Towards a New NLP

Mohammed Tikrity

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Introduction

NLP astonishes thousands of people with big success stories and amazing results for those who use it. NLP improves people's communication, decision making, time management, presentation skills, negotiation skills, sales results, team building, coaching and personal success. The Science Digest considers NLP as "the most important synthesis of knowledge about communications to emerge since the'60's".

NLP is taught and practised everywhere over the globe. Even NASA starts using NLP. NLP Comprehensive published an interview with Dr. Alenka Brown Vanhoozer, Director for Advanced Cognitive Technologies by Al Wadleigh under the title "NASA Launches with NLP!" Al Wadleigh said that "*Dr Alenka is taking NLP to the stars… her work involves using NLP to create what she calls Adaptive Human-System Integration Technologies for various applications: aerospace (commercial, military, NASA), brain mapping, behaviour profiling, modelling of learning and decision-making strategies and more.*"

But despite all this success NLP has received serious criticism from many researchers, psychologists and writers.

There is no doubt, that NLP has been misunderstood, misused and abused. So, where does NLP stands and where is it going?

The Strength of NLP is its weakness at the same time. NLP relies on subjective experience and follows a pragmatic philosophy. In other word there is a distance between NLP and science. This distance makes NLP a "soft" discipline which leads into questioning the reliability of NLP.

On the other hand, if NLP follows the "scientific methods" it will loose its power. It seems that the only escape for NLP is to consider it as an art rather than science, and an engineering practices rather than theoretical investigation. Magic is one ingredient of art. No art without an element of magic.

NLP relates to many knowledge disciplines. It takes from Neurology, Psychology, Physiology, Linguistic, biology, cybernetics and system theory. NLP takes these principles, theories, models and techniques and apply them elegantly in real time. Therefore NLP is not a scientific research endeavour but an application of the findings of scientific research in many fields.

Wikipedia encyclopedia says that "*NLP clearly falls under the broadest heading of psychology, and perhaps most closely relates to cognitive psychology. But while Grinder had an undergraduate degree in psychology,*"

NLP began quite outside the academic mainstream, and it remains largely divorced from mainstream academic psychology to this day, even though many NLP practitioners do have traditional credentials in psychology and psychiatry."

Wikipedia adds: ..."*Perhaps the overriding principle is utilitarianism. NLP is not so much about discovering what is **true** as in discovering what is **useful**, what works in any given situation. But beyond mere utility, NLP aims for efficiency and elegance. If one technique can effect a desired change in an hour, then the search is on for another technique that can accomplish the same change in ten minutes."*

Objective

The objective of this article proposes two main assumptions:

a) NLP should be viewed as more an art than a science.

b) NLP can and should benefit more from other fields and practises. One such field is the Control Systems Theory.

The first section of this report reviews some criticism of NLP. The second section shows how NLP is NOT a science. And the third section represents one of the most useful fields that NLP can benefit from: the control system theory.

Section 1: NLP Critics

There is a growing body of empirical literature on Neurolinguistic Programming (NLP). A thorough review of the literature presented conflicting and controversial research findings regarding the NLP methodology.

Dr. Daniele Kammer and his co-worker's at the University of Bielefeld in Germany compiled and edited NLP-RDB (NLP Research Data Base) which published by Dr. Franz-Josef Hücker, Berlin - Germany in December 1997. NLP-RDB details 180 academic and scientific research programmes focusing on various aspects of NLP [1].

