APPENDIX 1 WAY OF LIFE THEORY **DEDUCTIONS FROM FIRST PRINCIPLES**

This appendix shows that it doesn't matter which pair of contrasting issues are used; the result, if it is unambiguous, is always the same five WOLT types. It is also a demonstration of the effectiveness of science's "hypotheticodeductive" method of theorising.

Everything fits and it becomes tedious to keep proving it so some deductions below are abbreviated. You are, of course, invited to try to deduce types that refute WOLT.

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1. Freedom, negative and positive on YX

Liberty has been the rallying cry of countless social movements. Most people approve of it but its meaning is ambivalent. To theorise scientifically we need to hypothesise a relationship between two or more concepts. Since the late eighteenth century political philosophers have distinguished two contrasting concepts of freedom. The literature is enormous, with endless subtleties. We will use the least subtle. Freedom-from (also called negative freedom) means being free from interference. Freedom-to (positive freedom) means community help to transcend limitations. A lion would be happy with freedom-from; a lamb would need some freedom-to in order to be as free as a lion.¹

¹ The site https://berlin.wolf.ox.ac.uk/information/a-z.html#liberty (accessed July 2024) lists numerous users of the positive-negative distinction dating to Bentham in 1776, Kant in 1788 and Schiller in 1793.

In human terms, freedom-from means people should be left alone, and freedom-to means people should be assisted to be free. The two preferences are not just a matter of academic debate; they make an ever-present tension. Many a child has wished its parents would stop interfering. Most parents will go to great lengths to advance their children's interests.

Science theory expresses a relationship between two or more concepts. Let us hypothesise a relationship between negative and positive freedom. A relationship requires measurement but there are no agreed social measurement units so we must be content to interrelate extremes of presence or absence; that is, of whether a person accepts or rejects the freedom options. This makes four possible combinations (what philosophical logic calls "truth values") which are: 1. freedom-from not freedom-to, 2. both from and to, 3. to not from, 4. not from not to. These are all the available theoretical preference arrangements. The four are set out in Table A1.1 with the axes labelled X and Y. The question is: Are these axes and these numbers the WOLT axes and the WOLT numbers?

If we assume the four theoretical people think consistently, what can we deduce about the kinds of social relations each will want?

Table A1.1. Negative and positive freedom on Y and X

- Type 1. If freedom means being left alone and any help is rejected (presumably as busy-body interference giving unfair advantage to whomever is favoured), then for people to be social they will have to cautiously negotiate their relationships one-on-one. We immediately have the WOLT Type 1.
- **Type 2.** The two kinds of freedom are in conflict. If they are both to obtain, there will have to be rules about when each is to apply. Freedom is not a freefor-all; no one is free where there is disorder. Expert and orderly rule enforcement, requires a hierarchy. So it is the WOLT Type 2.
- Type 3. Freedom-from must be rejected, because it would permit the law of the jungle where lions eat lambs. To be free the weaker must be assisted. Only if all are equal can no one coerce anyone else. This type 3 is the familiar WOLT Type 3.
- **Type 4.** Where there is neither freedom-from nor help to be free, people are delivered up to coercive forces. If occurrences of coercion were predictable there might be a chance of avoidance, hence some freedom-from, but alas...

A further theoretical possibility is a type with no view of freedom. For this Type 5 to have no concern for social potentials and impositions must mean no association with other people—a kind of ultimate freedom, perhaps.

From individual preferences for two values of *freedom*, four social types and one non-social type have been deduced. It turns out these types are the familiar WOLT types. Though each type is independently deduced, all five are the same. The pattern shows that freedom-from is on Y and freedom-to is on X which is to say that freedom-from is in some sense the same as competition and equality of opportunity. The person (Type 1 or 2) who believes one of these, believes all of them. The same holds for freedom-to, cooperation and equality of condition.

The best-known learned treatment of freedom is Oxford professor Isaiah Berlin's 1958 Two Concepts of Liberty. Berlin distinguished negative from positive liberty but his description of positive freedom conflates the 3s and 2s (or X and Z—he does not consider the possibility of both and neither which results in a blurring of the distinction between types and dimensions).² Berlin, cold-war warrior and specialist in freedom, was a very convinced Type 1 with totalitarianism in his sights so perhaps he succumbed to the them and us dichotomy which here means "my view versus the rest."

