Mapping Transformative Learning
The Potential of
Neuro-Linguistic Programming

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This article explores the application of neuro-linguistic programming (NLP) as a framework through which to map transformative learning. This is original work that makes use of NLP as a methodology for inquiring into subjective experience. The authors outline issues in the theory of and research into transformative learning, introduce the field of NLP, then describe the research design for the empirical work, a longitudinal case study of a manager reflecting on experiences of organizational change. Themes resulting from the analysis comprise the following three main categories: characteristics of the output, or of the emergent understanding of the learner; characteristics of the person's inner process or journey; and characteristics of the interpersonal process between learner and facilitator. The article illustrates the application of NLP to the field of transformative learning, providing an example of its potential for empirical investigation.

Keywords: transformative learning; neuro-linguistic programming; management learning

Introduction

The purpose of this article is to explore the application of neuro-linguistic programming (NLP) as a framework through which to map transformative learning. This utilises NLP as a methodology, as a way of inquiring into subjective experience, which reflects the originally intended function of NLP. By exploring an empirical case, the article addresses some of the issues raised by Taylor (1998) about the understanding of transformative learning related to the field

of management learning. The concept appears highly relevant to this field but to date has received little attention.

This interest has arisen through our practice in U.K. higher education and as coaches working with business managers and consultants. We are strongly involved in holistic adult education for professional practitioners in the field of organizational development (OD) and group facilitation, with an emphasis on experiential learning and the importance of the affective dimension (e.g., Tosey & Gregory, 1998).

Two of the authors have trained in NLP and are active researchers in the field (Mathison, 2003; Tosey & Mathison, 2003). All authors have experience of facilitating what we think of as forms of transformative learning in contexts such as management development coaching. We say "think of" because according to Taylor (1998), "although the theory is much discussed, the practice of transformative learning has been minimally investigated and is inadequately defined and poorly understood" (p. vii). One purpose of this article therefore is to help us tease out to what extent or in what respects our practice and experience could be framed as transformative learning. Primarily though, we intend to consider the potential of NLP for assisting the empirical investigation of transformative learning.

The article concentrates on an illustrative case study of a manager reflecting on his contemporary experience of an organizational change process over time.

Transformative Learning: Theory and Issues

Dirkx (2000) identified two main strands of transformative learning theory, those of Mezirow (1975, 1981, 1990, 1991, 1997) and Boyd (1980, 1991). Taylor (1998) added to these Freire's model of transformative education. This article is concerned primarily with how NLP relates to the perspectives offered by Mezirow and Boyd.

Influenced in part by a personal dilemma (Mezirow, 1991), Mezirow built on and adapted Habermas's (1981) theory of communicative action. The formal empirical basis for the theory was a study (Mezirow, 1975) of the learning experience of women returning to formal education. This strand of theory concentrates mainly on the context of adult education (e.g., Cranton, 1996, 1997; Imel, 1998).

Mezirow (1997) emphasised a view of learning as meaning making and defined transformative learning as "the process of effecting a change in a frame of reference" (p. 5). He sought to understand processes by which frames of reference, or "meaning perspectives," through which we view and interpret experience are changed or transformed. He viewed transformation as a qualitative change of

cognitive perspective and emphasised the development of autonomous thinking. Transformation occurs as the self-concept is revised as a result of the new meaning perspective.

According to Mezirow, the mechanism for transformation is the differentiation and integration of meaning schemes in progressively wider contexts. This occurs through attaining higher levels of awareness, critical reflection on and reappraisal of assumptions, the ability to reinterpret a previously learned experience in a new context, and the ability to engage in rational, reflective discourse to take action. Mezirow suggested that transformative learning is relatively rare.

Dirkx (2000) commented that Mezirow's approach has a strong cognitive emphasis and may neglect modes of knowing such as intuition. By contrast, the second strand of theory, labelled by Dirkx as *mytho-poetic*, is characterised by an interest in a symbolic dimension of learning. Dirkx referred particularly to the Jungian approach of Boyd (1991) and others. Boyd's emphasis has been on transformation through group work (Boyd, 1980), using the metaphor of a journey and framing learning as a developmental process leading toward individuation.

Boyd, like Frick (1987) and others such as Nelson (1997), emphasised the holistic nature of learning, and the focus on the symbolic dimension and on imaginal experience appears important in the case that follows. However, we question the universality of the journey metaphor.

Despite this literature, empirical understanding and operational definition of transformative learning remain elusive. Although Mezirow's theory is only one strand of work in this area, it remains the main literature with which one can engage critically. We are aware (Wiessner, 2004) that there are other recent developments in the field, however these are yet to be disseminated through published literature.

Taylor (1998), whose critical review focuses on Mezirow's strand of theory, identified a range of issues. Among these is the observation that the empirical research base in the literature on transformative learning consists substantially of unpublished doctoral dissertations (Taylor, 1998), which Taylor argued is a problem for the field.

Taylor (1998) noted that most of these studies "were carried out in retrospect, where participants reflected back on their transformative experience, as opposed to observing and recording the learning experience as it was actually happening" (p. 22). In contrast, we offer observations of a case where data were collected over time from the participant.

Other than these studies, the literature seems characterised by writers' self-referenced accounts of their experiences, interpreted in relation to concepts of transformative learning (e.g., Clark, 1997; Foster, 1997; Wilcox, 1997). These descriptions of transformative learning, although valuable as learners' stories, are nevertheless highly dependent on their authors' interpretations of their own experiences. They do not make their claims (i.e., to be examples of transformative learning) explicit or subject these to debate; they seem inclined to adopt preexisting concepts of transformative learning uncritically and therefore can appear self-sealing.

Such studies would seem to reinforce the view that it is for learners to define what is transformative without complementary evidence and critical analysis. This appears to us to leave the concept nebulous. What is it that differentiates transformative learning from other learning? Indeed, should the concept be regarded as a description of a learning process (such as described by Mezirow's [1991] 10 steps) and not as an outcome or even as a metaphor that is engaging attention on a yet to be defined terrain?

