NEURO-LINGUISTIC PROGRAMMING: CARGO CULT PSYCHOLOGY?

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Abstract

Neuro-linguistic programming (NLP) is a popular form of inter-personal skill and communication training. Originating in the 1970s, the technique made specific claims about the ways in which individuals processed the world about them, and quickly established itself, not only as an aid to communication, but as a form of psychotherapy in its own right. Today, NLP is big business with large numbers of training courses, personal development programmes, therapeutic and educational interventions purporting to be based on the principles of NLP. This paper explores what NLP is, the evidence for it, and issues related to its use. It concludes that after three decades, there is still no credible theoretical basis for NLP, researchers having failed to establish any evidence for its efficacy that is not anecdotal.

Key words: Neuro-linguistic programming, theoretical credibility, cargo-cult psychology.

Introduction

Neuro-linguistic programming (NLP) is a school of thought founded on the psycho-therapeutic ideas of Richard Bandler and John Grinder. Since the publication of their co-authored book, *The Structure of Magic* in 1975 (in which Bandler and Grinder describe NLP as therapeutic magic), NLP has developed into a world-wide phenomenon. A simple *Google UK* search reveals a plethora of organisations and individuals offering NLP for training, personal development, coaching, and as an intervention aid for eating disorders, addictions, dyslexia, depression and chronic fatigue syndrome, to name but a few. NLP has been described by Tosey and Mathison (2003) as: "…one of the world's most popular forms of inter-personal skill and communication training" and is a recognised form of psychotherapy according to the United Kingdom Council for Psychotherapy.

To the casual observer, NLP appears to be a widely accepted set of techniques. Indeed, NLP has found its way into a number of academic institutions, appearing in peer-reviewed journals from an array of disciplines including counselling, business, marketing and education. This gives the impression that is not only widely used but is academically credible with a sound research base to support it. In short, NLP presents as a technique that we should all be aware of. It presents as though its central ideas should be universally available since it represents a model of human behaviour that can dramatically improve communication skills, empathy, and indeed, troublesome thought processes. Despite the cloak of respectability, the truth about NLP borders on the worrying. This paper argues that NLP is an ill-defined chameleon that masquerades as a discipline open to the rigours of academic enquiry, when in fact there is spectacularly no evidence to support NLP beyond personal testimony and anecdote.

What is NLP?

The term neuro-linguistic programming conjures up an air of scientific respectability, yet its very name is wholly inappropriate. O'Connor and Seymour (cited in Skinner and Croft, 2009) explain why this particular nomenclature was used:

- 'neuro': refers to our neurology, our thinking patterns.
- 'linguistic': language, how we use it, and how we are influenced by it.
- 'programming': refers to the patterns of our behaviour and the goals we set.

Bandler is reported to have stated that "neuro-linguistic processing" was a term that he made up to avoid having to be specialised in one field (Skinner and Stephens, 2003). This

would constitute a forgivable admission were it not for the persistence of its use today, and the pseudo-scientific, yet totally misleading, connotations of the term.

Firstly, our thinking patterns should be defined as 'cognition' not 'neuro'. Use of the latter word is effectively fraudulent since NLP offers no explanation at a neuronal level and it could be argued that its use fallaciously feeds into the notion of scientific credibility. 'Linguistic' again makes associations with the academically credible field of linguistics. And how does 'programming' equate to the patterns of our behaviour and the goals we set — aren't these 'behaviours' and 'thought processes'? Indeed, 'programming' actually implies a lack of conscious thought processes.

The links with scientific credibility persist in NLP books: "NLP is the art and science of excellence" (O'Connor and Seymour, 1994, cited in Heap, 2008). Yet despite this, and despite its very name suggesting strong links with accepted science, NLP has no credible basis in neuroscience and has been largely disowned by the very academic fields within which it claims to lie, namely psychology and linguistics.

What are NLP's central ideas?

NLP WAS founded on central philosophies born out of Bandler and Grinder's observation of transcripts and films of psychotherapy sessions. In particular, Bandler and Grinder were influenced by the hypnotherapist, Milton Erickson; the family therapist, Virginia Satir; and the founder of Gestalt Therapy, Fritz Perls. They considered these therapists to have a reputation for success and sensibly wanted to attempt to learn from their techniques. However, as Heap (2008) points out, what resulted was not a set of techniques based on good practice, but rather a number of suggestions of the ways in which we behave, think and communicate.

