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FACTS, MYTHS AND THOUGHT-STYLES: A RANT

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Abstract

This polemic calls for an end to our enchantment with Theory in the IS field. My critique uses Barthes' structuralism to argue that theories are myths which order, interpret and normalise the world. I address the fundamental question "what is a fact", drawing on the epistemology of Ludwik Fleck, which deserves more recognition in IS, supplemented by the structuralism of Roland Barthes. A "fact" from the domain of child welfare is used to illustrate the argument.

Key words: facts, myths, thought-styles, theory, language-action, child welfare

Prelude

The natural (mythical) way of thinking of an information system (IS) is as an organised repository of facts about the world, "reality-mapping" as Lyytinen (1987) put it. But what is a fact? With this blunt question, Ludwik Fleck began his seminal book, *Genesis and Development of a Scientific Fact* (1979). Published in 1935, GDSF foreshadows the better known work of Kuhn and other sociologists of knowledge. Facts are so central to our business in IS, but what the devil are they? Fleck can help us here. His work deserves to be better known, and I will make much of his ideas as I sally forth. The parenthetical "mythical" will be elucidated along the way; so-called facts are carriers of myths, myths of happy families, the omnipotent State, aligned organisations (Wastell, 2007). Theory is a central figure in the Myth-Fact relation, and I shall take an irreverent pot-shot at this most sacred of cows.

In a recent paper with Sue White (Wastell and White, 2011), we considered the genesis of the following "fact" extracted from the multi-disciplinary case file of a professional team investigating the parenting capacity of a young mother regarding her son, Seb, who was considered "at risk". Here is the "fact", recorded by one of the nurses during one of initial assessment sessions:

No problems when Mum left the room, continued playing happily.

Masquerading as a simple observation, it is far from it. In this case-note, we see the early emergence of a theoretical categorisation based on a corpus of ideas known as Attachment Theory (see Howe et al., 1999 for a vade-mecum version). AT is a hugely powerful diagnostic and therapeutic framework in child welfare. Its implicit invocation at this early stage is extremely consequential in terms of the way the case is formulated throughout, i.e. how the various professionals "make sense" of the situation. Ultimately this leads to Seb's registration on the child protection register. The equanimity of Seb is seen to be suggestive of an attachment disorder, and this formulation becomes increasingly dominant as the assessment sessions proceeded.

Enter Fleck, bearing concepts

Exactly as the title suggests, GDSF is a book about the production of facts in science. Fleck takes one such fact, the so-called “Wassermann reaction” (a test for antibodies in blood serum) which is held to be diagnostic of syphilis, a fact established through the experiments of August von Wassermann at the turn of the century. Fleck asks: “How, then, did this empirical fact originate?” This question sums up, for him, what should be the proper subject and method for epistemology, namely historical enquiry into the socio-cultural origins and development of knowledge. But his genetic epistemology can be applied to any “fact”, including the mundane facts that populate information systems. The categorisation of Seb as having attachment difficulties, for instance, thereby being “at risk”.

The “thought collective” (*Denkkollektiv*) is a key concept in Fleck’s system, i.e. the “community of persons mutually exchanging ideas or maintaining intellectual interaction” (p. 39). Fleck designates the set of beliefs and values common to members of a given collective, its “thought style” (*Denkstille*), defined as “directed perception, with corresponding mental and objective assimilation of what has been so perceived”:

The individual within the collective is never, or hardly ever, conscious of the prevailing thought style, which almost always exerts an absolutely compulsive force upon his thinking and which it is not possible to be at variance. (p. 41)

It is not merely that the thought-collective constrains what can be thought, but that without such social structures, there can be no knowledge:

Cognition is the most socially-conditioned activity of man, and knowledge is the paramount social creation.... Without social conditioning, no cognition is even possible. (pp. 42-43)... The true creator of knowledge is not an individual but the thought collective. (p. 123)

And what, then, of “facts”? Fleck’s account (p. 95) of their genesis is unusual:

This is how a fact arises. At first there is a signal of resistance in the chaotic initial thinking, then a definite thought constraint, and finally a form directly to be perceived. A fact always occurs in the context of the history of thought and is always the result of a thought style.

The nurse’s “fact” is not so simple after all; attachment theory is critical in its genesis. It is not hard to see why theory has such a potent hold. Writing without apparent irony, leading proselytizers of AT argue:

[T]heories help to organize what we know. Theories also provide an economy of effort. They allow conceptual short-cuts to be taken. If the theory is powerful one, it might only take a few observations to locate a particular phenomenon as an example of a class of objects or behaviours.... (Howe et al, 1999, p. 228)

We could not do better job in denouncing the malevolence of theory in pre-determining mind-sets and propelling confirmation biases! Returning to Fleck, we see how integral Theory is to “thought-styles”. When Fleck speaks of the “signal of resistance” that becomes a “thought constraint”, magically producing the “form directly to be perceived”, Theory is the sorcery he has in mind!

From facts to myths – sorry, myths to facts!

Challenging the orthodoxy that information systems are repositories of objective facts is hardly new. In a classic paper, notably entitled *Management Epistemology*, Stamper (1985) also attacks the conventional dogma and a doughty minority of IS colleagues, marching under the so-called language action (LA) banner, have tilted at this windmill for some time (Lyytinen, 1987). Fleck’s work readily fits this critique, though, as noted, it is not well known in our field, though there are sporadic mentions. Tuomi (2000), for instance, uses Fleck to reverse the conventional “data, information knowledge” hierarchy. Data does not come first; knowledge does. Without knowledge to organise data, there is no data.

I will pursue my scrutiny of factors by drawing on the structuralism of Roland Barthes, both his seminal treatise on modern myths (1972) and his analysis of semiological systems, as elaborated in the *Fashion System* (1990).

