

'Indigenous knowledge', assessment, and international standards

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Abstract

'African solutions to African problems' has become a well- and widely-used slogan in the years since the transition to democracy in South Africa. More often than not, suggestions of such solutions are taken to constitute examples of 'indigenous knowledge'. Conceptions of 'local' knowledge, development and struggles for cultural autonomy are usually articulated in terms of critiques of 'western' knowledge, development and hegemony. There are, broadly, two types of defence of 'indigenous knowledge'. The more radical defence joins, and avails itself of, 'post-colonial', 'post-modern' and relativistic critiques of the 'western' notions of 'universal knowledge' and 'international standards'. The more cautious approach emphasizes the different ways in which particular theoretical orientations—like realism, radical constructivism and anthropological cultural relativism—deal with questions of knowledge, including standards of assessment.

The present paper eschews the popular and 'politically correct' option of embracing the idea of indigenous knowledge. I argue here, on the basis of an analysis not of 'indigeneity' or 'locality' but of 'knowledge', that extant defences of this notion are deficient in several significant respects. The present analysis enables an understanding of the importance of context (of knowledge ascription and of assessment), without allowing the emphasis on relevance to erode any commitment to transcultural standards.

The idea of 'indigenous knowledge'

The emphasis on 'local' knowledge is in part a response to the perceived lack of relevance and/ or sensitivity to social and cultural context manifest in standard assessment practices and reference to 'global standards'. Thus, Malegapuru Makgoba tackles both the issue of (pursuit of) knowledge and the issue of standards, in university education in particular:

The issue of pursuit of knowledge for its own sake and the so-called standards have always reflexly (*sic*) become contentious factors around the African university. ... The pursuit of knowledge for its own sake has been one of the cornerstones of university education; but, is there such a thing as knowledge for its own sake today? Knowledge is a human construction that by definition has a human purpose. Knowledge cannot be sterile or neutral in its conception, formulation and development. Humans are not generally renowned for their neutrality or sterility. The generation and development of knowledge is thus contextual in nature. (Makgoba 1997: 177)

That knowledge ascription and justification have a crucial contextual component is surely not in doubt, but this does not mean that knowledge in all its aspects or components is essentially 'a human construction'. (I will return to these ideas below.) Nor does it mean that the pursuit of knowledge must be described and explained in consequentialist terms. It might be the *object* of knowledge that is and continues to be the legitimate cornerstone of university education. Makgoba continues:

The second is the issue that Africanising institutions in context and curriculum or staffing them by Africans lowers standards. ... The freedom of the African continent from colonial rule has one inherent dimension to it: the African must be free to do and choose as he deems fit. (Makgoba 1997: 177)

Whether one attaches an intrinsic or an instrumental value to education and knowledge, the deterioration in educational standards is evidently an absence of a significant good—and certainly perceived to be so by Makgoba, Barney Pityana and others. When Pityana speaks of the 'Africa-centred university' and of 'transformation as throughput rates and research profile', he intends this to be understood as a plea not for the lowering of standards but that South Africa focus on problems that are rooted in and significant for Africa (Pityana 2004: 4), including concerns around knowledge production and 'ownership'.

'Indigenous knowledge' is a fairly recent phenomenon, a buzz phrase that has gained increasing currency over the last quarter of a century, and in South Africa in particular since the first democratic election and subsequent political and educational transition in 1994. 'Indigenous knowledge systems' (IKS) is one of the National Research Foundation's focus areas (National Research Foundation 2005), and the introduction of IKS in school education is called for by the Revised National Curriculum Statements (RNCS) in the various learning areas (Department of Education 2002). Accounts or explanations of indigenous knowledge characteristically focus on 'indigenous'—as if this were the difficult or controversial term. It is commonly coupled with 'local', 'African', and the like, and contrapositioned with 'universal', 'global', 'world', 'western', 'Eurocentric' etc. (see Semali & Kincheloe, Higgs *et al*, and Odora Hoppers *passim*). To date, no policy document, statement or article has yielded the understanding of 'knowledge' the respective authors are working with—as if the concept

of knowledge were simple and uncontroversial. I contend that it is not, and that a circumspect account of knowledge will reveal 'indigenous knowledge' to be something of a misnomer.

