Epistemology, Story-telling and Pedagogy

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Parable

Once upon a time there lived a tribe of happy nomads who lived in the largest country in Africa – the Sudan. These desert nomads depended on their sturdy and faithful camels for survival. Camels supplied nutritious milk in geographical locations where there was nothing to eat and it is important to remember that camel meat is tasty and nourishing. Practically disease-free and cholesterol-free! Camel hair and wool were used to weave clothes, tents and rugs. Camels were also first-rate riding animals. They could either run very fast over a short distance, or cover very long distances without tiring. They were sometimes known as 'ships of the desert' and their value to the nomads was priceless.

To say that the nomads loved their camels would be an understatement. These odd and sometimes grumpy creatures were their pride and joy and young nomadic children were constantly being tutored in the ways of the camel. We could say that young children of six or seven knew their camels in much the same way that 'enlightened', western children know their shoot-em-up game boys and internet chat rooms. An elderly nomad would only need to say – "Where is Tati today?" and precise geographical knowledge would pour forth from the mouths of alert and attentive stewards. A sick camel could trust a six-year old girl to minister tender loving care and a pregnant camel was never bereft of young midwives.

Unfortunately our young charges were unable to furnish a rational account of their 'knowledge'. They could find any given camel at the drop of a hat but probe the young camel 'expert' and there was always a conspicuous lack of rational method. Living in a scientific society we sometimes forget the crucial ingredients that all proper knowledge must display. We can only be said to know something if we believe any given proposition for the right and proper reasons. A person must be able to support any given knowledge claim with appropriate logical and factual support. Eliminate this foundation and we are left with mere opinion and conjecture. In plain terms we are confronted with unenlightened dogma and belief.

In those days the Sudan was ruled by an enlightened, secular government and important representatives of the regime were distressed and alarmed by the crass ignorance of the nomadic offspring. Surveys clearly demonstrated that precise nomadic knowledge of quadratic equations, Boyle's law, and the Big Bang theory was non-existent. Civil Servants in Khartoum became understandably cross, grumpy and tetchy. How could an enlightened society tolerate such an appalling antipathy to precise, accurate rational knowledge? Knowledgeable agents of the state apparatus contacted the Nomadic tribe and alerted them to the abysmal plight of their children's education. Something had to be done and the perfect solution was concocted. A law was passed that forced all the nomadic progeny to attend government-sponsored schools. In these centres of wisdom and insight the youngsters would no longer waste their lives mastering conjecture and opinion about camels but the fundamental laws of maths and the hard sciences would be their daily companions. Precise knowledge would replace vague opinions.

In time the young nomads became increasingly rational and scientific. They learnt to despise their nomadic folk-lore and embraced the firm discipline of Cartesian prejudice. We can only know what is clear and distinct. We can only possess knowledge when vagueness and fuzziness have been eliminated.

Overpowered and bullied by the modern descendents of Galileo and Descartes, the nomadic offspring gradually became enlightened. They distinguished carefully between facts and opinions as any normal, healthy western child will do and the benefits and advantages of a western secular education became their prized possession. They learnt to despise any belief or prejudice that could not be explained in strict, scientific fashion and the old primitive concern and stewardship of camels became but a distant memory. Now they were able to draw accurate, scientific representations of these humpbacked beasts and develop cunning cigarette marketing strategies while quaffing excellent lager beer.

The nomadic offspring basked in the glories of algebra and statistics. Passionate discussions about electrons and protons were common fare and Newton's theory of gravity was fully mastered. Value-free, objective knowledge became an all-consuming focus. Happy days!

In the fullness of time their parents and their camels died and the young secular citizens became increasingly addicted to cigarettes, malt whiskey, drugs, computer games and pornographic magazines. At last enlightenment had come to the largest country in Africa.

Polanyi and Western Epistemology

The assumption of many western epistemologists is often that all genuine knowledge must be explicit. For example the standard tripartite analysis of knowledge is that we must be able to specify precise logical criteria in order to establish any claim to knowledge. The tripartite definition of knowledge concerns what philosophers call 'propositional' knowledge. This view of knowledge was first discussed by Plato in the Theaetetus. This definition has come to be called "the standard analysis" of knowledge. It is very basic to the study of epistemology. The heart of this view of knowledge goes like this:

S knows that p if and only if

- a) S believes p,
- b) S's belief in p is justified,
- c) P is true.

Can we challenge this very austere and rationalistic approach to epistemology?

We could argue that *we know more than we can tell*. This is the phrase with which Michael Polanyi (1891-1976) sometimes introduced what he called 'tacit' knowledge. For instance, you know your daughter's face. You could recognize it among a thousand with instant certainty. Yet you cannot tell how you know it; you could not specify exactly its shape, size, colouring etc.

As we see in our parable, nomads in the Western Sudan depend on the tacit knowledge by which their children can recognize each one of two hundred camels, and if one disappeared, know at once which it was, recognize its track and find it. The parents feared that if their children went to "western" schools and learned arithmetic and algebra and other formal subjects, they would lose their practical epistemological powers, and their way of life would be destroyed. This story illustrates how important tacit knowledge can be and how explicit knowledge may destroy it.

To bring out the significance of this point imagine how a devotee of the standard tripartite view of knowledge would respond to our nomadic children. She would not accept that their tacit knowledge qualified as knowledge at all! And yet ironically their ability to identify Tati the camel leads to crucial propositional knowledge. A child versed in these extraordinary skills can put forward true and life-preserving propositions about missing camels. "I know that Tati is drinking water by the third hill to the west of our village."

