Chapter Twenty-Five

NEUROLINGUISTIC PROGRAMMING - AN INTERIM VERDICT

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Neurolinguistic programming (NLP) is a model of human behaviour and cognition which describes how people represent their world, how they interact and communicate with it and with one another, how it can be that they can experience distress and disappointment in these interactions, and how they can be helped to change their representation of the world to alleviate their distress and cope with life more effectively and with greater fulfilment. Based on the tenets of NLP, strategies have been formulated whereby it is asserted that counsellors, therapists and communicators may enhance their effectiveness in helping their clients, and therapeutic procedures have been outlined which it is claimed bring about far more rapid and effective changes than hitherto in the formal practice of psychotherapy.

Perhaps the central philosophy of NLP is most aptly summed up in the sentence 'The Map is not the Territory' (see, e.g. Lankton, 1980, p.7). That is, each one of us only ever operates on the basis of our internal representation of the world (our 'map') and not the world itself (the 'territory'). The maps that we create may be limited in many ways, impoverished, distorted and inflexible. The choices which we thus make available to ourselves are restricted, and our transactions with the world will accordingly be frustrating and difficult. It is therefore the therapist's task to understand and operate on the basis of the client's map of the world in order to assist the client to overcome these restrictions and thus provide him with more choices.

THE PRIMARY REPRESENTATIONAL SYSTEM

One of the important concepts of NLP is the primary
Neurolinguistic Programming

representational system (PRS). The maps that people make of their world are represented by the five senses, visual (V), auditory (A), kinaesthetic (K), olfactory (O) and gustatory (G). V, A and K are thought to be the major ones and individuals differ in the way they employ these representational systems. For example, a person may tend to represent his world in the V mode, i.e. through internal pictures, another person may tend to use a K representation, i.e. through feeling, and a third person may have a predominantly A representation, through sounds and verbalization (Grinder and Bandler, 1976; Bandler and Grinder, 1979).

The personal consequences of having one PRS as opposed to another are not greatly elaborated upon. (Relationships are reported involving preferred leisure activity (Frye, 1980) and degree course (Ellis, 1981). What is stressed, however, is that it is advantageous for the therapist to ascertain the client's PRS.

How is this achieved? Firstly it is claimed that at any time the representational system being employed is revealed by a person's style of speaking, specifically in the predicates he uses - verbs, adjectives and adverbs. A person with a V PRS will tend to use predicates such as 'I see...', 'It appears to me' and 'I have a clear picture...'; someone with an A PRS will use phrases such as 'I hear...', 'It sounds to me...' and 'I tell myself...'; and expressions such as 'I feel', 'He's out of touch' and 'It's heavy going' will be favoured by someone with a K PRS. A second indication of representational system is direction of eye movement. It is claimed that a person accessing V information will tend to look upwards (left for remembering, right for constructing); a person looking horizontally left or right will be accessing A information (remembered and constructed, respectively), likewise looking downwards and to the left; a person looking down and to the right is accessing K information, and a final eye position is eyes unfocused and looking ahead which is interpreted as accessing visually represented information (Lankton 1980, p. 46).

Matching of Primary Representational Systems
NLP writers contend that by matching, mirroring or pacing the client's verbal and non-verbal behaviour, i.e. matching aspects of speech, gestures, body posture, breathing, blinking, etc, one is tuning in on the client's representation of the world and thereby facilitating rapport, understanding, trust, communication and so on. NLP writers are also
Neurolinguistic Programming

emphatic that by matching the client's PRS - i.e. using predicates in the same mode - rapport and therapist effectiveness will be considerably enhanced. Conversely, mismatching the client's PRS will impede communication, lead to misunderstandings, loss of rapport, and resistance (see, e.g. Bandler and Grinder, 1979, p.11). Consequently, according to the NLP model, to enhance one's effectiveness as a communicator one must establish the other person's PRS and match one's predicates, as well as other verbal and non-verbal behaviours, with those of the clients.

EXPERIMENTAL EVIDENCE CONCERNING THE PRS

Most experimental research into NLP has investigated the claims regarding the concept of PRS, notably the following three assertions:

1. The hypothesis that a person has a PRS which is observed in his choice of predicates: A number of studies have investigated this hypothesis by attempting to identify groups of people distinguished by their preferences for V, A or K predicates in their speech on simple interviewing or direct questioning (see Grinder and Bandler, 1976, p.12, for questioning procedure).