This situation also leaves the field highly vulnerable to charges of inadequate definition and oversubjectivity—which we would contrast not with objectivity but with the notion of "critical subjectivity," which Reason (1988, p. 13) described as being more demanding than orthodox inquiry, involving a high degree of self-knowledge, self-reflection, and cooperative criticism.

So we only partially support Mezirow's view that hermeneutic research is appropriate for this area and contend that Mezirow's (1991) rejection of empirical-analytic research methods needs to be debated. We support the appropriateness of qualitative and naturalistic rather than positivistic research, yet the field seems much in need of substantive empirical work to support its claims. We also have a desire to understand how we can engage empirically with this notion as facilitators to articulate and value our practice.

Taylor (1998) said "there is a need for research designs beyond the phenomenological approach, so that other paradigms are used from a longitudinal perspective in exploration of transformative learning" (p. 62). It is not clear what Taylor meant here by *phenomenological approach* as this term appears not to be used prior to this point (which is the final page of the publication). The present article's case does offer a longitudinal perspective. It is also phenomenological in the sense that it focuses on the subjective experience and constructed reality of the participant. The contribution of NLP is as a structured and systematic means of mapping that subjective experience.

We note that Taylor (1998) did not discuss the methodological approaches of the studies he reviewed beyond the aforementioned comment that most were carried out in retrospect. Indeed, it seems surprising that Taylor's critique did not include consideration of research methodology. This seems to warrant further exploration.

Neuro-Linguistic Programming

Neuro-linguistic programming was developed at the University of California at Santa Cruz in the 1970s (McLendon, 1989). Its founders and principal authors were Richard Bandler, a student of (initially) mathematics and computer science, and John Grinder, a professor of linguistics.

NLP has since achieved popularity as a method for communication and personal development. There is a need for data to be more precise about the level of activity; as an indication, the Web site of the International NLP Trainers' Association (INLPTA)[1] lists trainers in Europe, Australia, South America, and North

America. NLP is a recognised mode of psychotherapy in the United Kingdom, accredited by the U.K. Council for Psychotherapy (Experiential Constructivist Therapies section). NLP is used by professional practitioners of many kinds, including educators, managers, trainers, salespeople, market researchers, counsellors, consultants, medics, lawyers, and more.

The title, coined by Bandler and Grinder, broadly denotes the view that a person is a whole mind-body system with patterned connections between internal experience (neuro), language (linguistic), and behaviour (programming).

NLP has been defined in various ways, often in its promotional literature as (e.g.) "the art of communication excellence" or "the study of the structure of subjective experience." These definitions reflect a tension within NLP in that it is both a technology for communication and personal development and (as it claimed to be originally) a methodology or modelling process (Cameron-Bandler, Gordon, & Lebeau, 1985; Dilts, 1998).

Thus, although NLP has come to be identified as a mode of psychotherapy in its own right, originally it was offered as a method capable of identifying the effective aspects of existing models of communication (gestalt, transactional analysis, etc.) for pragmatic purposes. Initially (see Bandler & Grinder 1975b; Grinder & Bandler, 1976), Bandler and Grinder were interested in figures such as Carl Rogers, Fritz Perls, and Virginia Satir because of their reputation for excellence. Bandler and Grinder asked what was the difference that made a difference between these excellent practitioners and others, focusing on what they did in practice—on their patterns of communication and interaction—rather than on the formal theory from which their practice drew.

NLP writing and practice show influences from a wide array of fields, such as gestalt therapy (Perls, 1969), person-centred counselling (Rogers, 1961), transformational grammar (Grinder & Elgin, 1973), behavioural psychology, cybernetics (Ashby, 1965), the Palo Alto school of brief therapy (Watzlawick, Beavin, & Jackson, 1967), Ericksonian hypnotherapy (Bandler & Grinder, 1975a; Grinder, DeLozier, & Bandler, 1977), and perhaps most important the cybernetic epistemology of Gregory Bateson (1973; Tosey & Mathison, 2003). The cybernetic aspect is reflected, for example, in NLP's adoption of the TOTE (test-operate-test-exit) mode of functioning (Miller, Galanter, & Pribram, 1960), which depends on the dynamics of calibration and feedback (Bateson, 1973; Wiener, 1965).

We note that NLP is not a uniform field. For example, since the 1980s, Grinder has concentrated on "new code" NLP (DeLozier & Grinder, 1987), which takes an intentionally more holistic (i.e., whole body-mind) approach than the more analytical style of early NLP. New code NLP has incorporated interests in (e.g.) shamanic practices.

To date, NLP seems most welcomed by informal practitioner networks that encourage direct use of NLP's strategies. Academe appears relatively uninterested to date. A few experimental psychology studies in the 1980s and 1990s examined NLP's eye movement model (e.g., Baddeley & Predebon, 1991; Farmer, Rooney, & Cunningham, 1985; Poffel & Cross, 1985) and found no basis for acceptance of

the model. There has since been a sprinkling of academic journal articles reporting applications of NLP to various fields of practice (e.g., Field, 1990; Sandhu, 1994; Trickey, 1997) but little more.

The relationship between NLP and academe has been tenuous and somewhat strained, influenced in part by the apparently antitheoretical stance of the founders ("We have *no* idea about the 'real' nature of things, and we're not particularly interested in what's 'true.' The function of modeling is to arrive at descriptions which are *useful*," Bandler & Grinder, 1979, p. 7). NLP also appears to suffer (in the eyes of academics) from its Californian origins, and it has acquired an unfortunate reputation as a "manipulative" approach.

There are signs of the stirrings of welcome debate about the theoretical status of NLP (e.g., Craft, 2001; Tosey & Mathison, 2003), an issue also being addressed by some writers in the NLP field (e.g., Young, 2001). Because NLP originally was a methodology used to identify and code effective practices from a range of practitioners and theories, its contents—models and strategies—appear highly eclectic. This leads some (e.g., Craft, 2001) to the view that NLP, although broadly constructivist in nature, cannot be considered a theory. Another possible view is that it represents a more postmodern, transdisciplinary form of knowledge. Others (e.g., Young, 2001) have attempted to identify a unifying theory of NLP. Young's (2001) work views NLP through further maps that offer a valuable perspective (to which we return later in this article), but in our opinion this offers an alternative conceptual description of NLP, not a unifying theoretical explanation.