An analysis of 'knowledge'

'Curricula and classroom practices that accentuate multiple viewpoints and ways of knowing as well as the empowerment of students of color must be accompanied by assessments that acknowledge that there are many routes to similar outcomes, and that *knowledge is situational and culturally bounded*', according to A. Lin Goodwin and Maritza Macdonald (Goodwin & Macdonald 1997: 217; emphasis added). They illustrate their point by means of the following incident:

Lena's classroom has been studying animals and the discussion has turned to zoos. For one of the assignments, children use drawings to depict their definitions of 'zoo'. One child, Kavemuii from Namibia, draws animals in a big, open, green, and gold field. The other children notice and begin to tease him, saying that he doesn't know anything about zoos. Lena notices and begins a discussion about how zoos came to be and why Kavemuii's drawing is so different from those of the other children. Through the discussion, the children come to understand that countries like the United States build zoos to house animals that are not indigenous to the country; zoos are designed to display animals in habitats that are made by humans and in areas that are inhabitable to animals. In Kavemuii's experience, animal habitats are very different; 'zoos' are the open plains where animals live free and not in cages. (Goodwin & Macdonald 1997: 217)

In concluding that this vignette 'illustrates how knowledge is personal, contextual, and cultural' (Goodwin & Macdonald 1997: 217), the authors arguably confuse two different kinds of knowledge. Indeed, they fail to acknowledge that there are, broadly, three kinds of knowledge. First, knowledge of a person, a place etc. is also referred to as familiarity- or acquaintance-type knowledge. Second, knowledge-how may be called practical knowledge, even skill. Third, knowledge-that constitutes propositional or declarative (often also referred to as factual or theoretical) knowledge. The incident related by Goodwin and Macdonald appears to involve familiarity- or acquaintance-type knowledge, in which case their conclusion is plausible. To the extent that it also involves knowledge-that, however, the conclusion that 'knowledge is personal, contextual, and cultural' is not only unwarranted but is clearly avoided with the help of precise definition, namely of 'zoo'.

Whereas the first two types of knowledge are fairly straightforward, it is the third type of knowledge that is more complex. Traditionally defined as 'justified true belief', knowledge-that has three essential components:

- (strong) belief
- truth
- and (suitable) justification.

Each of these is necessary, and jointly they are sufficient, for knowledge. In other words, if one were missing, it would be meaningless to speak of 'knowledge'. 'Belief' is its subjective

component, while 'truth' constitutes the objective anchor for knowledge. While beliefs may vary from individual to individual, society to society, culture to culture—and indeed in terms of strength and duration—truth does not so vary. Truth refers to what is the case, independently of what individuals believe, think or feel may be the case, independently even of public or general consensus. The third component, 'justification', has a kind of bridging role between the subjective and the objective, between belief and truth. The justification component is multifaceted. Thus, what counts as *suitable* justification is determined by

- degree
- kind
- and context of justification.

Degree and kind of justification, and 'authentic assessment'

As far as the requisite *degree* of justification is concerned: minimal justification is clearly not enough, while conclusive justification is usually not available. Normally, that is, other than in mathematics and deductive logic, we accept justification that is less than conclusive, that is, reasons that are nonetheless compelling. Different *kinds* of justification include observation, sense experience, introspection, memory, oral and written testimony, deductive and inductive reasoning, and so on. The present account of suitable justification bears on the attribution of knowledge insofar as it concerns both self-ascription and other-ascription, the framing question being: 'Under what conditions can I/ others be said to know?' There is a parallel here between knowledge attribution and both self- and other-assessment. 'Authentic assessments', according to Goodwin and Macdonald,

are often described as meaningful and comprehensive measures of what learners know and are able to do. ... [They] are characterized by continuous observations of learning, depth and breadth of response, cycles of revision and refinement, students' engagement in self-assessment, and connections between what is being assessed and real-world issues and questions. ... Authentic assessment begins with teachers making it their business to purposefully watch, listen to, talk with, and think about the children in their classrooms. By observing, recording, informally monitoring, conferencing with, and interviewing their students, teachers initiate an ongoing process that uncovers who learners are and what they know, and that leads to opportunities for teachers and children to build shared language, meaning, and beliefs. (Goodwin & Macdonald 1997: 211, 223)