   Beale (1981), Lange (1981), Dorn (1983a), Petroski (1985) and Coe and Scharcuff (1985) obtained no clear distinctions between groups of subjects in terms of a PRS based on predicates. Birholtz (1981), Falzett (1981), Johannsen (1982), Gumm, Walker and Day (1982), Graunke (1984), Faulkender (1985) and Ridings (1986) all report that a large majority of Ss have a preference for using K predicates. Birholtz (1981) found that this preference (in all 27 Ss) was stable over time, although Ridings (1986) found the K preference to be less stable; in this investigation of 65 Ss, 55 showed a clear PRS on initial testing. This was in the K mode for 53 of these Ss, but the number of these showing a K preference dropped to 40 after 6 weeks. Finally, in Shaw's (1978) study, none of a sample of 108 students could be identified as having a PRS in the V mode using verbal report, and none of Mattar's (1981) Ss had a predicate preference in the A mode.

   Several investigators have explored the relationship between PRS, imagery material and imagery indices. Graunke (1984; see also Graunke and Roberts, 1985) gave Ss 10 imagery tasks associated with a particular modality (V, A, K or mixed). Ss' predicates
were directly related to the type of imagery; that is, Ss tended to switch from one mode to another according to the type of the imagery task. This does not support a trait concept of PRS. Beale (1981) also reported that predicate mode and material were related. Other negative findings regarding imagery and PRS were reported by Lange (1981), Johannsen (1982) and Fromme and Daniell (1984). For a discussion of strength of imagery preference and PRS see Grinder and Bandler (1976, p. 8-9).

Faulkender (1985) obtained no relationship between PRS in verbal report and performance on tasks involving the different perceptual modes (V, A and K). This author, however, reported some limited support for a classification of representational system using second and third preferences, and Pantin (1982) found a positive correspondence between S's dominant mode of predicate usage and self reports of imaginal style.

In view of the preponderance of negative results concerning the hypothesized PRS as exhibited by S's choice of predicates, it is worth noting some incidental positive findings that have been observed (but not yet replicated) by a number of investigators. For example, it was noted above that Johannsen (1982) observed some positive correlation between predicates and certain indices of imagery. Birholtz (1981) observed that the proportion of A predicates used by Ss was correlated with measures of well-being, socialization, achievement via conformance, and intellectual efficiency on the California Personality Inventory. O'Leary (1984) has reported a significant correlation between S's most accurate representational system as measured on the Affect Sensitivity Scale, and the thinking/feeling personality on the Myers-Briggs Type Indicator. Finally, Wilimek (1980) obtained some significant differences in predicate usage by high- and low-adjustment couples describing satisfying and upsetting experiences.

2. The hypothesis that a person has a PRS which is observed in the direction of his eye movements: Investigators of this hypothesis have generally looked for correlations between perceptual processing (V, A or K) and ocular movement, and for consistent differences between individuals in preferred direction of gaze. It may be mentioned in passing that the early writers on NLP surprisingly make hardly any reference to the existing experimental literature on eye movement and cognitive mode. Even in the '70s this work was quite extensive (see review by Ehrlichman and Weinberger, 1978). One of the early
prominent researchers was Kinsbourne; in one study (Kinsbourne, 1972) he observed that when solving verbal problems (interpreting proverbs), right-handed Ss tended to turn their head and eyes to the right, whereas with problems of calculation and visualizing familiar places they tended to look upwards and to the left. These relationships did not hold for left-handers. Although some of the findings on ocular gaze and cognitive mode may be compatible with the NLP model (e.g. Kinsbourne's spatial task) by and large the proposals are not supported in such studies.

