistoric homo species and space aliens as long as they discuss how they should live together.

The connection between the individual and society has been a puzzle for millennia. WOLT solves it for that part which is rational.□

11. Appendices

http://www.pepperday.eu/wolt/files/App_1_Deductions_from_1st_principles.pdf

http://www.pepperday.eu/wolt/files/App_2_Axial_Issues.pdf

http://www.pepperday.eu/wolt/files/App_3_Ways_of_life_table.pdf

http://www.pepperday.eu/wolt/files/App_4_Dimension_theories.pdf

http://www.pepperday.eu/wolt/files/App_5_Other_typologists.pdf

http://www.pepperday.eu/wolt/files/App_6_WOLT_Glossary.pdf

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mike.pepperday@gmail.com 2024

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