3.1 Confirming Companionship In Interests, Intentions and Emotions:

How Video Interaction Guidance Works

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Abstract:

Knowledge of how we share motives and emotions, intentions, hopes and enjoyment of life has been gained from film and video studies of infants in intimate play with people they know best. Important steps before language give us a new appreciation of the nature of friendship, and the value of meaning created and shared with friends. The research has used photography and sound recordings to direct attention to spontaneous initiatives and preferences of the learner, to expressions of emotions, and to the coordination of actions.

In the 1980s clinical methods were developed in the Netherlands to use videos of spontaneous encounters between family members in their homes to highlight and give value to small positive events that indicate latent strengths in relationships, which it was felt might be encouraged to improve attachments, communication and learning. The method, developed by Harrie Biemans, originally called SPIN (for the Dutch 'Stichting Promotie Intensieve Thuisbehandeling Nederland' or 'Association for the Promotion of Intensive Home Training in the Netherlands'), has been developed in many countries as Video Home Training or Video Interaction Guidance, and it has been applied widely -- to improve teachers' communication with pupils in schools, to assist shared experience with people with special

educational needs, such as autism, and to strengthen working groups of many kinds. The research on conversations with infants gives scientific evidence on how video feedback works.

BRINGING TO LIGHT HOW MOVEMENTS OF THE MIND ARE EXPRESSED TO OTHERS, AND WHY OTHERS' RESPONSES MATTER.

Video and sound recording with microanalysis of natural and experimental engagements with infants, following methods pioneered by researchers in animal ethology, has transformed our theory of communication without words (Trevarthen 1977, 1979a; Reddy 2008; Bråten 2009; Stern 2010). The findings have been used to improve methods of therapy for disorders of relating and cooperating (Stern et al. 1998; Ryle and Kerr 2002; Meares 2004; House and Portuges 2005).

The science of human communication has a long and complex history. Education in the conventions of social life in civilized and industrial societies has, since ancient times, often undervalued the powers of natural sympathy; in particular, it has doubted that infants can have or communicate states of mind, as Giannis Kugiumutzakis has recorded with reference to how ancient Greek philosophers viewed infants' imitative powers and the role of emotions in learning with others (Kugiumutzakis 1998).

Charles Darwin, in 'The Expressions of Emotion in Man and Animals', used the then very new art of photography to show how face expressions and gestures are used by infants and actors in similar ways to show their feelings (Darwin 1872). He commissioned portraits,

including those of mentally disturbed people, and collected pictures of other races, to prove the universal features of emotional expression. He distinguished complex human emotions including ***anxiety, grief, despair, joy, love, devotion, meditation, sulkiness, determination, hatred, contempt, disgust, guilt, pride, patience, astonishment, horror, shame*****, and *modesty*. Most of these have a highly personal, moral or relationship-regulating function. They do not just express feelings of physiological state, or simple 'primary emotions' of a single self-conscious individual, and they have no rational explanation. They are intuitive 'relational emotions' (Stern 1993), which demonstrate imagination for the hopes of living with another person or in a family or community. They seek intimate recognition by others.**

But Darwin's pictures are motionless, and often posed by actors – they are moments in communication caught by a camera. A deeper insight into his theory, and why he was willing to give rich interpretation to the motives of the expressions, is given to us by his sensitive reflections on the real-life situations where the movements could grant powerful meaning to the emotions. Especially informative are his 'Biographical Sketch of an Infant', based on affectionate entries by himself and his wife Emma in a dIAry of observations on their children (Darwin 1877), and the poignant essay he wrote about his own feelings after his beloved daughter, Annie, died (Conrad 2004).

An important change in research on the earliest stages of human communication came in the 1960s with the development of sensitive methods that, by recording 'instrumental' actions of the infants to choose their experiences, proved the abilities of even newborns to perceive different sights and sounds, and especially human

expressions, and to identify the mother from her face and from her voice (Trevarthen, Murray and Hubley1981). Then clear proof came from the studies of films that young infants could engage with affectionate speech and take part in conversational games by exciting and reacting to emotive responses of a partner. At the end of the 70s three landmark books announced the new findings; these made the way clear for a study of how language and other conventions of culture are learned within a sensitive and creative communication by precisely regulated rhythmic timing of inarticulate but delicately modulated vocal sounds, face expressions and gestures (Schaffer 1977; Lock 1978; Bullowa 1979).