No support for the NLP assertions on eye movements was found in investigations by Thomason, Arbuckle and Cady (1980), Beale (1981), Radosta (1982), Cody (1983), Dorn, Atwater, Jereb and Russell (1983), Petroski (1985), Farmer, Rooney and Cunningham (1985), Poffel and Cross (1985), Coe and Scharoff (1985) and Elich, Thompson and Miller (1985). Cody (1983) moreover found little stability over one week for the very marginal eye-movement preferences exhibited by Ss. Beale (1981) noted a predominance of upward eye movements regardless of stimulus; such movements are, in NLP terms, associated with the V mode, but Poffel and Cross (1985) found in their Ss that the responses associated with V and A occurred equally often (22% for both, and 6% for K; 50% of the time no eye movements were recorded at all). Also Wertheim, Habib and Cumming (1986) found more responses associated with the A mode for all types of materials; nevertheless, in accordance with the NLP model, Ss showed a significant tendency to make upward eye movements for visual items and some support for this also comes from a study by Hernandez (1981). No clear relationship has been reported between representational system as inferred by spoken predicates and by eye movements (Beale, 1981; Cole-Hitchcock, 1980; Gumm et al., 1982; Petroski, 1985; Coe and Scharoff, 1985; Elich et al., 1985). However, Cole-Hitchcock (1980) did find a consistency in indicators for PRS in the V and A mode from written responses and eye movements. This was not observed by Coe and Scharoff (1985). Finally, Owens (1978) reported that combining data from eye-movements with those from predicates in verbal reports gave a statistically reliable means of determining PRS. This was not replicated by Gumm et al. (1982) who also checked Owens's statistical result and found this had been incorrectly reported as significant.
3. The hypothesis that communicators may enhance effectiveness if they match their client's PRS in their choice of predicates: This hypothesis has been investigated by first observing the presumed PRS of Ss in their choice of predicates or in their eye movements and then subjecting Ss to an analogue counselling interview in which the counsellor is instructed either to use predicates which are congruent with Ss designated PRS or to deliberately mismatch the PRS. Occasionally a third condition in which there is neither matching nor mismatching (the 'un-matched' condition) has been employed. Ratings of interviewer qualities such as empathy, trustworthiness and attractiveness are then made by interviewees, interviewers and independent assessors using standardized scales. Sometimes the experimental Ss are the judges and they rate the quality of a given interview in which the different conditions of matching are manipulated.

In general, failure to confirm the hypothesis under discussion for such counsellor qualities as rapport, trustworthiness, perceived expertise and effectiveness, has been reported by Green (1981), Rebstock (1980), Frieden (1981), Dowd and Pety (1982),* Dowd and Hingst (1983), Dorn (1983b), Cody (1983), Schneider (1984) and Carbonell (1985). Moreover, Cody (1983) found that therapists who matched their client's language were rated as less trustworthy and less effective. Also, an incidental finding of Frieden (1981) was that predicate matching did appear to produce more eye contact, but paradoxically increased head-to-head distance. Appel (1983) failed to find any effect of congruency in PRS on the attractiveness of speakers as perceived by male and female Ss, although a significant effect involving Ss' secondary representational system when speaker and S were of the opposite sex was observed.

Support or partial support for the hypothesis comes from the following reports. Brockman (1981) found that interviewees rated a counsellor instructed to match predicates as more preferred and more empathic than one not so instructed; the empathy difference was also presented in judges' ratings. However, there was no difference in willingness to self-disclose. Shobin (1980) found in an initial psycho-

*Contrary to the references by Gumm et al. (1982) and Ellickson (1983), no positive findings for matching were reported by Dowd and Pety (op.cit.).
therapy interview that predicate matching gave higher ratings than a 'modified verbal pacing' method in which other verbal elements (e.g. voice tone, tempo and syntax) were matched but predicates mismatched. Schmedlon (1981) reported superiority of matching over mismatching for empathy but no differences for perceived level of regard and depth/value, smoothness/ease and positive feeling. Falzett (1981) reported a similar positive finding for perceived trustworthiness. In contrast to studies mentioned earlier, Pantin (1982) reported that Ss evaluated more positively recordings of simulated counselling in which client and counsellor were matched for dominant predicate mode. Ellickson (1981, 1983) obtained negative findings for the effect of matching on a number of scales, but ease of communication was superior in the matching condition for males only. Day (1985) found a 'matching strategy' (unspecified) gave superior scores for counsellors rated on expertness, attractiveness, trustworthiness and having utility. Paxton (1981) found no difference between matching and mismatching predicate systems on counsellor relationship but both methods were more effective than the non-matching condition. It was concluded that it was beneficial for counsellors to consistently use one representational system. Finally, Hammer (1983) has reported a favourable influence on perceived empathy of interviewer, if the latter tracks the predicates (i.e. matches them individually) of the interviewee rather than matches a single presumed PRS. Hammer concludes that PRS is not a useful concept but the predicates themselves have a perceptual significance because interviewers matched according to modality rather than responding with identical predicates. Other investigators who have used tracking rather than matching PRS include Ellickson (1981, 1983), Frieden (1981), Dowd and Pety (1982) and Dowd and Hingst (1983).

