CHAPTER THREE

TRANSCENDING HORIZONS: ALTERNATIVE CONCEPTUALISATIONS OF REFLECTION

At the centre of any tradition, it is easy to become blind to alternatives. At the edges, where lines are blurred, it is easier to imagine that the world may be different. (Bateson, 1989, p.73)

The previous chapter concluded by highlighting three challenges for further research into reflection. This chapter responds to one of the challenges, namely the need to more fully understand the complexity of reflection. In particular, it focuses on how we might transcend the limitations of the current over-reliance on conceptualisations of reflection as essentially analytical thought. Adopting Heidegger's (1971) view that "a limit is not where something stops, it is where something begins" (cited by Fuller, 1990, p.272), this chapter explores and extends possibilities and perspectives overlooked by much of the contemporary literature about reflection.

In many respects, this chapter can be likened to looking at reflection through a metaphorical kaleidoscope. The prisms of the kaleidoscope are constructed from the shadows of the previous chapter, that is, the inconsistencies, gaps in understanding, questions and half-sensed possibilities which briefly emerged before being overwhelmed by the weight of analytical tradition and pragmatic methodological constraints. These prisms are reinforced by contributions from the literature related to emotion, imagination, intuition, quantum theory and Eastern philosophical traditions.

As the lens of the metaphorical kaleidoscope (like any other) is turned, the ensuing movement of glass prisms within alters the frequencies of light passing through these prisms. The interconnecting patterns of light consequently change to reveal new forms, interrelationships and perspectives unable to be glimpsed otherwise. The view from each of these prisms and possible implications for our understanding of reflection are explored below. Italics indicate key terms associated with these perspectives.

EMOTION
Despite Dewey's (1933) suggestion that emotions have significance for reflection, relatively little attention has been given in the literature about
reflection to the role that emotions might play. Yet the tentative explorations by a few writers of possible links between reflection and emotion suggest that these investigations are worth pursuing. Previous explorations, however, appear to have been hampered by a lack of theoretical understanding of emotion. For this reason, the following discussion begins with a brief overview of theories of emotion.

**Theoretical Overview**

Contemporary theorists of emotion, like those of reflection, do not agree on a common definition (White, 1993; Crawford, Kippax, Onyx, Gault & Benton, 1992; de Sousa, 1987). Emotions have been defined in terms of physical feelings, perceptions and sensations by behaviourists and physiologists (e.g., Cacioppo, Klein, Berntson & Hatfield, 1993; Davidson, 1993); as evaluative judgments by cognitivists (e.g., Scheffler, 1991; Solomon, 1989); as socio-cultural beliefs and values by social constructivists (e.g., Crawford et al., 1992); and as links to an organic, interconnected universe by cosmologists (e.g., Heron, 1992). As with reflection, however, it may be more helpful to assume that emotions can manifest themselves in diverse ways and that different theories of emotion focus on different aspects of those manifestations (de Sousa, 1987).

The purpose of this discussion is to explore how an understanding of emotion may enhance understanding of reflection. The discussion focuses, therefore, on theories which see emotion as more than a passive or spontaneous event. This is because reflection, regardless of orientation, is acknowledged to be an active and deliberate process (see Chapter One). Essentially, these theories of emotion contend that emotion is more than physical sensation but rather a means by which we consider the possibilities of experience and incorporate meanings into our lives (Fuller, 1990). As Fuller explains, pain occurs when we feel something sharp penetrating our body; fear occurs when we think that sharp object is a snake. Hence, pain is a sensation; fear is an emotion. In other words, "people react not to events, but to their interpretation of events" (Epstein, 1993, p.319).

More formally, cognitive theories of emotion view emotions as a complex and multidimensional system of evaluative judgments, based on values and beliefs (Stein, Trabaso & Liwag, 1993; Jaggar, 1989; Solomon, 1989). As Jaggar points out, "my pride in a friend's achievement necessarily
incorporates the value judgment that my friend had done something worthy of admiration" (p.137). Emotion is not "merely a collection of opinions and random evaluations" but "an organized way of perceiving, acting, and living in the world" (Solomon, p.141). To cognitivist theorists, emotion is a way of finding meaning.

Like cognitivist theorists, social constructivists emphasise the evaluative judgment component of emotions, arguing that the beliefs, values and attitudes underlying these evaluative judgments are determined by cultural beliefs, conventions and morality (Armon-Jones, 1986). Indeed, these beliefs, conventions and morality are regarded as the medium through which sense is made. For this reason, emotional development, like language development, is seen to involve the acquisition of cultural norms (Jaggar, 1989). According to Jaggar, "children are taught quite deliberately what their culture defines as appropriate responses to certain situations" (p.150). Emotions recognised in some cultures may be unrecognised in others. Social constructivists would be inclined to argue, for example, that sexual jealousy is only possible in cultures where there is a sense of ownership of sexual partners and/or where monogamy is valued. Likewise, de Sousa (1987) suggests that it is impossible to experience an emotion for which there is no name, and queries whether people would fall in love if they had neither heard or read about love. It could be argued, particularly from Eastern perspectives (discussed later in this chapter) that a weakness of cognitivist and social constructivist theories is their apparently unquestioning and somewhat naive belief in the supremacy of the power of language.

On the other hand, from the perspective of this thesis, a strength of these theories is their focus on meaning, particularly if emotions are seen as a combination of social constructions and individual improvisations - that is, as a process of construction undertaken by individuals in socio-cultural contexts (Kemper, 1993; Crawford et al., 1992; Averill, 1980). These theories, though, can be interpreted in ways which lead to excessive fragmentation (Plutchik, 1993). Examples include imposing arbitrary labels to categorise various dimensions and intensities of emotional responses (such as irritation, anger, rage, and fury) and identifying these as primary or secondary emotions. These categorisations are unhelpful because they divert the focus away from meaning (Plutchik, 1993). This propensity for fragmentation characterises
and detracts from most contemporary Western theories of emotion (Flynn, 1995; White, 1993).

Contemporary Western theories of emotion have also been criticised for their tendency to assume that emotions can be represented as a linear schema, and that their primary purpose is to trigger actions such as appraisal / self appraisal, goal setting, planning and problem solving (Flynn, 1995; Goldsmith, 1993). Yet it can be argued that linear conceptualisations (see for example, Stein et al., 1993; Frijda, 1986) are of some value in that they legitimise emotions by creating a construct perceived to be logical from most Western perspectives. As such, they assist in overcoming the positivist misconception of emotions as uncontrollable passions or "nonrational and often irrational urges that regularly swept the body, rather as a storm sweeps the land" (Jaggar, 1989, p.146). Critics argue, however, that linear conceptualisations overlook the complexity of emotions. They claim that emotions are conceptualised more effectively from a systems or a network perspective of dynamic interactions (Flynn, 1995; Goldsmith, 1993). These interactions involve not only processes of a linear nature, but also non-linear processes such as those of attraction, bifurcation, oscillation, resonance and magnification (Haviland & Kahlbaugh, 1993).

From a dynamic perspective, emotions link environments, experiences and identities in unpredictable and unstable but often vitally important ways (Flynn, 1995; Haviland & Kahlbaugh, 1993). Small, apparently isolated incidents can resonate with other such incidents to magnify the effect far beyond the insignificant impact likely to have been predicted by linear, or logical, processes. A "one-off", seemingly unimportant experience in childhood, for example, can magnify and assume a significance far beyond what might have been expected. If this experience resonates with experiences of others, then the effects can be even more far reaching. So called butterfly effects, whereby small one-off events can influence whole systems through underlying webs of interrelationships, can open up infinite possibilities for change (Le Compte, 1994; Haviland & Kahlbaugh, 1993).

