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Unveiling Students' Primary Representational System through Predicate Analysis in Neuro-Linguistic Programming for Enhanced Learning Effectiveness

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ABSTRACT

In the 1970s, Richard Bandler and John Grinder established Neuro-Linguistic Programming (NLP). NLP was originally utilized in psychology but has now been applied for educational contexts, especially in English language acquisition. The representational system, a fundamental component of NLP, intricately links to students' sensory modalities in the representation of their experiences. Grinder and Bandler presented five sensory modalities: visual, aural, kinesthetics, olfactory, and gustatory. The most often utilized representational system is called the primary representation. There are four ways of analysing primary representational system: predicate analysis, eye scanning patterns, Satir categories (body posture), and self-report questionnaires. This study provides a qualitative descriptive report of predicate analysis of students' Primary Representational System (PRS), by identifying sensory categories with relative predicate frequencies. Research data was collected through interview. The results showed that fifteen students preferred visual PRS, two students preferred auditory PRS, and eight students preferred kinesthetics PRS. Unveiling students' Primary Representational System (PRS) preferences can inform instructional design and enhance language learning effectiveness.

Keywords: *Primary Representational System (PRS), Predicate Analysis, Neuro-Linguistic Programming (NLP*), *Learning Effectiveness*

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INTRODUCTION

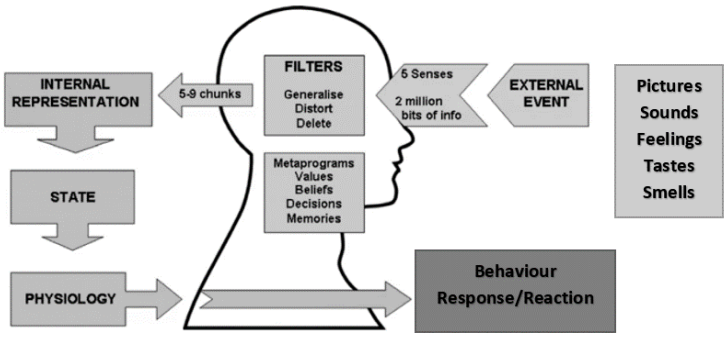
Neuro-Linguistic Programming (NLP) examines how the brain produces language and communication by studying the relationship between brain processes and activities, as well as the role of the brain in enabling people to speak and communicate. Hedayat et al. (2020) explained that neuro-linguistic programming is an interpersonal communication system developed by John Grinder and Richard Bandler, they claim that neuroglial process (N), language (L), and behaviour pattern learned through experience (P) are interconnected, and human beings can alter them. It is possible to alter someone to reach their desired goals in life.

More specifically, according to Revell & Norman (1997), the neuro section focuses on how humans' five senses (sight, hearing, smell, taste, and touch) perceive the world and how neurological systems use those senses to reflect it in their minds. NLP's linguistic component examines how people language both influences and reflects how they perceive the world.

People use language in thought as well as in speech to represent the world to their selves and to embody their beliefs about the world and about life. In order to unleash their potential and achieve the levels of success they previously only imagined, the programming components of NLP focus on teaching ourselves to think, speak, and behave in new, constructive ways.

The diagram below illustrates how the human mind processes interactions. This model is called the NLP Communication Model or Human Model of the World. The NLP Communication Model is responsible for determining how a person process all of the information that comes from the outside world.

Diagram 1.
NLP communication Model



Source: *Adapted from The Tad James co: NLP Coaching*

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Human neurology is responsible for filtering and controlling the information that they get from the outside world once it has been received through the sensory input channels (Visual, Auditory, Kinesthetics, olfactory, and gustatory). The following processes that filter perception cause someone to delete, distort, and generalize the information that they have gathered about the event, while maintain their perspective on it.

The internal representation of an event that is taking place right now will be determined by these filters. A particular state is created within someone as a result of their internal representation, which also results in a particular physiology. As a result of the circumstances in which we find their selves, their actions will be determined.

Internal representation is a representational system that pertains to the content of an individual's cognition or the validation of information, encompassing pictures, sounds, feelings, taste, and smells. According to the NLP premise, the map is not the territory. That is why, as a result, we have several different ways of representing our experience of the world. Representational system are the different ways that someone represents or store information in their mind, this occurs via five sensory modalities as explained at the beginning of this article.