That Berlin, and other 1s, conflated the 2s and 3s would not only be because they are both appear to be against 1s, but in particular because Types 2 and 3 are both collective and because 3s appeal to 2s—the government—to provide positive freedom. So from his 1-ist point of view the 2s and 3s can be seen as colluding—or perhaps they simply appear as the same. Ultimately though, this leads to absurdities such as conflating socialists and the aristocracy. When 2s assist people to be free it is an act of grace and charity or mercy whereas 3s consider assistance is due by right. The 3-ist idea of assisting people to be free (positive freedom) is quite different from the 2-ist perception of *order* as freedom—there is no freedom if there is disorder.

Berlin describes the 5s ("quietists" he called them) clearly and concludes 5s are not free. Everything is relative of course, however the Type 5's aloofness or abstemiousness is nothing like the trapped unfreedom of the 4s, of whom Berlin is quite unaware.

The proponent of negative liberty, on the Y axis, is saying, "Leave me be; do not restrict my freedom." The proponent of positive liberty, on X, is saying, "The disadvantaged must be assisted by society." So the negative freedom proponent on Y wants a certain state of being while the positive proponent on X

² Arch-1, F A Hayek in *The Road to Serfdom* made the same mistake. Alfredo Pareto and Max Weber, also 1s, did spot the 2s but they lumped the 3s in with the 1s (even though both do actually describe the 3s).

makes a call to *action*. This is opposite to the situation in material matters—the economy, the environment—where it is Y which is the axis of doing and X expresses being. For social matters, as here, being and doing are reversed.

A few confused theorists regard the positive freedom stance as a removal of obstacles which are in the way of freedom; this is back-to-front; the absence of obstacles is exactly the demand of negative freedom. The lamb's lack of fangs and claws is not an obstacle to be removed. In human terms, poverty and ignorance are surely obstacles to individual freedom but they are not restrictions that can be withdrawn. The positive remedy is care and education.

2. Just process and just outcome on YX

What is justice? Each of us, from an early age, judges the fairness and appropriateness of events around us and over the last few thousand years many philosophers have tried to define justice. The well-known definition is: *To each his due*. But what is due to each? The most famous exposition of justice is Plato's *The Republic* of 2400 years ago. It is still taught and, like more recent writings, it argues its author's preferences (Type 2 in the case of Plato³). Of course, WOLT's answer is that there must be four answers.

Is justice given by conducting a *just process*, or is it given if there is a *just outcome*? Written onto the Y and X axes of Table A1.2 these options designate four possible perspectives.

Table A1.2. Just process and just outcome on Y and X

If there are four theoretical persons who consistently hold these extreme positions, what sort of society would each prefer? We will, of course, yet again find the four WOLT types and confirm the type and axis labels of Table A1.2. The answers below lean toward modern society.

Type 1. Just process must prevail; the outcome will look after itself for if the process is just, then the outcome will be necessarily just. To meddle with the process with a view to satisfying some preconception of a just outcome would be coercion. It would prevent people from deciding their own outcome and it

³ For comparison, Rawls is Type 3, Nozick is Type 1.

would undermine individual initiative by destroying incentives. Coercive rules, if any, must be confined to ensuring just process. Thus, government should ensure security and provide law courts, and otherwise leave people to live their lives without interference.

Type 2. Just process is vitally important and it can only be given by rules. However the social world is too complicated to have a rule for everything, so we must also ensure a just outcome. This can be achieved if process and outcome are overseen by qualified senior personnel. (Plato wanted "philosopher-kings" to be "guardians.")

Type 3. The only way to know whether or not a process is just is to look at its outcomes. Processes which are ostensibly just will be exploited by the powerful and result in entrenched injustice. A widespread example of this is the disproportionate incarceration of the poor and of minorities. If outcomes are to be just, government must arrange special processes to assist the less privileged members of society.

Type 4. There is no justice. What you get depends on luck and fate—so grab what you can when you can and keep your head down.

Type 5. Someone who has no view of justice must have no interaction with others.

So we deduce the five WOLT types from the four truth values arising from the purely theoretical concepts of just process and just outcome. The person who believes in just process also believes in freedom-from, competition, and equality of opportunity. Similar goes for the items on the X axis.