Rhetorical system	Sr Phraseology of nurse		Sd Representation of the world
Connotation of Attachment	Sr Note		Sd Attachment Theory
Written attachment code	Sr /No problems when Mum left.../ : <i>Sentence</i>	Sd child’s behaviour suggests attachment problem: <i>Proposition</i>	
Real attachment code		Sr Child content/ absent mother	Sd Possible attachment problem

Figure 1: Semiological analysis of /No problems when mum left the room.../

The essence of Barthes method (NB, method not theory) is the analysis of “utterances” (linguistic entities) in terms of a hierarchy of “systems of information”. Following Saussure, the basic unit of meaning is the sign, the union of a signifier (Sr) and a signified (Sd). Going back to our simple fact, we have two obvious systems: what Barthes calls the “real code”, i.e. the child playing happily in the absence of his mother, and the written expression of this in the multi-disciplinary record (the IS), which Barthes calls the “written code”.

At the level of the real code, the signifier is the empirical phenomenon of the “contented child/absent mother”. For the lay observer, it is not clear what, if any, meaning seeing such a spectacle would convey, and it is very likely to go unremarked. For the nurse, on the other hand, there is a very clear signified (Sd), namely a potential attachment disorder: the child’s equanimity is unusual, suggesting an avoidant/dismissing attachment pattern. At the level of the “written attachment code”, we have the entry in the record, the sentence which we have already encountered /No

problems when Mum left the room... /; this is the signifier, with the sign of the underlying real code as its referent, i.e. the conceptual (or propositional) representation of the “contented child/absent mother”.

Intuitively, and conventionally, our analysis would stop here, with two levels (as depicted in the lower half of Figure 1): the behavioural evidence and its denotation in the IS. But Barthes goes further. Naïvely, there is merely a *note* in a file, which *denotes* a concrete real-world event. But Barthes now invites us to consider what this note (sign) *connotes*. What it connotes, of course, is the existence of a large corpus of concepts, techniques and therapies called Attachment Theory. This sign is level 3 of our analysis. But there is more to come. Barthes now asks us to think about what this sign means at a higher level still, the rhetorical level. Here, the level 3 sign becomes a “phraseological” signifier; it connotes a particular way of thinking about the world, of configuring reality in terms of the role of the professional and the ontology of attachment theory.

In other words, not only does attachment theory exist (level 3), but it constitutes a natural, self-evident worldview; more than this, the rhetorical system says “this is how the world *really* is”. The use of *natural* is key here. AT is anything but natural, it is the provisional, man-made, cognitive product of an esoteric elite. But in the vademecum realm of the thought collective, where it is “dominant and binding”, determining “what cannot be thought in any other way”, it seems to be nature itself.

In *Mythologies*, Barthes describes this rhetorical function as myth-making. Myth here does not mean its common usage, as something untrue or non-existent. For Barthes (1972) myth is a type of speech, a “second order semiological system”, providing the foundational cognitive structures which organize and make sense of the world. Although built from the bottom, properly the structure of Figure 1 begins at the top, with a world-view (the Myth), and then works downwards. The Myth thus makes the Facts: no Myth, no Fact.... No Attachment Theory, no attachment disorder.

The function of modern myths is ideological:

Myth is constituted by the loss of historical quality of things... the quality that they were once made ... what is got rid is their contingent, historical, *fabricated* quality. (p. 142)

Myth thus converts History (the contingent socially-constructed phenomenon) to Nature (*a priori*, objective and incorrigible). Myth mystifies, peddling the “simplicity of essences”, endowing a natural and eternal justification for the historical and political. AT does not merely produce facts, it attempts to validate itself in the mundane practices of its votaries, masking ideological claims as factual statements. Theorisation is not an inductive process, as we like to think of it, or even abductive, it is purely semiological. Reversing the naturalist fallacy, myth ingeniously moves from “ought” to “is”, oh so stealthily performing its “cultural work” of naturalizing the *status quo* (Wastell, 2007).

Thus we pronounce Attachment Theory to be a myth, as are all social theories to the extent that they form an accepted thought-style which dominates a practice.

Against theory

If not “Against Theory”, I am certainly highly sceptical. In IS research, and management research more broadly, theory is lionised. Egregiously, we describe theory as a lens, but what a preposterous metaphor! A lens might magnify reality, but

it does not configure it. Theory, on the other hand, does distort, conforming the world to its own metaphysics. More like a pastry-cutter, or a stencil, than a lens! We have seen how theory operates to distort professional practice, enchanting by simplifying, creating spurious certainty. By translating mundane human experience, articulated in vernacular language, into its rarefied and highly constrained vocabulary, Attachment Theory produces mystification not insight; it is a “thought constraint”, magically producing the “form directly to be perceived”. To the man with the Technology Acceptance Model (TAM), the whole world looks like TAM! In a word, theory is kitsch: a “repetitious and unadventurous genre” (Wastell and White, 2011).

It is time to kick the Theory-habit. Doing so should help suture the much-lamented gap between our research and practice. Enchantment with theory is partly responsible for this estrangement. The translation of the vernacular, phenomenal world of human experience into arcane, technical vocabularies is a form of mystification that inevitably creates division and hinders communication. Rorty (1989) argues that human beings carry a culturally-sustained “final vocabulary”, which they employ to justify their actions and beliefs and whose contingency is more or less ignored. Theories can expand the vocabulary, but not if we confuse them with the real world, conquering abundance with tyrannizing universals (Feyerabend, 1999). In short:

The only theory worth having is that which you have to fight off, not that which you speak with profound fluency. (Hall, 1992: 280)

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