Research findings have been published across many different journals, periodicals and academic papers, including: *The Journal of Counselling Psychology, The British Journal of Clinical Psychology, The International Journal of Clinical and Experimental Hypnosis, and The American Mental Health Counsellors Association Journal.*

In a provocative article published in the British magazine, "Training Journal" [2], Garry Platt mentioned some findings on the areas of NLP that, for him, carry little or no credibility. The results are as follows:

Topic	No of studies	Had little to no effect	%
Predicates	32	21	66%
Representational systems	36	29	81%
Eye-accessing cues	35	27	77%
Phobia cures	9	4	44%

Robert Todd Carol of the Skeptics Dictionary website states [3]:

It seems that NLP develops models which can't be verified, from which it develops techniques which may have nothing to do with either the models or the sources of the models. NLP makes claims about thinking and perception which do not seem to be supported by neuroscience. This is not to say that the techniques won't work. They may work and work quite well, but there is no way to know whether or not the claims behind their origin are valid. Perhaps it doesn't matter. NLP itself proclaims that it is pragmatic in its approach: what matters is whether or not it works. However, how do you measure the claim 'NLP works'? I don't know and I don't think NLPers know, either. Anecdotes and testimonials seem to be the main measuring devices. Unfortunately, such a measurement may reveal only how well the trainers teach their clients to persuade others to enroll in more training sessions.

Robert Todd Carol, Skeptics Dictionary. Visit (website) http://skepdic.com

Dylan Morgan published an article titled "Scientific Assessment of NLP" in the Journal of the National Council for Psychotherapy & Hypnotherapy Register, Spring 1993.

Morgan pointed out that Dr. Heap, Principal Clinical Psychologist for Sheffield Health Authority and lecturer at Sheffield University, did a very careful and thorough study of all the research that has been done into certain claims of NLP, citing 70 papers in all [4].

Dr. Heap, who is also Secretary of the British Society of Experimental and Clinical Hypnosis, ploughed through the literature to summarise the results of many workers.

Although the results have been mixed, the hypothesis that a person has a preferred representational system (PRS) which is observed in the choice of words has been found <u>not</u> to hold by the great majority of researchers. The hypothesis that a person has a PRS which can be determined by the direction of eye movements found even less support.

The third hypothesis which was looked at is the practical one of whether or not we can improve our relationship with a client by matching the presumed PRS. Again the answer is a resounding NO. There is no evidence that focusing on the presumed modality adds anything to the widely recognised finding that matching general characteristics of verbal and nonverbal communication may facilitate rapport. It is interesting that one researcher, Cody, found that therapists matching their clients' language were rated as <u>less</u> trustworthy and <u>less</u> effective!

Dr. Heap comes to the following conclusion:

'The present author is satisfied that the assertions of NLP writers concerning the 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."

And he ends:

'This verdict on NLP is .... an interim one. Einsprech and Forman 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."

Dr Kelton Rhoads, adjunct professor at USC's Psychology Department said "*I'm sometimes asked about NLP, since it also makes statements about how persuasion occurs. I've met some people who believe that NLP is very effective, and others who think that NLP doesn't live up to its claims.*" [5]

Dr Rhoads added that "*Social Psychology is a science; it relies in empiricism, research, the scientific method, data collection, and statistical analysis in the pursuit of verifiable facts about basic human nature. It is a recognized subdiscipline within psychology that is taught at most universities; its practitioners are largely Ph.D.s who publish in peer-reviewed journals. There is intense competition among researchers for journal space, so the quality of research in the top journals is high--even though few people have the training to follow what the research elite are publishing.*

NLP, on the other hand, is intuitive and philosophical in its approach. NLP borrows heavily from certain psychotherapies, and its origins are associated with the study of magic and trance inducement."

… "*I've been told by a number of NLP practitioners that "NLP theory was never meant to be tested in a laboratory."* Dr Rhoads answer: "*I don't understand that statement. But then, I'm a scientist, and I think theories should be tested.*"

Dr Rhoads reviewed the literature on research on NLP in 1997, here's what he found:

- "Though it claims neuroscience in its pedigree, NLP's outmoded view of the relationship between cognitive style and brain function ultimately boils down to crude analogies. NLP basks in effusive testimonials, but the National Research Council could unearth no hard evidence in its favor, or even a succinct statement of its underlying theory." [6]

-- Beyerstein, BL. (1990). Brainscams: Neuromythologies of the New Age. International Journal of Mental health, 19 (3), 27-36.

