

Neurolinguistic Programming: What is the Evidence?

Michael Heap

Dept. of Psychology, Middlewood Hospital,
Sheffield, England, S6 1TP

Abstract

Neurolinguistic programming (NLP) is a system of ideas about how people experience and communicate with their world. It describes how people might come to experience problems in living, how these problems may be alleviated, and how in general we can live more effectively and satisfactorily.

The originators of NLP state that it is based on close observations of how effective therapists such as the late Milton Erickson conducted successful therapy with their clients. Like Ericksonian methods, NLP has been received with great enthusiasm in some quarters as shown by the growing number of publications, congresses, conferences, presentations and workshops on the subject. In Britain, at least, there appears to be great interest in NLP and Erickson and his followers amongst lay organisations in hypnosis and psychotherapy as revealed by advertisements for their courses. Interest has been evident amongst clinical and academic psychologists. Strong, and in some cases quite remarkable claims are made concerning the effectiveness of NLP as a therapeutic tool. Fortunately, many of its assumptions and predictions are easily testable by objective procedures and several such studies have now appeared in the literature. These will be reviewed and some tentative conclusions will be drawn.

Introduction

Neuro-linguistic 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 disappointments 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.

The Assertions of NLP

Perhaps the central philosophy of NLP is most aptly summed up in the sentence "The Map is not the Territory". 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"). This emphasis on internal representation, as the proponents of NLP acknowledge, is of course neither new nor unique; existential therapies and cognitive approaches such as those of Kelly, Ellis and Beck adopt the same stance.

The map 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. NLP writers have described ways of tuning into the client's map - e.g. by carefully observing and modelling the client's use of language and other verbal and non-verbal behaviour.

The Primary Representation System

One of the important concepts of NLP is the primary 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 verbalisation. (Grinder and Bandler (1, p. 9), assert that "From this fact - namely that person X has a most highly valued representational system that differs from that of a person Y - we can predict that each will have a dramatically different experience when faced with the 'same' real world experience".

The personal consequences of having one PRS as opposed to another are not greatly elaborated upon; Lankton (2), asserts (without evidence) that ballet will be better learned by people with a K preference, chemistry by people with the V preference, music by those with an A preference, and so on. 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 ad-

verbs. 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 . . .”; 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 (2, p. 46).

Another phenomenon inferred from eye movements is that of ‘lead system’. Lead systems appear to be precursors of the PRS as described above and are revealed in eye movements; sometimes the eye movements and the predicates used represent different systems – that is, information is being accessed or processed in one modality but is expressed in another. Grinder and Bandler (1) call these “fuzzy functions”; they may arise when there is a mismatch between representational systems and the input or output channel (*op. cit.* pp 100–101). It is apparent, however, from examples given that congruency may be expected from predicate usage and eye movements and the PRS may be ascertained by observing predominating tendencies in both (3, p. 24).

Matching of Primary Representational Systems

NLP writers contend that by matching, mirroring or pacing the client’s verbal and non-verbal behaviour (e.g. aspects of speech, gestures, body posture, breathing and blinking) one is tuning in on the client’s representation of the world and thereby facilitating rapport, understanding, trust, communication and so on. This may be done directly – e.g. copying the client’s body movements or pacing the client’s breathing with one’s own – or indirectly, say by slightly nodding one’s head in time with the client’s breathing or matching the client’s blinking with a finger movement. NLP writers are also 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. Bandler and Grinder (3) claim they have made extensive studies of therapists in action: “We spent a lot of time sitting in on professional communicators. It’s very depressing. And what we noticed is that many therapists mismatched in the same way that we demonstrated” (*op. cit.* 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.

Evidence for the assertions of NLP

I have recently completed a survey of studies which have investigated the

validity of the assertions made in the early NLP writings, i.e. 1975–1980. I do not wish to recite all of these studies here – this would not be a sensible use of conference time – and I will therefore refer you to some recent review papers. Let me summarise the general impression however, which has been open to criticism, that the allegations of the NLP model with respect to PRS, the notion of predicate preferences, the assertions on direction of eye movements and the predictions concerning predicate matching have received relatively little empirical support, and allowing for the less than 100% reliable application of the scientific method to psychological phenomena, I would say the weight of evidence suggests that the following assertions are probably incorrect:

(i) *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 and K predicates in their speech by simple interviewing or direct questioning as instructed (1). Generally these have been unsuccessful and in many studies a majority of subjects (Ss) have shown a preference for K predicates, in some reports almost exclusively so. Several investigators have explored the relationship between assumed PRS, imagery material and imagery indices. The allegations on imagery preference and predicate preference made by Grinder and Bandler, (1, p. 12), *inter alia*, have received little support and it seems that people readily switch mode of predicate usage according to imagery mode, which is unsurprising.