The most renowned twentieth century theoretician of justice, Harvard professor John Rawls, thought that

a well-ordered society ... is a society all of whose members accept ... the same principles (the same conception) of justice. It is also the case that basic social institutions and their arrangement into one scheme (the basic structure) actually satisfy ... these principles.⁴

It can never be. If the well-ordered society is a free one, all its members will never accept the same principles. There can be no single scheme or basic structure. The rival conceptions just process and just outcome logically give rise to four incompatible structures, not only of justice but of everything moral. How, then, can people live peacefully in a free society? Presumably there is a prospect of peace if everyone sees their preferred notion of justice prevailing at least some of the time and therefore tolerates the other notions. That can be ensured by 2-ist competence.

⁴ John Rawls, "A Kantian conception of equality," *Cambridge Review*, 1975.

When the types talk of justice what are they really talking about? What actual process do the 1s want when they demand "just process"? What actual outcome have the 3s got in mind when they demand a "just outcome"? That doesn't matter here. No reasonable variation in meaning will affect the deduction of the four types—so variations in interpretation are of no consequence. This is precisely as it should be in science, where understanding comes from the relationship and the relationship holds independently from the various scientists' opinion of what the related concepts mean.

The types do have very different meanings. In particular, just process in our society has three distinct manifestations in the form of legal procedures for attributing blame: adversarial, inquisitorial and restorative justice. These fall directly into place on the Y, Z, and X axes. This illustrates a principle: if an axial issue can be divided, then its divisions must also fall on the axes. Must—if people think consistently.

3. Human nature, bad and good on YX

The nature of a social animal—affectionate, docile, suspicious, aggressive, etc—will determine the tone of its society. Human beings have *views* on human nature. One's view of human nature will affect one's expectations of others' behaviour and affect one's own behaviour toward others. Many observers, particularly American neo-liberals (i.e. 1s), think attitude to human nature is the fundamental indicator of worldview, that it is the crucial difference between right and left, or what Americans call "(neo)conservative" and "liberal".⁵

A negative, mistrustful perception of human nature drove both Hobbes and Locke in the 1600s and, following them, misgivings about human nature shaped the US constitution and led to the "separation of powers" of government into legislative, executive and judicial branches which can provide a check on each other. Thus did the USA create the first modern democracy.

Human nature is something most of us would have a conscious, possibly explicit, opinion about (unlike grand themes such as freedom and justice) and your understanding of human nature will affect your dealings with people. Is human nature bad or good? People might hold four dichotomised views: bad not good, both bad and good, good not bad, neither bad nor good. Table A1.3 sets out these four possible views with the types numbered and the axes labelled in anticipation. In addition there is a fifth possibility of not having a view.

Assuming people are social, what further beliefs would these four extreme perspectives on human nature lead to?

⁵ Examples are Thomas Sowell, US political scientist and neoconservative media commentator, in his book Vision of the Anointed and Steven Pinker, Academic linguistics psychologist, in his book The Blank Slate.

Type 1. If human nature is bad and not good then society should be structured to curb the anti-social. People should deal only with those they trust, those of good reputation. Bad human nature means there is a need for security and for dispute resolution which are roles for government. Such power in human hands is dangerous so government must be kept to a minimum. If society ensures no one can coerce anyone or renege on agreements, and if all have the same opportunity to prosper, then people's actions in their own interests will enrich society.

Type 2. If human nature is both bad and good, society will need to ensure the goodness predominates. That will take strong government to inhibit the bad and encourage the good. Power should be in the hands of the good so society should be structured such that senior people train juniors and judge their worth. A system of willing cooperation supported by coercive power is called for.

Type 3. If people are good, not bad, there is no need to keep them in check as the 1s and 2s want and nor is there a need for incentives. Incentives are an insult which assumes people would not otherwise do the right thing. People's natural goodness should neither be corrupted by miseducation or deprivation, nor tempted by riches or privilege. Thus people should be equal in terms of power and money. Interventionist government is needed to maintain equality and keep temptation at bay.

Type 4. If human nature is neither bad nor good, it must be capricious. It follows that one should stay out of the way of powerful people and of the government.

Type 5. If you have no view of human nature, you cannot be mixing with humans.

* * *

Evidently the WOLT types can be deduced by dichotomising two subjective views of human nature, two views which, as the pattern of the deduced types shows, fall on the Y and X axes. The three pro-active types want to structure society to take human nature into account—each according to its particular view—while the 4s, having no ideal, keep low in an unpredictable environment.