INSERT FIGURE 3.3.1 ABOUT HERE

'Figure 3.1 1: Stages in the development of infant sociability in the first year.

A. A newborn infant, in the first day, imitates tongue protrusion, and another about one hour after birth tries to imitate hand movements.

B. Laura at home in Edinburgh at 3 months, in her family, chats with her mother Kay. Her 3-year-old sister wants to talk with her too. Father proudly watches them.

C. Leanne at 5 months enjoys her mother's recitation of 'Round and Round the Garden', with actions. Emma at 6 months, as she sits on her father's knee, is proud she knows 'Clappa-Clappa-Handies' when her mother asks her to show it.

D. Basilie, a one-year-old in Edinburgh, reads her book as her mother reads the telephone bill. They both know what reading is. In Lagos, Adegbenro, also one year-old, is proud of his rattle and after asking someone to hand it to him, he

shows it to everybody.'

Mary Catherine Bateson described a film she studied of a dialogue between a mother and her 9-week-old in these words:

> The study of timing and sequencing showed that certainly the mother and probably the infant, in addition to conforming in general to a regular pattern, were acting to sustain it or to restore it when it faltered, waiting for the expected vocalization from the other and then after a pause resuming vocalization, as if to elicit a response that had not been forthcoming. These interactions were characterized by a sort of delighted, ritualized courtesy and more or less sustained attention and mutual gaze. Many of the vocalizations were of types not described in the acoustic literature on infancy, since they were very brief and faint, and yet were crucial parts of the jointly sustained performances. (Bateson 1979, p.65).

By 1980 it was established that a child is born with a human mind adapted for learning by intimate sharing of impulses and feelings with other human minds (Trevarthen 1979a, b, 1980). In Edinburgh my group was beginning systematic recordings of the age-related changes in mother-infant communication through the first year (Figure 1), and, in collaboration with Alistair Mundy-Castle, we made comparisons of what we found in Scottish subjects with developments of babies in the very different culture of Lagos in Nigeria (Mundy-Castle 1980; Trevarthen 1998). There were important differences, but there were also clear universals in how mothers understood their infants' expressions and shared their interests and feelings, explaining their own ideas and those of their culture, making them easy to learn.

INSERT FIGURE 3.1.2 ABOUT HERE

‘Figure 3.1 2: Chart of developments in self-awareness and communication in the first year, related to key developments in motor regulation and perception. (See Trevarthen and Aitken 2003, for sources)’

While we were charting the key phases, summarized in Figure 2, Saskia van Rees visited and introduced me to the work of Harrie Biemans and his new kind of therapy that supported positive moments in engagements between people who were finding communication difficult. Saskia and Harrie thought the observations of infants, and the stages of their development in cooperative communication, could give support to the method of SPIN. I have since benefitted from our collaboration, especially from the beautiful video studies Saskia has made of birth, communication with newborn infants in the intensive care unit, ways of assisting communication with children who have developmental disabilities, and video hometraining

(Body Language Foundation)

One idea that grew from discussions with Harrie and Saskia was that the course of video home training might parallel or reproduce the sequence of stages in communication with an infant – from ‘courteous’ proto-conversations of the early weeks, through the fun of games in the middle of the first year to studious cooperation in tasks at the end of the year, preparing the way for mastery of conventions of object use, and for language. I remember we summarized the sequence as *Love* comes before *Play*, which prepares for *Work*. In other words, a stage of intimate, trusting and

affectionate communication must be in place before the teasing creativity of games may enrich and bring confidence and joy to the relationship, and then attentive cooperation in performing tasks and solving challenging problems together may confirm friendship. I compare this to a hierarchy of different language functions, with increasing informative authority and decreasing concern for feelings of relationship: *Intimate, Inventive, Informative, Instructive.*

I will review the findings from research with infants to clarify how development, regulated within relationships by core motives and emotions common to all human beings, is vital to well-being and the growth of understanding.

