

Creating a Space for the Co-Existence of Multiple Knowledge Systems: Indigenous Knowledge in Academia

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Abstract

Indigenous knowledge systems have long been subsumed into other kinds of knowledge and in most instances have not been regarded as viable, reliable and scientific because they do not belong to any scientific theory or paradigm. The disregarding of indigenous knowledge systems has led to discussions which have shown that this practice is illogical and contradictory. The notion that only one knowledge system can justifiably attest to claims of truth is obnoxious. A need exists to create a space where diverse knowledge systems co-exist. The co-existence of such knowledge systems will create a space where knowledge, ideas and material for imagining can occupy the same platform. In this article I explore the different kinds of knowledge and the imperative to create a space for their co-existence. To reach this goal, I delve into the different approaches that are used to define indigenous knowledge. I also explore the complexities that surround the definition of indigenous knowledge. The article closes with reasons why indigenous knowledge should reclaim its standing and why it should co-exist with other knowledge systems.

Keywords: knowledge; indigenous knowledge systems; Western knowledge system

1. Introduction

The dominance of the academy by a single knowledge system (such as 'Western knowledge') is deplorable because it advances and promotes a particular world view. Furthermore, such a dictate leads to theorists and scholars judging other knowledge by using only one particular lens or criteria of a specific world view. Several 'issues' are raised by Western scholars about the legitimacy of indigenous knowledge. Kai Horsthemke (2008:129) for example suggests that even if the 'manifestation' of indigenous knowledge could be traced back to the origins of humankind, the intellectual concept of 'indigenous knowledge' is a relatively recent phenomenon. His claims cannot however be regarded as an absolute truth. In 1860, the United States Office of Indian Affairs collected information pertaining to the history, pictography, rites and superstitions of the Indian tribes of the United States and preserved them in the *Archives of Aboriginal Knowledge* (Schoolcraft & United States, Office of Indian Affairs 1860). Similarly, in South Africa, Watt and Breyer-Brandwijk (1932) published a comprehensive survey of the indigenous knowledge specifically of Southern African plants of pharmacological and toxicological interest. These two authors managed to engage and advise the South African Union Government on much valuable indigenous lore which was in danger of being lost due to the rising popularity of artificial medicine.

Nakashima and Roué (2002:3) state that indigenous knowledge has developed together with humanity through innumerable years of environmental change and cultural adjustment. In *The savaged mind*, Claude Lévi-Strauss (1962), a prominent anthropologist, presents a discussion on the nature and character of indigenous knowledge. And in 1952, Harold Conklin, the first indigenous knowledge scientist, completed a comprehensive investigation of the Hanunoo indigenous people of the Philippines and their knowledge of the natural environment (Conklin 1954). Whether the Eurocentric mainstream academy has acknowledged the conceptualisation and existence of indigenous knowledge or not, the fact remains that it has existed and been accessible for many years.

Eurocentric scholars frequently question the status of indigenous knowledge within the academic world and wrestle with the question "what is indigenous knowledge?" Rata (2011:7) states that indigenous knowledge is "social knowledge" and says that it is different from scientific knowledge. Unfortunately, Western scholars often seek to understand indigenous knowledge from one particular cognitive perspective. Again, the tendency to compare indigenous knowledge and Western knowledge is a matter of concern in all indigenous studies. Maerk (2012:164) importantly warns

that 'Western' and 'Indigenous' theorists should as far as possible avoid placing the two kinds of knowledge as binaries. Dei (2008) also consistently advocates for the recognition of the ontologies and epistemologies of indigenous knowledge within the academy, placing them alongside the Western annals of knowledge and research processes.

The call for the co-existence of different kinds of knowledge in academia, especially in Africa, is something that can no longer be swept under the carpet and dealt with at a later stage. The World Bank (1998) has consistently valued indigenous knowledge, embracing it as a "good thing" and stating that it should form part of Africa's development agenda. However, a sense of frustration and disappointment that the inclusion of indigenous knowledge in academia has not been fully realised still exists. Sillitoe (2004:12) writes that after two or so decades, indigenous knowledge has not occupied the space that it should in development initiatives and, in the few places where it did, it did not enjoy the success that policy makers and education specialists expected.