Indeed, Fuller (1990) suggests that possibility is a useful dimension for exploring emotions and meaning - far more so than the typical linear dimensions of time or effect. To Fuller, emotions represent possibilities of experience and knowing. He differentiates between possibilities which
culminate in "troubled meaning" where "tensions have failed to attain harmony" (p.208) and those in which a sense of harmony, or wholeness of meaning is attained. He represents these possibilities not as dichotomies, but as complementary polar tendencies operating along a continuum, with one most dominant at one end and the other at the other end. As Heron (1992) explains, this notion of complementarity is fundamental to systems theory.

Like Fuller, Heron (1992) emphasises the importance of harmony. He argues, though, that it is beyond reach of the individual and cannot be conceptualised adequately by theories which focus solely on the individual. In Heron's view, most contemporary theories of emotion are constrained by their emphasis on the individual (although presumably he is not referring to dynamic theories of emotion). He maintains that they are overly concerned with individual consciousness, that is, with individuals making sense of experience within their distinct and individualised contexts. Attention also needs to be given, he argues, to participatory consciousness - "a form of consciousness" which "resonates with the universal flow of events" (p.113) and represents "the capacity of the psyche to participate in wider unities of being" (p.16). In simpler terms, it involves attunement, or a deep sense of involvement, connection, belonging and harmony with the world rather than preoccupation with the concerns of the individual.

To Heron, participatory consciousness represents a higher order understanding than individual consciousness. In this sense, he adopts a similar stance to most Eastern philosophical traditions (discussed later in this chapter). His use of the term feeling to describe experiences of participatory consciousness is potentially confusing, however, given that in the context the debate about theories of emotion, feeling typically refers to perception or sensation. For this reason, while sympathetic to Heron's conceptualisation, this thesis uses the term emotion to encompass both individual and participatory consciousness.

In summary, the preceding overview of conceptualisations of emotion indicates that theorists of emotion, like those of reflection, do not share a common view. To what extent, therefore, might they provide a useful prism through which to look at reflection?
**Possible Implications For Reflection**

Despite the diversity of the above views of emotion, it seems reasonable to conceptualise emotions as responses to experiences, filtered through beliefs and values and, indeed, a range of personal-socio-cultural considerations (Kemper, 1993). As such, emotions fulfil "a signalling function - indicating to us where we stand in the world, and defining our relationships to others and to our own goals, motives and interests" (Kemper, 1993, p.47). In this sense, they orient us to our environment, enabling us to interpret experiences and events. In addition, they provide information which assists us to operate effectively within that environment and initiate processes such as goal setting and problem solving (Greenberg, 1993). From a dynamic or systems perspective, emotions can also establish connections, highlight possibilities and initiate changes beyond the level of the individual. In other words, they can be a medium for the development of communal as well as individual awareness and understanding (Flynn, 1995; Heron, 1992).

If the above broad interpretation of emotion constitutes the prism through which we look at reflection, and the literature about reflection, what perspectives or insights might it offer? First and foremost, it highlights the relative lack of attention to emotions in the literature about reflection. While the above discussion shows that many theorists of emotion now challenge the supposed dichotomy between reason and emotion, the previous chapters have indicated that, in general, researchers into reflection do not.

Second, the few references to emotion in the literature related to reflection are, for the most part, ambivalent about the contribution of emotion to reflection. Boud et al. (1985), for example, claim on the one hand that "the reflective process is a complex one in which both feelings and cognition are closely interrelated and interactive" (p.11). Yet, on the other hand, they contend that people need "to work through the attitudes and emotions which might colour their understanding in order to make sense of new ideas and information" (p.11). As such, they imply that emotions are less trustworthy than reason and express concerns that emotions may hinder reflection. They state, for example:

*Even though our emotions and feelings are a significant source of learning, they can also at times be barriers. Depending on the circumstances and our intentions we need either to work with our emotional responses, find ways of setting them aside, or if they are positive ones retaining and enhancing them. If they do form barriers they need to be recognized as such and removed before the learning process can proceed.*

(p.29)
They do not distinguish between emotions and feelings and appear to use these terms interchangeably. Essentially, they seem to see emotions as a possible accompaniment or hindrance to reflection, rather than a medium for reflection (Michelson, 1996). Richert (1992) adopts a similar usage and stance, evident in her assertion that "feelings need to be expressed before any substantive analysis can be done" (p.177). Possibly, these writers have some implicit understanding of cognitive/social constructivist theories of emotion. Positivist perspectives, though, remain very evident in their conceptualisation of the relationship between emotions and reflection.

Third, LaBoskey's (1994) references to reflection as a state of flux involving processes of thought, emotion and intuition, and her emphasis on the importance of passionate creeds suggest implicit recognition of emotion as a connecting force. As noted in Chapter Two, however, her methodology did not incorporate and was inconsistent with her implicit understanding. Conceivably, dynamic theories of emotion and systems could provide a conceptual framework which might assist researchers with similarly implicit understandings of the contribution of emotion to reflection to develop more congruent methods for investigating reflection.

Fourth, similarities in the language frequently used by theorists of emotion and researchers into reflection suggest many, albeit mostly unrecognised, links between theories of emotion and orientations to reflection. Social constructivist theorists of emotion, for example, assert that emotions are "ways of organizing and making sense of the world" (Jaggar, 1989, p.135). Likewise, Grimmett et al. (1990) contend that reflection is a process by which people attempt to "make sense of the phenomena of experience that puzzle or perplex them" (p.20). Although it could be argued that this search for meaning has a broader focus than Grimmet et al. imply, the similarities in the above stances are startling.

The analogy of frame as a key component of this sense-making process is also common to theorists of emotion and reflection. De Sousa (1987), for instance, points out that emotions "frame, transform, and make sense of our perceptions, thoughts and activities" (p.3) and "serve as explanations, excuses, or justifications for other acts or states" (p.1). Similarly many researchers into reflection (e.g., Barnes, 1992; Russell & Munby, 1992; Schon, 1983; 1987) use the same analogy to explain the process of
interpretation inherent in reflection. Barnes, for example, writes that "the frames that we bring to any context allow us to both categorize what we see and to attempt to interpret what is going on" (p.16). Given the closeness of these semantic and conceptual links, it seems timely that these commonalties be made more explicit.

In summary, this glimpse of reflection through the prism of theories of emotion suggests that there is ample reason to investigate more fully the links between the two. With a few notable exceptions, including Conle (1996) whose work is discussed later in this chapter, investigation of the potential contribution of emotion to reflection has been tentative and, indeed, rarely undertaken. A greater understanding of emotion appears likely to enrich and invigorate these preliminary explorations by suggesting new possibilities for conceptualising the contribution of emotion to reflection. It may also suggest ways of overcoming methodological constraints which, to date, appear to have discouraged researchers like LaBoskey (1994) from pursuing these links.

MEMORIES, IMAGES AND IMAGINATION
Although not emphasised in the above discussion, emotions are influenced by memories or images of the past and anticipation or imagination of the future (Crawford et al., 1992). In effect, memory, images and imagination, like emotion, are a medium for making meaning (Buchmann, 1993c; Heron, 1992). As such, their potential contribution to our understanding of reflection warrants exploration.