A core principle proposed in NLP is the notion of a preferred representational system (PRS). It is suggested that individuals construct internal maps of the world by processing external information through five sensory systems: visual, auditory, kinaesthetic, olfactory and gustatory. It should be noted that in the context of NLP 'kinaesthetic' inexplicably refers to feelings in general. It is suggested within NLP that a person's conscious activity predominantly uses one of these systems (particularly visual, auditory and kinaesthetic) and, according to Grinder and Bandler (1976), the particular system being used at any given time is reflected in that individual's style of speaking.

An individual thinking in the visual mode, for example, will tend to predicate sentences with visually-related words such as: "I can see that…" or: "It looks to me as if…". Bandler and Grinder (1979) also claimed that the representational system an individual uses at any given time can be revealed in their eye-movements. For example, it is proposed that the kinaesthetic mode is associated with a downward gaze to the right. Given that Grinder and Bandler (1976) proposed that each individual has a preferred idiosyncratic representational system, it follows that two individuals perceiving the world through different systems will be having differing experiences of that world. In order to achieve maximally effective communication, NLP proposes the notion of matching, whereby one individual matching the verbal and non-verbal behaviours of another individual can tune into their representational system and hence, to their view of the world.

What is the evidence for NLP's central ideas?

IF THE claims of Bandler and Grinder were substantiated, then it would be true to say that they had uncovered a corner stone of human cognition. They are claims that easily lend themselves to empirical investigation and, in the 30 years since the claims were first made, volumes of supportive research evidence should be available to underpin these theories being taught in university psychology departments across the world. Three decades on, however, the most striking observation about the perpetuation of NLP is that it exists almost entirely in isolation from published evidence to substantiate it. The core ideas of NLP from the mid 1970s were mostly discredited in the 1980s. Sharpley (1984) reviewed the research to date concerning NLPs assertion of a PRS and concluded that that there was little evidence for the use of a PRS in NLP, with much data to the contrary.

Even prior to NLP, mainstream psychology had been investigating the link between hemispheric asymmetry (reviewed by Ehrlichman and Weinberger, 1978) and eye movements, so it was not unreasonable for Bandler and Grinder to propose a link. However, in terms of the specific claims made by NLP, the supportive evidence is scant and at best offers only partial support. Wertheim *et al* (1986), for example, examined the hypothesis that eye-movements reflect sensory processing. Consistent with Bandler and Grinder's claims, Wertheim and co-workers found evidence of increased upward eye-positioning and stares when participants were asked to recall visual information but findings from the auditory and kinaesthetic modalities were inconsistent. Further, Wertheim and colleagues (1986) dismissed any notion of their findings being supportive of NLP since auditory-type eye position changes were most prevalent in all three (auditory, visual and kinaesthetic) stimulus conditions. Beyond this one study, evidence for Bandler and Grinder's claim is notable by its absence from the cognitive psychology literature. Surely this must be

because cognitive psychology tested the claims and failed to find an effect.

In response to criticisms, Sharpley (1987) updated his earlier review with further evidence reporting that of 44 studies evaluating NLP, only six could be categorised as accepting the principles of NLP, PRS, eye movements, and predicate-matching without criticism. Sharpley quantified the credibility gap further by pointing out that the majority of studies were not published in peer-reviewed journals but appeared to be abstracts from postgraduate theses. The ratio of non-supportive to supportive studies was 4.5:1, and Sharpley concluded:

> *(a) the PRS cannot be reliably assessed;*
>
> *(b) when it is assessed, the PRS is inconsistent over time; therefore,*
>
> *(c) it is not even certain that PRS exists; and*
>
> *(d) matching clients' or other persons' PRS does not appear to assist counsellors reliably in any clearly demonstrated manner.*
>
> Sharpley (1987, p105)

The lack of a credible research base is not unknown by the NLP community. Consider the following quote from the University of Surrey's NLP research project website:

