WORLD-VIEW PERSPECTIVES

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ABSTRACT: The foundation of a tolerant society is an ability to foster and respond to the diversity of perspective among its people. Cognitive psychologists have described how perspective influences information processing, while our innate ability to adopt perspective has been established by neuropsychology. Literature, through the use of point-of-view, together with results from researchers adopting socio-cultural paradigms suggests perspective is also a social construct. An ecologically-based framework is described that provides cohesion to the temporal, spatial, universal and other types of world-view perspective associated, predominantly, with indigenous cultures. Culturally responsible types of creative and critical thinking are evoked when world-view perspective is engaged while reading text and reading the world. World-view perspective provides us with a means of critiquing the construction of knowledge through the de-construction of dominant discourses, re-valuing of indigenous world-views and reducing the relational distance between indigenous and non-indigenous peoples.

KEYWORDS: Perspective, language, diversity, cognition, New Zealand.

The real voyage of discovery consists not in seeking new lands, but in seeing with new eyes. (Proust)

Societies that fail to accommodate the needs and beliefs of their citizens are characterised by people and institutions insensitive to the perspectives of others. More specifically, the failure of these societies to accommodate the needs and beliefs of indigenous peoples can be attributed to education systems that fail to reflect the perspectives of these people. Conversely, the ability to appreciate the perspectives of others is central to the function of a tolerant society.

The *world-view perspective* of indigenous peoples is one set of perspectives that can be used to help us appreciate how others see the world. Although *world-view perspective* is the focus for this paper, there are other physical and social perspectives that assist us to achieve similar goals (Whitehead, 2004).

For example, the physical perspective of time assists us to appreciate the present based on experiences of the past. *Time perspective* allows us to think critically about how authors construct the temporal position of their discourse, and to appreciate how our understanding of an historical event changes when re-viewed using an alternative time perspective.

Again, the social perspective of talk helps us to hear the voices of others. Adopting a *talk perspective* allows us to ask why an author gave voice to some people and silenced others. This perspective helps us expose the gaps and silences in texts. In

particular, adopting a *talk perspective* assists us to access the *world-view perspectives* of indigenous peoples by, for example, giving supernatural voice to objects as diverse as trees and mountains. The understandings that emerge from the adoption of *talk perspective* can be used to reconstruct and critically evaluate dominant discourses and decide whether those voices should be heard.

World-view perspective, the focus of this paper, allows us to hear the voices of indigenous peoples and those whom have adopted indigenous perspectives. It engages us in indigenous and universal cognition about objects, events and ideas (Berry, Irvine & Hunt, 1988). Consequently, this perspective is associated, simultaneously, with an appreciation of cultural diversity and the development of a tolerant society. One type of world-view perspective, the temporal perspective, helps us appreciate that the concept of time is a product created by the beliefs, tradition, and values of particular cultures. A second type of world-view perspective, the truth perspective, helps us appreciate that some people see truth as fixed, while others see truth as contestable and dynamic. A third type of world-view perspective, the *universal perspective*, helps us appreciate the differences between indigenous cultures that see themselves as connected to the universe (natural, social and supernatural), and the perceptions of other cultures who see themselves as separate from these dimensions. Other world-view perspectives relate to how ideas and objects are valued, and the spatial dimensions of reality.

This paper first defines the concept of 'perspective' then examines an ecologicallybased framework for the description of *world-view perspective*. Finally, it justifies the centrality of *world-view perspective* in a diverse and tolerant society.

What is Perspective?

Different epistemologies provide us with multiple ways of understanding the concept of 'perspective'. Cognitive psychology demonstrates that perspective can be manipulated to influence the representation and retrieval of information. Neuropsychology suggests that our ability to adopt perspective is innate, and literature provides evidence of how authors use this innate ability through the pointof-view literacy device. A socio-cultural paradigm reveals the ways in which perspective is constructed through social interaction, and this provides us with a means of understanding how interactions within indigenous societies, and between indigenous societies and their environment, construct their *world-view perspectives*.

