

# Exploring Hypnotic Trance to Generate a Newer Framework for Psychotherapy

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## Abstract

This review paper focuses on developing a newer argument to emphasize the use of linguistic principles and theories about thought in hypnotherapy. The authors assume hypnosis as a form of focused state of relaxation effective to alleviate psychological and physiological pain. Further, hypnosis is viewed as a technique to help alleviate discomfort associated with psychological disturbance. To further conduct exploratory research in the future, the present paper elaborates authors' comprehension of hypnosis. This is further supplemented with the use of relational frame theory to propose a newer framework for psychotherapy. This paper will be of significance as it will provide the required literature support to consider hypnotherapy as a mainstream approach to assist clients to heal and recover from psychological disturbance. Future studies based on the developed argument will continue to demonstrate hypnotherapy's effectiveness in both medicine and psychology.

**Keywords:** Hypnotherapy, Focused-State of Relaxation, Psychological Disturbance, Altered-State of Consciousness

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## Introduction

Hypnosis has been a major source of discussions that often provoke curiosity and enigma. Clinical work by psychiatrist Milton Erickson has opened the eyes of clinicians to view the importance of hypnosis as a form of therapy to address various forms of neuroses and psychological disturbance. Further, careful use of logical sentences along with client-centered metaphors could bring profound changes in clients (Grinder, Bandler, 1975). Although the concept of hypnotherapy has been widely studied in the western world, the attention hypnotherapy has received to demonstrate its efficacy in the application of clinical cases has not been addressed in Sri Lanka. Further, hypnosis is largely underutilized internationally despite its possible benefits (Yeh, Schnur, Montgomery, 2014). To address this existing lack of appreciation, the following review paper was written. Through this, the authors help generate a newer framework to help clients experience hypnotic trance that appreciates third-wave cognitive-behavioral approaches to psychotherapy.

Hypnosis as a form of psychotherapy contains three major elements: absorption, dissociation, and suggestibility (Green, Lynn, Green, Bradford, Rasekhy, 2020). Absorption as the word suggests is when the client fully embraces slipping into a trance through all their senses as the client continues to be guided by the hypnotherapist. It is the base and foundation of the formation of hypnosis. Thus, a client who has been fully involved during absorption would find dissociation to be easier and experience an effective state of hypnotic trance. Dissociation happens when the client has fully absorbed the description the therapist portrayed and is starting to mentally separate himself from the present and slips into the world the hypnotist shows him/her (Spiegel, 2002). This is almost like a state when a person indulges in reading a book and goes into the world of the book though the reader knows they are sitting on a chair. Similarly, the final element of suggestibility is where the most interesting part of hypnosis takes place. A client fully absorbed into a specific mental state, and has completely dissociated with his/her environment will eventually be ready to accept the suggestions of the hypnotist if his/her subconscious permits. To enable this process, the therapist should successfully pace with the client which includes describing both observable and non-observable experiences of the client using effectively constructed language patterns (Grinder, Bandler 1975). Pacing and leading is a primary principle of Ericksonian hypnotherapy. A successfully paced client, therefore allows the subconscious mind to learn the suggestion as he/she accepts what the therapist delivers to be an accurate description of their experience. In this state, it is the client's subconscious that decides if it wants to accept the suggestions or reject them. As a result of that, hypnotherapists must obtain significant training in the use of language patterns to effectively pace and lead clients.

Although it is widely considered a focused state of relaxation, a substantial number of clinicians also believe this to be an altered state of consciousness. Grinder & Bandler (1975) states that Dr. Milton H. Erickson believed hypnosis as a form of altered state of consciousness. Entering into an altered state of consciousness does not occur at once. It happens stronger and quicker with the number of times the client undergoes hypnosis. In this altered state of consciousness, suggestions are made to the client to help them alleviate unpleasantness associated with identified undesired behaviors. Suggestions ideally should result through a clear psychotherapeutic process and should possess the capacity to challenge dysfunctional beliefs and negative thoughts of the client. Since hypnosis can be utilized within the realms of psychotherapy, hypnotherapy has gained some attention over the past years. However, lack of empirical support for hypnotherapy's efficacy still remains a major factor that pushes a lot of clinicians away from the application of hypnosis for clinical

practice. However, there is reasonable support demonstrated how hypnotherapy can be applied to treat a variety of psychological problems such as anxiety, depression, irritable bowel syndrome, pain, psychophysiological conditions, post-traumatic stress disorder, and smoking (Cowen, 2016). Thus, this paper endeavors to address the existing dearth of empirical evidence associated with the clinical application of hypnosis by developing an inductive argument that can later be tested through scientific investigation.