> *The academic research into NLP is thin. The empirical studies to date have various limitations (we review this research in a forthcoming journal article).*
>
> *We believe there is an urgent need for more research, of a variety of methodological types. It is sometimes believed that the only valid research and the only type in which academics are interested, is experimental and uses statistical methods to develop proofs. This is a narrow and somewhat stereotyped view of research. We support, in particular, qualititative [sic] and action-based methods, and we are strongly interested in the potential of NLP 'modelling' as a phenomenological research method.*
>
> *In addition to pursuing our own research, NLPresearch.org seeks to support academic researchers and NLP practitioners wishing to enquire into NLP and its applications.*
>
> Neuro-linguistic Programming and Research (2006)
> Centre for Management Learning and Development
> University of Surrey

Phenomenological research is free from hypotheses, pre-conceptions and assumptions, and seeks to describe rather than explain. Given the claims made by proponents of NLP, this adds little to the credibility debate and would produce reports concerning the experience from the perspective of the individual rather than confirmation of the claimed efficacy.

The fact remains that NLP proponents make specific claims about how NLP works and what it can do and this compels providing evidence to substantiate these claims. The above statement constitutes an admission that NLP does not have an evidence base and that NLP practitioners are seeking a post-hoc credibility.

Can NLP be though of as an umbrella term?

Criticisms of the primary ideas of NLP have more latterly been addressed with the argument that NLP has evolved to encompass the modelling of effective strategies in top performers and the adoption of strategies in others towards achieving a desired outcome. Craft (2001) argues that NLP draws on the theoretical framework of social constructivism — thus it is considered to be experiential, action-based and involving the negotiation of meaning. Tosey and Mathison (2003), while concurring with Craft (2001) that NLP is a set of strategies rather than a theory, suggested it was possible to infer a theoretical cohesion and that NLP should be described as reflecting a systemic theory drawing its inspiration from the work of the cyberneticist Gregory Bateson. As such, NLP can be considered to be focused on feedback mechanisms

As Linder-Pelz and Hall (2007) state, NLP is about adopting a humanistic constructivist approach involving collaboration, focus on solutions, precision questioning, detachment from the problem, feedback and finding out what works and what doesn't. However, such a description appears to categorise NLP as anything that ultimately helps an individual address a particular life issue. There exists in this an evaluative problem. An individual meets with an NLP practitioner regarding a particular issue. Strategies are tried until ultimately the individual feels a solution has been found. The practitioner thus claims another success story. Within this however, it is impossible to quantify precisely what has happened owing to the humanistic constructivist label. In this context, to describe NLP as social and/or humanistic constructivism is nothing more than tautology and creates a smoke screen around the conclusion that its core ideas are unsupported.

The use of NLP as an umbrella term only adds to the confusion and conveniently excuses its proponents from having to substantiate its claims.

"At the end of the day none of this matters because NLP really works" — or does it?

If NLP encourages people to learn ways of communicating more effectively then that is a noble endeavour and not particularly problematic. However the problem arises with the perpetuation of claims. It has been suggested that NLP is: "being applied widely, if often informally, in UK education" (Tosey and Mathison, 2003, p371). Such informal application makes it difficult to assess, but the claims of one NLP website are fairly typical, claiming that NLP can help you:

1. *Discover the children's preferred learning styles and allow for them to be different.*
2. *Use circle time to share their values and identity.*
3. *Celebrate their sunbeams and reframe their raindrops.*
4. *Allow children to share how they do things so that they can model each other.*
5. *Use brain gym to calm, energise or reconnect right and left brain for improved concentration.*
6. *Help the children to access an appropriate state to learn easily.*
7. *Increase motivation by recognising success and putting it in the future.*

New Oceans (2005)

Brain Gym® (referred to in claim 5) is a commercial learning efficiency programme that appears to have been taken up by some schools, despite a complete lack of evidence for its efficacy (Hyatt, 2007) and is beyond the considerations of this paper. Of the remaining claims: 2, 3 and 7 are simply shallow statements with 1, 4 and 6 based on NLPs discredited claims about learning styles. In short, these claims are simply nonsense.