The statement "He showed me some vivid images" exemplifies how a person expresses his or her language experience. The ability to express experience with words in each other representational system, such as in a digital system, reveals one of the most useful aspects of language representational systems: their universality. That is, by employing language representational system, a person can present their experiences with any other representational system. (Grinder & Richard, 1976).

Any element related to how hearing is perceived or used is considered to be in the auditory mode. The kinesthetics mode encompasses all bodily and emotional perceptions and responses. The visual mode encompasses all aspects pertaining to vision or the sense of sight. The primary representational system, or the relative predicate frequencies, is the most valued one.

Four methods can be used to analyse primary representational systems, including predicate analysis, eye movement patterns, body language categories, and self-reporting questionnaires. Dowd & Pety, (1982) emphasized that matching predicates is a valuable method for identifying primary representational systems, despite the availability of other approaches.

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1. Identify Primary Representational System

Identifying the preferred representational system of an individual is one of the most important aspects of personal development. It will help clarify what the individual intends to convey, as each sensory representational system is linked to distinct characteristics and preferences(Birknerova et al., 2022).

In pedagogical context, by examining the primary representational system, it can help the instructor to evaluate and understand how students process the information and interpret the meaning. Particular The primary representational system of the student is associated with specific characteristic tendencies. The preference for utilizing each representational system may be associated with various generalizations of characteristics.

Amirhosseini et al. (2018) point out that understanding students' preferred representational system can provide significant insights into their learning behaviour and characteristics. Additionally, emotional connection and a stronger bond with the topic and the instructor can all be achieved by presenting the information via students' preferred system (Fekete, 2010). Indirectly, the effectiveness of learning can be achieved.

Experts in NLP have identified that a primary indicator of reliance on particular sensory modalities is the language employed. This is due to the existence of several sensory terms in language, referred to as 'predicates,' which allow for the identification of the corresponding sensory modality through the recognition of these predicates (Amirhosseini & Wall, 2022). For instance, individuals often utilize visual language when seeing or depicting something visually. They express phrases such as "I see what you mean" or "I get the picture" or "I require an alternative viewpoint on that matter." Auditory language, such as "That doesn't sound right", "I hear what you're saying but...", and "His name rings a bell". Additionally, there exists olfactory and gustatory language: "That smells a bit fishy," "I don't like the taste of this," and "It has left a bad taste in my mouth". In NLP, these sensory-specific ideas are commonly termed predicates (Revell & Norman, 1997: 42).

Revell & Norman (1997: 45-46) offered a set of predicates for instructors to use with their students, which are outlined in table one. To effectively utilize these predicates, students need to be familiarized with the classification first, particularly for individuals who do not speak English as their native language. Subsequently, this predicate classification can be applied to the primary representational system that they utilized when discussing their experiences.

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Table 1.
Sensory Predicates

Predicates	Neutral	Visual	Auditory	Kinesthetics	Olfactory/ Gustatory
Nouns	Thing, experience, thought, knowledge, understanding, description, representation, memory, belief	Pictures, image, point of view, viewpoint, perspective, focus, insight, horizon, scene, sight, glimpse.	Sound, tune, voice, volume, discord, harmony, echo, accent	Feeling, sensation, stress*, pressure, temperature, gut reaction, emotion, wight, attitude, posture	Smell, aroma, Perfume, Odour, whiff, flavour, taste
Verbs	Think, believe, understand, remember, know, experience, describe, represent, explain, agree, disagree, concentrate, comprehend, consider	See, look at, show, picture, focus, illustrate, visualise, reflect, dazzle, glace, at perceive, gaze	Hear, listen to, tell, say, speak, talk, shout, stress*, harmonize, tune in, amplify, ring, smashing	Feel, touch, connect, move, bear, support, grab, hold, string, grasp, fit, catch	Sniff, breathe in, stink, savour
Adjectives	Great, wonderful, excellent, ok, easy	Blinded, blank, hazy, blurred, revealing, bright, graphic, short-sighted, brilliant, clear*, lucid opaque	Deaf, dumfounded, out of tune, off key, flat, sharp, speechless, loud, clear*, smashing*	Closed, stunned, heavy, hard, tangible, cold, hot, cool, knocked out, smashing*, sensational, comfortable, uncomfortable.	Fishy, stale, pungent, sour, sweet, bitter, acid, smelly, tasty, delicious