Academic and indigenous scholars are faced with the serious challenge of affirming indigenous knowledge paradigms and revealing their potential educational contributions to knowledge generation. The objective of this article is to provide a discussion of the affirmation of indigenous knowledge and to reveal why it is imperative that it co-exist with other kinds of knowledge. I will firstly delve into the different approaches that are used to define the concept 'knowledge.' Secondly, Eurocentric frameworks that have been developed to understand indigenous knowledge will be described. Thirdly, I will clarify and evaluate the nature and theoretical framework that undergirds indigenous knowledge. Thereafter I will conclude by giving a few reasons as to why I think indigenous knowledge should co-exist with other kinds of knowledge.

2. Different Approaches to Defining Knowledge

Defining the concept 'knowledge' is problematic. For many years, philosophers, theoreticians and scholars alike have been cautiously deliberating on the nature of knowledge. The challenge in defining the concept of knowledge remains because the search for knowledge has always been fundamentally conducted in different belief systems. Spender (1996:48) comments that knowledge is a very controversial concept and says that it cannot therefore be interpreted without taking into consideration the epistemology which gives it its meaning. It is illogical to confine and construct meaningful statements about knowledge as long as we emphasise a homogeneous conceptualisation of knowledge which is unrelated to anything else. Thompson and Walsham (2004) explain that knowledge is relationally defined and that it is constituted in the mind. Consequently, understanding 'knowledge' is subjective and not transferable; knowledge is related to the context in which a person finds himself/herself.

Linh-Chi Vo (2012:79) states that many theoreticians (Jarzabkowski, Mohrman & Scherer 2010; Wicks & Freeman 1998) believe that there are basically two main schools of thought that can be used to define the concept of knowledge. These are positivism and non-positivism perspectives and are discussed in the following section.

2.1 Positivist approach towards defining knowledge

In its broadest sense, positivism is a position that holds that the goal of knowledge is simply to describe the phenomena that human beings experience. Positivist theorists hold the view that all reasonable knowledge is the result of the systematic and scientific analysis of our sensory experience of a knowable external reality (Spender 1996:47). Chiva and Alegre (2005) mention that knowledge is justified true belief. These theorists further argue that scientific knowledge, which is deemed true at all times and in all places, is the highest rated knowledge. Nairn (2012:6) explains that positivist theorists are preoccupied with developing vigorous methods and aphoristic rules of enquiry that are predominantly statistical. These methods are believed to have access to precise knowledge about the world.

Positivism makes use of systematic logic that is characterised by empiricist and rationalistic thought (Moore 1998). Empiricists argue that all of our knowledge is ultimately derived from our senses or experiences. Both empiricism and rationalism, which prevailed during the scientific revolution of the seventeenth century, place a greater emphasis on scientific worldviews which emphasise experimentation and observation. Lambe (2003:315) argues that empiricism accentuates the collection of facts and observations at the expense of conceptual reflections and theoretical enquiry. Empiricists reduce knowledge to that which can be tested or experimented with and so confirmed through empirical methods. Empirical theorists deny the existence of innate knowledge, i.e. knowledge that people possess from birth.

Rationalists hold the view that at least some of the knowledge people possess is derived from reason alone, and that reason plays an important role in the acquisition of all our knowledge. Audi (1999:771) explains that rationalism holds the view that reason "has precedence over other ways of acquiring knowledge, or, more strongly, that it is the

unique path to knowledge." Blackburn (1994:318) defines rationalism as "any philosophy magnifying the role played by unaided reason, in the acquisition and justification of knowledge." Rationalists further believe that the mind is more fundamental than the senses in the process of knowledge-acquisition.

Positivist assumptions which permeate many academic disciplines advocate the notion that knowledge exists prior to and independently of knowing the subject (Chiva & Alegre 2005) and that knowledge precedes action and is distinguishable from action (Jarzabkowski *et al.* 2010). Lambe (2003:315) observes that subjective influences such as emotions, personal experience and tradition are substituted by logic and reason. The positivist approach does not embrace multiple paradigms, i.e. it doesn't create a space where different knowledge systems can co-exist. Recognition is not given to the ontologies and epistemologies of, for example, indigenous knowledge.