In addition to the potential for informal application in education, 'NLP-certified practitioners' make claims about its efficacy in the treatment of a whole range of quite serious disorders such as addictions, eating disorders, anxiety problems and pain management to name but a few (Brain-train, 2007, for example), yet the medical literature is devoid of any published evidence to substantiate these claims. This creates a serious ethical problem in both the educational and the paramedical fields. As Heap (2008) points out, knowledge is power and anybody making claims about being able to help with serious disorders or improve learning efficiency is making a claim for some kind of power. However, with that power, there must be accountability through public scrutiny. The lack of evidence for such claims means that the most rudimentary test of accountability cannot be addressed. In addition to this, if NLP is just a communication model, what special abilities does obtaining a certification in it bestow upon an individual which allows them to meddle in education issues and serious medical conditions?

In relation to dealing with vulnerable (indeed perhaps desperate) people, the claims of unqualified practitioners are extremely worrying. The precise nature of a 'qualification' in NLP is difficult to ascertain with many organisations offering impressive sounding training from 'Diplomas' up to 'Master Practitioner'. Precisely who accredits these 'qualifications' though? Who is responsible for externally examining and moderating them? How are they regulated? And how long do they take? The latter point is key with training courses in NLP being offered over a period of as little as two days. Consider the training required to become a Chartered Clinical Psychologist — a British Psychological Society- (BPS-) accredited first degree is needed, followed by three years of doctoral-level training within the National Health Service. Entry to the doctoral courses is fiercely competitive and so successful applicants have usually worked as psychological assistants for a number of years. The whole process is regulated by the BPS (NB in 2009 the Health Professions Council will become the regulator), who in addition to setting the framework for ethical practise, have a discipline and complaints procedure that is crucially administered by independent non-psychologists. Such a system ensures that individuals are not only appropriately qualified, but are publicly accountable for their actions. Similar training is required to specialise in the other professional areas of psychology (health psychology, educational psychology, counselling psychology, forensic psychology, occupational psychology and sports psychology) with a minimum of six years training. An individual presenting themselves as being a 'Master Practitioner' in NLP is giving the impression of having acquired a high level of training, yet it is an unregulated 'discipline'. A code of conduct has been set out by the Association for Neuro-linguistic Processing, yet worryingly it contains the following disclaimer:

> *The Code does not assume that individual Members possess particular levels of skill in any specific area; it is important, therefore, that users of Members' services do satisfy themselves that the person they are working with is appropriately skilled*
>
> Association for Neuro-linguistic Processing, 2007

To put the onus of responsibility onto the individual seeking the service is scandalous. What basis do they have to satisfy themselves that an individual is qualified in the face of impressive sounding claims and 'qualifications'?

Personal testimonies are not difficult to come by in relation to the efficacy of NLP. A *Google* search will again yield a wealth of personal testimonies and endorsements of the powers of NLP. Given that a similar search will equally yield personal testimony in favour of many other dubious techniques such as homeopathy, astrology or even trepanning, such testimonies are of little worth. Carl Sagan (Sagan and Druyan, 1996) suggested a number of ways of detecting a fallacious argument (now known as 'Sagan's Baloney Detection Kit'), the most pertinent being wherever possible there must be independent confirmation of the facts. Such independent confirmation of the claims of NLP does not exist.

Conclusion

One could argue that to refute NLP is to engage in argumentum ad ignorantiam. However, NLP singularly fails to stand up to scrutiny concerning its face validity and its construct validity. NLP's predictive validity is more difficult to ascertain as proponents of the 'discipline' engage in academic goal-post shifting and arguments about its 'constructivist' nature. Claims about what NLP can do persist though and as such it is analogous to Bertrand Russell's celestial teapot with the burden of proof to support its theoretical foundations and efficacy as an intervention lying with its proponents.

The physicist Richard Feynman coined the term 'cargo cult science' (Feynman, 1985). In the South Seas there is a cargo cult of people who, during war-time, observed lots of airplanes carrying goods. They wanted the planes to continue to land after the war ended and so set about reconstructing airports with fires alongside the runway, a wooden hut for the air traffic controller to sit in and antennas made of bamboo. Despite the form of the airport being right, the planes didn't land! Feynman adapted the idiom of 'cargo cult science' to refer to research that follows all the form and pretence of scientific investigation yet is missing something essential.

To adapt this term one more time, NLP masquerades as a legitimate form of psychotherapy, makes unsubstantiated claims about how humans think and behave, purports to encourage research in a vain attempt to gain credibility, yet fails to provide evidence that it actually works. Neuro-linguistic programming is cargo cult psychology.

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