A study by Kosslyn, Thompson, Constantini-Ferrando, Alpert, & Spiegel (2000) provides critical insight into the structural and functional changes the brain undergoes while individuals are under hypnotic trance. In this experiment, a group of highly hypnotizable individuals was chosen and they were given black and white images to view. Followed by this, they were guided into a trance and were instructed to imagine the same black and white image with color. It was noted that during this deliberate imagery under a trance state, the activated brain regions are similar to the brain regions that get activated when a person views colored images in non-hypnotic real-life situations. This specific finding is useful to further comprehend the positive effect guided imagery could bring to a person who may experience physiological or psychological pain if imagery takes place under hypnotic trance. Further, research has also documented changes in the brain through electro-encephalogram (EEG) which displays the involvement of the frontal and anterior cingulate structures which has implications on inducing hypnotic analgesia (Gruzelier, 2006). Moreover, as per Bandler & Grinder (1975) to activate the non-dominant hemisphere in the human brain, visualizations are crucial and it also makes the process of reaching the unconscious mind of the client easier. This specific technique is called hypnotic imagery which is known to bring positive and transformative effects on clients (Spiegel, 2003).

Similar to the scientific evidence related to hypnotic trance, the present paper strives to further comprehend subjective experiences individuals undergo to generate recommendations for the effective application of hypnotherapy to assist individuals with psychological disturbance. Through this, the authors encourage clinicians to consider hypnotherapy along with conventional approaches such as cognitive behavioral therapy when assisting clients with neuroses. Thus, the proceeding literature review will provide an effective argument comprised of four unique principles that can readily be incorporated into hypnotherapy to enhance the efficacy of treatments in alleviating psychological disturbance.

### **Literature Review**

This paper is based on the authors' understanding of why hypnotherapy is effective in treating psychological disturbance, psychologically derived pain, and unpleasantness in multiple clients. Utilizing the "language of thought hypothesis" (LOTH) and theories of imagery, the author introduces how hypnotherapy is incorporated within a cognitive-behavioral framework. Prior to understanding the proposed novel approach, the following table succinctly summarizes the argument utilized by the author.

Each premise in the proceeding table is an argument itself. Once each premise is added, the true purpose of the concept author strives to deliver becomes clear. To further comprehend the above-mentioned argument, each premise is listed and elaborated in the later paragraphs.

**Table 1***Proposed Framework for Psychotherapy that Utilizes Clinical Hypnosis*

Argument Element	Description
Premise 1	Hypnosis is a focused state of relaxation which utilizes the concept of imagery which activates deeper representations in the long-term memory and retinotopic areas of the visual cortex.
Premise 2	Thoughts results due to a computational process facilitated by an independent linguistic system.
Premise 3	Individual experiences affect linguistic processes, which precede thoughts, and may amend one's interpretation of an event.
Premise 4	Using cognitive-behavioral strategies, under hypnosis, the language a person uses could be used to challenge troubling mental representations. Further, language can be utilized to elicit psychotherapeutically beneficial imagery.
Conclusion	Even though, the imagery argument of thoughts and LOTH are competing positions, both theories can be applied in hypnotherapy even without a person consciously realizing its usage. Thus, the positive change in behavior could result as a product of the manipulation of the thought process which involves language and imagery.

**Premise 1:**

Hypnosis is a focused state of relaxation which utilizes the concept of imagery which activates deeper representations in the long-term memory and retinotopic areas of the visual cortex.