These sources of what Goodwin and Macdonald refer to as 'holistic assessments that ... enable children to demonstrate learning by integrating and applying knowledge and skills to real-world tasks' (Goodwin & Macdonald 1997: 223 fn.1) are similar to sources of justification, that is, on the basis of which educators ascribe knowledge to their learners and students—and, indeed, on the basis of which we ourselves can claim to know.

Knowledge, justification and the 'social'

Stewart Cohen's verdict that the 'social component [of knowledge] is best seen as indicating that attributions of knowledge are context-sensitive' (Cohen 1986) is related to what Israel

Scheffler says about the suitability of justification¹. Scheffler argues that the idea of *suitability* 'involves standards, which are normally applied more strictly in some cases, more approximately in others, thus giving rise to multiple interpretations of *knowing*' (Scheffler 1965: 96). Thus, the justification component permits some kind of leeway. What counts as suitable justification in the case of a young child or learner or person from a remote rural area, with limited opportunities, resources or access to information, differs from that required of an older, more mature child or learner or person from an industrialized, technologically advanced/ privileged, urban background. Yet, in all the various cases, the justified belief must be true. In the absence of truth, one cannot meaningfully speak of, or ascribe, knowledge. Scheffler suggests a subtle shift from examining beliefs to examining the *contexts* in which beliefs are advanced as knowledge-claims. In other words, he suggests that we distinguish the question concerning justification (of a belief) from the 'question of *appraisal of the believer*' (Scheffler 1965: 102). 'To speak of the right to be sure is, in the present context, to appraise the *credentials* of belief from the vantage point of our own standards; it is to spell out the attitude of these standards toward specific *credentials* offered for a belief', Scheffler contends² (Scheffler 1965: 102).

Like Scheffler, Cohen argues that justification, or having good reasons, is relative to an epistemic community. He advances his argument through an analysis of what it means to have good reasons for believing something. The concept of *defeasibility* is crucial to Cohen's argument. One's reasons for believing something are *defeasible* if there is something else that could count against them, that is, something that could *defeat* them or undermine their feasibility. According to Cohen, we can say that someone (like a six-year-old) has good reasons if, given her reasoning ability, it is (epistemically) permissible for her to believe that something is the case. In Scheffler's words, we would be inclined to apply our standards of justification more leniently in the case of the six-year-old and more strictly in the case of the sixteen-year-old.

The important point for educators is that what counts as a good reason depends on who is giving the reason and in what context. One of the responsibilities of an educator is to assess learners' knowledge in a way that is sensitive both to their level of understanding and to the context of assessment. Another (related) responsibility is to develop learners' grasp of the intersubjective standards of different learning areas – or, in Cohen's terms, to help learners move from a level of reasoning which provides *subjectively evident* grounds for believing something to a level which provides *intersubjectively evident* grounds for belief.

The concept of having good reasons is not without ambiguity. A person can have *subjectively good reasons* (that is, reasons that are clear and convincing to her, given her level of understanding) or *intersubjectively good reasons* (that is, reasons that are clear to her and that comply with the standards of reasoning of the social group to which she belongs). How are these different applications of justification relevant to the concept of knowledge? When is an educator entitled to say that a learner knows something (in the sense of *knowing that*)? To put

¹ Scheffler initially refers to 'evidential adequacy', a notion he later abandons in favour of that of 'the right to be sure'. I take 'justification' to be more comprehensive than 'evidence' and to be consistent with the notion of the right to be sure.