To address this issue in detail, which there is not space to do here, one would need to review what is meant by *theory* and thus what criteria are being applied. Our own view (Tosey & Mathison, 2003) is that the key theory of NLP is that which pertains to its methodological nature. We argue (Tosey & Mathison, 2003) that NLP is strongly and consistently based on a systemic epistemology, as represented in the work of Bateson (1973; Bateson & Bateson, 1988) and as described in the field by Dilts (2000). Trying to reconcile the contents of models and frameworks employed by NLP seems unlikely to be as fruitful.

Although NLP is a methodology, it is not a recognised research method, hence the application in this article represents an innovation. We have used NLP frameworks because they appear to us to offer possibilities for finer and more specific analysis of subjective experience than is available from other phenomenological methods. There appears to be broad compatibility between NLP and the various theoretical perspectives contributing to Mezirow's (1991) notion of meaning perspectives. NLP assumes that people act according to the way they understand and represent the world, not according to the way the world is, often summed up in Korzybski's (1958) dictum, "the map is not the territory." It therefore supports the constructivist principle that people create their own reality while also focusing on common structures of those constructions—their form rather than their content. NLP however typically attends much less to the social dimension, tending to emphasise the uniqueness of individuals' maps of the world and to underplay the role of social influence and interaction.

We have used NLP as a framework through which to map changes in the participant's worldview using the following particular models or perspectives.

1. The meta model (Bandler & Grinder, 1975b; Grinder & Bandler, 1976), which classifies language patterns based on the theory of transformational grammar.
2. Dilts's neurological levels (Dilts & Epstein, 1995), which is derived from Bateson's (1973) notion of levels of learning.
3. Metaphor and symbol (e.g., Gordon, 1978; Lawley & Tompkins, 2000).

The Empirical Study

The intention of the case study was to explore what learning a senior manager who was in the midst of an organizational change process could gain from his experience. The broad themes of interest were the potential for management learning from experience and links between individual and organizational change issues. Although management learning is a significant area of academic concern (Burgoyne & Reynolds, 1997), there appears to be relatively little research devoted to in-depth understanding of the experience of and learning of managers themselves. Exceptions include Marshall (1984, 1995), through her studies of female managers, and Stuart (1995), who considered managers' experiences of organizational change through the metaphor of the "change journey."

STUDY DESIGN

In this section, we describe the nature of the study and address methodological features, including the single case study, longitudinal design, and the dual analysis, with both collaborative and researcher-led aspects.

The study is the story of Ed, managing director of a European operation within a global company (ZCo). He was in his 50s and had worked for ZCo for 30 years. A few months before I (principal author) first met him, he had been appointed as a new, cross-Europe head of business. Soon after his appointment it was announced that ZCo was to merge with another global company, XCo. Ed saw this as "tantamount to being told that the world is about to change."

I met Ed through a student and asked to interview him about his experience of and learning from the change process. My offer to Ed was to provide him with a space for reflection, which he felt would be of benefit. The outer details of the change process were not the focus. The interest was in how Ed perceived and framed his experience of change, in how his inner map of change and its meaning for him changed over time, and in what he considered he learned from the experience both about himself and about the management of change.

Ed and I eventually met four times over a period of a little less than a year from one August to the following May. The main method of data collection consisted of four conversational interviews lasting at least 90 minutes each, at intervals of between 3 and 5 months. All the interviews were tape-recorded and transcribed. Analysis procedures are described in the following section.

The study may be thought of as a single case study[2] (Stake, 1995) where the manager himself was the case. In Stake's (1995) terms, this case study has both intrinsic and instrumental aspects. The intrinsic dimension is the intent to understand Ed's particular, individual situation. The instrumental dimension is reflected in the desire to illuminate issues of management learning from experience and in the desire to apply NLP as an analytical framework.

There are precedents for a single case study approach as well as challenges to its validity. Silverman (2000) noted that some such challenges are based on the standard of generalisability applied in quantitative research. Yin (1993), although preferring the scientific method himself, acknowledged the alternative of a naturalistic approach (e.g., Lincoln & Guba, 1985), which this study adopts. Stake (1995) took the view that "the real business of case study is particularization, not generalization. We take a particular case and come to know it well, not primarily as to how it is different from others but what it is, what it does" (p. 8).

The purpose of this case was to develop an illuminative understanding of this manager's experience for its intrinsic benefit and to generate themes and questions that may be investigated in other contexts. The case is used in this article to illustrate the application of NLP as an analytical perspective. There is no intention to claim that the substantive findings can be extrapolated beyond this case.

We also emphasise the longitudinal design. Collins (1998), for example, noted the relative dearth of longitudinal, contextualised studies of organizational change. Here, the series of interviews provides for comparison through time, which is the basis of the multiple data perspectives in the study.

Time was a significant dimension also in that the participant's perception of his learning emerged and changed over time through a process of reflection and dialogue rather than through an analysis of data gathered at one point in time. Meaning evolved through reflection over time, in sympathy with the idea that sense making ripens (Patton, 1990).

The research was also collaborative in the style described by Reason (1988) in that the study intentionally engaged the participant in the analysis, interpretation, and exploration of meaning. The participant was also invited to but chose not to collaborate in the writing up. In common with many forms of collaborative research, the research process inevitably constitutes an intervention in the participant's life as an event that may lead to change or learning. Therefore, the methodology also has an action research characteristic typical of collaborative-style studies, and the research aimed to treat the participant as a self-directed person (Heron, 1996).

The surfacing, discovery, and shaping of narratives was itself regarded as a learning process in which we suggest in principle participants are entitled to engage. This aimed to embody Martin Buber's "I-Thou" stance, which Maslow recognised as an alternative epistemological stance to that of "objective science" (Rowan, 2001, pp. 18-19). According to procedures for validity in collaborative inquiry (Reason, 1988), critical evaluation was enabled in this study through reflective dialogue between researcher and participant and soliciting of independent third-party perspectives on the data and their interpretation.