Polanyi also contended that tacit knowledge, the same kind that we use every day, is in fact the dominant principle of **all knowledge**, and that its rejection would involve the rejection of any kind of knowledge whatsoever. At the heart of all knowledge, he insists, however exact, however much it uses formal procedure, there is this element of personal judgment depending on an unformalisable intuition, a skilled integration of unspecifiable particulars.

In the sciences where classifying is involved, this is easily seen. Botanists and geologists have to spend a long time learning the skill of recognizing plants or rocks as belonging to a certain class or species; medical students have to toil for months to acquire the skill of seeing the meaningful shapes in a lung X-ray. Written descriptions cannot tell all. If they could there would be no need for live

teaching or laboratory work. The student has to learn how to recognize the plant or the disease by watching how the expert does it, and trying herself, till she catches the meaning of what the expert is doing.

Proponents of the standard analysis of knowledge ignore this vital (if hidden) tacit component to knowledge. Without doubt explicit knowledge is important and, at times, life-preserving but this insight should not blind us to the reality and significance of tacit knowledge.

Dooyeweerd and Epistemology

On my website I have a simple introduction to Dooyeweerd's philosophy. I tell a story about crocodiles and then I explain how Dooyeweerd would analyse the structural features of the crocodile using his very rich modal theory. I contrast reductionist theories with this very rich and dynamic ontology. Go to <u>www.markroques.com</u> and you will find this essay. It's visual and hopefully entertaining.

Let's now combine the insights of both Polanyi and Dooyeweerd and show how they illumine different kinds of knowledge.

In Giles Milton's wonderful book *White Gold: The Extraordinary Story of Thomas Pellow and North Africa's One Million European Slaves* there is a fascinating story about a North African desert guide who had a very important kind of knowledge. Just like the nomads of the Sudan, this blind man 'knew' things that the common, rationalistic perspectives simply cannot fathom.

In a desert it is vital to 'know' where water is. In 1731 the Cornishman Thomas Pellow met a blind guide who was able to **smell sand** and then 'know' where the next water hole could be discovered. This man told Pellow that he used his nose to lead them from waterhole to waterhole, sniffing the sand to determine their exact position.

Some of the thirsty and skeptically minded desert travelers decided to test the guide in order to see whether he had this important knowledge. One of them 'had retained a small bag of sand from two days previously and now presented this to the blind man. 'After he had sniffed on it for a much longer time than at first,' wrote Pellow, 'he told him that either the army was again marching back, or that he had most grossly and basely imposed on him.' When informed it was sand from two days earlier, he was angry that the men had not trusted his abilities. He demanded that they scoop up some sand from where they were now standing and 'after just putting his nose to it, he said that we should, about four o'clock that afternoon, have water sufficient'. The caravan pressed onwards until they sighted a distant speck of green in the desert.

'At last,' wrote Pellow, 'we got up to these so very much longed after wells...and drank our fill'.

This method of finding water intrigued Pellow and he quizzed his guide about his 'wonderful and surprising knowledge in smelling to the sand. The man replied that he had crossed the Saharan desert thirty times and, 'finding his sight gradually declining, he had, by often making the experiment.....attained to this so wonderful knowledge.' Such skill and knowledge were, in fact, by no means unique to this particular guide. They had been in use for centuries among the nomadic tribes of the Sahara. The medieval Arab traveler, Ibn Batouta, and the sixteenth-century adventurer, Leo Africanus, both mention similar techniques.

This kind of knowing re-enchants the world when we marinade in its significance. It can also transform philosophy from a dry, arid desert experience into a rich, meaningful experience that reminds us of a wonderful oasis full of trees, waterfalls, cocunuts and loquacious parrots.

Let's now do some creative philosophising and develop a new way of doing epistemology. We could say that the blind guide had a very important form of tacit knowledge (Polanyi) that we must both honour and understand from a theoretical point of view. We could say that he has a kind of knowing that is qualified by the sensitive mode. This act of knowing displays all the aspects (following Dooyeweerd) but focuses upon the 'sensitive' dimension.

There is great significance to this. To disparage this kind of knowledge as merely 'intuition' is to rob this act of knowing of its important truth claims. We can verify that the guide had knowledge. We could say that his 'claim to knowledge' was tuned in to how things really are. His act of knowing was faithful to the way things really are.

By saying that this act of knowing displays all the aspects (remember the crocodile) we are alerting the reader to the hidden, tacit presence of the logical aspect. It is present in the act of 'smell' knowing without swallowing up the act of knowing. It is present but dormant. The blind guide was not doing something irrational or non rational. Rather the rational was present in a tacit sense. This complexity needs considerable elaboration and development.

Pedagogy and Different kinds of Knowing

When we begin to think about pedagogy we must consider the vast gulf there is between the standard tripartite view of knowledge and the richer view of knowledge which I have tried to sketch. If we believe that knowledge is a onedimensional affair (eg a passive understanding of the 'facts' etc) we will produce teachers who are 'flat', one-dimensional, colourless and uninspiring. We will hear lectures that incarnate this drab, false and dehumanizing epistemology. Do we want to bore our students to death as we force feed them (remember how foie gras is made) with meaningless facts/logical atoms or do we want to bring them joy, colour, insight and a baptized imagination?

If we attend to the multifaceted nature of the world (ontology) and the many rich ways in which we garner knowledge (epistemology) of this rich creation, our pedagogy will be transformed. We will integrate acting, imagining, playfulness, story-telling and appropriate irony into our teaching. We will also authorize students and allow them to tell us their stories. Much more can be said about this.

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