Perspective and cognitive psychology

Historically, perspective experiments were associated with the development of schema theory, and were fundamental to the development of cognitive psychology (Anderson, 1980, 1990; Anderson, Spiro, & Anderson, 1978). Anderson (1990) describes schemata as abstract knowledge structures that guide the representation and retrieval of information. His research has demonstrated the guiding role of schema through the activation of perspective-altering prior knowledge.

Seminal research that investigated the role of imposed perspective in cognition was conducted by Anderson and Pichert (1978). These researchers presented subjects with a story that described two boys playing truant at home. The story contained 72 pieces of information about the house, and subjects either read the story from the

perspective of either a homebuyer or a burglar. Recall was obtained from subjects from either the initially assigned homebuyer or burglar perspective, or from the alternative perspective.

Their results indicated that the facts recalled depended on the imposed perspective. In particular, results indicated that when subjects changed their imposed recall perspective, they increased their overall recall by 10%, and decreased the number of facts recalled about the old perspective. Theses results suggest that the effect of perspective is not during the encoding information, but at the moment of retrieval, and that approaching a text from a particular perspective allows us to be purposeful in retrieving information from memory.

Perspective and neuropsychology

More recent results from neuropsychology have supported the conclusions reached from these earlier studies by cognitive psychologists. Based on their results, neuropsychologists claim that the ability to adopt perspective appears to be an innate function of the frontal lobes. Evidence from brain damaged subjects of their ability to adopt perspective was obtained by Ferstl, Guthke and von Cramon (1999). Ferstl et al. made use of Anderson and Pichert's (1978) experimental paradigm with 24 subjects. Seven subjects showed unilateral left-frontal lesions, five subjects unilateral right-frontal lesions, four had bilateral frontal damage, and the lesions of the remaining eight subjects did not involve frontal areas.

The results for subjects without frontal lesions and those with unilateral right-frontal lesions were consistent with Anderson and Pitchert's (1978) results. The subjects encoded relevant information and recalled it better than other information. Furthermore, the switch of perspective aided their recall of perspective-relevant information during the second recall. In contrast, patients with left-frontal or bilateral frontal lesions could not make use of the perspective instructions. In a general sense the results suggest the architecture of the left frontal lobes allow us to adopt perspective. In a specific sense, these results suggest that left-frontal damage leads to an impairment of goal-directed text perspective thinking processes.

Perspective and literature

The innate psychological reality of perspective can be seen, epiphenomenally, through authors' use of point-of-view, the perspectives from which a narrative is presented. In a general sense, both story tellers and authors deliberately use forms of language genre to convey their message. These forms can act as agents of ideological closure by excluding or silencing certain perspectives. But more specifically, the literary device point-of-view used by story tellers and authors of narrative text determines who tells a story. Point-of-view also influences the tone, feel and meaning of a story.

For example, authors are able to adopt an objective point-of-view that allows them to tell what happens without stating more than can be inferred from the story's action and dialogue. When adopting this third person point-of-view, the narrator remains as a detached observer, adopting a perspective that allows them to go inside the head of a key character. An alternative third person point-of-view is one where authors' are not actually participating in the action of the story as one of the characters, but still letting us know quite explicitly how characters' feel. In contrast, when using the first person point-of-view, the narrator participates in the action of the story, including the recount of what might not be objective truth. The omniscient point-of-view situates the narrator as knowing everything about all the characters. Adopting the limited omniscient narrator allows an author to describe only what is experienced by a few characters, or one alone, as epitomized by the first person stream-of-consciousness narration. The use of point-of-view as a literary device allows authors to give voice to either themselves or their characters and provides support to the claims made by cognitive and neuropsychologists.