2.2 Non-positivist approach

Vera and Crossan (2003) argue that even though the positivist approach towards defining the concept of 'knowledge' has predominated academia, it has been persistently contested by non-positivist scholars. Non-positivists criticise the notion that knowledge should be regarded as a commodity that individuals may acquire and hold the view that knowledge is socially constructed and may be held communally (Chiva & Alegre 2005:53). The notion that knowledge should be regarded as a commodity has its origin in the cognitive sciences such as cognitive psychology. These sciences perceive reality as a fact and so as something that can be unveiled through focussed insight or observation (Chiva & Alegre 2005:53).

Non-positivists regards reality as being socially constructed and something founded upon social contacts and conversational conduct and actions. Obviously, different operational contexts make people understand and interpret realities differently. The view of practice and communities of practice are regarded as fundamental components of the non-positivists. Communities of practice consist of groups of people connected together who continually share the same interests and passions. Wenger, McDermott and Snyder (2002) state that these communities of practice share the same knowledge domain. Together they create common ground and a sense of common knowledge and social fabric of learning in the community. Furthermore, they create a set of learning frameworks which include ideas, information, learning styles, language, stories and documents. Lave and Wenger (1991:98) mention that a community of practice should be understood to be "a set of relations among persons, activity, and world, over time" and also that it is "an intrinsic condition for the existence of knowledge."

With this approach, non-positivists bring another dimension of understanding to the fore, namely the use and definition of the concept knowledge. Non-positivist theories disclose the fact that knowledge is not context-free. It is imperative that knowledge theorists understand the context in which the knowledge is located, namely, the historical, social, cultural and political contexts.

3. Indigenous Knowledge and the Intricacies of Legitimacy

The major challenge that faces indigenous knowledge is its legitimisation and validation, especially by Eurocentric scholars. In most instances 'other' epistemological and ontological lenses are used to define and understand indigenous knowledge. These scholars use approaches that are underpinned by positivist perspectives.

Indigenous people are sometimes viewed by Eurocentric scholars as being backward and not contributing to the development of scientific theories in the global context. Maerk (2012:164) is quick to caution that both the Western and indigenous theorists should as far as possible avoid placing the two knowledge systems as binaries. I am aware that 'scientific' knowledge is not synonymous with 'Western' knowledge since not all Western knowledge is scientific and not all scientific knowledge originated in the West. The distinction that is typically drawn between indigenous knowledge and Western knowledge implies that Western knowledge is scientific and indigenous knowledge is not. It is also inaccurate to place indigenous knowledge in direct opposite to the so called 'hard sciences.' However, Nakashima and Roué (2002) have compiled an enormous body of literature on the differences that exist between Western science and indigenous knowledge systems. They explain that: Western science promotes analytical and reductionist procedures; is positivist and materialistic; is objective and quantitative and is founded on an academic and literary transmission of knowledge. In addition, indigenous knowledge is seen as being intuitive, holistic and spiritual. It does not differentiate between what is empirical and sacred, and is disseminated orally from one generation to the next by the elders (Nakashima & Roué 2002; Iaccarino 2003:223). Scientific knowledge promotes the view that human beings gain knowledge through the conceptualisation of empirical observations to better understand and interpret nature and the environment around them

(Iaccarino 2003:220). Iaccarino (2003:223) further postulates that indigenous knowledge adopts a more holistic approach when compared to scientific knowledge which classifies observations into several academic disciplines. Freeman (1992) defines indigenous knowledge as a world formed by multidimensional cycles which comprise parts which are interwoven into a web of networks.

Western scientists further believe that indigenous people are trapped in a knowledge system underpinned by the past which does not have a bearing on the future. It is also poignant to think that indigenous knowledge is situated in the past and not inclined to change. Flavier, de Jesus, Navarro and Warren (1995:479) maintain that indigenous knowledge is

basically local knowledge that is unique to a given culture. It is the information base for a society which facilitates communication and decision-making. Indigenous information systems are dynamic, and are continually influenced by internal creativity and experimentation as well as by contact with external systems.