- ". . . N.L.P. Theory is not well articulated, its terminology, premises and assumptions are ambiguous or poorly specified. As the analysis in this article has shown, a basic reason for the theory's inadequacies are due to its borrowings from theories that are theoretically antagonistic to each other. . . .

The conclusions from reviewing the literature are that as a theory, it is undeveloped and incoherent and that its techniques offer nothing new." [7]

-- Baddeley, M. (1989). Neurolinguistic programming: The academic verdict so far. Australian Journal of Clinical Hypnotherapy and Hypnosis, 10 (2), 73-81.

• This study compared NLP techniques such as pacing, metaphor, and phonemic devices to two much simpler non-NLP control conditions: a direct-information condition and a placebic information-only condition. No differences in attitudes were found among the conditions, but the non-NLP direct-information control condition demonstrated significantly more persuasion in behavioral measures, resulting in the opposite of what NLP practitioners would predict. [8]

-- Dixon, PN; Parr GD; Yarbrough D; and Rathael M. (1986). Neurolinguistic Programming as a Persuasive Communication Technique. The Journal of Social Psychology, 126(4), 545-550.

Huge intercorrelations (hovering around r=.7) between subject performance in different sensory modes resulted, which is the only possible outcome that wasn't predicted by NLP. [9]

-- Fromme DK & Daniel J (1984). Neurolinguistic Programming Examined. Journal of Counseling Psychology 31 (3) 387-390.

"The basic tenents of NLP have failed to be reliably verified in almost 86% of the controlled studies . . . the inquirer in this field may be forgiven for accepting the conclusion of Elich et al, (1985), 'NLP has achieved something akin to a cult status when it may be nothing more than another psychological fad' (p.625)." [10]

-- Sharpley, C. F. (1987). Research findings on neurolingusitic programming: Nonsupportive data or an untestable theory? Journal of Counseling Psychology, 34 (1), 103-107.

Of course, you'll have to do your own research and make up your own mind about this topic, but perhaps these leads can get you started.

Research Defending Neuro-Linguistic Programming

Many researchers feel that the preferred representational system (PRS) cannot be assessed through the use of NLP techniques, and many question whether the PRS even exists. The founders and proponents of NLP defend their position by suggesting that the effectiveness of the techniques cannot be adequately assessed through traditional experimentation.

Einspruch et al [11] found that Dr Sharpley's review (1984) failed to consider a number of methodological errors. They identified six categories of design and methodological errors contained in the 39 empirical studies of NLP

documents through April 1984. These categories include (a) lack of understanding of the concepts of pattern recognition and inadequate control of context; (b) unfamiliarity with NLP as an approach to therapy; (c) lack of familiarity with the NLP "Meta-Model" of linguistic communication; (d) failure to consider the role of stimulus-response associations; (e) inadequate interviewer training and definitions of rapport; and, (f) logical mistakes. Representative reports reflecting each category are discussed. Suggestions are offered for improving the quality of research on NLP.

Robert W. Norris conducted a study to survey the findings in the areas of "real life" applications and effectiveness by those who have undergone a certified training course. The study pragmatically determines if the use of NLP techniques is perceived to be an effective tool for communication.

Results of this study seem to indicate that usefulness and effectiveness of Neuro-Linguistic Programming is positively perceived by those who have participated in the training, even in the absence of laboratory research documenting NLP's provability. [12]

The researcher determined that the NLP training was perceived to be both useful and effective. This conclusion was drawn because consistently high mean ratings (M = 4.03 or higher) were observed for all Likert-style question items. Also, open-ended question responses indicated an overwhelming positive response to the NLP techniques and training. Not every Neuro-Linguistic Programming technique or intervention received positive response; but as a whole, respondents indicated that the NLP training and methodology was effective, useful, and valuable.

Anne M. Dietrich, University of British Columbia, concluded that V/KD may be a promising treatment for at least some forms of Posttraumatic Disorder. Intrusive symptoms, avoidance behaviors, and interpersonal and occupational functioning improved for many of the participants in the studies reviewed. [13]

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Section 2: NLP and Science

What is NLP?