It is often said human nature is the same everywhere, that we all laugh and cry and that we do it over the same sort of things. But those are emotions, hence not relevant to WOLT which deals with values. Emotions are also experienced by animals so are not particularly human. In the rational, social realm it is harder to say what all humans share. Celebration of births, weddings, and funerals are universally recognisable, and incest is everywhere condemned. So is murder but murder is bad by definition and attitudes to killing are by no means uniform. In short, it is not so clear that human nature is everywhere the same. If human nature is perceived in two forms, bad and good, then these everywhere will give rise to five ways of coping.

Seeing human nature as bad, having a taste for competition, preferring equality of opportunity, preferring negative liberty and preferring process justice seem to be different concerns yet we see they belong on the same axis (Y), and therefore to mindsets Type 1 and Type 2. The theoretical person who agrees with one issue must agree with the other issues and the person who rejects one, must reject the others. The same applies to the X issues: to accept human nature good requires accepting cooperation, accepting equality of condition, accepting [rejecting] positive freedom, and accepting just outcome. The consistent person must accept them all or reject them all.

4. Mother Nature, friendly and unfriendly on YX

For our purposes, nature—Mother Nature—means the supplier of all material resources. Perception of nature has been a central political motivator since concerns arose in the 1960s for species extinctions and environmental pollution. It has since escalated to an argument over climate change (or global warming). The material facts play only a secondary role in this polarisation; the primary role is psychological, namely the timeless, fundamental moral and ideological division between 1-ism and 3-ism. Basically, the 1s think nature can support the pressure upon it (with perhaps some help from technology) while the 3s insist the planetary ecosystem is in trouble (largely due to overuse of technology).

If we set the contrasting perceptions of nature as nature friendly on Y and nature unfriendly on X and proceed as usual, we will see that the four truth values fit the WOLT types...

The 1s who think nature friendly, not unfriendly, must perceive her as willing to provide resources if she is approached with skill. The history of science and technology supports such a view. The 2s who see her as both friendly and unfriendly must be saying she will provide resources if expertly managed, and may wreak havoc if not. Thousands of years of effective irrigation schemes support this view. The 3s, who see nature as unfriendly and not friendly, must see havoc as likely or inevitable and require that we treat her with care and impose on her as little as possible. Countless extinctions and environmental disasters support their view. The 4s, who see nature as neither friendly nor unfriendly must find her capricious with the result that what you get is a matter of luck and fate. Earthquakes and deadly illnesses would support this view. A possible **Type 5** with no view of nature must feel independent of it.

Those descriptions are so skimpy they barely qualify as deductions but the issue seems almost self-evident. A feature of this nature issue is its universality, exemplified by "global warming." Of all the 3-ist campaigns of recent centuries—slavery, animal cruelty, prison reform, child labour, working class welfare, environmental protection, feminism—climate change is the most universal and will be the most durable. Any resolution will, as always, depend on 2-ist regulation.

We may note a certain symmetry of human nature and mother nature. If you compare nature here with human nature in Table A1.1, the axial attitudes are switched: the 1s, positive on Y, find nature "good" and human nature bad; the 3s, high on the X axis, find nature "bad" and human nature good.

This symmetry occurs for many concept pairs and in general it is a distinction between things versus people or between material versus social. Y (Type 1) sees things as friendly whereas X (Type 3) favours people. (where thing here means whatever is not people, including abstractions). The Type 1 is comfortable with, and optimistic about, things and is leery of, or pessimistic about, people. The Type 3 is relaxed about people but worried about what can go wrong in the material world. A list of general concepts that reverse themselves depending on whether the matter is material or social, is given by Table A2.3 in Appendix 2. This *things* versus *people* distinction is closely allied to a *doing* versus *being* distinction for which see Table A2.2.

5. Material risk, embrace and avoid on YX

Following from the positions on nature, we can readily put the contrast, welcome material risk and avoid material risk on Y and X.

With friendly nature, the 1s welcome material risk as essential to innovation and progress; the 3s see such risk as a greed-driven imposition on unforgiving nature so they avoid it; the 2s see a conditionally friendly nature so risk is manageable, to be welcomed or avoided as appropriately qualified experts determine; and the 4s, for whom the world runs on luck, can have no notion of risk as investment. In short, the 1s welcome material risk, the 2s both welcome and avoid it which requires risk to be managed, the 3s avoid it, and the 4s do neither—and so are likely to take unrecognised risks and fear imaginary risks. The 5s, whose resources exceed their needs, take no material risks and need have no opinion on it.