Finally, the study adopted a constructivist perspective by assuming that meaning emerges from sense making through both reflection and the discourses of the social (interview) context. In this research, we regard the story of the manager's experience as a series of coconstructed narratives rather than being straightforward representations of what the manager had already "learned."

DATA ANALYSIS

Analysis of data included both researcher-led and collaborative review of the transcripts. There were two phases of analysis.

a. Contemporary: The researcher used the NUD*IST qualitative data software to perform an inductive analysis (Patton, 1990) by identifying, grouping, and refining grounded themes from raw data. During this process, I supplied transcripts to Ed and fed back to him the themes and categories I had identified in the data. At each meeting we would talk about what he had said the previous time and how he felt about it now.

b. Post hoc using NLP: After the series of interviews, the first and second authors did a further analysis to explore the potential of neuro-linguistic programming for making sense of the data. We used NLP to identify distinctions and changes in Ed's language patterns over time, utilising the three NLP models noted earlier, which appeared appropriate to the verbal (transcribed) data.

Dimensions of Transformation

The analysis is developed under the following three main headings: (a) characteristics of the output or of the emergent understanding of the person/learner, (b) characteristics of the person's inner process or journey, and (c) characteristics of the interpersonal process between learner and facilitator. These connect together on the map in Figure 1, which we assemble as we describe the various parts.

THE OUTPUT: CHARACTERISTICS OF
THE EMERGENT UNDERSTANDING

Taylor (1998) stated, "One of the most elusive concepts of transformative learning is the definitional outcome of a perspective transformation. What is the consequence of changing your world view? What are related outcomes of revising meaning perspectives?" (p. 42).

A general feature of transformative learning is that of taking a wider perspective, creating an expanded worldview. In Mezirow's (1991) words, this perspective is "more inclusive, differentiated, permeable, and integrated" (p. 155).

For example, successive interviews with Ed are marked by a lessening of anxiety about his own situation and an increasing focus on others: "So now every-
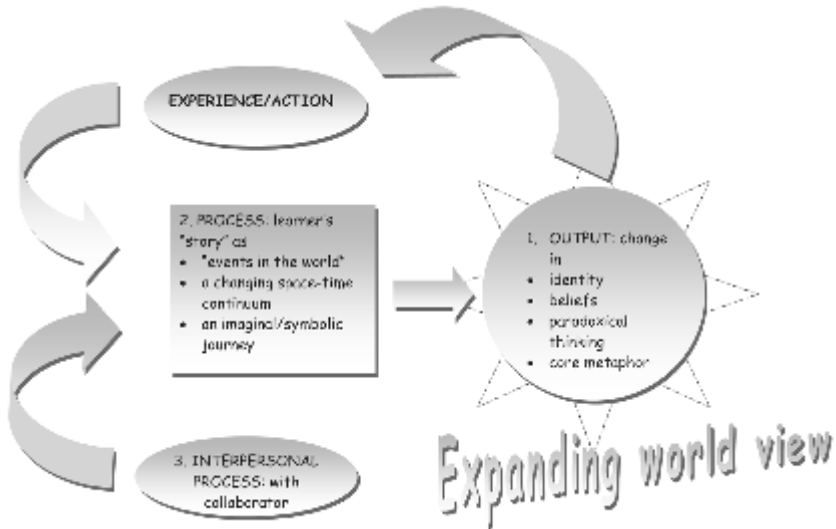
Figure 1: Synthesis

thing is much sunnier. . . . I'm not worried about myself any more, I'm much more worried about people out there, how can we deliver to them something in terms of either job security or a job." Within this expanded perspective, we identified the following four characteristics: change of identity, change of beliefs about the world, paradoxical thinking, and emergence of a new core metaphor.

Change of Identity

Here we used Robert Dilts's NLP model of neurological levels (Dilts & Epstein, 1995). Dilts identified six levels (environment, behaviour, capability, belief, identity, and spirit). The model is represented as a hierarchical network. This denotes that change at a higher level (e.g., identity) has more far-reaching consequences for the person in that this is likely to affect an increasingly wide range of beliefs, capabilities, and behaviours.

The analysis searched for statements that defined or described the self (see Table 1).

Some of the changes over time were in Ed's perception and definition of self, perhaps illustrating tensions between personal and sociocultural definitions of identity. For example, in the first interview his descriptions were of feeling "alone in the universe" and potentially limited to his "one company career," asking "are my skills transferable?"

Later, he reported a more detached perspective, asking questions such as "Do I want to be doing this for the rest of my life?" His identity toward the end seemed far less strongly identified with his career role, and there was a loosening of attachment to the organisational world and its values. His image of himself existing outside

Table 1: Themes of Self and Identity

	Themes	Identity	Quotes
Month 1	How things used to be, comparisons with what will be (e.g., warm to cold) Prospects of loss and gain Lack of opportunity to participate Uncertainty in personal life too—divorce proceedings Anxiety about skills and future Difference between anxiety about self and anxiety about where the company is going (the latter I can't do anything about)	One company career—are my skills transferable? Prospect of being "alone in the universe": no roadmap; being lost A nonparticipant in the company's future?	"I still feel confident enough that I've got a job in the new organisation and I'll be able to lead it and deal with. . . . But when I rationalise things as you do, sort of take hold of yourself and sort of say OK, mister bloody optimist, now let's just look at it from—how would you look at it from the new owner's point of view? Yes, you are 50+ so that's a negative, a real negative. . . . Yes you have a lot of experience but then surely there are a lot of other people around in the globe. . . . so who else is around who could do your job? You start to sort of do the balancing act."
Month 4	Getting more into the knowledge, signed confidentiality agreement Divorce Less anxiety than last time Having 30 years' career, choices	Equanimity about where future lies; detached (from the anxiety), having choice	"There is not necessarily another job option within the organisation, and for me, if that doesn't happen, it doesn't happen. I've earned my, I've got my sort of 30 years worth of career so I'm sort of in that position, much more fortunate than some others."