Perspective and socio-cultural knowledge

Perspective can also be understood using a socio-cultural paradigm. Like literature, perspective is a social construct (Vygotsky, 1978). But neither literature nor knowledge is ever neutral. Perspective, like knowledge, is imbued with the ideological lens of those who construct it, and the socio-cultural milieu in which they live. These ideological perspectives are formed by instructional practices and institutional culture among other variables.

In particular, in schools, the ways teachers talk with or past students' influences the way students see the world. Perspective in an educational context is crafted through the dominant academic discourse, and is significant because it provides a means of assimilating students into the dominant practices and point-of-view of a culture.

Associated with our innate disposition to acquire language and adopt perspective is the assumption of a *narrative* brain. This suggests we construct perspective through narrative or storying. Indeed, many cultures represent their world-views in narrative form. Story telling allows them to maintain and legitimate their *world-view perspective*. Unfortunately for indigenous peoples, the discourses of dominant cultures tend to exclude or silence their stories and their perspective. In particular, the status afforded to non-fiction written texts by dominant cultures de-values the less easily assessed oral discourse of indigenous peoples.

However, by thinking creatively and critically about an author's adopted point-ofview we can discover the gaps and silences in text. These gaps are created by authors who determine who will 'speak' and by the point-of-view they allow their speakers to adopt. These gaps and silences can be filled through the application of perspective that gives voice to the people and characters silenced by an author. The meanings that emerge from the adoption of this perspective assist us to analyse an author's construction of power, identity, beliefs and knowledge.

An Ecologically-Based Framework for World-View Perspective Thinking

World-view perspective engages us in what Berry, Irvine and Hunt (1988) describe as indigenous and universal cognition about objects, events and ideas. Consequently, this perspective may assist us to foster and respond to cultural diversity.

Cajete (1997) provides a cohesive ecologically-based, valid framework that accommodates different types of *world-view perspective*. According to Cajete there are five foundations that form the basis for understanding relationships central to the beliefs of indigenous peoples worldwide. These foundations provide a framework for describing perspectives adopted by indigenous peoples and include:

- (i) An environmental foundation which provides a basis for understanding indigenous peoples' ecological relationship to the land. This foundation helps us explain, for instance, how an indigenous perspective of time can be expressed as a seasonal rather than mechanical construct.
- (ii) A community foundation which provides a basis for understanding indigenous peoples' ecological relationship to the land, plants and animals. This foundation helps us explain, for instance how an indigenous perspective of identity can be expressed as a collective rather than an individual construct.
- (iii) An artistic/visionary foundation, which provides a basis for understanding indigenous peoples' ecological relationship to the land, plants and animals. This foundation helps us explain, for instance, how the perspective of a universal and spatial consciousness among indigenous peoples can accommodate an integrated conception of the natural-supernatural realms.
- (iv) The foundation built around the realm of story which provides a basis for understanding indigenous peoples' ecological relationship between storytellers and story hearers. This foundation helps us explain, for instance how an indigenous perspective of truth can be expressed as a fixed rather than a negotiable construct.
- (v) A foundation in spiritual ecology, which provides a basis for indigenous peoples' ecological with life and death, including an understanding that all life is imbued with an animating energy to which we are all connected. Again, this foundation helps us explain, for instance how an indigenous perspective of the natural-supernatural realms can be expressed as an integrated construct.

Adopting *world-view perspective* help us appreciate the expression of these five foundations, and through them to foster and respond to cultural diversity. In particular, they provide us with a means of deconstructing and critiquing Eurocentric meanings constructed by dominant discourses.

Based on the five foundations described by Cajete, the world-views perspective described in this paper centre on the concepts of how truth is expressed, how the universe is perceived, how identity is constructed, how temporal and spatial consciousness is perceived, and how the relative value of objects and ideas is constructed.