Several researchers have examined whether matching verbal material to S's preferred predicates improves task performance or potentiates the effectiveness of the material. For example, Kraft (1982) explored the effectiveness of audiotaped relaxation instructions framed predominantly in the V, A or K modes. No benefits were observed when the instructions were congruent with S's preferred predicate system. However, Yapko (1981a, 1981b) found that hypnotic relaxation instructions were increasingly effective when framed in the least to the most preferred mode, in line with NLP predictions. Talone (1983) found no evidence of a match in the mode of S's responses.
Neurolinguistic Programming

(writing an essay) and mode of the experimenter's suggestions (V, A or K). Shaw (1978) found no effect of matching material to be recalled to S's preferred mode. Cody (1983) did not observe any expressed preferences due to matching amongst Ss for audiotaped vignettes concerning common pleasant experiences. However Pantin (1982) found that performance on a memory task was facilitated when mode of item presentation was congruent with S's preferred mode of predicate usage, and Mattar (1981) found some evidence of greater ease of comprehension for segments of spoken material congruent with S's inferred PRS (V or K).

Comments
In 1984, Sharpley reviewed the experimental evidence for the tenets of NLP relating to the PRS. He concluded that there was no support for the identification of the notional PRS by predicates and eye movements and no consistent evidence for the alleged benefits of predicate matching in counselling. Dorn, Brunson, Bradford and Atwater (1983) also concluded from their review of the literature that there was no demonstrably reliable method of assessing the hypothesized PRS. Sharpley's review was criticized by Einspruch and Forman (1985) to which a rejoinder has been issued (Sharpley, 1987) in which the writer restates his position in the light of further evidence. The objections and counter-objections will not be fully discussed here and the reader is referred to the original papers, and to criticisms of research made by Beck and Beck (1984).

The present author is satisfied that the assertions of NLP writers concerning representational systems have been objectively and fairly investigated and found to be lacking. These assertions are stated in unequivocal terms by the originators of NLP and it is clear from their writings that phenomena such as representational systems, predicate preferences and eye-movement patterns are claimed to be potent psychological processes, easily and convincingly demonstrable on training courses by tutors and trainees following simple instructions, and, indeed, in interactions in everyday life. Therefore, in view of the absence of any objective evidence provided by the original proponents of the PRS hypothesis, and the failure of subsequent empirical investigations to adequately support it, it may well be appropriate now to conclude that there is not, and never has been, any substance to the conjecture that people represent their world internally in a preferred mode which may be inferred from their choice of predicates and from their eye movements.
These conclusions, and the failure of investigators to convincingly demonstrate the alleged benefits of predicate matching seriously question the role of such a procedure in counselling. It may be however that the general process of matching linguistic style and other verbal and non-verbal behaviours is of value, and this would still be consistent with NLP formulations. In accordance with this, some writers have suggested that with increasing familiarity there may be a tendency in counselling (and probably other) interactions for each participant to accommodate the other's linguistic style - types of verb phrase, sentence length, and so on (Beiber, Patton and Fuhriman, 1977; Mercier and Johnson, 1984). Also, a test by Sandhu (1984) of the benefits of mirroring non-verbal behaviour (movements of extremities and posture directly, other movements indirectly) was positive for empathy although not for trustworthiness or positive interaction.

CONCLUSION

This verdict on NLP is, as the title indicates, an interim one. Einspruch and Forman (1985) are probably correct in insisting that the effectiveness of NLP therapy undertaken in authentic clinical contexts of trained practitioners has not yet been properly investigated. If it turns out to be the case that these therapeutic procedures are indeed as rapid and powerful as is claimed, no one will rejoice more than the present author. If however these claims fare no better than the ones already investigated then the final verdict on NLP will be a harsh one indeed.

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N.B. The abbreviation DAI denotes Dissertation Abstracts International.

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