Month 7	Remarriage	One who has been through divorce	"Yes and it's really uncanny because I'm the one person in the whole business who can actually say . . . do you know I've just been through this, and I've gone through the sort of the trauma of personal . . . of personal divorce with immediate marriage." "I know that I want to get to the other side . . . and so now I've got to concentrate on that transition period and manage the complexity. . . . Do I want to be doing this for the rest of my life? No. But I know this is a necessary part of the management of the business of today."
	Sensing (un)fairness		
	Increasing participation/influence		
	Loss		
	New job known, new challenge, implications for lifestyle		
	Known timescale (4 or 5 years)		
	Doing what is necessary		

the company (which he subsequently left) was surer and less anxious. Ed increasingly said that family was more important than career in the scheme of things.

Change of Beliefs: Complex Equivalence and Causality

NLP suggests that a significant change to one's map of the world may be new views of cause and meaning. This literally means that a person reconfigures the causal relations between the parts of their map, so it is consistent with the literature in that transformative learning entails change of understandings about the world. It corresponds also to the belief level in Dilts's model (Dilts & Epstein, 1995).

Bandler and Grinder's (1975b) meta-model of language structures calls one such type of connection "complex equivalences." This is where two elements, categories, or abstractions are linked together to form new meaning. The simplest algorithm describing this process would be A = B, a linguistic connection indicating an epistemological linkage in the person's map of the world.

In the transcripts, a number of interesting complex equivalences emerge, many of which are linked to Ed's views about information. He worked in a large organisation in which there was (he reported) little open sharing of information. Access to information seemed an important feature of the situation, reinforced by the outer reality of the involvement of various regulatory bodies and the fact that at one stage Ed was required to sign a confidentiality agreement.

In the first interview (Month 1), the theme of inclusion in and exclusion from groups with information about the future is prominent. The complex equivalence was that having access to information means being included. Conversely, not having access carried with it a sense of being excluded, being an outsider, not being valued, perhaps being thought inadequate, and being frustrated and powerless.

In the third interview, Ed had weathered the changes in the organisation and had himself become one of the people who "know": "So now I am in a position of knowledge, of where I'm going, but nobody below me knows where they are going. . . . I do know where they are going." By now, he was on the other side of the fence, as it were. In other words, he now felt powerful because he had access to information that he could withhold from others.

Note that this example gives some possible counterevidence of transformative learning. Although Ed's place or position in the complex equivalence has changed, his personal beliefs are still characterised by the same set of complex equivalences. In Watzlawick, Weakland, and Fisch's (1974) terms, this is a first-order change rather than the second-order change we would associate in principle with transformative learning.

A second aspect of beliefs about the world concerns causality. Most significant here, we can consider the extent to which an individual experiences himself or herself as being primarily the agent of causality or primarily at the effect of other agents.

Initially Ed was not at cause because he did not perceive himself as having agency in the situation ("I guess the frustration is not being able to participate in

the making of the future"). Over time, he seemed to switch to a different conceptual framework in which he seemed more at cause.

> So my learning . . . is that you can only do what you can do, you can only do what's within your reach to do, and . . . choose the thing that is relatively short term, you have control over and that means the most to people you're actually leading.

Paradoxical Thinking

A third characteristic is paradoxical thinking. People's thinking may contain a number of implied or actual opposites (e.g., light and dark) by dilemmas (e.g., "I don't know whether to do A or B"), by examples of either-or thinking, and sometimes by double binds (Bateson, 1973; Watzlawick et al., 1967). Paradoxical thinking is reflected in a movement from either-or thinking, where the two poles of a dilemma are seen as in opposition and mutually exclusive, to a capacity to hold apparent opposites in tension and eventually to find creative resolutions to those tensions. This relates, for example, to dialectical thinking (Basseches as cited by Mezirow, 1991) and to characteristics of Torbert's (1991) later stages of development.

Ed's first interview shows much either-or thinking connected to complex equivalences (e.g., Ed initially either had information and therefore was powerful etc., or he did not and was powerless). "You know there's a gap, and the gap is widening all the time in terms of people's . . . people believing that either you know or you don't know."

Either-or thinking and dilemmas seem to be experienced as frustrating. Prominent in the first interview is what Ed described as "an inside splitting."

Either-or thinking occurs much less frequently in the later interviews, when Ed seems to be developing ways of tolerating the paradoxes and contradictions that appeared as part of the organisation's transitions. Leadership for him then means "holding the split" and accepting and managing the contradictions in his own position of having information. The focus has also changed from his own world to taking care of others. In that sense, one might argue that there has been self-transcendence.

Emergent Metaphor

Finally in this section, a feature was the emergence of a new core metaphor. This seems to operate as a basic theme or image around which the new worldview constellates.

Ed's experience of organisational change was happening alongside a process of divorce and then remarriage in his personal life. As our interviews proceeded, he had a growing sense of these experiences as parallels, reflections of each other in different domains of his life with (for him) remarkable similarities between them. He felt, for example, that the divorce was giving him a unique insight into the sep-

aration of two parts of his company, which was a prerequisite for the subsequent merger.

This may raise the interesting question—to which we have no set answer—of the relationship between Ed's personal and professional contexts. Were these coincidental or perhaps synchronistic? Was one context primary and the other more a screen onto which the primary transformation became projected and acted out?

Whatever one may speculate, it seems significant that divorce and remarriage became the organising metaphor for Ed's experience of change management. This would support Edwards's (as cited in Taylor, 1998) view that people perceive their lives to be organized as narratives rather than in rational-logical form.

Summary of Case Analysis

In summary, if we were to extrapolate from analysis of Ed's transcripts, the following types of change might indicate that a transformative process has taken place:

- the emergence of a capacity for a wider frame or perspective, probably involving a less egoic, more detached view of a situation (possibly but not necessarily a spiritual perspective), including
- a change at the level of identity (in Dilts's model of neurological levels);
- changes also at the belief level in Dilts's model, represented by changes in what NLP calls *complex equivalence* and *cause-effect* patterns: and notably a movement from being at cause to being at effect;
- evidence of tolerance of paradox, especially of change toward integrating or resolving dilemmas, and less use of either-or thinking;
- emergence of a (new) core metaphor around which the person's story (e.g., their revised understanding of themselves and their world) is constellated.

