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UNCERTAINTY: METAPHORS, MOTIVES AND MORALS

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UNCERTAINTY: METAPHORS, MOTIVES AND MORALS

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The metaphors people use provide insights into how they think about and respond to uncertainty. People bring divergent motives to bear on uncertainty and there are motives for maintaining or creating uncertainty as well as reducing or banishing it. Most of these motives are based on moral positions and concerns, which likewise may compete with one another.

Integration Insights is a series of digests of concepts, techniques or real-world examples of integration in research.

INTRODUCTION

Effective responses to real world problems require integration of areas of ignorance and uncertainty, as well as synthesis of discipline and practice knowledge. Understanding how people think about and respond to uncertainty requires insights into the metaphors they use, their motivations and even their moral orientations. In this *Integration Insight* we provide a brief overview of each of these aspects of uncertainty.

UNCERTAINTY METAPHORS

Where do our ideas about uncertainty come from? Smithson (2008) points to two sources: commonsense realism and commonsense sociality. Commonsense realism encompasses everything we believe or think about how the non-social world works. Commonsense sociality refers to our beliefs about the social world and includes our commonsense ideas about people. The main reason for distinguishing these two sources is that a number of important characteristics we attribute to people (e.g. intentions) we do not attribute to objects in the non-social world, and that has direct consequences on how our commonsense theories direct us to think about uncertainty.

Common metaphors for uncertainty are highly informative about how it is regarded and used in a society. Following Lakoff and Johnson (1980), below are a sample of metaphors for uncertainty from English-speaking cultures. Most of these metaphors have a negative cast to them. Smithson (2008) suggests that one reason is that Western intellectual culture has been effectively blinded to most of the positive functions uncertainty performs.

Sample Metaphors from Commonsense Realism

The following metaphors stem from commonsense realism:

1 Uncertainty is obstructed vision. Uncertainty is blindness. To know is to see. Vague ideas are blurry, murky, hazy, unclear, obscured. Knowledge is brilliant, illuminating, and enlightening. Uncertainty is dim and dark.

2 Ideas can be felt. Vague or uncertain ideas are soft and woolly. Objective knowledge, truth and logic are hard. Incomplete ideas are rough.

3 Learning and discovery are a journey. To know or discover is to arrive at a destination. A path can be cleared or paved to help us learn or discover. Learning is finding one's way. Uncertainty is straying from the path, getting lost, going in the wrong direction, going around in circles, wandering aimlessly, failing to arrive.

4 The unknown is an ocean. Knowledge is an island. The bigger the island, the larger the border between the known and unknown.

5 The unknown is wilderness. Knowing is domesticating and taming the wild. The border between the known and unknown is a wild frontier. Learning and discovery push back the frontier, diminishing the extent of the unknown.

6 Seeking knowledge is gathering and hunting. The unknown is prey. Sought-after ideas, facts, and truths can be elusive, hard to find, slippery. They can be apprehended, grasped, or homed in on. They can also escape. Errors or bad ideas are off-target, wide of the mark.

7 Ideas are food (for thought). Bad ideas are half-baked or even raw. Raw data have yet to be cooked into knowledge. Thinking or analysing is cooking.

8 Uncertainty is gaps or holes. Knowledge covers a surface or fills a container. An ignoramus is devoid of knowledge, whereas an expert is brimming with knowledge. An incomplete theory has holes or gaps, whereas a complete theory covers the terrain.

9 Ideas, theories and arguments are buildings. Uncertain or erroneous ones are shaky, badly constructed, unfounded. They collapse, don't hold together, fall apart, can be knocked down.

10 Uncertainty is variability. Certainty is constancy.

Sample Metaphors from Commonsense Sociality

The following metaphors stem from commonsense sociality:

1 Inquiry is invasion. Learning is conquering. Uncertainty is conquered or overcome by knowledge and ideas.

2 Ideas and knowledge are resources. Knowledge and information are currency. Uncertainty is poverty. Bad ideas are worthless, bankrupt. An expert has a wealth of knowledge.