Source: *In your hand: NLP in ELT Revell and Norman (1997: 43-44)*

*****_Indicates words which appear in more than one representational system_

Students can use predicates to create a map of their world when they use the sentence. Nevertheless, Grinder & Bandler (1976:11) note that certain predicates can be ambiguous in relation to representational systems. For example, the predicate 'clear' might imply either a visual or auditory representation, depending on the context. To clarify, the instructor can ask students what they would need to do to verify the description provided by the predicate.

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Primary representation system analysis has been the subject of a number of prior research. Amirhosseini & Wall, (2022) who discovered the methodology outlined that serves as a valuable tool for NLP practitioners and psychologists in identifying an individual's preferred representational system and associated cognitive processes.

The results of the study indicate advantages for organizational leaders, as they can improve communication and performance processes. Yapko (1981) emphasize that by understanding and applying effective communication patterns through Primary Representational System (PRS) identification, physiotherapist or even instructor can enhance the quality of their work through optimizing communication. Birknerova et al. (2022) conducted a study to validate the original PSSR-VAK approach, and found that, one sensory representational system tends to dominate.

Prior research has proven the advantages of analysing Primary Representational Systems (PRS), although its application in education, particularly in language learning, remains limited. Therefore, this study intends to analyse the PRS of speaking class students throughout the 2023/2024 academic year at Kyai Haji Saifuddin Zuhri State Islamic University, Purwokerto, Central Java.

METHODOLOGY

This research utilized a descriptive qualitative method. According to Creswell & Creswell (2023), a descriptive method in qualitative research involves an analytical approach where the researcher stays close to the data, utilizing limited frameworks and interpretations to explain the data and cataloguing information themes. I collected the research data by conducting interviews with 25 participants who enrolled in a speaking course. The participants were students of Class TBI/C (English Department) who registered in the 2023/2024 academic year at Kyai Haji Saifuddin Zuhri State Islamic University, Purwokerto, Central Java.

The interview sessions were adapted from the procedure offered by (DORN, 1983). First, participants were introduced to a relaxation exercise. The relaxation exercise was divided into two stages: first, taking deep breaths in a relaxed manner; second, muscle relaxation with simple movements. Afterward, the participants were asked to sit comfortably. The researcher explained the purpose of the interview was to uncover their experiences celebrating *Eid al-Fitr* with their families. A familiar instrument playing *Eid al-Fitr* theme songs was used to evoke their memories

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After completing and documenting the interviews, the researcher proceeded with further data analysis steps. First, the sentences produced by the participants were divided into several parts. Second, predicates were identified from each sentence fragment. Third, sensory inputs (visual, auditory, kinesthetics, and olfactory/gustatory) were used to determine the detection findings. Finally, the relative frequencies of predicates for each sensory input were categorized into the primary representational system owned by the students.

FINDINGS AND DISCUSSION

The results of the PRS data analysis performed by the students are represented in Table 2 below.

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Table 2.
The Result of Data Analysis

NO	Students' Initial	Predicates				PRS
		Visual	Auditory	Kinesthetics	Olfactory /Gustatory	
1	ASF	see (v), see (v) look at (v)	stress (v)	feel (v), touch (v),	taste (n), bitter (adj)	Visual
2	NAM	see (v), see (v)	-	emotion (n), feel (v), connect (v), touch (v)	taste (n)	Kinesthetics
3	JH	see (v), look at (v), bright (v), Perspective (n)	loud (adj), Say (n), Stress (v)	fit (v)	delicious (adj), taste (n)	Visuals
4	SJN	see (v), see (v)	-	feel (v), sensational (adj), uncomfortable (Adj)	-	Kinesthetics
5	DNR	see (v), see (v), see (v), look at (v)	tell (v)	-	smell (n), taste (n), delicious (adj)	Visual
6	MAN	see (v) focus (n)	listen to (n)	feel (v), Touch (v), hold (n)	taste (n), delicious (adj)	Kinesthetics
7	SNA	see (v), see (v), pictures (n)	hear (v)	feel (v)	taste (n), smell (n)	Visual