Agrawal (1995:423) points out that several Western scientists hold the view that indigenous knowledge is dispersed and that it is only afforded a low stature. The other challenge facing the acceptance of indigenous knowledge as legitimate is centred on the unavailability of any systematic documentation of indigenous knowledge. The creation of a database is undeniably important because such a database will protect indigenous knowledge from countless pressures that consistently undermine indigenous people and the communities in which it thrives. The claim that indigenous knowledge is not scientific due to, amongst others, the non-existence of a so-called 'logic' and 'scientific' database is regrettably not acceptable. It would be an overstatement to defend the position that certain knowledge systems derive their reputation from the basis of belonging to a particular and advantaged group.

The above discussion does not affirm the ideal of placing indigenous knowledge and scientific knowledge as opposite binaries. I want to draw attention to the fact that the analysis of indigenous knowledge is problematic if it has to be understood and interpreted from a purely scientific point of view. Trying to understand and interpret indigenous knowledge systems using scientific frameworks opens up a possibility of, and carries the risk of, misrepresenting knowledge systems. The main challenge in interpreting indigenous knowledge is that it has developed over a substantial period of time, and that it cannot be detached from a particular culture or society. Feyerabend (1987) concurs and states that any form of knowledge seems sensible only when it is understood within its own cultural context.

4. Towards Defining Indigenous Knowledge

It is imperative that I explain the parameters around the conceptualisation of the term 'indigenous' and forms of 'indigenous knowledge' in order to provide a space for understanding the importance and co-existence of different kinds of knowledge. Broadly stated, the term 'indigenous' is defined within the contexts of the relationship that local people had with European colonial forces and the attempt of these people to restructure the economic, social, political and cultural lives of the country. Smith (1999:7) emphasises that indigenous people "have been subjected to the colonization of their lands and cultures." Semali and Kincheloe (1999:23) posit that indigenous people's cultural identities have been "shaped and re-shaped by boundary transgressions." Prakash and Esteva (1998:3) reiterate that the concept indigenous includes "elders, parents, and neighbors teach[ing] and learn[ing] traditions that emphasize staying well rooted; strengthening the knowledge and skills needed to nourish and be nourished by their own places." The notion of community of practice is dominant in indigenous communities. Interactions of community members make it possible to decide what is worth sharing and also which ideas are worth presenting. This is an intellectual exercise which makes it possible for communities to give meaning to what they do and it guides the overall learning process.

Indigenous knowledge fills the ethical and knowledge gaps that Western education, research, and scholarship cannot address. According to Dei (2008:6) indigenous knowledge

... embod[ies] the essence of ancestral knowings as well as the legacies of diverse histories and cultures. Indigenous knowledges represent essentially a "speaking back" to the production, categorisation and positions of cultures, identities, and histories. These knowledges challenge the conventional discursive frameworks and practices that seemingly present unquestionable "truths" about social existence. Indigenous knowledges are about unravelling systemic power relations that have assured the dominance of particular ways of knowing in the academy.

Dei (2008) has consistently advocated for the recognition of the ontologies and epistemologies of indigenous knowledge systems within the academy and says they should be placed alongside the Western annals of knowledge and research processes. However, Shawn Wilson (2001:175) posits that there is one major difference between Euro-Western

paradigms and indigenous paradigms; this is:

... that those dominant paradigms build on the fundamental belief that knowledge is an individual entity: the researcher is an individual in search of knowledge, knowledge is something that is gained, and therefore, knowledge may be owned by an individual. An Indigenous paradigm comes from the fundamental belief that knowledge is shared with all creation. It is not just interpersonal relationships, or just with the research subjects I may be working with, but it is a relationship with all of creation.

Individuals are formed out of groups, organisations, communities and cultures. A community conceives the social framework for learning. A community which is grounded on trust and mutual respect has a tendency to share ideas with each other, debate difficult questions and also listen to each other. Fundamentally, indigenous knowledge can create a space for scholars to engage in a theorisation or conceptualisation exercise.