6. Social risk, avoid and embrace on YX

A risk, someone has said, is a future you hope will not happen. It is often said that men tend to be risk-happy and women are risk-averse. Men go to war, ride skateboards, drink beer, drive fast cars. But it is not quite right; it only fits with material risk for men are biased to Y and women to X. With social risk the situation is reversed: X welcomes social risk; Y avoids it. Women want to marry and have children and they take big risks to do it. Historically, every girl would grow up knowing women who were beaten, abandoned or even killed by their husbands, and who died in childbirth. Huge risks have to be taken for a return in social status of being married and having children.

The risks of marriage for men would seem to be far less yet men tend to be reluctant to tie the knot. To a man marriage is a social risk; marriage usually does not enhance a bachelor's status, it brings responsibilities of husband and father, judgemental in-laws, and restrictions on personal freedom. So risk conforms to the things-people dichotomy—see §4 above and Table A2.2. It would follow that the risk literature, which is confined to material risk, is sexist and needs a re-write.

As for the 2s, they have their usual each-way bet: risks may be taken but only after due process and by appropriately qualified persons acting according to the guidelines. The social relations of the 4s, who neither avoid nor invite risk, are erratic; for example, a celebration is likely to end in a punch-up.

In sum, with material risk, *invite* and *avoid* go on Y and X respectively, whereas with social risk, *invite* and *avoid* go on X and Y.

7. Self-identity: role and social on YX

"Identity," like "culture," is a vague word with a literature and usage too broad to allow an overview and in which the word tends to mean whatever the writer wants. However there is a field in psychology called "self-identity" with reasonably clear boundaries. It distinguishes role identity from social identity, referring to how you see yourself in relation to other people.

Role identity means seeing yourself as what you do. Social identity means seeing yourself as who you are. It is a distinction between doing and being (which is already a signal that *role identity* is going to fit Y and *social identity* will fall on X). If you identify yourself in a role, you interact with others in their roles; each in his or her different, complementary role. If you have a social identity you see yourself as a member of a group and as being similar, and having similar perceptions, to others in the group.⁶

^{6 &}quot;...having a particular role identity means acting to fulfil the expectations of the role, coordinating and negotiating interaction with role partners... the basis of role identity resides in the differences in perceptions and actions."

[&]quot;...social identity means... being like others in the group, and seeing things from the group's

How do you see yourself? As what you do, i.e., in terms of role identity, or as who you are, i.e., in terms of social identity? For example, as a salesman or as Irish? As a nurse or as a mother? Both perhaps. In reality we each have multiple identities and boundaries are blurry. We must ignore reality and idealise the two kinds of self-identity as extremes if we are to construct theory.

The two forms of self-identity are independent of each other. You can quit selling and become a camel driver without affecting your Irish status. No particular occupation is associated with your nationality and no particular nationality is associated with your occupation. As a mother, what you do does not affect that state of being. If you stopped actual nursing and became, say, the full-time secretary of the nurse's association, you might still identify yourself as a nurse which would thereby cease to be a role identity and become a social identity.

If we put role identity on Y and social identity on X, the four truth values—four "types"—will be as per Table A1.4. In addition there might possibly be a fifth type who has transcended self-identity.

Table A1.4 Role identity and social identity on YX

If we presume five theoretical people who profess these extreme identities, we will see that they are the familiar WOLT types and that they do indeed comprise the Y and X axes...

Type 1s want to interact with others in their different roles. The reason they reject any group perspective must be because they fear group similarity would interfere with role differentiation. In this 1-ist environment people would negotiate to determine who does what and since there is no uniformity of perception, society must consist of individuals bargaining with each other, competitively and circumspectly.

Type 2s want both kinds of identity which requires individual difference and group similarity at the same time. To resolve this contradiction will require

perspective... the basis of social identity is in the uniformity of perception and action." (Stets and Burke 2000: 226)

Since the 1930s sociology has recognised a comparable distinction of social role versus social status (Linton cited by Merton 1957: 110) or action versus group (Albrow 1970: 21). The distinction corresponds to two very basic questions: "What do I do?" and "Who am I?"

rules to say who and where and when and how people should see their differences and their similarities. Rules must be enforced so society will have to be a hierarchy. The contradictions and their resolution can be vividly represented by dress, where everyone wears the same pattern of clothes (known as a "uniform") while at the same time wearing various badges displaying rank, sphere of competence, and performance distinctions.