Wikipedia encyclopaedia defines Neuro-linguistic programming**,** or NLP as "the empirical study of, and modelling of, human excellence. It looks at precisely how we do what we do, and how highly successful individuals do what they do. The purpose is to enable portability and replication of those skills."

Richard Bandler defines NLP as "*the study of the structure of subjective experience.*" [1]

Robert Dilts says that "*NLP is a behavioural science that provides: (1) An Epistemology – A system of knowledge and values. (2) A Methodology – Processes and procedures for applying knowledge and values. (3) A Technology – Tools to aid in the application of knowledge and values. Dilts added that the NLP's purpose is to synthesize together a number of different kinds of scientific theories and models*". [2]

Joseph O'Conor: "*NLP is like the eighteenth camel. It is brought into the situation by a wise man, solves the problem quickly and then disappears as it had never been there.*" [3]

In 1979 Psychology Reviewed the domain of NLP in an article entitled, 'The People Who Read People.' *It surveyed a brand new field within cognitive-behavioral psychology.* [4]

Charlotte Bretto Milliner: "*NLP is a discipline … it makes no commitment to theory, but rather has the status of model – a set of procedures whose usefulness is to be the measure of its worth. … The term model is chosen deliberately and in contrast to the term theory. A model is simply a description of how something works without any commitment regarding why it might be that way. A theory is taxed with the task of finding justifications of why various models seem to fit reality. Milliner added "We are modellers and we ask that you evaluate this work as a model, ignoring whether it is true or false, correct or incorrect, aesthetically pleasing or not, in favour of discovering whether it works or not, whether it is useful or not.*" [5]

NLP was created by Richard Bandler and John Grinder in the 1970s from modelling several well-known psychotherapists, namely Fritz Perls, Virginia Satir, and Milton Erickson. Bandler, then a student at the University of California at Santa Cruz, and Grinder, then an Assistant Professor of linguistics, were strongly influenced by the mentoring of Gregory Bateson, and they drew their approach from many inspirations such as cybernetics and the General Semantics of Alfred Korzybski.

Wikipedia, the free encyclopedia considers NLP "*as a field of human endeavour originally concerned with empirical study of, and modelling of, human performance and excellence, with the goal of creating transferable*

skill sets, and this remains the core activity of the field to this day. The field has grown in many directions since its beginnings in modelling successful psychotherapists and has found applications in most areas involving human communications, such as education and learning, persuasion, negotiation, sales, leadership, team-building, etc, as well as decision-making, creative processes, health, medicine, and athletic performance.” [6]

Is NLP a Science?

Critics of NLP assert that the majority of methods taught as part of NLP have *not been scientifically verified*. Some even classify NLP as a pseudoscience.

The fact is that NLP is not committed to any central theory or fixed set of models. NLP practitioners are constantly looking for new models, patterns, and techniques that may be more effective than or complementary to existing ones. Novel ideas are encouraged and experimented with. Those not found to be useful (or not as useful) are discarded.

There are natural sciences, which include physics, chemistry, and biology, and there are social sciences, which include sociology, anthropology and economics. Where NLP fits in is a matter of some dispute.

Some claim that NLP has all of the keys to scientific empiricism, because NLP is:

- *objective*, as anyone can do the studies that we do (who performs the study does not influence what is found),

- *systematic*, as the manner in which we collect the evidence for our ideas does not change depending on how we felt at that moment, and

- *repeatable, as the evidence we gather to test our ideas can be repeated.*

Many agree that NLP falls under the broad heading of psychology, and perhaps most closely relates to cognitive psychology. So the question now is whether psychology itself is a science.

Is Psychology a Science?

Psychologists maintain that psychology is a science (what else can they say?).