Some Types of World -View Perspective

Temporal perspective

Temporal perspective is associated with Cajete's foundation which describes the ecological relationship indigenous peoples have to their land and to the realm of story. The concept of time in any culture is a product created by beliefs, tradition, and values. In some cultures, time is regarded as cyclical and unstructured, rather than as a scheduled object. Other cultures, especially Western cultures, view time as mechanistic, something that can be divided into schedules and can be wasted. Some Australian Aboriginal cultures conceive of time only in the present, or regard the present moment as the most significant. In these cultures, planning for the future is not emphasized. Examples of this perspective can also be seen in the Philippines, Latin America, and many countries with an Islamic tradition. Other cultures, for instance the United States, are future-oriented. Indeed, one could argue that the Western world's conception of time has moved from the concept of the natural world,

controlled by God or nature, to that of a world in which people attempt to control time.

The flexible concept of time and the nature of its existence is something intricately woven into the fabric of any culture. For example, for Christians the Scriptures make a distinction between temporal and eternal time. From an Indian perspective the smallest unit of time is a *kaashta*, which is 18 times the amount of time it takes to blink an eyelid. Ten *kaashtas* make a *kshanam* and 12 *kshanams* constitute a *muhoortam.* Sixty *muhoortams* constitute a day. From an Indian *temporal perspective*, time is based on human response rather than mechanics or what event is occurring at the moment.

Meyen (1995) constructs time in terms of the variability (change) of real objects. He notes the different notions of time that have developed in natural sciences, such as Newtonian physics which deals with absolute time and space. In contrast, in biology and geology, time is built up of qualitatively different periods, such as eras or periods in geological history, seasons of year, or stages of animal development that correspond to certain changes of real objects, and as such cannot be considered as absolute notions. In contrast to Newtonian physics, this conception of time is not a background of object change but the change itself.'

Meyen's (1982, 1984) concept of time aligns with Cajete's foundations and worldview in the sense that for Meyen, time is conceived from the observer's perspective and linked to the variability of each object and individual in the environment. His *temporal perspective* contrasts with Newton's physical definition, and might be better characterized as an *observer's* or *psychological time perspective*. Meyen's position is also aligned to Kant's (1978) idea that time is an internal form introduced into the world by an observer.

Temporal perspective also interacts with *spatial perspective* (described below). For example, in linguistic terms, the English language uses spatial terms to describe time as in: "The best is *ahead* of us", or "We're *behind* schedule", or "Let's move *forward*". *Temporal perspective* in English is horizontal and the future lies ahead. But from a Mandarin *temporal perspective*, time is vertical. Refer to the future in Mandarin and it is down, not straight out (Boroditsky, 2001). Therefore, the use of a *temporal perspective* engages us in types of creative and critical thinking that that helps us compare mechanical conceptions of time with the natural and social conceptions of time as described by Meyen, Cajete and Kant.

The use of *temporal perspective* thus involves identifying how the concept of time is constructed by an author: for instance natural constructions of time, social / cultural constructions of time, or mechanical constructions of time. Then, it allows readers to appreciate the effect on meaning of an alternative *temporal perspective*. The outcome of this creative thinking process allows readers to critically de-construct the original discourse by asking why an author used a particular *temporal perspective*, and then to reflect whether adopting an alternative *temporal perspective* might enhance their ability to appreciate the perspective of others.

Spatial perspective

We have just seen that there are complex linguistic interactions between *temporal* and *spatial perspective*. More specifically, the concept of *spatial perspective* involves us in comparing different world-views about the extent of our physical and mental space. The reality of physical space for some indigenous peoples may be geographic landmarks such as rivers, lakes and oceans. For others physical space is bounded by mythological boundaries that describe voyages of discovery or stories of creation. For some people, mental space is confined to occurrences in the here and now; indeed their language may be restrained to the present tense. For others their mental space accommodates the past and future, and is connected with others, including those who have died.

The psychological reality of *spatial perspective* is also demonstrated through language. About one third of the world's languages articulate *spatial perspective* in absolute terms (Slobin, 1985). For example, people of many Pacific Islands would construct their spatial location as "north of the tree", or "seaward from the tree". In these cultures spatial perspective is relative to fixed points; one needs to perceive these points in order to talk about events and locations.