THE LEARNING JOURNEY: CHARACTERISTICS OF THE INNER PROCESS

We now turn to characteristics of the person's learning process through time. Ed's story could of course be taken just on the level of being a series of events in the outer world. The following two further dimensions were of particular interest from the analysis:

- changes in his inner landscape or mental map of the situation, as delineated through metaphors of space, time, and motion;
- metaphors and symbols, which may indicate a mythic or archetypal dimension to transformative learning.

Here we are concerned only to give an NLP perspective on Ed's learning process. We do not intend to develop a model of the process to compare with Mezirow's (1991) 10 stages.[3]

Space, Time, and Motion

An intriguing feature of Ed's worldview (revealed by the inductive analysis) was that it seemed permeated by metaphors of space, time, and motion.

The notion that the representation of space is an important epistemological organising principle was put forward by Fauconnier and Sweetser (1996), Johnson (1987), Lakoff and Johnson (1999), and Fauconnier and Turner (2002).

What emerged here was the sense of Ed metaphorically (and thus literally for him as NLP takes such verbal reports to be literal descriptions of a person's inner map of the world) moving through a changing space-time continuum.

We say *changing* because space and time were configured differently at each interview (see Table 2). There were three domains that for Ed had spatial dimensions, as follows:

- the change process itself (e.g., the spatial characteristics of the change process include much reference to apparently existential themes; Ed referred to "the void," limbo, and "no man's land"),
- Ed's internal experience (e.g., the "internal splitting"),
- the company (e.g., concepts of centrality and distance).

To illustrate just the last of these, one of Ed's main distinctions is between insiders and outsiders, people who are included in or excluded from information. He also talks about being closer to or more distant from "the centre" or "the heart": "You're not in the real centre but on the sort of the next layer out." "You are that number of spaces away from the heart."

Sometimes he used the image of a wall or fence separating him spatially from the centre of power. Exclusion was experienced as "a huge sort of wall that you can't peer over" and later, "I haven't got a ladder tall enough to look over the fence." So the metaphorical space also seems to have an architecture.

The most noticeable difference in the third interview is that he reports being positioned in the metaphorical centre, having survived much of the reorganisation and been able to stay in the company. He is now an insider; there are others who are now outsiders. Survival has meant moving from the periphery to the centre: "I guess because the management team is in a different place now because we are knowledgeable, more knowledgeable than the people outside."

The extent and quality of time itself undergoes change according to Ed's accounts. In summary, time was portrayed successively as a period of planned transition of finite duration, with emphasis on the present; followed by being "in limbo," with things "grinding slowly," the eventual timescale impossible to predict; followed by time "taking care of itself" in that the process acquired "a rhythm of its own;" and finally another transitional period but now with a sense of new beginnings (described as a time of "giving birth") and with Ed's personal future in terms of his role in the company having a known timescale.

Table 2: Ed's Experience of Change as a Space-Time Continuum

	Time	Space	Motion (and Quality)	Events/Processes
Month 1	Over by Christmas Focus on the present, don't speculate about the future Future is unknown	(Change as) the unknown, a void; "the other side" (destination) (Company) inside/outside; walls; levels; distance (Internal to Ed) split	Going into the unknown Frustration, tension, anxiety "Unknowing"—the truth; not knowing own future	"The world is about to change" Others (e.g., transition teams) are filling the void
Month 4	The void now extends through time The "credibility clock" (decay in Month 1's strategy) "Not yet on the starting blocks" Focus on 3 months ahead	In the void, "limbo" ("Is anybody out there doing business?") In no-man's land Isolation—the "leper colony" (Ed's department split off from main company); "in our own little world"	Suspended animation, "not in any different position" Feeling of isolation, strain Rumbling on Grinding very slowly Frustration, anxiety Shock ("realisation")	In the hands of others Rumour mill "in full flood" fills the void Changing relationship (internal to ZCo)

Month 7	(Actual) transitionary period beginning "The time component keeps on coming in as to 'When are we going to know?'" Near and far	Segregation—dividing up "the new world" (Our side)—the other side (other party) In here—out there/out in the field Centrality ("Because you're in… are not in the real centre but on the sort of the next layer out")	A rhythm of its own Progress is very slow; both going into deep holes Severe frustration Others not knowing Sadness, loss, having to let go	Separation, divorce Huge arguments, stand-offs Changing relationship (ZCo vis-à-vis Ed's business) Less rumour because things are happening Destruction: "It really feels like we are destroying all the good things that [we had] set up, and were doing well at" Letting go
Month 10	End of "destruction" New beginnings	Segregation complete, focus on "new" business	Transition Tiredness Emotion returns, can spark people off again	Giving birth

Although we have separated space, time, and motion, their interrelatedness, particularly concerning the change process, is shown by phrases such as *grinding slowly, being in limbo, suspended animation*, and *a rhythm of its own*.

It has been of great interest to notice the possibility of viewing Ed's experience as a changing space-time continuum. The empirical material here about dimensions of space, time, and motion is to our knowledge original. Obviously comparison with other cases will be helpful. Ed may have a particular preference for such metaphors, and others' process may well be portrayed differently. However, in tune with the work of Johnson (1987), Lakoff and Johnson (1999), and others (e.g., in the field of NLP, Lawley & Tompkins, 2000), there seems merit in considering space and time as underlying epistemological metaphors.

There also appear to be connections with the output characteristics of transformation. Thus for Ed, an internal sense of being in the centre appears linked to being increasingly at cause and suggests an increasing integration.

A further aspect relevant to the management of change is that Ed's account told of how he managed with reference to these dimensions, in effect by shaping or moving according to their configuration. For example, he was explicit about managing time in the period of limbo by telling his people to focus on a finite timescale (the next 3 months) and about needing to "hold the split" between what he could and could not tell. Again we speculate that this inner dimension of change management could be illuminating to explore in other cases.