Theoretical Overview
The terms memory, images and imagination are used in so many different contexts that each has many divergent meanings (Jagla, 1994; Buchmann, 1993c; Walters, 1992). The following discussion is not intended to critically review the range of meanings accorded each term (for this, see Noddings & Shore, 1984). Instead, it focuses on conceptualisations of memory, images and imagination which emphasise their role in constructing meaning, rather than representing or reproducing predetermined visual models. It can be argued that the former are more likely to have potential relevance for reflection, particularly if the highly technical orientations to reflection, such as Cruickshank's (1987) reflective teaching are ignored. Within these
parameters, the discussion focuses on similarities in the contribution of memory, images and imagination to the construction of meaning.

Etymologically, *imagination* is derived from the Latin *imago*, meaning representation or image while *memory* originates from the Latin *memoria*, meaning that which is called to mind. Although from different origins and accorded different meanings in common usage, memory and imagination essentially involve constructing images or representations (Jagla, 1992; Kerby, 1991). While Sloan (1983) refers specifically to imagination as "the image-making power of the mind" (p.140), his description applies equally to memory. Both are a way of seeing or "a way of representing reality to ourselves" (Pickard, 1990, p.5). In effect, they provide a "personal window on the world" (Heron, 1992, p.11).

Within the broad conceptualisation of memory and imagination as a way of seeing, three themes are evident. Memory and imagination are seen variously as: (i) a means of interpretation; (ii) a source of new possibilities; and (iii) a means of making connections. These processes are intertwined and difficult to extricate. Rather than attempt to unravel them, the following discussion presents a holistic overview of the contribution memory and imagination can make to enhancing understanding of reflection.

Fundamentally, because they provide the images through which we interpret the world, memory and imagination shape our understanding of the world. They constitute a medium for interpretation which is unbounded by the constraints of time, logic or reality, thus enabling us "to suspend ordinary assumptions" (Walters, 1992, p.139). Once limiting assumptions have been removed, previously undisclosed possibilities may emerge. Walters uses the term *seeing-as* to describe how memory and imagination can reveal previously undisclosed possibilities or unrecognised aspects of a phenomenon. She contrasts seeing-as, a novel and multidimensional way of seeing, with *seeing-that*, a literal, routine and unidimensional way of seeing where phenomena are accepted to be as they appear. In comparison to seeing-that, Walters claims, seeing-as is "laden with a multitude of interpretative possibilities" (p.136). Metaphors, which involve seeing something in terms of another (Lakoff & Johnson, 1980), are an example of these interpretive possibilities.
Both scientifically and metaphorically, image and light are interlinked. In a metaphoric sense, memories and imagination constitute a "source of understanding and illumination" (Greene, 1993, p.6) which can refocus attention from the familiar to the often overlooked or the previously undisclosed (Walters, 1992). This illumination also allows us to "look beyond things as they are" (Greene, 1988, p.45) to what is not actually present (Sloan, 1983); to "envisage possibilities in and beyond the actualities in which we are immersed" (Hansen, 1988, p.49); and to "anticipate what might be seen through a new perspective or through another's eyes" (Greene, 1988, p.45). As such, memories and imagination may illuminate hitherto unrecognised connections (Sloan, 1983). For this reason, Greene (1993) likens memories to a "luminous thread of life and meaning" (p.6) connecting past, present and future.

Ainsworth-Land's (1982) model of image creation illustrates some of the above possibilities and, for this reason, is discussed in some detail below. Essentially, Ainsworth-Land proposes that it is possible to categorise the dynamic processes of image creation according to their complexity. He refers to four orders of imaging, the first of which involves the perception and creation of "a mental warehouse of imprints" (p.11). In a teacher education context, an example might include student teachers spontaneously remembering and adopting methods of classroom behaviour management used by their own teachers. From an analytical perspective, images of this order are not associated with reflection because they involve the unconscious, rather than deliberate action. From a holistic perspective, on the other hand, this process could be seen to involve the unconscious informing the conscious (Allender, 1991) and thus a form of reflection.

Second order images are created when seeking to improve, extend or modify "an existing idea, object, pattern or behaviour" (Ainsworth-Land, p.14). Typically, they involve analysis, goal setting, experimentation and evaluation. Student teachers seeking to improve their behaviour management techniques might first replay in their mind's eye a specific incident where they had difficulty managing children's behaviour effectively and their responses to that incident. They might then recall different theories and approaches and imagine their possible impact. Finally, they might use these images to select, implement and evaluate an approach and, subsequently, to modify their
practice. As Ainsworth-Land notes, the creation of these images requires considerable conscious control of ideas.

Third order imaging is characterised by innovation and synthesis. It involves letting go of preconceived ideas and encountering new ways of thinking, imaging and discovering. To create images of this type, one must "be able to create a mood of receptive spontaneity, to be open and have access to more conscious material, yet to direct and manipulate imaging to fit with a purpose or goal" (Ainsworth-Land, p.15). To improve behaviour management, student teachers might utilise techniques such as journal writing (Francis, 1995; Holly, 1989) and mind mapping (Oldfather, Manning, White & Hart, 1994) to tap into a flow of ideas and images, not necessarily accessible through the analytical approaches associated with second order imaging. The intent is to find a solution through "deliberate spontaneity" (Ainsworth-Land, p.22).

Fourth order imaging, similarly to Heron's (1992) notion of participatory consciousness referred to in the earlier discussion of emotion, involves "seeing oneself as part of a larger reality" (Ainsworth-Land, p.17) or interconnected universe. Sense of individuality disintegrates and "one becomes an agent through whom a larger idea can be expressed" (Ainsworth-Land, p.18). Student teachers concerned about behaviour management techniques would abandon any conscious striving for improvement. Instead, through meditative techniques (Miller, 1994), they would aim to become one with the universal flow of consciousness so that meaning might be revealed and appropriate behaviour management strategies illuminated.

Ainsworth-Land's model seems unlikely to have universal appeal. In particularly, his assertion that analytical reasoning is a lower level form of understanding than more intuitive, unconscious forms of understanding could concern some critics. Others might find inconsistency in the sharp distinctions implied between orders, given his apparent belief in universal relatedness. Yet, as Ainsworth-Land points out, "a model does not assert that something is so, it simply illustrates a particular mode of observation" (p.25). Given that the purpose of this chapter is to speculate on new perspectives from which reflection might be usefully observed, it could be argued that Ainsworth-Land makes an interesting contribution.
To summarise, this overview has suggested that images generated by memory and imagination can enhance an individual's understanding of his/her world. To what extent, however, can this glance through the lens of the metaphorical kaleidoscope enhance understanding of reflection?

Possible Implications For Reflection

Considerable attention has been given to memory, images and imagination by some orientations to reflection especially by those conceptualising reflection in the broader sense of making meaning. Boud et al. (1985), for example, acknowledge the role of memories when they include returning to experience as an integral stage in their reflection cycle. Their emphasis on the analytical replay of events suggests that their conceptualisation of the role of images in reflection is similar to Ainsworth-Land's 2nd order imaging.

From a narrative orientation, Connelly & Clandinin (1988) emphasise the importance of images, particularly in relation to their potential to foster connections. They describe how an image "reaches into the past, gathering up experiential threads meaningfully connected to the present" and "reaches intentionally into the future and creates new meaningfully connected threads" (p.60). Their language is strikingly similar to that used by writers about imagination. So, too, is Eisner's (1993) emphasis on the importance of grasping connections and interrelationships and recognising recurring patterns as a means of making sense of experience through reflection. Interest in the use of metaphor in reflection (e.g., Bullough & Stokes, 1994; Griffiths & Tann, 1992; Bullough, 1991; Russell, 1989) also indicates an awareness of the role of images. Because of their emphasis on connections and synthesis, these writers' conceptualisations of the role of images in reflection appear to correspond most closely to Ainsworth-Land's (1982) third order imaging.