(ii) *That representational systems may be observed in the direction of eye movement.*

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 (4)). One of the early prominent researchers was Kinsbourne; in one study (5) he observed that when solving verbal problems (interpreting proverbs), right-handed Ss tended to turn their eyes and head to the right, whereas with problems of calculation and visualising familiar places they tended to look upwards and to the left. These relationships did not hold for left-handers. Kinsbourne postulated that the direction of eye gaze reflected the lateralization of the underlying cerebral activity. However, Ehrlichman & Weinberger (4), concluded from their review that there was no clear support for the cerebral lateralization hypothesis. Bandler & Grinder (3) imply that hemispheric specialisation is associated with their proposed eye movement patterns: although some of the findings on ocular gaze and cognitive mode may be compatible with their model (e.g. Kinsbourne's spatial task) by and large their proposals are not supported in such studies.

More recent investigations of direction of eye movements which have

specifically tested the NLP hypothesis have almost consistently found no evidence in favour of the predicted eye movements except that there may be a statistical trend for people to look upwards more when visualizing; no relationship between predicate usage and eye movements has been found.

(iii) *That communicators may enhance their effectiveness if they match their client's PRS in their choice 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 S's designated PRS or to deliberately mismatch the PRS. Occasionally a third condition in which there is neither matching nor mismatching (the "unmatched" condition) has been employed. Ratings of interviewer qualities such as empathy, trustworthiness and attractiveness are then made by interviewees, interviewers and independent assessors using standardised 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. Finally several researchers have examined whether matching verbal material to S's preferred predicates improves task performance or potentiates the effectiveness of the material. The results are discussed in a number of reviews which I will mention shortly. On the balance the findings have been negative but a number of positive outcomes have been reported, enough to suggest that there may be some beneficial effect of matching, perhaps not specific to predicates but to more general linguistic and non-linguistic behaviour, as indeed NLP writers themselves have suggested. For example, Mercier and Johnson (6) have concluded that with increasing familiarity, client and counsellor tend to converge in their usage of certain linguistic structures such as verb phrases. One point I would like to make here concerns the reported large majority of Ss who prefer K predicates. If this is a valid and generalisable observation then it implies the following: namely, that if say 85% of the population have a K preference (7) then it is more likely that interviewer and client will already be matched in their preferred predicate usage. Therefore, in predicate-matching conditions, more interviewers will be using their preferred system than in predicate mismatching conditions. It may therefore be that any impediment to interviewer effectiveness in the latter condition may arise from the greater likelihood of the interviewer having to employ an unaccustomed phraseology than in the predicate mismatching condition and this may be an unwelcome distraction.

As I have stated I have not presented you with details of all the many studies which have now been conducted on the three hypotheses, but I refer those interested to the following reviews:

Sharpley, C. Predicate matching in NLP. A review of research on the preferred representational system. *J. counsel. Psychol.*, 1984, 31, 238-248.

Einspruch, E.L. & Forman, B.D. Observations concerning research literature on neuro-linguistic programming. *J. counsel. Psychol.* 1985, 32, 589-96.

Sharpley, C. Research findings on neuro-linguistic programming: non-supportive data or an untestable theory? *J. counsel. Psychol.* 1987, **34**, 103-107.

Heap, M. Neuro-linguistic programming: an interim verdict, in M. Heap (Ed.) *Hypnosis: Current Clinical, Experimental and Forensic Practices*, Beckenham, London: Croom-Helm, 1988.

Sharpley in his 1984 review of studies concluded there was no consistent support for the hypotheses discussed here. His conclusions and the work on which they were based were challenged by Einspruch & Forman (1985) but he restates his position in his 1987 article in which he concludes that of 44 studies only 13.6% supported NLP. I refer those interested to the criticisms and counter-criticisms in these three papers. My own opinion is that I am satisfied that the assertions made by the originators of NLP 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. At least, it ought to be the case that writers refrain from, and editors of books and journals disallow, the presentation of such allegations as though they were well-established scientific facts rather than a series of unsubstantiated speculations about how the human mind operates. 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 be still consistent with NLP formulations.

References

- 1 - Grinder, J. & Bandler, R. *The Structure of Magic II*. Palo Alto, CA: Science & Behaviour Books, 1976.
- 2 - Lankton, S.R. *Practical Magic*. Cupertino, California: Meta Publications, 1980.
- 3 - Bandler, R. & Grinder, J. *Frogs into Princes*. Moab, UT: Real; People Press, 1979.
- 4 - Ehrlichman, H. & Weinberger, A. Lateral eye movements and hemispheric asymmetry: A critical review. *Psychol. Bull.*, 1978, **85**, 5, 1080-1101.
- 5 - Kinsbourne, M. Eye and head turning indicates cerebral lateralization. *Science*, 1972, **179**, 539-541.
- 6 - Mercier, M. & Johnson, M. Representational system predicate use and convergence in counselling: Gloria revisited. *J. counsel. Psychol.*, 1984, **31**,

161-169.

- 7 - Ridings, D. Neuro-linguistic programming's primary representational system: Does it exist? *Unpublished doctoral dissertation*, University of Massachusetts, 1986.