The Imaginal/Symbolic Dimension

There is also an imaginal, symbolic layer to Ed's inner process according to his accounts that relates particularly to Boyd's (1991) mytho-poetic perspective on transformative learning (Table 3).

The transcripts contain some powerful metaphors, such as being in limbo (which clearly overlaps the spatial dimension with the symbolic) and divorce. These illustrate the relevance of the mytho-poetic perspective of Boyd (1991) and others.

Perhaps the most explicit metaphor is an image that figures particularly in the second interview, that of a group of outcasts. This arose from a period when Ed's section of the company was for legal and regulatory purposes out of contact with the main company and had to move to a separate geographical location. This metaphor is a strong image of exclusion. Being no longer a part of the organisation as it was and waiting for the unknown to reveal itself, he says, "Yes, we're out on a limb . . . we are lepers, the group had to go and reside somewhere else because . . . 'they are not as clean as the rest of us.'"

Ed's experience of going from a familiar, known world into "limbo," surviving his ordeal, and eventually reconciling both the company's and his own future with new "marriages" has many potential parallels with the literature. For example, Scott (1997) referred to a "mythical journey" (p. 45). Outside the field of transformative learning, there is Campbell's (1985) notion of the "hero's journey," which he said consists of stages of separation, initiation, and return

Table 3: Imaginal Themes

	Imaginal Theme	Possible Imaginal Roles
Month 1	**The day of judgement** Anticipation of being judged on the "other side" Weighing up, scales **Into the unknown (the future)** ("I'm really in the unknown; it's that sort of unknown factor that really gets into your belly. Whoa, what can I do next?; It's not having a road map any more.")	**Protector** (shielding staff, holding split; not passing on) **Explorer/voyager**
Month 4	**Outcasts (the leper colony)** ("The . . . strange thing about being a leper is, is that this organisation . . . doesn't, cannot now have any discussions or any relationship with the [main] corporation. So, whereas I was on a global team doing sort of things, that has been severed, so I can't talk to my colleagues in any part of the . . . any other region now.")	**Guide** ("Then once I've helped them get to that point, for them to help their people realise the same;" "To some of my managers it's come, the reality, the realisation has come a lot earlier than others.")
Month 7	**Good guys—bad guys** **The fall (destruction and betrayal)** ("This so-called partner of ours that we had, that we liked and loved and enjoyed being with, was now sort of setting its stall up to destroy us.")	**Seeker after justice** ("What I've managed to do now, in my own mind is to recognise that this isn't the way it's going to be, that there is going to be this unfairness but you just have to manage that.")

(Cairnes, 1998). Such transformative journeys are characterised by elements such as ordeals (Bartunek & Moch, 1994) and epiphanies, "moments of truth" that have "the potential for creating transformational experiences for the person" (Denzin, 1989, p. 15), an idea reminiscent of Frick's (1987) description of a symbolic growth experience.

CHARACTERISTICS OF THE INTERPERSONAL INQUIRY PROCESS

The third main category concerns some features of the process of inquiry and of the interaction between learner and facilitator as distinct from the learner's intrapsychic process.

This involved spaces away from the action. In conventional terms, these constituted research interviews. However, we want to highlight that we regard these interviews as an active and collaborative process of constructing whatever the person came to regard as their learning. This is quite different from

the conventional view of research as a process of collecting data that have some existence prior to the research. In other words, it would be erroneous to suppose that the person's learning had been formulated independently of and prior to the research.

Second, it is a public and relational process. This case involved a learner and a collaborator—a facilitator who supported the person in reflecting on his experience. Taylor (1998) noted that "relational knowing, the role of relationships in the learning process, has been given only minor attention by Mezirow in transformative learning theory" (p. 36). The discourse was by no means confined to the rational domain (Taylor, 1998). It was a sustained reflection and shared characteristics with Boyd's notion of discernment, especially a sense of grieving for loss.

Third, time was an important dimension to the research in that the participant's perception of learning emerged over time, through a process of reflection and dialogue, and what might be termed *indwelling*, which Moustakas (1990) defined as "the heuristic process of turning inward to seek a deeper, more extended comprehension of the nature or meaning of a quality or theme of human experience" (p. 24). The longitudinal dimension shows up differences over time rather than relying on an analysis of data gathered at one point in time.

This is relevant to debate about the facilitation of transformative learning. For example, how do we differentiate transformative learning in education from modes of personal development such as psychotherapy? Taylor (1998) described Mezirow's position as "middle of the road" and said "he tends to avoid or gives minimal attention to the deep analytical challenges associated with personal transformation, such as its inherent emotive nature, the emphasis on personal self-awareness, and the need to resolve past life issues" (p. 19). This may account for Mezirow's (1991) views on ethics and facilitation that depending on one's point of view might be described kindly as permissive. We note with interest the prominent metaphor of "fostering" (e.g., Taylor, 1998, p. 47), with its parental connotations rather than for example "facilitation," which Mezirow uses at other times (e.g., Mezirow, 1997, p. 11).

Discussion

Through analysis of Ed's case we have synthesised a tentative map of transformative learning through the lens of NLP. If we were to sum up Ed's learning, it appeared to be a process of coming to terms with the way his world changed around him and gradually experiencing himself more at cause than at effect. In summary, themes resulting from the analysis comprised the following three main categories:

1. characteristics of the output or of the emergent understanding of the learner,
2. characteristics of the person's inner process or journey,
3. characteristics of the interpersonal process between learner and facilitator.

Output characteristics included the capacity for a wider frame or perspective, probably involving a less egoic, more detached view of a situation, including

- a change at the level of identity (referring to Dilts's model of neurological levels);
- changes also at the belief level in Dilts's model, represented by changes in what NLP calls *complex equivalence* and *cause-effect* patterns, and notably a movement from being at cause to being at effect;
- evidence of paradoxical thinking, especially of change toward integrating or re-solving dilemmas, and a movement away from either-or thinking;
- emergence of a (new) core metaphor around which Ed's story (e.g., his revised understanding of himself and his world) could cohere.