Similarly close links between the literature about imagination and the literature about reflection are evident in Schon's (1983;1987) work. Indeed, Schon also uses the term seeing-as, although in a more limited context than Walters (1992). To Schon, reflection is primarily about problem solving, an important part of which, he argues, is "our capacity to see unfamiliar situations as familiar ones ... and to bring our past experience to bear on the unique case" (1983, p.140). Moreover, he claims that "it is our capacity to see-as ... that allows us to have a feel for problems that do not fit existing

Given that some of the literature related to reflection already refers to the role of memory, imagination and images how can this glimpse through this prism of the metaphorical kaleidoscope contribute to current understanding of reflection? In effect, it can be argued that it makes two contributions. First, it legitimises the significance attached to memory, imagination and images by some orientations to reflection, but ignored by others. Second, using the notion of image (which as the preceding discussion shows is reasonably well accepted in the literature about reflection), it begins to establish a conceptual link between emotion and intuition. Thus, it may assist those researchers of reflection who seem implicitly aware of the importance of emotion and intuition (e.g., LaBoskey, 1994) but who have not been able to conceptualise adequately the role these play in reflection. The link between image and intuition is developed more fully below.

**INTUITION**

As indicated in Chapters One and Two, there are occasional references in the literature about reflection to the importance of intuition. Its role in reflection, however, is inadequately conceptualised or clarified. The following overview aims to overcome this shortcoming by providing a theoretical basis for considering intuition in relation to reflection. It also highlights interconnections between intuition and analytical thought, and between intuition, imagination and emotion.

**Theoretical Overview**

The term *intuition* is accorded a variety of meanings (see Jagla, 1992; Goldberg, 1989; Noddings & Shore, 1984). Etymologically, it is derived from the Latin verb *intueri* meaning "to look upon", "see within", or "consider or contemplate" (Goldberg, 1989, p.31). Broadly interpreted, intuition, like memory, imagination and image, can be considered a "way of seeing" (Noddings & Shore, p.7) or, in turn, a "way of knowing" (Noddings & Shore, p.
46). It is posited that two key features characterise intuitive understanding and distinguish it from analytical understanding.

First, it is claimed that intuition is a direct way of seeing that is neither filtered through a cognitive screen (Noddings & Shore, 1984) nor mediated by the conscious mind (Holman, 1994). Unlike analytical thought, which involves contact with "the concepts attached to an object", it is asserted that intuition allows "contact with the object itself" (Noddings & Shore, p.7). Second, intuition and analytical thought are seen to differ in their awareness of interconnections (Myers & Myers, 1990; Bastick, 1982). Linear analytical thought is based on an awareness of "detailed defined relations between two elements at a time" (Bastick, 1982, p.61). In contrast, intuition is assumed to be based on simultaneous awareness of a multitude of dynamic interconnections (Fuller, 1990).

Analytical thought, like language, is linear in nature (Loy, 1986) and, as such, can be described relatively easily by language (Smith, 1996; Doeringer, 1994). The non-linear processes of intuition, on the other hand, are described much less easily (Puk, 1996; Fuller, 1990). Indeed, Noddings & Shore (1984) assert that "our contemporary conceptual terms and schemes are inadequate" (p.79) to describe intuition. Nevertheless, it can be argued that if intuition is to be acknowledged as an aspect of reflection, efforts must be made to find appropriate constructs to conceptualise its contribution.

One option is to consider intuition in relation to analytical thought. At least two pitfalls, however, must be avoided. First, any temptation to see intuition as simply "a rapid and unconscious form of analytical thinking" must be resisted as unduly simplistic (Noddings & Shore, 1984, p.19). Second, it seems important to recognise the inherent inconsistencies in attempts to conceptualise the interplay of analytical thought and the non-linear nature of intuition as a linear process involving stages such as saturation, incubation, illumination and verification (e.g., Brown 1989, cited by Holman, 1994), even though these phenomena may play some role in intuition. A more useful approach might be to focus on the complementary nature of analytical thought and intuition (Puk, 1996; Goldberg, 1989; Noddings & Shore, 1984).

Noddings & Shore (1984) argue that because "intuition acts in complementary fashion with reason ... it is impossible to isolate the two
meticulously and discretely" (p.69). Instead, they distinguish between dominantly intuitive and analytical modes. The former, they claim, involves a conscious decision to cease striving, a letting go of the "attempts to control" (p.74) which characterise the analytical mode. In other words, there is a commitment to receptivity. Structures and patterns are not imposed but simply emerge as in a "sense of receiving something, of being spoken to" (p.73). This sensation may be accompanied by an intense energy which penetrates previous barriers to understanding to reveal a new association, meaning or solution (Bohm, 1984). Typically, this phenomenon is referred to as illumination (Holman, 1994; Wheeler-Brownlee, 1985).

Interestingly, Noddings & Shore seem reluctant to explore the notion of illumination. They merely emphasise that it should not be regarded as "an unfailing source of truth" (p.7) and disassociate themselves from writers such as Heron (1992) who assert that illumination constitutes the flow of universal consciousness through the individual being and is, therefore, an intimation of ultimate wisdom. This notion, a key tenet of many Eastern philosophies (Smith, 1996) is investigated more fully later in this chapter. Meanwhile, it could be argued that Noddings & Shore’s somewhat cursory discussion of illumination limits the potential of their conceptualisation to contribute to our understanding of intuition.

Alternative conceptualisations with arguably more potential to enhance understanding of the interplay between intuition and analytical thought than Noddings and Shore’s (1984) contribution include those which involve some form of adaptation of Skolimowski’s (1992) notion of interconnected webs or dimensions. Skolimowski contends that we live our lives intertwined in a "multitude of webs signifying different orders of being" (p.53). He refers, for example, to the analytical web and the intuitive web. The former, he claims, is characterised by "a preference for the straight line and for the simple geometric web" (p.188). The latter, in contrast, is characterised by irregularity. These different webs or dimensions, he asserts, overlay each other, creating numerous interfaces or connections. The interface between these webs is often "transparent and therefore imperceptible" (Bateson, 1979, p.14), especially to those who emphasise compartmentalisation rather than connectedness. Yet, for those seeking holistic understanding, these interconnections or interfaces could be key.
Using a slightly different metaphor, Puk (1996) elaborates on how the notion of interface between different ways of knowing might apply to intuition and analytical thought. He introduces the concept of "reciprocal permeation" (p.130) and posits that "one might think of rational and extrarational processes being separated by a permeable membrane ... through which either set of processes 'flow' as the need arises" (p.130). In this way, he argues, intuitive and analytical processes are able to work in conjunction, creating a synergy of understanding and meaning.

The interfaces of different ways of knowing can also be permeated through imagination or image formation (Bateson, 1979). As explained previously, imagination (and memory) can dispense with analytical structures and open up new possibilities not accessible through analytical thought. Intuition can then work with these new possibilities to illuminate new understandings. In this sense, imagination can be likened to the raw material for intuition.

It seems that emotion, too, can transcend these interfaces of different ways of knowing. The link between emotion, memory and imagination was discussed earlier in this chapter. The emotion of empathy, and its connection with intuition, is referred to here as an example. Conceptualisations of empathy vary but include various combinations of the analytical, the emotional, and the intuitive (Teich, 1994). Essentially, empathy involves attunement and sensitivity to others (Moffett, 1994). For empathy to develop, there must be a loosening of the boundaries around oneself (Jordan, 1991). There must also be an awareness of interdependency, that is an understanding that the individual is part of a network of connections that extend beyond the self (Jordan, 1991; Kohut, 1978). From this perspective, empathy, in effect, is "the resonance of essential human likeness" (Kohut, p.713). It involves hearing, "accepting, confirming and understanding the human echo" (Kohut, p.705). By loosening boundaries and heightening sensitivity to interconnections which, as discussed previously, is integral to intuition, empathy can enhance intuition (Holman, 1994).