LOVE: RELATING TO KNOWN PERSONS WITH AFFECTION AND TRUST IN INTIMATE DIALOGUES

The experiments of the 1960s changed beliefs about the beginnings of human experience. They proved infants could see people with discrimination and were seeking certain appearances and making social associations. Hanuš Papoušek **(1967; M.** Papoušek 2007**) demonstrated that infants a few days old had an 'appetite' for controlling experience by moving in a purposeful way, and they showed emotional appraisals 'of a human kind' depending on the consequence -- pleasure at success and annoyance at failure. Studies of listening, by measuring purposeful orientations of head and eyes to attend to sounds, proved that infant's hearing was discriminating and that it enabled delicate appreciation of the quality of human vocal sounds. Babies were proved to have learned to identify their mother's voice and certain acoustic or prosodic features**

of her language before birth, and they showed a preference for her particular voice immediately after birth (DeCasper and Spence 1986; Busnel et al. 1992). Care of newborns, including those born prematurely, was transformed by the work of Brazelton and his associates who used demonstrations of the infant's capacities for self-regulation, selective orientation to events in the nearby world and emotional response to people as feedback to facilitate parent's care and to boost their confidence and joy (Brazelton 1979; Als 1995; Brazelton and Nugent 1995).

Then a controversy was generated by claims that newborn infants could imitate sounds, face expressions and gestures of adults. Freud, Piaget and Skinner had all denied it is possible. But by the 70s there were clear proofs that responses to certain human signs were both controlled by emotion and imitated (Uzgiris 1991; Reddy et al. 1997; Nadel and Butterworth 1999**). Kugiumtzakis (1998) demonstrated that the acts of imitation were accompanied by expressions of effort to imitate 'correctly' and pleasure at accomplishing the goal. Emese Nagy confirmed that neonatal imitations are not merely copies of actions, but bids to establish a dialogue (Nagy and Molnàr 2004; Nagy 2010). She distinguished 'imitations', where the infant copied an act demonstrated by the experimenter, from 'provocations' or 'initiations' where, after the experimenter had paused and watched the infant expectantly, the baby repeated the act with attention to the experimenter, clearly wanting a reply. Nagy showed, moreover, that the infant's heart accelerated just before an imitation, and that it slowed just before the infant initiated a provocation and paid attention to the response. The baby was taking an active part in a dialogue and was doing so with emotion, as Kugiumutzakis had said.**

Earlier Uzgiris (1991) had maintained that imitation by infants serves a social motive. By 1979 I was convinced we had evidence for a state of Primary Intersubjectivity that enabled infant and adult to cooperate in a precisely regulated exchange of their changing individual interests and feelings (Trevarthen 1979a, b, 1998). It was clear that both the baby and the mother were emotionally involved in a single evolving process or 'composition'. A loving mother's voice when she addresses her infant was shown to have controlled timing and prosodic or musical features that transcended the special features peculiar to her language, and that 'attune' precisely with her infant's expressions, supporting them with 'intuitive parenting' (Stern et al. 1985; Papoušek and Papoušek 1987; Papoušek 1996)**. These parenting behaviours are clearly adapted to meet and confirm the intelligent sensibility of the young infant. In them the 'musicality' of movements that convey the dynamic flow of human thoughts and feelings is made especially clear and responsive (Malloch and Trevarthen 2009a, b) (Figure 3.1.3). Experiments that varied the appropriateness, temporal contingency and affective tone of the mother's responses to the infant's expressions of interest and pleasure, or those of the infant to the mother's efforts to communicate, proved that the actions and feelings were expectant of a certain synchrony and quality of sympathetic human response, in the mother for the infant, and *vice versa* (**Papoušek **and** Papoušek **1977; Tronick et al. 1978; Murray and Trevarthen 1985, 1986; Reddy et al. 1997).**

INSERT FIGURE 3.1.3 ABOUT HERE

‘Figure 3.1.3 Malloch’s analysis of a proto-conversation between 6-week-old Laura and her mother. (See Malloch and Trevarthen 2010b)’

In New York Daniel Stern and Beatrice Beebe and their colleagues adapted ‘conversational analysis’, the approach of researchers who had been making micro examination of adult conversations from film, to study games between mothers and infants (Stern 2000; Stern, et al. 1975, 1985; Beebe, et al. 1985, 2000). They found the same integrated patterns of body movement, facial expression, vocalisations and gestures with self-synchrony of actions within each subject, and inter-synchrony of timing between them. Stern gave special value to the dynamics of movement in games and has developed a theory of ‘Forms of Vitality’ to give an account of the rich variety of controlled ways of moving that animate all human communication and the dramatic arts, and that support all forms of therapy (Stern 2010). The intentionality of infants was accepted and integrated into a theory of early inter-subjective communication and the growth of shared understanding by John Newson (1979), who with his wife Elizabeth, pioneered a longitudinal study of how parents support their children’s learning in early years by intimate communication (Newson and Newson 1974).