Type 3s find identity in being the same as, and agreeing with, others in their group and they reject different roles. No roles means no division of labour. Along with uniformity of perception, that implies that there are no power differences so all are equal.

Type 4s do not perceive themselves as having any role or belonging to any group. Social interactions can only be random, out of their control, so 4s must have a fatalistic perspective.

The **Type 5** who admits no self-identity must be a person for whom both complementary role and group similarity are irrelevant, a person who does not interact socially at all.

* * *

These five self-identity positions are general answers to the personal questions "What should I do?" and "Who am I?" Applying conventional science theorising to these personal, self-oriented questions revealed, once again, the connection between the individual and the social. These are *personal* questions but the logic of their interrelationships immediately transformed them into the social questions, "What should we do?" and "Who are we?" which yielded five strikingly varied answers. It resolves a puzzle that has baffled observers for thousands of years—namely how individual psychology connects to social interaction.

Psychologists in the field of "self-identity" are quite unaware that their two kinds of self-identity imply five types of people and five social arrangements. Indeed, most (not all) of the psychology literature is divided into two schools concentrating either on role identity or on social identity—and the two schools are not on speaking terms. No one considers the idealised relationship between the two kinds of identity so all discussion depends on definitions. That will never do for science. A science theory consists of an idealised relationship between idealised concepts and is independent of definitions.⁷

8. Managing needs and resources on YZ

The universe is divided into the living and the non-living and each living organism must match needs and resources or it will join the non-living. Managing needs and resources is of unremitting, urgent importance to every

⁷ Note: there was no dependence on definitions here. The concepts of *role identity* and *social* identity were explained for the lay reader, not defined.

individual plant, animal and microbe and as such it is not particularly social. Nor does it look, at first glance, much related to freedom, justice, human nature, self-identity, etc. Yet it is directly related.

Human beings will have views on managing needs and resources and four dichotomous extreme positions are possible: 1, both needs and resources are manageable; 2, only resources are manageable and needs are fixed; 3, only needs are manageable while resources are fixed; 4, neither is manageable. These four positions are set out in Table A1.5. A fifth position would be to have no view on managing needs and resources which cannot be shown on the table.

The two images of Table A1.5 say the same thing. The first is difficult to read because of the double negatives. The second shows Z reversed. That is, managing needs is positive in the negative Z direction, in the direction opposite to coercion.

Table A1.5 Manage needs and resources on Y and -Z

The four positions are numbered in anticipation of being the WOLT four. How do I know the pattern of axes? Because there is no flexibility; the same four types result and any misallocation becomes immediately apparent.

But let us put aside our prior knowledge and consider what these types would be like if they were social...

Type 1. If you think both needs and resources are manageable, the world is your oyster. Given appropriate skills there can be no limit for a limit would be a point where needs or resources are unmanageable. With no limit, this Type 1 cannot view manageability as dependent on other people, so these Type 1s must be (and therefore all people should be) self-reliant and individualistic. To 1s, other people and society are resources to be managed.

Type 2. If needs are not manageable it will be necessary to manage resources to meet the set needs. The chairman has needs, the clerk has needs, the receptionist has needs. Different people with differing needs requiring differing resources will be of varying worth. Thus for these 2s, individuals are defined in terms of their status relative to other people; propriety will be important and resources will have to be allocated appropriate to station. Such complexity will require rules and a hierarchy to enforce them.

Type 3. If resources are not manageable, then needs must be managed in order to fit in with resources. If resources are fixed and finite, frugality is imperative. Frugality in turn implies equality, since if one person were to receive more resources than others, that person would have more than necessary for minimal use. Thus the Type 3, like the Type 2, defines people in terms of their relation to other people, but insists that all are equal. If people are equal then no person can command another and saving resources will require people to cooperate with each other. So these 3s want a society that is cooperative and egalitarian.

Type 4. If neither needs nor resources are manageable, what you get depends on luck and fate. Since personal effort cannot influence what they receive, 4s will tend to apathy, improvidence and gambling. Because others influence what 4s get, 4s will see people as agents of power or luck, so one should stand clear or, if contact is unavoidable, curry favour with the powerful. Without knowing whom to trust or mistrust, effective alliances are impossible and interpersonal relations will be superficial.