Ed's case appears to match Mezirow's (1991) description of conditions for "perspective transformation" such that his situation can be regarded as an "epochal dilemma such as death, illness, separation or divorce" (p. 168).

The aforementioned account, especially with regard to the space-time dimen-sions, could be regarded as a story of renewed orientation to the world. Ed ap-pears to have acquired a "more inclusive, differentiated, permeable (open to other points of view), and integrated meaning perspective" (Mezirow, 1991, p. 7) and to some extent to have learned to "negotiate meanings, purposes and values criti-cally, reflectively and rationally instead of passively accepting the social realities defined by others" (Mezirow, 1991, p. 3).

The account also has characteristics relevant to Boyd's symbolic emphasis. For example, Ed's process of separating and moving on from the old company, em-phasised by the metaphor of divorce as well as Ed's life stage, seems analogous to the grieving process described by Scott (1997).

Thus, the case draws on both the Mezirow and Boyd perspectives, perhaps il-lustrating Grabove's (1997) view that these are interconnected. Although Mezirow (1991) emphasised the significance of metaphor, his approach re-mains rationalist and ego-centred (Imel, 1998; Taylor, 1998). In tune with our experience and preferences as educators, we support a more holistic perspec-tive and strongly support the contention that "transformation is not a ra-tional process . . . and cannot be pushed or planned for as in a goal-oriented, technical, rational process" (Scott, 1997, p. 44).

Another relevant frame is that of Reason and Hawkins (1988), who talked of explanation (an analytical mode) and expression (an aesthetic, meaning-making mode) as two complementary paths of inquiry. From this expressive mode, we pondered what would symbolise the transformative learning process as we have experienced it, and what came to us was the image of a labyrinth. Labyrinths are representations of life's journey and also literally pathways for inner and spiritual reflection. They are found in spiritual traditions throughout the world—the leg-endary labyrinth at Knossos in Crete, turf labyrinths in England, labyrinths in the Nazca plain in Peru, and so on. A labyrinth differs from a maze in that a labyrinth has only one path that one follows inward to a centre and then returns to the out-side; a maze is a puzzle, with alternative pathways. The image of the labyrinth res-

onates well for us with the notion of a period of inward focus, culminating in the emergence of a new core metaphor and an expanded worldview with which one returns to the outer world. Such a process effectively creates a sacred space. This symbol of the labyrinth may help to differentiate the process from more instrumental models of learning.

The NLP frameworks employed seemed to permit both an explanatory/analytical and an expressive/symbolic view of Ed's learning. The perspective offered by NLP may be elaborated further through McWhinney's (1997) four realities model based on ancient systems of understanding including the four elements, represented also in Jung's map of psychological functions preferences and applied to NLP by Young (2001). Adopting McWhinney's terms for these four realities (unitary, sensory, social, and mythic), this case as we perceive it has done the following:

1. Attended in the sensory realm to what we have argued is a lack of evidence or empirical data to support concepts of transformative learning and illustrated the potential of NLP for helping to provide such evidence. The dimensions of space and time, although metaphoric and thus in principle related to the mythic realm, reflect Ed's inner sensory world.

2. Used NLP's language models to identify rules and beliefs held by Ed (e.g., the complex equivalences), which relate to the unitary realm.

3. Included the mythic realm through the notion of emergent metaphor and through attending to the symbolic aspects of Ed's language (see Table 3).

4. Represented the social realm less in the analysis than probably through the collaborative nature of the inquiry process and the coconstruction of Ed's stories.

McWhinney (1997) emphasised that change involves moving from one mode to another. Our reflection on Ed's experience is that although the mapping of his sensory and unitary reality appeared helpful, it was his growing awareness of the mythic dimension (catalysed perhaps through the social interaction of the research) and especially the resonance between the personal and organizational experiences of divorce that proved most significant for him.

A final conceptual issue concerns what might be termed a *meta-characteristic* of transformative learning. Transformative changes yield insights into the learner's own epistemological processes, resulting not only in change to the existing map but also in change to the mapping process. In Bateson's (1973) terms, this represents a higher logical level of learning. Possible evidence of this type of shift is in Ed's following statement: "Yes, very much so, and the message or the lesson from that is, nothing in life is as you think it is because that's your own perception of what it is."

This reflexive characteristic may be an important aspect of the vexed question of how to define transformative learning. We perceive a strong need for the field to make use of conceptualisations of qualitative difference, such as Bateson's (1973) seminal paper on the notion of logical levels of learning. This is a model familiar in NLP as well as one to which Mezirow (1991) made reference and on

which McWhinney (1997) drew. Bateson's work has been influential on many theories of change in organisations and human systems, for example Watzlawick et al.'s (1974) notion of first- and second-order change.

In conclusion, this case has illustrated the potential of frameworks taken from NLP to identify differences—in this instance, linguistic differences—that may help to codify transformative learning. These distinctions appear relevant to Mezirow's (1991) emphasis on "the dynamics involved in modifying meanings, and the way structures of meaning themselves undergo changes" (p. xii). In essence, the article offers a range of possible indicators and perspectives that NLP may provide. We do not regard these as definitive, and we acknowledge the tentative and contested status of NLP in academic work. Instead, we offer these indicators as being of potential value in conversations about learning, especially to complement and perhaps critique different understandings and perceptions of transformation.

Finally, we reemphasise the issue of the evidence base in the literature of transformative learning. The literature often seems persuasive to us because we feel an intuitive connection with the topic, empathise with the concerns of authors, and recognise the issues. But setting this aside, we cannot avoid feeling skeptical about the concept of transformative learning and the claims made for the field. We hope this article may contribute to the furthering of dialogue about and research into transformative learning.

Notes

1. The address is http://www.inlpta.com/ (accessed October 5, 2004).

2. It represents one of a number of ongoing studies of learning from experience being pursued by the authors.

3. Michelli is conducting a grounded theory (Glaser & Strauss, 1967) study of transformative learning that is intended to offer such a comparison.

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