The research on early infancy has shown that there are personal capacities in infants from birth that are developed during gestation. By two months the baby and a person in the role of a parent can share a story that opens the baby’s powers of learning to the imitation and co-creation of special rituals of knowing and acting, making narratives of

changing expectation, excitement and satisfaction (Gratier and Trevarthen 2008)**. But this is just the first phase of human relating and expanding knowledge. In the following months there are developments in the infant's strength, wit and self-awareness that lead a parent-companion into more lively games and more acute manifestations of pleasure or displeasure.**

PLAY: MAKING FUN AND SHOWING OFF IN RITUAL FORMS OF ART

All who have made close observations week by week of how infants show their purposes and feelings in the first year have noted 'periods of rapid change' when the abilities of the body, awareness, emotional regulations and preferred interests undergo development, changing both active exploration of the world and communication with other persons (Trevarthen and Aitken 2003). After three months the head, trunk and arms gain power to support themselves against gravity and the infant has new interest in objects at a greater distance from the body. Objects are tracked with head and eyes, and the hands reach out to manipulate them. This increase in self-awareness seems to compete with interest in communication. Mothers notice their infants often do not seem to want to join in intimate chats as before, and this causes them to change their strategy for attracting the infant's attention. They become more playful, and the infant responds happily. We called this the beginning of the 'Period of Games' (Trevarthen and Hubley 1978). Companions discover the baby enjoys being invited to take part in action songs, sharing in melodies that are similar in different cultures with different languages. Baby songs are rhythmic and melodic, like intuitive motherese, but they have a more extensive narrative/dramatic form, being composed of rhyming phrases grouped in repetitive verses or stanzas lasting tens of seconds. The infants join in with harmonious

sounds at particular points in the poetry, and if actions are requested they comply with enjoyment.

The appreciation of stories in body movement is accompanied by a growing sense of fun in interplay with others to make narratives into jokes, teasing their intentions and experiences. At first, around 4 months, the games involve the mother or other playmate acting in a comical imitative way, then increasingly the infant's growing interest in objects causes the things to which they give attention to be used as 'bait' for the game. Infants around 6 months of age can take pleasure in giving and taking objects and throwing or hitting them in teasing ways (Hubley and Trevarthen 1979; Reddy 2008). By 6 months the behaviours of the infants become self-conscious displays of pride in compliance with a ritual action song, such as 'Clappa-Clappa-Handies', of laughter with surprises, and of coyness or shame if another person's appraisal appears too attentive, negative or uncomprehending. Reddy has observed the beginnings of this social self-other-awareness in displays of shyness, as when the child catches sight of him or herself in a mirror, from as early as 10 weeks (Reddy 1991, 2008; Reddy et al. 1997). She shows that there is an acute other awareness long before any evidence of an acquired 'theory of mind', were such an achievement natural and necessary for social cooperation, as has been claimed.

Awareness of how others appraise one's expressions of will, interest and feelings is essential for discovering what they intend and believe, and for gaining shared meaning or 'common sense' with them. The 'moral' emotions, especially pride and shame, are demonstrated by infants in the first year. All our endeavours and ambitions in society are regulated by feelings about how others give their regard, which Scheff (1988) calls 'deference emotions'. Adam Smith in his 'Theory of Moral Sentiments' (1759) defined the conscience as an impartial

observer who passes judgement on one's actions. In other words, he describes the moral self as divided into two persons, and concludes this is essential for sympathetic awareness of other persons; ' … it is only by consulting this judge within, that we can ever see what relates to ourselves in its proper shape and dimensions; or that we can ever make any proper comparison between our own interests and those of other people.' (Smith 1759, p.213). Evidently we are born with this doubleness of self, able to sense how another may regard what we do and how we feel, and we are ready for what may be called a 'co-conscience' in habitual social dealings with other persons and their wishes.