Although the above writers refer specifically to empathy, it is possible to extend their arguments to emotions generally, via the dynamic theories of emotion referred to earlier in this chapter. Indeed, it could be argued that it is possible to extend these notions to different ways of knowing, including intuition. Kohut's (1978) notion of resonance or sympathetic vibration, for
example, might well complement Skolimowski's (1992) interconnected webs. Resonance refers to "amplification and enhancement of natural qualities through interaction with an other that is sufficiently related, so that a transfer of energy can occur" (Conle, 1996, p.299). As such, it could be argued that resonance accounts for the energy which enables movement to occur across interfaces of different ways of knowing.

In summary, this overview suggests that intuition is a way of seeing which differs from, but complements, analytical thought. It contends that emotion and imagination also complement and enhance intuition. As such, it highlights the holistic nature of understanding and the synergy from different ways of seeing. Yet, despite much speculation, the exact nature of these links between different ways of seeing and understanding remains unknown.

Possible Implications For Reflection
We return now to the metaphorical kaleidoscope to consider what insights into reflection we might gain from looking through the perspective of the literature about intuition. Two strong impressions emerge. First, the assertion arising from the earlier review of the literature related to reflection is reinforced. That is, much of this literature seems either unaware of, or unable to conceptualise adequately, the role of intuition to reflection, or its synergistic and holistic relationship to other ways of knowing and understanding.

Schon (1983; 1987) is an exception to this general tendency. As explained in Chapter One, essentially he sees reflection-in-action as improvisation to a situation as it unfolds, just as jazz musicians, when they improvise, respond continually to the feel of their music. Improvisation, he argues, requires the intuitive capacity to hear and see differently in order to reach alternative interpretations to those which might be attained through formal reasoning. It also requires familiarity and experience with contexts or schemas and the ability to recognise patterns as they emerge within these contexts or schemas. It relies more heavily on tacit than explicit understanding. As such, his conceptualisation of reflection-in-action indicates considerable awareness of the importance of receptivity to dynamic interconnections which, as discussed previously, is inherent in intuition. Similarly, his emphasis on the complementary nature of reflection-in-action and reflection-on-action demonstrates awareness of the potential for interplay between intuition and
analytical thought described earlier in this chapter. Looking at reflection through the metaphorical prism of intuition, therefore, reaffirms the importance of Schon's contribution to the literature about reflection, especially in terms of conceptualising reflection as more than analytical thought.

The second impression which emerges from the overview of intuition, and its links with emotion and imagination, is that conceptualisations of reflection as linear or cyclical processes are unnecessarily constraining. These models are unlikely to portray adequately the complexity of reflection, especially if reflection is ultimately about understanding, a holistic process. Could an alternative involve conceptualising reflection as a flow of energy across different webs of meaning networks and resonance within and between these networks - as described by Skolimowski, (1992) and Kohut (1978) in relation to holistic understanding? This possibility is explored in more depth below.

QUANTUM THEORY
Many might contend that Skolimowski's (1992) and Kohut's (1978) notions of interconnections, while interesting, lack theoretical foundation. Yet there appear many links between their conceptualisations and the basic principles of quantum theory. Investigating these links requires some understanding of quantum theory. The following overview provides an elementary explanation of the complex theoretical concepts involved. It relies heavily on Zohar's (1990) explanation, which is exceptionally lucid and easily accessible to readers with no background knowledge of quantum theory.

Theoretical Overview
Basically, quantum theory "stresses dynamic relationships as the basis of all that is" (Zohar, 1990, p.220). As such, it deals with possibilities and becomings, rather than with fixed states (Shepherd, 1993; Zohar, 1990). Three key tenets are the Principles of: (i) Duality and Complementarity; (ii) Uncertainty; and (iii) Interconnectedness of Observer and Observed. These principles are explained briefly below.

The Principle of Duality and Complementarity asserts that, at the subatomic level, all being exists simultaneously in both predominantly particle-like and wave-like states. Each state of being complements the other, and each must be appreciated in efforts to fully understand a phenomenon. Yet it is
impossible to focus on both particle-like and wave-like states simultaneously. As Zohar points out, "while both are necessary to get a full grasp of what being is, only one is available at any given time" (p.10). Which state is apparent at any one time depends on circumstances, including "whether or not anybody is looking, or when they are, what they are looking for!" (p. 10). How long any one state remains apparent is also uncertain. Indeed, electrons jump from one state to the other in random, discontinuous and unpredictable quantum leaps. The Principle of Uncertainty arises from this essential indeterminacy and elusiveness.

This underlying uncertainty is compounded by the tendency of subatomic entities in either a predominantly wave-like or particle-like mode to retain some elements of the other mode. That is, at any one time, they are neither purely wave-like or not particle-like. Thus, even assuming that a state remains constant long enough to measure its position (for particle-like states) or its momentum (for wave-like states), these readings will be "fuzzy" (Zohar, p.11). As Zohar explains, "an electron might be a particle, it might be a wave, it might be in this orbit, it might be in that - indeed anything might happen" (p.11). In other words, the Principle of Uncertainty suggests that reality is "an unfixed, indeterminate maze of probabilities" (Zohar, p.12).

These probabilities can best be conceived as a "probability wave" which spreads out infinitely in all directions. An electron within this probability wave can move simultaneously in every direction, unbounded by time and space. As such, all potential objects and events are integrally linked. In Zohar's words, "all things and all moments touch each other at every point" (p.18). Because there is no notion of separateness, one object or event can influence another instantaneously. In a sense, quantum theory provides an explanation for the butterfly effect referred to earlier in this chapter, although according to quantum theory, the processes and impact of this influence are simultaneous.

At the same time as the probability wave is spreading out in all directions, Zohar (p.15) explains how it:

\begin{quote}
puts out temporary 'feelers' towards its own future stability by way of trying out - all at once - all the possible new orders into which it might eventually settle, in much the same way that we might try out a new idea by throwing out imaginary scenarios depicting its many possible consequences.
\end{quote}
Temporary "feelers" or virtual transitions might eventuate into final transitions, as illustrated in the classic analogy of the quantum hussy (sic). Zohar describes how a quantum woman, unable to decide amongst many suitors, becomes involved simultaneously with all of them. After exploring all possibilities, she eventually settles down with one suitor, but not without leaving traces of her numerous simultaneous temporary liaisons. In this sense, virtual transitions can have ongoing impact, even though the possibilities which they represent may have been negated at some stage.

Frequently, Zohar explains, final transitions are caused by the act of observation under the Principle of Interconnectedness of Observer and Observed. This principle can be explained by another classic quantum analogy - Schrodinger's cat. The cat is placed in an opaque experimental laboratory cage where it has an equal chance of either triggering or not triggering a lethal dose of poison. The possibility of it being dead or alive fans out like a probability wave throughout the cage. When the cat is observed, the probability wave collapses. That is, the cat no longer exists simultaneously in both wave-like or particle-like forms as it did before it was observed, simply because the human eye is unable to absorb both at once. To the human eye, the cat is either dead or alive. Upon observation, the possibilities which the probability wave describes "suddenly gel into one fixed reality ... [and] we get a cat that we can either bury or fondle" (Zohar, p.23).