John Corso, a psychologist and author, asserts in his book - The Experimental Psychology of Sensory Behavior - that “*it is now generally agreed that psychology has succeeded in its quest for a place among the sciences*”. [7]

 “*Sometimes the attempt is made to provide an explicit distinction between scientific areas by dividing the various subject matter fields into the so-called*

natural sciences and social sciences … The phenomena of individual and group behaviour are as much the object of natural science as any other phenomena. ... As a general method, science can encompass this entire range of events" [8]

Corso considers that the critical and distinguishing feature of science is its *general method*. The scientific method, for Corso, consists of five phases:

1. Selection of problem

2. Formulation of a hypothesis

3. Controlled test and data collection

4. Organisation and analysis of data by appropriate statistical technique

5. Evaluation and generalisation of the findings

But regardless what psychologists say many scientists and scholars believe that psychology is NOT a science

Paul Lutus in an article titled "Is Psychology a Science" concluded that "*psychology can make these wild claims, offer these questionable therapies, only because there is no practical likelihood of refutation – no clear criteria to invalidate a claim. This, in turn, is because human psychology is not a science; it is a belief system similar to religion.*" [9]

In the final analysis, the present state of psychology is the best answer to the original inquiry about whether it is scientific, because if human psychology were as grounded in science as many people believe, many of its historical and contemporary assertions would have been falsified by its own theoretical and clinical failures, and it would be either replaced by something more scientifically rigorous, or simply cast aside for now.

Psychology is generally defined as the science of behaviour and mental processes and the application of the resulting findings to the solution of problems. The word thus simultaneously refers to a science (involving the study of the behaviour of humans and animals) and to various interventions (treatments and therapies) in the mental processes and behavioural patterns of people. Psychology differs from sociology, anthropology, economics, and political science, in part, by studying the behaviour of individuals rather than the behaviour of the groups or aggregates themselves.

Both psychology and its related discipline psychiatry (whose practitioners are medical doctors with a specialty in mental health) are criticised by a vocal and well-credentialed people in medical and academic circles. These critics call them pseudo-sciences, arguing that their theories, diagnoses and treatments don't hold up under the rigor of the scientific method and that they are not reproducible; others question the appropriateness of applying the scientific method to the study of the human mind and human behaviour.

What is a scientific method?

The scientific method is the best way yet discovered for winnowing the truth from lies and delusion. The simple scientific method looks something like this:

1. Observe some aspect of the universe.

2. Invent a tentative description, called a *hypothesis* that is consistent with what you have observed.

3. Use the hypothesis to make predictions.

4. Test those predictions by experiments or further observations and modify the hypothesis in the light of your results.

5. Repeat steps 3 and 4 until there are no discrepancies between theory and experiment and/or observation.

When consistency is obtained the hypothesis becomes a *theory* and provides a coherent set of propositions which explain a class of phenomena. A theory is then a framework within which observations are explained and predictions are made.

Karl Popper

Karl Popper, one of the philosophers of science who has had the biggest impact on the practice of science, thinks that *falsificationism* is what distinguishes science from non science, and he uses the examples of the marxist theory of history, psychoanalysis, and Einstein and the Eddington experiment to show this.

"During the summer of 1919 I began to feel more and more dissatisfied with the other three theories Marx's theory of history, Freud's psycho-analysis, and Alfred Adler's so-called 'individual psychology'. I began to feel dubious about their claims to scientific status. I felt that these other three theories, though posing as sciences, had in fact more in common with primitive myths than with science; that they resemble astrology rather than astronomy." [11]

"*I maintain*", asserts Popper, "*there exists no scientific method in any of these three senses (...)*:

1) There is no method for discovering a scientific theory.

2) There is no method for ascertaining the truth of a scientific hypothesis, that is to say, no method of verification.

3) There is no method for ascertaining whether a hypothesis is 'probable', or 'probably true'.

Popper thought that Einstein's theory of gravity was the only one that was really science because it was the only one that was falsifiable.

He thinks that the way to test whether or not a theory is scientific is to ask yourself, "what would it take to make this theory false?" If the answer is nothing, it isn't science. "The criterion of the scientific status of a theory is its falsifiability, or refutability, or testability."