None of this self-other-awareness has to be defined or explained by rational rules of conduct. It is founded on motives and emotions felt within the self, and shared in what Stein Bråten (2009) calls 'felt immediacy' with others; he extends the evidence for sympathetic feelings of relatedness in infants to include 'helping' or 'altruistic' actions of caring for another's difficulties or distress. Showing off, being funny, and teasing test the limits of other's enjoyment and tolerance of opposition or surprise (Reddy 1991, 2008). Provocation with a sly expression of pleasure, as well as confusion when another's responses are inappropriate, may occasionally be seen even in newborn infants (Nagy 2010). These ways of life with others show impressive development in the games mothers play with infants in the middle period of the first year, and by 8 months an infant can be a very successful clown capable of clever mimicry or teasing to share a joke with a willing, or hopefully admiring, audience (Hubley and Trevarthen 1979; Trevarthen 1990; Reddy 1991, 2008).

But in spite of this clever self-other awareness, a baby under 9 months of age is unlikely to show 'joint attention' to a task that requires sharing of the practical use of objects, outside the

performance of a game. The infant appears incapable of combining self-interest in using an object with attention to another's different purpose. Thus the baby will not follow directives to do something new. This changes around 9 months, as Penelope Hubley discovered, leading to what we named Secondary Intersubjectivity or Person-Person-Object awareness in cooperative awareness (Trevarthen and Hubley 1978; Hubley and Trevarthen 1979).

WORK: CONFIDENCE IN AGENCY AND CONFIDING WITH ANOTHER TO MAKE MEANINGFUL ACTION WITH SHARED OBJECTS, AND THEN TALKING ABOUT IT

After moving to Oxford in 1968, Jerome Bruner, who had been concentrating his research on intentions and development of concepts of things at Harvard, became more concerned with the antecedents of language, and he and his collaborators described the development of 'joint attention' (Bruner 1977). This has since become a topic of major importance in infant psychology, and identified as the beginning of cultural learning (Tomasello 1999). Hubley and I were interested in the interpersonal 'mutual attention' from which we saw a capacity to divide responsibility for joint task performance developing. Infants, we found, changed around 40 weeks after birth, wanting to comply with their mother's wishes and taking instructions in how to manipulate objects. They started to combine their cognitive mastery of objects with their understanding of their mother's interest. For us it was important that this ability grew within an established companionship of fun in games where the 'artistic' action rather than the object and its 'technical' uses was paramount. They began to share projects directed by the mother *indicating*, not demonstrating, what the infant should do, and the infants were proud to comply. Our observations were in agreement with the findings of the linguist Michael Halliday, who described the development, when his son was 9 months old,

of ‘acts of meaning’ in a ‘proto-language’ made up of pointing to objects and events combined with vocal expression of his interpersonal feelings (Halliday 1975). At this age games involving objects become more 'business like', more concentrated 'cognitively' and methodical or, as Halliday puts it, more 'mathetic', and at the same time they begin to be shared with a familiar companion.

Halliday understands language as growing from interpersonal or social acts. It is not just a way of passing on information, and not just a consequence of mastery of grammatical rules, or the product of a ‘language instinct’. Children acquire language because it serves certain purposes or functions for them in a community. He identifies seven functions that language has for children in their early years. Four, which he calls *instrumental* (to express needs), *regulatory* (to instruct others what to do), *interactional* (to make contact and express affection), and *personal* (to state how the child’s self is) are intersubjective. Three are related to the shared world: *heuristic* (to gain knowledge about the world), *imaginative* (to tell stories and jokes, which obviously relate to *interactional* and *personal* uses), and *representational* (to convey facts and information).

Language, a common sense made of descriptions of the world, can grow only within intimate relationships and a presumption of trust and shared curiosity. Working relationships, though they may become technically, politically and legally complex, and seemingly ruled by dispassionate procedures and reasons, are based on intimate friendships. As Jerome Bruner insists, they, and language, depend upon the innate ability of human beings for sharing creative and moving stories (Bruner 1990).

CONCLSUONS: STEPS IN VIDEO INTERACTION GUIDANCE RECALL THE JOURNEY OF INFANCY

The responses which VIG seeks to encourage in a client viewing his or her videos are exactly those by which an affectionate mother supports a chat with her young infant, plays games and finds tasks that build confidence and cooperation as the baby becomes more active and willing to share purposes with her. She reflects her infant's mood and will, not only with respect and care for distress and anxiety, but also with attunement to any positive sign of pleasure in her company. She offers respect and wants to empower the baby, guiding from worries and concerns to enlivening fun and hopes for a better future.