The point of this analogy is that unobserved quantum phenomena are radically different from observed phenomena. In other words, the process of observation changes quantum systems into recognisable objects. Furthermore, how we "observe quantum reality partly determines what we shall see" (Zohar, p.28). This is not to say that the observer actually creates reality. Rather, "at the moment of observation, some dialogue between the quantum wave function and the observer ... gives concrete form to one of the many possibilities inherent within that wave function" (Zohar, p.32). According to Zohar, what it actually is about observation, or consciousness, that collapses the wave function and "fixes" possibilities remains one of the many unresolved issues in quantum theory.

Possible Implications For Reflection
As interesting as quantum theory might be, what contribution could it possibly make to enhancing understanding of reflection? No mention appears to have
been made in the literature about reflection to quantum theory, nor do explanations of quantum theory refer to reflection. Yet if we look at reflection through the prism of quantum theory, interesting possibilities emerge. The way in which observation or consciousness impacts on quantum reality, in particular, appears to have clear links to reflection.

As Zohar points out, "the word consciousness is used to embrace a whole panoply of meanings and associations - mind, intelligence, reason, purpose, intention, awareness, the exercise of free will" (p.202). However we choose to define consciousness, it may be "in some important sense, continuous with other things in the universe" (p.35). In other words, "we are, in our essential being, made of the same stuff and held together by the same dynamics as those which account for everything else in the universe" (p.83). For this reason, Zohar argues that thought, used in a loose sense to imply a quest for understanding, can be described in quantum terms.

As in quantum systems, Zohar asserts, the processes we use in seeking understanding are integral to each other. They cannot be analysed effectively in terms of discrete elements, because when focusing on one, inevitably sight is lost of the others. Using quantum terms, Zohar distinguishes between the wave-like nature of unfocused musing and the particle-like nature of focused thought. The former is characterised by possibilities, the latter by position. Unfocused musing, Zohar argues, can be likened to "the free play of thought and imagination" (p.62). It could be argued that her notion of free play could include intuition and emotion as well. In contrast, focused thought collapses the wave function of possibilities, resolving the musings into "a settled idea" (p.62). Thus, quantum theory might present an alternative explanation for the interplay between logical thought and other mediums for understanding. For some, the scientific basis of this explanation might add credibility to arguments that reflection be conceptualised as a holistic process rather than primarily one of analytical thought.

To return now to the question foreshadowed at the beginning of this section: Is there any connection between quantum ideas of consciousness and Skolimowski's (1992) notion of interconnected webs and Kohut's (1978) notions of resonance and echo? It appears so, assuming interconnected webs are analogous to different wavelengths. According to Bronowski (1973), different wavelengths result in different visions, images and revelations.
Relatively short wavelengths are more visible to humans. These wavelengths determine what we see. Fiumara (1990) and Bowers & Flinders (1990) extend this notion to cultural wavelengths. They suggest that rationality is a dominant wavelength in the Western "cultural frame of reference" (Fiumara, p.128). Within that cultural wavelength, however, there will be individual responses, presumably based on dominant personal wavelengths. Unlike sound or light waves, these cultural waves and personal waves are not confined to any particular medium. Thus, they are not bound by the characteristics of waves in these mediums. It is possible, therefore, that they might overlap, creating a situation analogous to Skolimowski's interconnected webs of meaning.

Kohut's (1978) notions of resonance and echo also complement quantum notions of consciousness. Although Kohut refers specifically to the resonance of empathy, from a broader metaphysical perspective, it seems that this notion could be extended to include understanding resonating through space and time, from one person to another. Indeed, this is the key principle underlying the notion of morphic resonance in which energy from the events of the past are seen to influence events of the present and future (Sheldrake, 1988). Similarly, while echo, in a scientific context, specifically refers to the reflection of sound waves, in a broader context it could well refer to the reflection of all waves, or forms of meaning. In a literary context, for example, it could be argued that themes echo across different literary works. It seems likely that themes could also echo across different ways of knowing.

The above conceptualisations can be interpreted as either actual or metaphorical representations of metaphysical processes. How they are interpreted depends essentially on one's world view. That reflection itself is a term from traditional wave theory suggests, however, that theoretical advances such as the emergence of quantum and other associated theories might inform understanding of reflection. Conceivably, for example, Cruickshank's (1987) notion of reflective teaching and Van Manen's level of technical thinking, could be considered focused, particle-like manifestations of reflection. As explained below, contemplation and narrative orientations, on the other hand, appear to refer to reflection which is more wave-like in nature.
From an orientation of reflection as narrative knowing, Conle (1996) develops the notion of internal resonance. She argues that when a story, image or emotion “reverberates within us and calls forth another in an echo-like fashion” (p.301), often prompting us to say "Oh, that reminds me ...", the phenomenon of internal resonance is at work. In this sense, she asserts, resonance is a key process in establishing connections and constructing meaning and is therefore a vital aspect of reflection. Although her reference to wave theory extends no further than resonance and echo, it could be argued that her work highlights the potential contribution of quantum theories and other associated theories to enhancing understanding of reflection. It is surprising, therefore, that few other writers appear to have explored these links.

In contrast, numerous writers (e.g., Kesson, 1996; Zohar, 1990; Pelletier, 1985; Wilber, 1983, Capra, 1975) see links between quantum theory and Eastern philosophical perspectives. As indicated in the preceding chapters, there are also occasional references in the literature about reflection to the potential relevance of Eastern philosophies (see, for example, MacKinnon, 1996; LaBoskey, 1994; Miller, 1994; Korthagen, 1993; Tremmel, 1993; Louden 1992; Yinger, 1990). It seems appropriate, therefore, to conclude this investigation of alternative ways of conceptualising reflection through the prism of Eastern perspectives.

EASTERN PHILOSOPHICAL PERSPECTIVES
The immanent nature of most Eastern philosophical traditions suggests that they are more likely to have developed sophisticated conceptualisations of inner processes such as reflection than many Western traditions which, arguably, have focused more on developing understanding of the external world (Inada, 1994; Chung-Ying Cheng, 1991; Organ, 1987). If Western understanding of reflection is to be enhanced, it seems important to explore the potential contribution of Eastern perspectives.

Yet such an exploration should be undertaken with caution, given the many difficulties inherent in translation, interpretation and comparison. Oversimplifying important distinctions in assumptions, conceptualisations and vocabulary is a particular danger (Rosemont, 1988; Strenge, 1988; Scharfstein, 1978a). As Scharfstein points out, "it is only too easy to lift ideas out of their cultural contexts, to translate the terms in which they are
expressed into familiar ones, and to come to plausible but misleading conclusions" (p.9). Similarly, it is necessary to guard against gross generalisations (Organ, 1987) and uncritical enthusiasm for unfamiliar ideas (Stambaugh, 1986).

The following discussion attempts to avoid these pitfalls. In an exploratory and initial incursion into unfamiliar territory, however, it is not always possible to realise the above ideals, particularly concerning overgeneralisations. It could be argued, though, that the possibility of enhancing understanding of reflection by examining it through the prism of Eastern perspectives appears to outweigh the inherent risks involved. From the outset, it must be emphasised that within Eastern and Western traditions there are many diverse perspectives. Thus, some Western philosophers might be seen to have more in common with what tend to be thought of as "typically" Eastern perspectives, than with what might be perceived as "typically" Western perspectives (Tarnas, 1991).