² The notion of 'the right to be sure' is A.J. Ayer's (Ayer 1956).

the question more formally: Under what conditions may an educator attribute knowledge to a learner? According to Scheffler, when we judge that someone possesses suitable justification, we are judging that he possesses reasons the quality of

which he understands. In saying he knows, we are not merely ascribing true belief but asserting that he has proper credentials for such belief, the *force* of which he himself *appreciates*. (Scheffler 1965: 112)

Scheffler's and Cohen's arguments imply that even if a learner has subjectively good reasons for believing something to be true, she does not have knowledge unless she also has *intersubjectively good reasons* (and, of course, unless her belief is true). One of the tasks of an educator will be to assist learners to acquire the relevant concepts and intersubjective standards of justification. To repeat, I am not talking about *perfect* reasons: I am talking about *good* reasons. An important feature of what constitutes *good* reasons is that they are *reliably produced*. If reasons are unreliably produced, they cannot function as justification for one's belief/s. What does 'reliably produced' mean? For one thing, one's sense experiences must be reliably connected with the world, one's sense organs must be intact, etc. For another, one's reasoning must be correct. This analysis of good reasons indicates why reference to them is context-sensitive. Neither our reasoning nor our sense-experiences are infallible. Nonetheless, if they are generally reliable sources of justification, the reasons they produce might be called *intersubjectively certain*. As Cohen says: 'Reasons can be permissible grounds of belief, relative to that standard, even though they are not ideally correct' (Cohen 1986: 575).

If reference to good reasons is context-sensitive, does this mean that the criteria for knowledge-ascription change with the respective social group? Is knowledge itself relative? In Plato's cave parable, whatever the enlightened person knows about 'reality' stands in stark contrast to the (majority) view that what the prisoners in the cave claim to know is reality. Does this indicate that *knowledge* is ambiguous between various concepts, each based on a different standard? Is this knowledge context-dependent? Scheffler's and Cohen's arguments suggest that it may be better to say that attributions of knowledge are *context-sensitive*. This is because the term '*context-sensitive*' does not offer an open invitation to epistemological relativism.

Epistemological relativism and relativism about truth

What are epistemological relativism and relativism about truth? In a nutshell, relativism about knowledge and truth denies that there can be any objective knowledge or truth that is not dependent on some specific social or historical context or conceptual framework. Ernst von Glasersfeld, in defending what he has called 'radical constructivism', asserts:

There is no simple argument to justify the distinction between experiential reality and ontic reality. ... As a constructivist, I have never said (nor would I ever say), that there is no ontic world, but I keep saying that we cannot know it. I am in agreement with Maturana when he says: 'an observer has no operational basis to make any statements or claim about objects, entities or relations as if they existed independently of what he or she does'. (Von Glasersfeld 1991: § 17; see Maturana 1988: 30)

He says that he, too,

arrived at this conclusion, albeit by a path quite different from [Maturana's]: I started from the sceptics, he from biology. The crucial point is that we do not make claims of knowing what exists 'in itself', that is, without an observer or experiencer. ... And as far as our knowledge ... is concerned, I claim that we cannot even imagine what the word 'to exist' might mean in an ontological context, because we cannot conceive of 'being' without the notions of space and time, and these two notions are among the first of our conceptual constructs. (Von Glasersfeld 1991: § 18)

Willard Van Orman Quine and J.S. Ullian concur that an 'observation is made by an individual'. However,

the truth of the observation sentence is an intersubjective matter. Here a favorite old irrationalist doctrine finds both its seductiveness and its rebuttal. The hoary view contends that truth is relative to believer; there's truth for me and truth for you, and their reconciliation is generally neither possible nor desirable. Now the variable ownership of acts of observation might be cited in support of this doctrine ...; but which observation sentences are *true* will not ... depend on either of us nor on any other observer. (Quine & Ullian 1978: 28)

The 'hoary view' or 'irrationalist doctrine' Quine and Ullian are taking on in the passage from which the quote is lifted is relativism about truth. To be a relativist about truth is to maintain that there is no universal, transcultural or objective truth, that 'truth' is in the eye of the beholder, or in the mind of the believer: it differs from individual to individual, from society to society, from culture to culture. In other words, truth is particular or relative to a specific personal, social, cultural, historical or geographic context.