Culture, which has been ignored by traditional Western research, is a vital aspect of understanding and defining the knowledge that communities have. Kim (2000:270) posits that the aspect of culture has been treated as a quasi-independent variable by most Western scholars in cross-cultural studies. Adair (1999) emphasises the point that indigenous theorisation should take place in one's own local context. Indigenous knowledge scholars such as Kim (2000:270) perceive culture as an "emergent property of individuals and groups interacting with their natural and human environment."

Communities, with different cultural practices are regarded as knowledge resources. Wenger *et al.* (2002:46) emphasises that a community should "intentionally become an effective knowledge resource both to its own members and to other constituencies that may benefit from its expertise." Wenger *et al.* (2002:38-39) state that:

These communal resources include a variety of knowledge types: cases and stories, theories, rules, frameworks, models, principles, tools, experts, articles, lessons learned, best practices and heuristics. They include both the tacit and explicit aspects of the community's knowledge. They range from concrete objects, such as a specialized tool or a manual, to less tangible displays of competence, such as an ability to interpret a slight change in the sound of a machine as indicating a specific problem... It also embodies a certain way of behaving, a perspective on problems and ideas, a thinking style, and even in many cases an ethical stance.

Dei (2010:114) mentions that the knowledge (cultural traditions, values, belief systems and world views) that local people have constitute an "indigenous informed epistemology." The knowledge that community members have is theoretical and conceptual and is founded on the history and the environment of the people.

5. The Co-Existence of Different Knowledge Systems

In this section, I am not trying to put the Western knowledge system against the indigenous knowledge system, as Maerk (2012) has cautioned against. Instead, I am putting forth a suggestion for a possible co-existence of multiple knowledge systems in academia. Both indigenous and Western scholars should work towards establishing and recognising the universal characteristics of all knowledge systems that would provide valuable ways of making a contribution to community and global knowledge. The co-existence of different knowledge systems in academia is imperative because inadequacies are present in both the indigenous and Western knowledge systems and these account for the incomplete body of facts and ideas that have shaped human development over a number of years (Dei 2011).

There is a tendency in academia to continue promoting the dominance and universalisation of the Western knowledge system. Maerk (2012:164) argues that a possible way of overcoming the universalistic outlook in academia is to consider the 'indigenization' of knowledge. The question that indigenous knowledge does not contribute to global knowledge is also a matter of concern. Indigenous knowledge scholars should work towards making sure that the conceptualisation of indigenous knowledge makes a contribution towards the global community. However, theorists and scholars of indigenous knowledge shouldn't fall into the trap of using Eurocentric lenses to assess the magnitude of the contribution that is made by indigenous knowledge towards the global community.

The representation and inclusion of an indigenous knowledge system is another option to consider since it contributes towards the promotion, reconstruction and conceptualisations of the particular socio-historical contexts of the content that is contained in different disciplines. The approach towards the indigenisation of knowledge in academia should not be assessed by placing indigenous knowledge and conceptualisations against the criteria of them being 'scientific' or 'not scientific' (Nakata 2007:9). In defining and validating the co-existence of indigenous knowledge, it is imperative to point out that indigenous knowledge cannot be dislocated and separated from its locale and the social

institutions that are attached to it.

It is important for academia to create a space where dominant Western theoretical frameworks can be balanced with developing indigenous knowledge. Relatively speaking, no absolute and single truth exists; instead multiple truths exist. Academic faculties have always toiled to defend the status of particular disciplines in the academic environment.

Maintaining academic standards in academia is one of the top priorities of most institutions of higher learning. Creating a space for the collaboration and existence of different kinds of knowledge should play a role in knowledge development and in the teaching and researching activities of academia.

6. Conclusion

To conclude, I hold the view that all knowledge, irrespective of where it originated, has the ability to inform and change. All knowledge provides an opportunity for everyone to be involved in the process of learning, questioning and interpreting what he/she sees. It is my firm belief that Western knowledge can co-exist with indigenous knowledge. The debate that one knowledge system is better than the other is irrelevant. The issue of diverse kinds of knowledge should rather be seen as an opportunity for knowledge systems to create a synergy that would promote intercultural discourse.

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