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8.	FHN	see (v), look at (v), show (v)	bright (adj)	fell (v)	taste (n)	Visual
9.	DFR	see (v)	hear (v), listen to (v), look at (v), say (n), talk (v), sound (n)	feel (v)	smell (n), delicious (adj), uncomfortable (adj),	Auditory
10.	SR	see (v),	hear (v), tell (v)	temperature (n), hard (adj), hot (adj), feel (v), Fit (v)	delicious (adj)	Kinaesthetic
11.	ES	see (v), see (v), see (v), look at (v)	hear (v)	feel (v)	smell (n), delicious (adj)	Visual
12	AS	see (v), see (v)	hear (v)	touch (v), hot (adj), uncomfortable (adj), emotion (n)	smell (n), delicious (adj), smell (n)	Kinesthetics
13	SW	see (v), see (v), see (v), look at (v)	hear (v), voice (n)	touch (v)	smell (n), delicious (adj), taste (n)	Visual
14	DH	see (v), see (v), show (b)	hear (v)	feel (v), emotion (n)	-	Visual
15	ZF	see (v)	hear (v), hear (v)	feel (v), feel (v), uncomfortable (adj), (adj), cool (adj), touch (n)	-	Kinaesthetic
16	LZH	see (v), look at (n), see (v), see (v)	tell (v)	feel (v)	-	Visual
17	ANZ	see (v), look at (v), show (v), look at (v)	hear (v)	feel (v), hold (v)	-	Visual
18	DA	see (v), look at (n)	hear (v), say (v)	touch (v), feeling (n), uncomfortable (adj), hold (v), attitude (n)	delicious (adj), taste (n)	Kinesthetics
19	NI	see (v), see (v), see (v)	hear (v)	feel (v)	delicious (adj)	Visual

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20	DN	see (v), look at (n), see (v)	hear (v), sound (n)	feel (v)	-	Visual
21	DYF	see (v), see (v), show (v), look at (v)	hear (v)	feel (v)	smell (n), aroma (n)	Visual
22	NA	see (v), see (v), picture (v), see (v),	hear (v), voice (v), speak (v)	touch (v)	smell (n), delicious (adj), taste (n)	Visual
23		see (v), see (v), picture (n), look at (n), view point (n), see (v)	-	hot (adj)	delicious (adj),	Visual
24	ZA	see (v), see (v), look at (n)	hear (v), hear (v), listen to (v), tell (v), talk (v), speechless (adj), voice (n)	fell (v)	smelly (adj)	Auditory
25	AAI	see (v), see (v),	voice (n), hear (v),	feel (v), feel (v), emotion (n) touch (v), comfortable (adj), hard (v), talk (v)	delicious (adj), smell (n)	Kinesthetics

The data in the table 2 indicates that TBI. II/C students predominantly preferred visual representation, with fifteen students indicating this preference, eight students demonstrating kinesthetics representation, and two students demonstrating auditory representation.

Representational systems are constructed from informational chunks of experience generated by different sensory channels, including visual, auditory, kinesthetics, and olfactory/gustatory. Sensory experiences are the primary focus of an individual's awareness in their normal state. The words they use to describe their experiences indicate which sensory channel they are consciously using.

It is important to emphasize that the objective of this research is to ascertain the primary representational system that students

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acquire through sensory input in the form of visual, auditory, kinesthetics, and olfactory/gustatory chunks of information. The research findings indicate that students tend to narrate their experiences using different representational systems.

Therefore, in order to determine students' tendencies towards a particular representational system, as described by Grinder & Bandler (1976:15), the instructor should consciously select predicates that align with the students' own predicates (the instructor may use the examples listed in adjacent columns to guide the students in their specific representational system). It is implied that as instructors, we should delve deeper into the topic by asking students what they would have to do verify the description given by the predicates and their phrases. Additionally, the instructor will establish more direct and clearer communication with the students if they implement this technique.

The outcomes of this study were significantly impacted by a number of obstacles encountered during the interviews. One of them was that some students made limited use of vocabulary (predicate selection provided) that accurately described what they wanted to convey based on their internal state. This obstacle significantly affects the determination of the primary representation system, which is identified through predicates used.