For a young baby the future and its goals are present, or very near, but they come from an adventurous vitality within that is anticipating experience; surprisingly early mother and infant are sharing habitual stories of their life together, building them in trust and with pleasure. Adult relationships and those between parents and older children also use these principles of attunement and an imaginative story-making that grows in time and space and becomes 'transcendent' (Donaldson 1992). They are the natural ways human minds build creativity and cooperation in intimate friendships. Awareness of these motives requires sensitivity for 'micro elements of interaction', as Hilary Kennedy says -- for the timing and courtesy of steps in the dance; often they can be perceived only with a patient and respectful attention to signs of strength that avoids detached causal explanations or formal diagnosis of problems.

When there is discord or ‘mis-attunement’ there has to be a step back to sense small signs of how things can go better. Infants feel disconnection, and withdraw when a mother is made distant and unresponsive by depression or worry. But they are quick to respond positively when there is a moment of recognition and support from her. That is how, as Selma Fraiberg (1980) found, an infant can be a co-therapist. She demonstrated that severely mentally ill mothers could benefit greatly from assistance in responding to their infants and 'developmental guidance' that alerted them to the responses that could be expected when communication and care were directed to meet the infants' needs for company.

I think the work on infant development and the changing relationship with a happy parent gives us information that complements the notion of affective maternal attachment for infant care and state regulation. Mothers and infants need fun. They enjoy testing the limits of one another’s ‘attunement’, making the harmonies hilarious. They make dramatic narrations of intimacy like those that, when developed as musical art and theatre, can generate powerful attachments in a community, as Ellen Dissanayake says in ‘Art and Intimacy’ (Dissanayake 2000). Mothers and infants also become involved in serious *creativity,* or intentionality with affective appraisal of projects and goals in rhythmically patterned time, and *cooperation* in engagements of purposes and feelings to do practical tasks. Cooperation generates mutual approval and the making of shared meaning, with more awareness than an individual can accomplish. The one year old’s Zone of Proximal Development (Vygotsky 1967) is a region of learning how to act with skill and how to share it. The parent accompanying and composing or improvising the achievement works with a comrade. I am sure successful Video Interaction Guidance will be aiming for this too, after the difficulties of primary inter

subjective attunement and trust are recovered. Dan Hughes (2006) finds this is so in his caring work with the relationships between severely traumatized youngsters and their foster parents. They are guided to intend together and to share rewarding plans.

Babies are born intentional persons, wanting goals and wanting to do by moving body and mind; asserting a wish and purpose. But the will is always tinged with apprehension, a fear for the cost, effort and possible pain. Giving help requires first deliberate empathy for this, leading to genuine positive sympathy in achievement and pleasure of accomplishment.

Chapter 3.2 Video Interaction Guidance (VIG) and Attachment: theory, practice and research

Jenny Jarvis and Nelleke Polderman

This chapter brings together two very different but complimentary discussions of the contribution that video interaction guidance brings to the achievement of secure attachment in infancy. Jenny Jarvis, a counseling psychologist working in children's centres, uses the vehicle of a hypothetical case study, drawing on her experience in using VIG with many vulnerable parents and children, to give a highly detailed account of the way that the processes of the first VIG cycle can work to promote attunement with the child. Nelleke Polderman works in the Netherlands and explains Basic Trust, an approach to attachment problems that is very similar to VIG.

The relationship between attachment and intersubjectivity, parent sensitivity, mindfulness,

mentalization and attunement become clear in this careful work by the two authors. Each makes a significant but different contribution what VIG can bring to attachment concerns. Jenny takes the reader through the first meeting, filming, shared review and supervision. The details of how to go about this first cycle will be useful to the experienced and novice guider alike. She also shows how hope is inspired in both the parent and the guider and how goals are negotiated. A particular contribution of the discussion of Basic Trust by Nelleke Polderman is an explanation of the importance of naming, an aspect of VIG easily forgotten in the interest in attunment principles. She quotes an evaluation of Basic Trust, and both sections reference other evaluations of the contribution of VIG to parent sensitivity (Kennedy, Landor and Todd 2010; see also Fukkink, Kennedy and Todd, 2012).