The defence of relativism draws on the central role that Quine and Ullian, and others, have accorded to observation, with regard to belief systems and knowledge formation. Observations are made by individuals, and 'the ultimate evidence that our whole system of belief has to answer up to consists strictly of our own direct observations – including our observations of our own notes and of other people's reports' (Quine & Ullian 1978: 21). Given, furthermore, that our observations differ, does this not imply that the truth/s that we access by means of our observations will differ? No, say Quine and Ullian: our observations may indeed differ—the may either contradict each other, or they may be of different aspects of the same object—but what is actually the case, what is true, does not depend on these observations, nor on any observers.

'Truth is relative to believer'. Is this truth (if it is that) also relative to believer? If so, why should it impress others? If not, then there exists at least one truth that is not relative. 'There's truth for me and truth for you, and their reconciliation is neither possible nor desirable'. Is this my truth? Or is it also your truth? If the former, why should it impress those who hold a different view of truth? If the latter, this indicates that reconciliation is possible—yet, again at the expense of relativism and in favour of universalism. Either way, the relativist will be caught up in paradox, in a logical conundrum. At some point, he will want to claim that his statements about the relativity of truth are, in fact, universally (that is, nonrelatively) true—which he cannot do consistently, given his relativism. If anything, von Glasersfeld's characterization of 'scientific truth', as requiring the 'separation of metaphysical beliefs and convictions, which purport to reflect an ontological reality, from rational/

scientific knowledge, which is given an instrumental function in the living organisms' management of their subjective experiential reality' (Von Glasersfeld 1991: § 48), achieves the opposite of what it is intended to do. It provides no means for distinguishing between scientific truth and superstition.

Moreover, if 'an observer has no operational basis to make any statements or claim about objects, entities or relations as if they existed independently of what he or she does' (Von Glasersfeld 1991: § 17; see Maturana 1988: 30), how can the observer *claim* that these objects' existence *depends* on what s/he does? How does von Glasersfeld *know* that we *cannot* know the ontic world? What he refers to as the 'original seed of constructivist ideas', 'undoubtedly the sceptics' realization that we can have no certain knowledge of the real world' (Von Glasersfeld 1991: § 7), is problematic in that sceptics cannot claim to 'know' or to have 'realized' this. Similarly, the 'sceptics' irrefutable proposition that the truth of what we would call "knowledge of the world" cannot be assessed or demonstrated because the "representations" of which it is supposed to consist can never be compared with what they are supposed to represent' (Von Glasersfeld 1991: § 48) cannot, for reasons of consistency, be taken as 'certain knowledge of the real world'. Nor can it be taken as reflecting 'experiential reality', given that 'the sceptics [have] demonstrated quite irrefutably that the senses are fallible' (Von Glasersfeld 2003). It follows that von Glasersfeld and the sceptics cannot both construct their cake and eat it.