Therefore, it is essential to thoroughly explain the usage of words associated with particular sensory channels as a first step. If this concept is applied effectively, it will facilitate instructors in designing learning instruction by considering the students' information acquisition processing characteristics, especially in EFL learning. Language teaching also can be more effective with the integration of NLP principles (Richards & Rodgers, 2001). NLP techniques focus on experience, skill, and tacit knowledge; if implemented well and aligned with students' preferred learning styles, they may learn more easily, quickly, and naturally (Kong & Farrell, 2012).

CONCLUSSION

The acquisition of information that students possess must be understood before the learning process takes place. By analysing PRS, instructors can help students recall information conveyed during classroom learning, and assist them in matching students' preferred ways of learning. Certainly, the results will enhance the effectiveness of learning and inform the instructional design.

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The recommendations for further investigation are, first, research on representational systems is still lacking; therefore, similar research using another method, such as eye-scanning patterns, Satir categories (body posture), and self-report questionnaires, can be carried out to add information about PRS. Second, many subjects characterize their conditions with inadequate use of the predicates offered. To achieve the best results, the obstacle must be highlighted further.

REFERENCES

Amirhosseini, M. H., Kazemian, H. B., Ouazzane, K., & Chandler, C. (2018). Natural Language Processing approach to NLP Meta model automation. *Proceedings of the International Joint Conference on Neural Networks*, *2018-July*, 186–193. https://doi.org/10.1109/IJCNN.2018.8489609

Amirhosseini, M. H., & Wall, J. (2022). A Machine Learning Approach to Identify the Preferred Representational System of a Person. *Multi Modal and Interaction*, *6*.

Birknerova, Z., Misko, D., Ondrijova, I., Tomkova, A., Cema, V., & Cigarska Nicole, B. (2022). IDENTIFICATION OF PREFERRED REPRESENTATIONAL SENSORY SYSTEM IN NEUROLINGUISTIC PROGRAMMING. *Marketing and Management of Innovations*, *3*, 114–124.

Creswell, J. W., & Creswell, J. . (2023). *Research Desing: Qualitative, Quantitative, and Mixed Method Approach* (6th ed.). SAGE Publications Inc.

DORN, F. J. (1983). Assessing Primary Representational System (PRS) Preference for Neurolinguistic Programming (NLP) Using Three Methods. *Counselor Education and Supervision*, *23*(2), 149–156. https://doi.org/10.1002/j.1556-6978.1983.tb00599.x

Dowd, E. T., & Pety, J. (1982). Effect of conselor predicate mathing on preceived social influence and client satisfaction. *Journal of Counseling Psychology*, *29*(2), 206–209.

Fekete, T. (2010). Representational systems. *Minds and Machines*, *20*(1), 69–101. https://doi.org/10.1007/s11023-009-9166-2

Grinder, J., & Richard, B. (1976). The Structure of Magic, II: A Book about Communication and Change. In *Family Process* (Vol. 16,

p-ISSN: 2579-7549
e-ISSN: 2579-7263

Issue 1). Sciwncw abd Behaviour book Inc. https://doi.org/10.1111/j.1545-5300.1977.129_4.x

Hedayat, N., Raissi, R., & Asl, S. A. (2020). Neuro-linguistic programming and its implications for english language learners and teachers. *Theory and Practice in Language Studies*, *10*(9), 1141–1147. https://doi.org/10.17507/tpls.1009.19

Kong, E., & Farrell, M. (2012). Facilitating knowledge and learning capabilities through neuro-linguistic programming. *International Journal of Learning*, *18*(3), 253–266. https://doi.org/10.18848/1447-9494/cgp/v18i03/47540

Revell, J., & Norman, S. (1997). *In Your Hands NLP in ELT* (1st ed.). Safira press.

Richards, J. C., & Rodgers, T. S. (2001). *Approaches and Methods in Language Teaching*. Cambridge University Press.

Yapko, M. D. (1981). The Effect of Matching Primary Representational System Predicates on Hypnotic Relaxation. *American Journal of Clinical Hypnosis*, *23*(3), 169–175. https://doi.org/10.1080/00029157.1981.10403262