Type 5. We are likely to have no view on matters that (we think) do not concern us. Managing needs and resources is of dire concern to every living organism so having no view can only arise if there is an excess of resources. For a sense of this consider iodine. Can you manage your iodine needs and iodine resources? You probably have no view—because your iodine supply exceeds your needs. Health workers and people with a thyroid problem will be concerned about managing iodine needs and resources.

For the four socially engaged types, resources are never plentiful. For 1s they are never enough no matter how vast the wealth; for 2s they are enough if properly managed; for 3s they may be enough with frugality; and for 4s resources are only sporadically and temporarily enough. But a Type 5 always has plenty. With resources in excess, the Type 5 is not engaged in the struggle to live as the other four ways of life are, and consequently will not participate in society. The Type 5 is an autonomous outsider, a hermit.

An odd conclusion follows: human sociality depends on resources being in short supply. Apparently, if we all had, individually and personally, all the material resources we wanted, each of us would be entirely self-sufficient—and we'd all be hermits.

Discussion of needs and resources

Everyone knows that the individual-psychological and the socialpsychological are connected but the nature of the connection has been a mystery. Once again we see science's hypothetico-deductive approach revealing the connection. Managing needs and resources, which is the most basic survival issue there is, turns out to require the same five types as every other contrasting pair. As with other contrasting pairs, the individual's view immediately implies a specific social structure.

Needs and resources are not intrinsically social and matching them would, for most life forms, be a purely individual problem. However, social animals knowingly share resources and for humans, resource allocation is the task of politics. The five type deductions above show that attitudes to this physical problem have drastic social implications: the 1s' management confidence leads to self-reliance and individualism; the 2s' inability to manage needs leads to hierarchy; the 3s' inability to manage resources leads to equality; the 4s' inability leads to social atomisation; and the 5s' lack of concern leads to social detachment.

When resources are scarce, they will be quarrelled over and shortage is a basic contributor to the social division into four types of interaction. At the same time the inference from the Type 5 deduction is that the greater our access to resources, the less social we are.

Basic though managing needs and resources is, the division of manageable versus not manageable is not discussed in philosophy not a theme in the social sciences.8 It seems strange, and an oversight, not only because it is the most fundamental life or death issue and is the driver of commerce, but also because concern for the manageability of resources is so prominent and explicit in our world—for example, as the 1-ist disinclination to accept environmental limits on resource exploitation and the 3-ist disapproval of consumerism and waste.

So the most basic, fundamental issue that exists, the issue that is of daily concern to ordinary people as well as to economists and politicians, is unknown to the social scientists and philosophers. They produce learned papers by the thousands on subjects such as identity and freedom but nothing at all on needs and resources.

Perhaps the underlying reason for this academic lacuna is that it does not include the X dimension; the manageability of resources and needs are on Y and Z and X is not mentioned. X, the dimension of togetherness, specifies the division between individualism and collectivism which all the theorists and typologists note. Some of them also notice Z, and some notice Y, but all notice X (see Appendix 5 for discussion of theorists who use dimensions and Appendix 6 for an extended list of typologists). Of the theorists who employ dimensions, none use Y with Z. The X dimension is so evident that everyone uses it, either on its own or else with Y or X, and no one contemplates relationships that do not include the distinction between individual and collective.9

⁸ It is discussed in some grid-group literature, e.g., Thompson and Wildavsky, 1968: 168 and Dake and Thompson, 1993.

⁹ In psychology X is the *only* dimension and there is a large literature trying, in vain, to make

The social science which most concerns itself with resources is economics. Mainstream economics theorises a world where resources are scarce and are competed for. Thus economics assumes the world is 1-ist, for it is only the 1s who overtly compete for resources. The other types have other coping options. The 2s and 3s, positive on the X axis of cooperation, can redistribute resources through formal obligations or through casual altruism. The 4s, reliant on coercion, snatch what resources they can. The 5s have no concerns for they have excess resources.

In economics needs does not exist as a concept. Needs cannot be objectively measured and economics would say that needs are a figment. Because the 1s see needs as manageable, to them a need is not really a need but rather a want. What a person's wants (or "tastes") are is not the concern of economics¹⁰ which insists that people be free to choose. For economics, the price people are prepared to pay indicates how strongly they value satisfying their tastes. By assuming people can manage their needs or wants, mainstream economics cannot recognise even the possibility of not being able to manage needs or wants.