How is this to be applied to the discussion of indigenous knowledge? There may be a sense in which knowledge of the familiarity or acquaintance type can be 'indigenous'. 'Indigenous' South Africans could be said to have such knowledge of their traditions, customs, myths and folklore, and the San have such knowledge with regard to the terrain in which they live, that is uniquely and distinctly theirs. Similarly, the notion of 'indigenous practices' or 'indigenous skills' appears to make sense—like pottery or weaving practices, or architectural and design skills. But does the idea of 'indigenous' knowledge make sense when applied to the third type, factual or theoretical knowledge? I would suggest that everything depends on the truth condition. The idea of 'indigenous beliefs' certainly is plausible, and there may well be some leeway with regard to justification, to enable greater leniency in assessing (the justification for) Ju'hoansi knowledge claims and greater stringency in assessing those of university graduates. But could there be 'indigenous truths', could there be (an) African truth(s) that is/are different from 'western' or 'occidental' truth(s)? If an affirmative answer is given to these questions, there are two problems. The first is that of superstition. Anything that is honestly and (more or less) justifiably believed and advanced as a knowledge claim could count as truth. There would be no way to distinguish between knowledge and superstition. The second problem is that of relativism. If knowledge and truth did differ from individual to individual, society to society, culture to culture, then it would be impossible to pass judgment on another's knowledge claim. Moreover, in order to decide what is true or false, one would merely have to consult the beliefs prevalent in one's own society. Finally—if one thinks especially about standards over time, across subjects and across learning pathways—one could not really say whether any progress has been in a society, in terms of advancement in knowledge and assessment. (Think of the views of a 'flat-earth' society in all these instances.) The deeper problem is that relativism about knowledge and truth is expressible only as knowledge claims or as stating a truth—which would, at best, not be very compelling or, at worst, incoherent.

Concluding remarks

To sum up, there are several questions one might ask, that bear also on the plausibility of applying the formula 'everything is relative' in discussions about assessment and educational standards, with regard to the 'hoary' conception that concerns the status of truth. *Is* truth (for example, facts about the shape of the earth) relative? *Does* it differ from culture to culture, from society to society, and even from individual to individual (as in 'What is true for you may not be true for me')? Or is what may differ from culture to culture etc. not truth but *beliefs*? At this juncture, one may stop to think about why beliefs are referred to as the 'subjective' component of knowledge and truth as the 'objective' component. Can one compare and evaluate different beliefs and belief-systems or not? Do we have recourse to an objective framework of reference? Finally, is it *true* that truth is relative? It is worth also noting the implications of this for the status of *knowledge*. Truth, after all, is a necessary condition for knowledge, as are belief and justification. Philosophically, therefore, does it make sense to speak of *true* knowledge or *legitimate* (or *valid*) knowledge? Can there be any *other* kind, knowledge other than 'true' and 'legitimate' or 'valid'? Does it make sense to say that knowledge is 'relative'? Or is what may differ from culture to culture, from society to society, from individual to individual, again, either beliefs *or* the level (or standard) of justification required or expected? Clearly, the trick for the epistemological relativist is to avoid advancing his thesis as anything other than a nonrelative knowledge claim. If he presents his epistemological relativism as a piece of universal knowledge, he can be accused of inconsistency. Yet, if he does not, it is unlikely to convince nonrelativists—just as realists would be unfazed by the construction of radical constructivism.

By contrast, the term *context-sensitivity* indicates that the standards of knowledge-attribution and of assessment may be determined by (1) the context of attribution/ assessment and (2) the *intentions* of those who attribute or ascribe knowledge and who are involved in assessment. It does not imply that truth, and with it (the concept of) knowledge itself, is relative to a particular standard, unstable, or changing.

Where does all this leave the notion of indigenous knowledge? If the important term here is 'indigenous', then it refers either to indigenous practices or to indigenous belief. It would consequently be wise to jettison the term 'knowledge'. On the other hand, if it actually is meant to refer to 'knowledge' in the factual or propositional sense, then the idea of 'indigenous' knowledge simply fails to make sense. What we are dealing with here is knowledge as such.

In South Africa as elsewhere, people do not all have the same cognitive resources, skills and opportunities; they do not act or operate free of time constraints. Their situations are characterised by different levels of expertise, by different opportunities for information gathering, by different levels of cognitive maturity and training, and by severe time constraints. As Alvin Goldman cautions, a 'social epistemology for the real world needs to take these constraints into account' (Goldman 1992: 223). If the present analysis is plausible, it arguably enables an understanding of the importance of context, in terms of both attribution and provision of knowledge, as well as of assessment, without allowing the emphasis on relevance to erode any commitment to transcultural standards.

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