**Theoretical Overview**

The following discussion focuses mainly on Indian (Hinduism, Jainism, Buddhism) and Chinese (Zen Buddhism, Taoism and Confucianism) philosophical traditions for these are seen by many (e.g., Krishna, 1988; Organ 1975; Nakamura, 1964) to be the major traditions of the East. Reference is made occasionally to the mystical Islamic tradition of Sufism but not to Islamic traditions as a whole because of their close derivative links with Greek philosophy, a foundation of Western traditions (Krishna, 1988). The term *Western perspectives*, in this context, refers primarily to Newtonian scientific thought and its antecedents in some aspects of the Hebrew-Greek-Christian-Roman traditions. In some form or another and despite fundamental differences in conceptualisations of self and knowing, the theme of "knowing thyself", transcends all the philosophical perspectives referred to above (Organ, 1987). For this reason, the following discussion focuses specifically on perceptions of self, knowledge, and the nature of knowing.

**Self**

Most Western perceptions of self emphasise the uniqueness and power of the individual (Smith, 1996). People are valued for their knowledge and their ability to use their knowledge to make their mark on the world (Smith, 1989; Organ 1987). In contrast, Eastern traditions value the potential of the
individual to merge with the world. As Shaffi (1988) writes, "when a drop of water returns to the ocean, although it outwardly loses the identity of dropness, it gains the permanency of the everlasting ocean" (p.37). While he refers specifically to Sufism, the notion of communion of the individual with the universal in a state of universal harmony is common to Eastern traditions. Hindus, for example, refer to universal harmony as atman, Buddhists to nirvana and Taoists to tao (Organ, 1987).

Indeed, most Eastern traditions regard the attainment of universal harmony through the fusion of the individual with the universal as the ultimate goal (Smith, 1996). The path to universal harmony is through personal equilibrium and only attained by relinquishing attachment to needs, wishes, goals, possessions, opinions and similar binds (Chung-Ying Cheng, 1991; Laycock, 1989; Wawrytko, 1989). The importance of relinquishing attachments is highlighted in the following Zen story, cited by Organ (1975, p.175):

- A university professor once came to Nan-in, a Zen master, to enquire about Zen. Nan-in served teas. He poured his visitor's cup full, and then kept on pouring. The professor watched the overflow until he could no longer restrain himself. 'It is overfull. No more will go in,' he said. Nan-in said, 'Like this cup, you are full of your own opinions and speculations. How can I show you Zen unless you first empty your cup?'

This story suggests that the more attachments that can be relinquished, the closer the individual becomes to the celebrated state of non-being. A state of emptiness, like the void within an empty bowl or between the spokes of a wheel, non-being represents infinite possibilities and is inherent to universal harmony (Chung-Ying Chen, 1991). From this perspective, the typical Western emphasis on self as individual being with a multitude of attachments to the physical world hinders attainment of non-being and ultimately, universal harmony (Smith, 1996).

**Knowledge**

Traditionally, many Western perspectives have regarded knowledge as largely absolute, unchanging and exact (Inada, 1994; Shepherd, 1993; Berman, 1989). Knowledge is considered part of a logically ordered and structured reality, accessible through abstraction and deduction, and communicable through language (Chung-Ying Cheng, 1991). Because of this emphasis on order, much Western thought tends to be antagonistic to paradoxes, contradictions, and ambiguity (Organ, 1987). This distrust is apparent in the dualism also characterising much Western thought. The
separation of subject and object, the main criteria for the legitimacy of knowledge, typifies this duality (Heshusius, 1994).

In contrast, it could be argued that Eastern traditions tend to see reality, and consequently knowledge, as dynamic and non-dualistic. In Hindu, Jainist and Buddhist traditions, reality has a vertical context with hierarchical levels determined by degrees of consciousness (Organ, 1987). Thus, reality has depth and being is but a moment in the eternal process of becoming, hence the belief in reincarnation (Smart, 1988; Goldman, 1986). In many Chinese traditions, reality is similarly dynamic, although the process of harmonisation is considered equally as important as the process of evolution (Chung-Ying Cheng, 1991; Allinson, 1989; Wawrytko, 1989).

In some traditions, harmony is perceived as continual "dialectical interchange between yin and yang" (Chung-Ying Cheng, 1991, p.87). Yin and yang are degrees of a continuum in which yang is in the process of developing into yin, and vice versa (Allinson, 1989). This process is like the harmony underlying surf, with its rhythmic balance between the vibrant breaking waves upon the beach, and the unseen backward thrust into the ocean (Inada, 1994). Both waves and backward thrust are inextricably interwoven in the process of becoming one another. The analogy of the surf represents the constant interplay between the states of visible and vibrant state of being and the non-discernible but equally important state of non-being (Inada, 1994).

Ultimately, though, from most Eastern perspectives, the dynamic nature of reality and knowledge precludes expression through language. This is partly because language is far less fluid than reality and thus unable to capture the essence of reality (Doeringer, 1994; Tang Yi, 1985). In addition, the complexity of understanding is beyond the explanatory power of language which is why Taoists refer to the tao as that which cannot be named (Chung-Ying Cheng, 1991). Indeed, Chinese philosophy as a whole has been described as the study of "what language cannot describe, define, or otherwise capture" (Hansen, 1989, p.75).

From many Eastern viewpoints, words can be as much a trap as a tool if the inherent limitations of language are overlooked. A traditional Buddhist saying, for example, likens words to fingers that point to the moon, but warns that
fingers must not be confused with the moon (Organ, 1987). At best, words can only seek to illuminate the otherwise unperceived.

Similarly, in many Eastern traditions, sequential deductive thought, because of its inherent limitations in understanding higher levels of consciousness, is seen to have a limited role in understanding reality and accessing knowledge. Empirically verifiable levels of reality are regarded as relatively lowly, as higher levels of reality cannot be reached by the logical mind (Loy, 1986). As an old Sanskrit saying asks, "How ... can you grasp what is beyond the mind with the mind?" (cited by Goldman, 1986, p.352).

Furthermore, over-reliance on logic can be seen as inhibiting. If one "clings to a thought by allowing the thoughts to link up in a series, which means having one's next thought 'caused' as it were by previous thoughts" then this may result in "self conscious paralysis of all thought" (Loy, 1986, p.304). Much of the energy involved in logical thinking may be regarded as wasted as "most of the effort involved ... is due to selecting and organising into a rational pattern thoughts which naturally arise, which in themselves have no such pattern" (Loy, p.305). This is not to imply that logic is not valued. Indeed, most Eastern traditions have developed highly complex systems of logic (Staal, 1988) but, because of its perceived limitations, regard reason as less significant than the intuitive understanding associated with the fusion of the individual with the universal (You-Yuh Kuo, 1996).

In Buddhism, for example, prajna is valued more highly than vijnana. Prajna is immediate, spontaneous, and unpredictable, akin to a flash of lightning with no intervening moment for deliberation, interpretation or analysis (Loy, 1986). It is holistic, often paradoxical and essentially incommunicable. Vijnana, in contrast, is deliberative, analytical and predictable, concerned mainly with parts and concepts and considered "the raft to be abandoned upon reaching the other shore" (traditional Buddhist saying cited by Organ, 1987, p.100). The following account of the Taoist butcher illustrates these differences:

When I first began
To cut up oxen
I would see before me
The whole ox
All in one mass.
After three years
I no longer saw this mass
I saw the distinctions.
But now, I see nothing
With the eye. My whole being
Apprehends.

My senses are idle. The spirit
Free to work without plan
Follows its own instinct

Guided by natural line
By the secret opening, the hidden space,
My cleaver finds its own way
I cut through no joint, chop no bone.