3 Argument is war. Rational argument is still war. Ambiguity or indecision is internal war.

4 Knowledge is power. Uncertainty is helplessness and impotence. Uncertainty or doubt still is impotence. We succumb to uncertainty.

5 Uncertainty is being stuck, enslavement. Knowledge makes you free.

6 Innocence is chastity. Scepticism, doubt, or uncertainty is still chastity. To be known is to be violated. To believe or be persuaded is to be seduced.

7 Information exchange is sexual intercourse. Good ideas are fertile and can procreate. Bad ideas are sterile or barren.

8 Ignorance is inequality. Shared knowledge is generosity, democracy, freedom. Unshared knowledge is selfishness, autocracy, elitism, oppression. Secrecy is selfish. Privacy and expertise are elitist.

9 The unknown is a secret. Even nature keeps secrets. The unknown is locked away. Discovery or learning is unlocking and revealing.

10 Uncertainty is insecurity and fear. We are afraid we don't know. Certainty is confidence.

POSITIVE ASPECTS OF UNCERTAINTY

Uncertainty can motivate people positively as well as negatively. People find uses for uncertainty and do not always want to be rid of it. For example, freedom, discovery, creativity and opportunity require uncertainties about what the future will bring so that there actually are choices to be made. No uncertainty, no freedom.

It is not difficult to find examples of 'virtuous' uncertainty and secrecy. Would it be a good thing if everyone knew the location of the Wollemi Pines? On a more mundane but also more general level, how would politeness (e.g. tact or white lies) be possible without the deliberate creation and maintenance of uncertainty? What would gift-giving be like if surprises were forbidden? As Smithson (1989) points out, politeness often operates via disinformation (e.g. promoting a false impression of approval), or by referential abbreviation (particularly vagueness and ambiguity, as in tactful utterances).

INDIVIDUAL MOTIVATIONS REGARDING UNCERTAINTY

There are three key aspects to the ways individuals think about and deal with uncertainty:

1. making sense out of unexpected events and outcomes;
2. thinking counterfactually about undesired outcomes; and
3. prognosticating and deciding about the future.

Human engagement with ignorance or uncertainty is generally a mixed-motive enterprise. People are not always motivated to eliminate or deny uncertainty. Instead, uncertainty can be actively sought, created, utilized, and traded against other benefits or costs.

First, there are powerful motives that countervail against the indiscriminate acquisition of new information, effectively rendering information searches highly selective and constrained. Second, some motives even oppose acquiring apparently relevant and useful information, thereby imposing constraints on the uncertainties individuals elect to reduce versus those we prefer to maintain. An example is 'confirmation bias' which refers to information processing, often unconscious, where one selectively gathers or gives weight to evidence that supports one's position, while neglecting or discounting opposing evidence.

INTERPERSONAL MOTIVATIONS REGARDING UNCERTAINTY

A dominant assumption in communications and organizations frameworks is that coordinated action requires full communication among the actors involved. In short, everyone must be certain about what the others think the purposes, goals and means are. In contrast, we argue that shared communication or meanings are not necessary for effectively coordinated action. We agree with Eisenberg (1990) that lack of shared understandings and a degree of vagueness can often enable more effective collaboration than shared understandings would.

Privacy, trust and polite social interaction all require uncertainty.

Privacy is a socially mandated arrangement involving voluntarily imposed uncertainty and ignorance. As Warren and Laslett (1977) point out, privacy involves a consensual and essentially cooperative arrangement, whereas secrecy is unilaterally imposed. The usual motives for privacy are quite obvious, generally amounting to freedom from surveillance and exploitation.

An important component of that risk is a requirement that the truster remain partially ignorant about the trustee. Trust relationships (e.g. friendships) entail a kind of privacy. If a person believes another is monitoring them or insisting that they self-disclose or account for their actions, that person will infer that the other does not trust them.