This is the problem of demarcation: drawing a line between science and other ways of knowing.

Demarcation

Therefore, the main demarcation criterion associated with Popper is falsifiability - in order to be scientific, a hypothesis should be falsifiable - it should make predictions that can be tested by observation or experiment. By tested, Popper meant some of its predictions must be such that, at least in principle, the contrary could be observed. This was his primary demarcation criterion and was seen by him as very important.

On this basis Popper criticised the various schools of psychiatric thought because each could accommodate all observations. As a result the ideas did not compete with one another and attempts to distinguish them could not be informative.

The idea is that only models which can, in principle, be falsified are scientific. Popper is saying that, to be meaningful, a scientific theory must deny something. The idea asserts that the actual meaning of a theory lies not in what it asserts about the universe but what it denies.

Popper listed two other criteria besides falsifiability. *Firstly*, a good, new theory should, "proceed from some simple, new, and powerful unifying idea," (Conjectures and Refutations). It should, in principle, be able to unify a body of knowledge that would otherwise be a set of disparate facts. *Secondly*, Popper held that it should pass some tests. A good new theory should make at least one successful prediction not apparent from existing theory.

Popper proposed that the refutability or falsifiability of a theoretical system should be taken as the criterion of demarcation. According to this view, a system is to be considered as scientific only if it makes assertions which may clash with observations, and a system is, in fact, tested by attempts to produce such clashes; that is to say, by attempts to refute it. Thus testability is the same as refutability, and can be therefore like wise be taken as a criterion of demarcation. [10]

Science and Art

Science is literally knowledge, but more usually denotes a systematic and orderly arrangement of knowledge. In a more distinctive sense, science embraces those branches of knowledge of which the subject-matter is either ultimate principles, or facts as explained by principles or laws thus arranged in natural order.

Webster dictionary defines art as follows:

1) skill acquired by experience, study, or observation (the art of making friends)

2) a branch of learning

3) an occupation requiring knowledge or skill (the art of organ building)

4) the conscious use of skill and creative imagination especially in the production of aesthetic objects

5) a skilful plan

Synonyms ART, SKILL, CUNNING, ARTIFICE,

CRAFT mean the faculty of executing well what one has devised. Art implies a personal, unanalyzable creative power (the art of choosing the right word).

SKILL stresses technical knowledge and proficiency (the skill of a glassblower).

CUNNING suggests ingenuity and subtlety in devising, inventing, or executing (a mystery plotted with great cunning).

ARTIFICE suggests technical skill especially in imitating things in nature (believed realism in film could be achieved only by artifice.

CRAFT may imply expertness in workmanship.

Britannica definition of art: modes of expression that use skill or imagination in the creation of aesthetic objects, environments, or experiences that can be shared with others.

NLP is an interdisciplinary science that draws on many fields (as psychology, artificial intelligence, linguistics, and philosophy) in dealing with human perception, thinking, and learning.
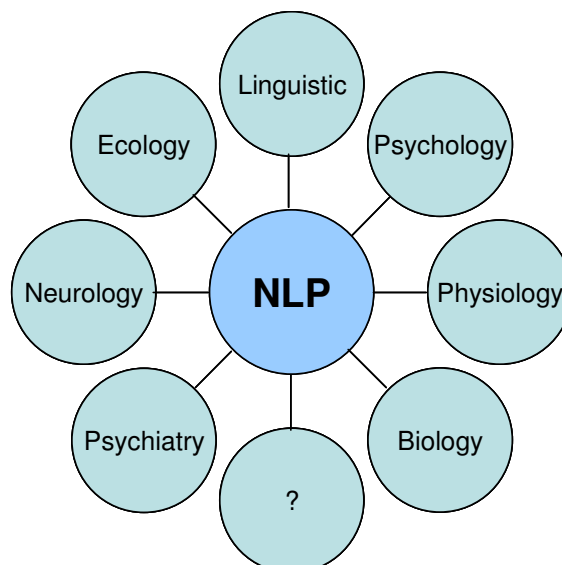
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