The needs-resources analysis exposes some unexpected constraints. For example, those who believe in competition necessarily believe that resources are manageable (they are both on the Y axis). To reject competition is to reject the prospect of managing resources. It would surprise no politically aware observer to learn that the sort of people who favour competition think that nature can be managed, however it is probably not so widely realised that rejection of one logically requires rejection of the other. It is surely also not obvious that a felt necessity for social coercion is logically bound to a conviction that human needs are not subject to human determination. Conversely, the person or social group that thinks needs can be managed must logically reject coercion as a technique of social control. Scholars are not aware of these things.

sense of its terms IND and COL. Consequently, the psychology literature is dependent upon the definitions of individualism (IND) and collectivism (COL). Perhaps the thinking is that if one dimension was sorted out, then it would be time to look at further dimensions, however without a second dimension no relationship is specified. No relationship equals no science. There are many hundreds of published papers on IND-COL (for an overview see Oyserman et al, 2002) but no progress.

¹⁰ "For economists to rest a large part of their theory of choice on differences in tastes is disturbing since they admittedly have no useful theory of the formation of tastes, nor can they rely on a well-developed theory of tastes from any other discipline in the social sciences, since none exists." (Becker 1976: 133) In 1977 a famous economics paper by Stigler and Becker argued that there is no accounting for tastes because they involve "endless degrees of freedom," are ad hoc, and explain everything and nothing. WOLT says there are just three degrees of freedom which are rigorously logical and explain everything that is necessarily social.

9. Conclusion

It should be fairly clear by now that it doesn't matter what pair of contrasting social issues we choose, we always derive the WOLT types. In setting out the above cases I knew where I needed the logic to go, and for some of the examples my deductions were quite minimal, so it is reasonable to consider whether I have engaged in some glibness, some sustained trickery of language or selection of examples. Could, sometimes, a different result be deduced? You are invited to try to deduce something else. This is an offer, and an opportunity, you will find nowhere else in social science.

The method is simple: just take two contrasting social concepts, assume presence or absence (yes/no, accept/reject...) of each and deduce the consequences of the four truth values. Evidently, the approach will expose the inherent relationality¹¹ of every issue that is rational and necessarily social.

Try it! There is an unknown number of contrasting pairs of social concerns that can be used to deduce the five types from first principles. Appendix 2 lists the axial locations of a large number of relational issues, many pairs of which will serve. Most of them are well established concepts and some are centuries old in academic literature. The lists in Appendix 2 are surely not complete: whatever people must sort out in order to live socially is appropriate. If you can find two issues which unambiguously yield some other types, you falsify the theory.

Not only does every pair deliver the same five types but it bears repeating that each case the five deductions are independent of each other. The number of potential opportunities for falsification is astronomical.

The primary purpose of the deductions in this appendix was to demonstrate that every pair leads to the same result. But at the same time we learnt new things. Fundamentally, this is because the hypothetico-deductive method is relational; we don't just see the parts; we see how the parts are related. The primary usefulness of fitting two contrasting concepts to the axes is not so much to test WOLT—we can now take it as given—but to thicken the logical web of interrelated values, to see the interdependencies, to see how this issue relates to that issue and to every other issue in the social universe.

Over the last two centuries or so, scholars have got much right and WOLT draws on their work. At the same time, fixing relational issues to axes lets us see where academic work has failed. As a by-product of its actual purpose the above discussion has drawn red lines through much social science writing. It set two famous philosophers, Isaiah Berlin and John Rawls, to rights on their specialities of freedom and justice; it indicated the writing on risk is one-eyed

¹¹ Inherent relationality is the title of a 1996 book on grid-group theory by Michael Thompson.

and sexist; it showed the literature on psychology's self-identity to be thrashing about; and it located the essential limit and limitation of economics.

Each example in this Appendix took the approach of deducing WOLT from first principles. What is easier is to take the theory as a given and to fit a pair of concepts to WOLT—rather than deduce WOLT from a pair. Working out the fit is sometimes by trial and error since there are three options, YX, YZ, and ZX, and some issues go on in reverse, like managing needs above. But there is no flexibility and each issue will fit only one way on only one axis.

Fitting should also work for a non-contrasting pair. If you wish to try it, you need to make sure the two concepts are on different axes (which is guaranteed with contrasting concepts) and also to not confuse the material and the social (Table A2.3). In theory it ought to be possible to deduce WOLT from a non-contrasting pair, however the lack of contrast requires meanings to be explored and clarified which tends to get long-winded.

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