Polite social interaction is another important example of how social relations trade on ignorance. In polite conversation, conversationalists do not expect to deal in the truth, the whole truth, and nothing but the truth. The employment of vagueness and ambiguity in communication serves many of the same purposes in polite conversation as it does in organizational contexts where participants want to promote cooperative goodwill. We have already noted Eisenberg's (1984) claim about the use of ambiguity for achieving unified diversity, as in a working consensus or mission statement. Another strategic use is to enable deniability, e.g. the ability to claim that an interpretation which threatens to shame or anger someone was not the intended meaning of what was said. A third is increasing capacity for organizational change and adaptability by permitting diverse possible interpretations of organizational goals and rules while still appearing consistent. All of these are potential motives for employing vague or ambiguous communicative strategies.

MORALS AND UNCERTAINTY

We adopt ethical and moral stances towards uncertainty. What underpins our judgments of which uncertainties are 'bad' or 'good,' which are exchangeable, and which can be blamed on people? This is an area which is still wide open for investigation, but we can gain insights from various disciplines and areas of practice.

For example, Pickard's (2008) review illustrates that religious faith is not certitude but is more like trust. Faith therefore embraces a kind of uncertainty but it is a morally positive kind. Doubt is another kind of uncertainty, but doubting God's existence is a failure to trust and thus a kind of moral failing. In some traditional religious belief systems, such doubts are heretical. Different uncertainties may possess divergent moral qualities.

We can also find moral judgments regarding uncertainty in domains such as physical measurement, probability or statistical theory. The most obvious are moral judgments surrounding measurement (im)precision. After all, if the pursuit of truth and elimination of disagreement both are good, then precise measurement also must be good.

If measurements are not precise, then are there moral imperatives to let others know the degree of uncertainty attached to them? Professions such as engineering, medicine and law present interesting examples of both positive and negative answers to these. For example, in medicine it is not difficult to find persuasive arguments for clients' rights to know the diagnosticity and sensitivity of medical tests. On the other hand, medical practice also has a long tradition of moral arguments for concealing from patients the true extent of medical uncertainties.

The task of identifying moral concerns involving uncertainty becomes much easier if we replace the term 'uncertainty' with morally loaded equivalents such as 'freedom' or 'risk.' Risk, for example, carries considerable moral implications, which heavily depend on what is believed to be at stake. Even the source of risk has moral implications. Several studies have found that uncertainties imposed by others are viewed as worse than 'natural' uncertainties, which in turn are worse than self-imposed uncertainties (or collectively mandated uncertainties). Furthermore, one person's 'risk worth taking' may be another's 'culpable negligence.' Contemporary social norms and cultural climates are bound to influence such judgments in fundamental respects.

Just as moral arguments are employed to justify uncertainty reduction, so they often are invoked to justify the maintenance of uncertainty or ignorance. Taboos are enforced initially by moral arguments. Handmer (2008) avers that in emergency management secrecy on the part of a stakeholder may be rationalized by appeals to 'national security' or 'commercial confidentiality.'

Uncertainty itself is employed for moral justifications and appeals to legitimacy. Uncertainty is used in various guises to justify inaction, maintenance of the status quo, opportunism, evasion of responsibility or culpability, and risk-management policies.

CONCLUSION

People bring divergent motives to bear on uncertainty and there are motives for maintaining or creating uncertainty as well as reducing or banishing it. Most of these motives are based on moral positions and concerns, which likewise may compete with one another. This is not a case of 'good' versus 'bad' motives; it is good versus good. Appeals to reducing or banishing uncertainty can be made in the name of the pursuit of truth, protection of the vulnerable, insurance of safety, enforcement of transparency and accountability, or the establishment of binding agreements. However, appeals against uncertainty reduction can be argued on the basis of building certain kinds of social capital (e.g. trust, privacy, civility), excessive cost, avoiding the violation of rights, or even maintenance of religious faith. An important consequence of these diverse and competing motives and morals is that there are essential tensions between various alternatives for coping and managing under uncertainty. These will be dealt with in a future *Integration Insights*.

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