The linguistic characteristic of different cultures also demonstrates how they perceive an object's shape, substance or function. For example, in English shape is implicit in many nouns: we know the shape of a "car". It is only when we want to quantify amorphous things like flour that we employ units such as "cup" or "bag". But Yucatec Maya, spoken in Mexico's Yucatan Peninsula, constructs spatial perspective using words that describe shape. So, for example, a "long thin wax" is a candle, and a "long banana" describes the fruit while a "flat banana" describes the banana leaf (Lucy, 1992). These linguistic examples suggest that English speakers construct spatial perspective on the basis of form and Mayans construct *spatial perspective* on the basis of substance.

Indigenous *spatial perspective* is associated with Cajete's description of foundational relationships built around the realm of story. These stories often describe and explain physical and mental boundaries, and allow the storyteller to talk with members of their society who have past-on.

The use of *spatial perspective* involves identifying how the concept of space was constructed by an author, for instance restricted or extended physical and mental constructions of space. Then, it allows readers to appreciate the effect on meaning of an alternative *spatial perspective*. The outcome of this creative thinking process allows readers to critically de-construct the original discourse by asking why an author used a particular *spatial perspective*, and then to reflect whether adopting an alternative *spatial perspective* enhanced their ability to appreciate the perspective of others.

Truth perspective

Truth perspective is also associated with Cajete's description of the realm of story. *Truth perspective* engages us in a type of thinking that involves comparing a worldview that constructs truth as fixed and inviolate, with a world view that holds truth to be dynamic and debateable. For example, some societies believe that written scriptures or the word of a spiritual leader are inviolate. Other societies encourage their children to question and regard knowledge as subject to error and illusion.

These opposite *truth perspective* provide a continuum against which we can critically evaluate the meanings of dominant discourses. They provide alternative and contradictory constructions of truth that assist us to adopt an alternative *truth perspective*, and reconstruct those discourses.

The use of *truth perspective* involves identifying how the concept of truth was constructed by an author, for instance, fixed or contestable constructions of truth. It then allows readers to appreciate the effect on meaning of an alternative *truth perspective*. The outcome of this creative thinking process allows readers to critically de-construct the original discourse by asking why an author used a particular *truth perspective*. Finally, it enables readers' to reflect whether adopting an alternative *truth perspective* enhanced their ability to appreciate the perspective of others.

Universal perspective

Universal perspective engages us in a type of thinking that involves comparing the world-view of people who see themselves as one within a connected universe (connected to nature, society and the supernatural realms), with the world-view of people who see these three dimensions, and themselves, as disconnected and separate. For example, indigenous and other persons may seek permission from their society and the spirits of the forest before felling a tree. They may also consider the impact of felling the tree on the wider ecology of the forest. In contrast, many non-indigenous persons may adopt a disconnected view of felling the tree and consider only personal benefits when deciding to fell the tree. This *universal perspective* is associated with Cajete's description of artistic/visionary foundation and spiritual ecology.

The use of *universal perspective* involves identifying how the concept of connectedness with the universe was constructed by an author, for instance connected to, or separate from the universe. It then allows readers to appreciate the effect on meaning of an alternative *universal perspective*. The outcome of this creative thinking process allows readers to critically de-construct the original discourse by asking why an author used a particular *universal perspective*. Finally, it enables readers' to reflect whether adopting an alternative *universal perspective* enhanced their ability to appreciate the perspective of others.

Identity perspective

Identity perspective engages us in a type of thinking that involves comparing a worldview of ourselves as separate identities constructed within a competitive capitalist society, with a world-view of ourselves as relational identities constructed within more collective societies. For example, Samoans tend to construct their identity through association with others: 'I am because we are'. Other cultures construct their identity based on their achievements as individuals and their acquisition of possessions – 'I am because I've made it'. *Identity perspective* is associated with Cajete's description of the community foundation.