In this account of Merton’s (1965) cited by Yinger (1990, p.73), the butcher did not acquire his expertise “by ever more advanced courses in bovine anatomy” (Neville 1989, p.71). Rather, through intuitive understanding, he, his cleaver and beast became as one.

Knowing
Some Western perspectives recognise and value intuitive understanding (Tarnas, 1991). As the discussion earlier in this chapter suggests, though, they are less likely than Eastern perspectives to extend their recognition of unmediated interconnections to include the interconnectedness of the individual and the universal. More typically, Western perspectives associate knowing with reasoning and language (Shepherd, 1993). Consequently, they tend to distrust knowing which fails to fit within established hierarchies or is not directly communicable (Doeringer, 1994; Blofeld, 1981). In contrast, most Eastern traditions acknowledge knowing based on reason and language, but emphasise the need for deeper understanding. They see meditation as a means to more significant understanding (Shaffi, 1988).

Meditation involves appreciation of the “significance of silence” as a means of gaining insights and understanding (Shaffi, 1988, p.126). Silence represents a stilling of the body and mind and the gaining of freedom from “repetitive and compulsive use of body movement, language and thought processes” (Shaffi, p.146). Through internal silence, one becomes more perceptive to “invisible rhythms within and around”; to “wholes rather than parts”; and to “internal and external clues” (Shaffi, p.146). Silence opens up new dimensions of understanding by transcending the limitations of thought and language and gaining access to the unconscious (Laycock, 1989; Podgorski,
1985). In other words, to draw on previous analogies, meditation assists in exploring the space in the empty bowl and between the spokes of a wheel.

At the core of the unconscious, and attainable only through the state of non-being, lies the link between the individual and the universal (Inada, 1994). When the external and the internal, the individual and the universal, the knower and the known are in harmony, enlightenment occurs (Chung-Ying Cheng 1991; Shaffi, 1988). Enlightenment has been likened to an infinite chamber of mirrors with each mirror arranged in a way that it reflects all the other mirrors in the chamber (Laycock, 1989). The effect is a "vast, universal, multidimensional network of independence and intercausation" (p.179). Enlightenment can only occur when there is no obstruction impeding the projection and reflection of light. Concepts and abstractions, like opaque objects, obstruct the path of the light and conceal what is behind, thus impeding enlightenment (Laycock, 1989).

Enlightenment can be sudden (Chung-Ying Cheng, 1991) but is more frequently the outcome of a lengthy process of transformation through the unfolding of successively higher levels of consciousness (Wilber, 1983). Many Eastern traditions have hierarchical dimensions of consciousness, just as Western traditions have hierarchies, for example, those developed by Kohlberg (1981) and Piaget (1978). Epstein (1990) and Wilber (1983) argue that at lower levels of consciousness, there are many similarities between Western and Eastern hierarchies. They point out, however, that in the former rational thought constitutes the highest level while in the latter it is only middle-ranking. Eastern conceptualisations of levels of consciousness continue for several stages beyond rational thought, concluding with universal consciousness or enlightenment (Epstein, 1990; Wilber, 1983).

Possible Implications For Reflection
To what extent might these Eastern conceptualisations of self, knowledge and ways of knowing enhance Western understanding of reflection? It could be argued that relevance might be determined, to a large extent, by three factors: the prevalence of culture-boundedness, the likelihood of overcoming the limitations of language, and the possibility of new developments in research methodologies. Each of these factors is discussed below.
In relation to culture-boundedness, the first of the above factors, one could claim that people are born into "a set of cultural constructions and constraints" and live their lives "in the embrace, or stranglehold, of various ... socially invented systems of perceptions, meaning, and knowledge" (Spretnack, 1991, p.14). Add to this a human tendency to see one's own cultural norms as the most desirable, and the outcome may well be a tenacious adherence to one's cultural traditions (Spretnack, 1991). Those who support this argument are unlikely to perceive any relevance of traditional Eastern perspectives to a contemporary Western context. As illustrated in Chapters One and Two, this stance appears to underpin much of the contemporary Western literature about reflection.

Conversely, one might contend that at a time of global cross-cultural interaction, it becomes more feasible to move beyond the confines of one tradition and to develop greater awareness of "the cultural construction of concepts" (Spretnack, 1991, p.4) rather than assuming them to be natural, universal and unquestionable. Such awareness could help to overcome the constraints of particular cultural and conceptual backgrounds. This notion of the loosening of cultural binds is illustrated in the philosophical shifts in the writing of Van Manen (1977; 1991) and MacKinnon (1987; 1996), discussed in earlier chapters, as they moved from an essentially analytical perspective to a far greater appreciation of more holistic ways of knowing.

Despite their interest in alternative perspectives, as yet, Van Manen and MacKinnon do not appear to have found ways of overcoming the limitations of language and current research methodologies. In other words, their access to appropriate methodological tools for investigating reflection appears to lag behind their appreciation of its complexity. This also seems the case for those who, like Tremmel (1993) and Yinger (1990), are interested in contemplation and meditation as an aspect of reflection. Attempting to understand meditation from an analytical perspective is problematic, however, because of the different levels of consciousness involved (Epstein, 1990). As Goldman (1988) points out, ultimately, it is not possible to use reason to explain that which is beyond reason.

Although higher (or different) realms of consciousness cannot be grasped in terms of lower (or other) realms, it has been asserted that they sometimes leave behind footprints (Wilber, 1983) or cosmic echoes (Wawrytko, 1989). By
nature, faint and indistinct, these connections between different realms of knowing can be difficult to recognise or describe, especially given the limitations of language (Wawrytko, 1989; Wilber, 1983). Doeringer (1994) argues that European languages are particularly limited in their ability to describe interconnections because of their emphasis on the individual, the objective, external action and control. Consequently, he contends, they have no concepts or names for many ideas intrinsic to Eastern notions of interconnections, such as the union of opposites through a middle path.

For contemporary Western understanding of reflection to be enriched by Eastern perspectives, therefore, it appears that there would need to be a greater commitment to recognising and appreciating more complex interconnections than traditional Western notions of cause and effect (Doeringer, 1994). From a perspective of interrelatedness, notions such as balance, rhythm, cadence and resonance might be more significant. Exploring interconnections of this nature would require moving beyond the continuing preoccupation with rationality and reductionism evident in much of the literature about reflection. This methodological shift would appear difficult, though, given the lack of alternative methods conducive to exploring the inner processes of reflection. In particular, there appears an urgent need for methods with the capacity to recognise and describe nonverbal experiences and to transcend the subject-object dichotomy characterising current investigations (Heshusius, 1994).

CONCLUDING COMMENTS
The metaphor of kaleidoscope adopted in this chapter has enabled reflection to be explored from a range of perspectives occasionally hinted at, but mostly overlooked, by much of the contemporary literature about reflection. As this chapter has shown, each of these perspectives or metaphorical prisms is located within its own substantial body of literature and more indepth understanding of these phenomena would be required to fully realise their potential contribution to enhancing current understanding of reflection. Nevertheless, these perspectives have highlighted the complexity of reflection and the paucity of those conceptualisations of reflection which focus primarily on analytical thought.

Interestingly, despite the eclectic nature of the literature informing the prisms of this metaphorical kaleidoscope, a strong unifying theme has emerged. All
perspectives investigated in this chapter emphasise the importance of interconnections and their contribution to holistic understanding. Yet conceptualising reflection as a complex and holistic process appears likely to raise many methodological challenges. Some of these challenges, and their implications for the present study, are explored in the following chapter.