The use of *identity perspective* involves identifying how the concept of identity was constructed by an author, for instance from separate, individual and autonomous, to, relational and collective identity. It then allows readers to appreciate the effect on meaning of an alternative *identity perspective*. The outcome of this creative thinking process allows readers to critically de-construct the original discourse by asking why

an author used a particular *identity perspective*. Finally, it enables readers' to reflect whether adopting an alternative *identity perspective* enhanced their ability to appreciate the perspective of others.

Ideas and objects perspective

Ideas and objects perspective engages us in a type of thinking that involves comparing the perspective of people who value things (objects and events) equally with ideas, and the world-view of people who value things and ideas differently. For example, some people value material possessions (objects) above ideas like truth and equality. Some people will lie to make a profit, while other people will value their status in a community or their love of God above material possessions. *Ideas and objects perspective* is associated with all Cajete's descriptions.

The use of *ideas and objects perspective* involves identifying how the criteria against which we value objects and ideas was constructed by an author, for instance, from material objects are of more value than ideas because they provide a comfortable lifestyle, to ideas are of more value than material objects because material possessions are impermanent. It then allows readers to appreciate the effect on meaning of an alternative *ideas and objects perspective*. The outcome of this creative thinking process allows readers to critically de-construct the original discourse by asking why an author used a particular *ideas and objects perspective*. Finally, it enables readers' to reflect whether adopting an alternative *ideas and objects perspective* enhanced their ability to appreciate the perspective of others.

Why Use World-View Perspective?

The use of these types of *world-view perspective* can be seen as a response to education systems that fail to accommodate the needs and beliefs of many indigenous and minority peoples. These educational systems may produce less tolerant populations. The ideologies of these systems constructed through the world-views of dominant cultures, may contribute to the political and economic marginalization of indigenous minorities and threaten the processes that cultures use to define, access and protect their world views.

Education systems through their curriculum mandates have the power to either marginalize or enhance *world-view perspectives* and practices; to either threaten or celebrate elements of indigenous cultural identity. Indigenous cultures in particular are marginalized and threatened by the mono-cultural perspectives of teachers from dominant cultures. These teachers lack an understanding of, and consequently cannot build on, the different world-views that their students' bring to the classroom.

When this occurs the language and culture of indigenous peoples may be excluded from curriculums and classrooms. The use of *world-view perspective* provides an alternate route for the voices of indigenous and minority people.

In addition to accommodating the needs and beliefs of indigenous peoples the use of world-view perspective engage students in creative, critical, caring and reflective thinking (Whitehead, 2004). Adopting world-view perspective can help nonindigenous peoples reflect by 'walking a mile' in the shoes of an indigenous person. Adopting these perspectives engages people in creatively and critically deconstructing dominant discourses. This disruption of the commonplace (McLaughlin & De Voogd, 2004), results in an active, challenging approach to reading and textual practices. It allows us to examine the meaning within texts, to consider the author's purpose, to challenge the way texts are constructed and to engage in multiple readings. It helps us transition from accepting a text at face value, to questioning both the author's intent and the information as it is presented in the text. It assists us to read the world, to adopt a critical stance and to question and challenge the attitudes, values and beliefs that rest beneath the surface meaning (Lewison, Flint, & Van Sluys, 2002).

These de-constructions can be used to critically evaluate the meaning and intent of a dominant discourse. Ultimately, this de-construction process can result in us: (i) asking why societies and institutions fail to include certain meanings, (ii) adopting a more caring and tolerant attitude toward diversity, and (iii) reflecting on whether the use of *world-view perspective* enhanced our learning.

Conclusion

World-view perspective provides us with a legitimate means of creating new knowledge and of critiquing an author's construction of knowledge. It provides us with a means of de-constructing dominant discourse and of valuing the authenticity of indigenous world-views. *World-view perspective* has the potential to reduce the relational distance between peoples and build a more tolerant society. Ultimately, it maintains the integrity of indigenous learners, their knowledge, and their culture.

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