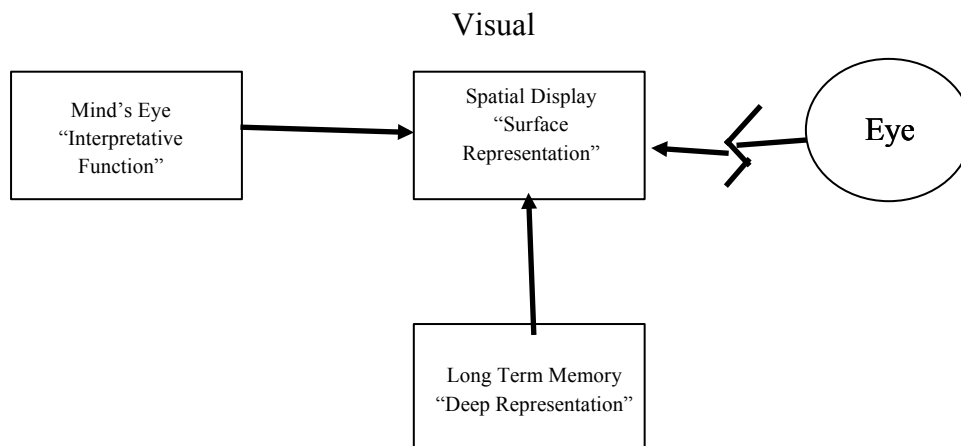
Hypnosis is a focused state of relaxation. Calming effects can be delivered in hypnosis, and often imagery is coupled to make clients achieve the best outcomes (Gruzelier, 2002). Guided imagery, Autogenics, and other forms of relaxation therapy also deliver this. However, considering the author's reliance on imagery as a formal method of eliciting behavioral change in clients under hypnosis, one could question the validity of using imagery to transform thoughts and thinking. Although there is proof that imagery can have a real effect on the human brain, imagery's ability to impact our perception is dubious. Thus, one has to think of hypnosis as a process that goes beyond just imagery. For this, the author proposes two steps: 1). Understanding theory behind imagery, and 2). Effects of hypnotic imagery in a controlled setting. For this purpose, Kosslyn's quasi-pictorial theory of imagery is utilized (Kosslyn, Schwartz, 1977).

Imagery can be elicited in a person's perceptual processes simply by providing guiding statements that are strongly associated with one's own five senses (i.e., *"imagine how the wind slowly caresses your hair and the salty smell greets your nostrils"*). The more vivid the descriptions, the more effective it is in getting the client to fully invest oneself in the imagery. In the standard practice of guided imagery, therapists are often encouraged to use imagery-laden words. As per Kosslyn and Schwartz (1977), data for such images lies within deep representations (illustrated in figure 1). These mental representations are not readily available in a person's consciousness. Instead, the moment someone hears imagery-laden words, the listener forms a quasi-picture or a surface image (figure 2) using one's own stored information in the long-term memory. This quasi-picture is created on a functional surface named "visual buffer," which is a component of the visual information processing system

where it also analyzes input coming through the eyes. The analyzed data creates an image in the buffer which then comes to a person's conscious awareness and it is further interpreted through the mind's eye function.

**Figure 1**

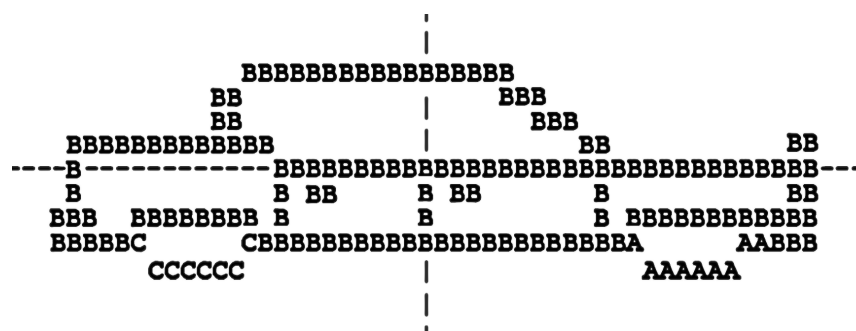
*The quasi-pictorial theory of imagery*



This process is important for hypnotherapy as the description the therapist includes while the client is under a trance can create imagery. Such imagery generated under a hypnotic trance is demonstrated to be perceived by the human brain as real phenomenon (Kosslyn et al. 2000). As per, Kosslyn's theory, such imagery could happen in the absence of language-like structures. In some sense, this idea is well supported in the philosophy of representationalism which states that thinking and thought could occur purely through images and related perceptual experiences (Thompson, 2008). However, if imagery alone can support human perception, then it must be supported through deep representations an individual has stored in one's long-term memory. Although commonly psycholinguistics sees the human perception of visual and spatial features to occur primarily semantically, it could also occur through imagery as well. Thus, the author makes a reasonable attempt to justify the consideration of imagery as a critical component of hypnotherapy as imagery could elicit complex representations that may not be able to be deciphered through language-like structures.

**Figure 2**

*Surface representation (extracted from Kosslyn & Schwartz, 1977)*

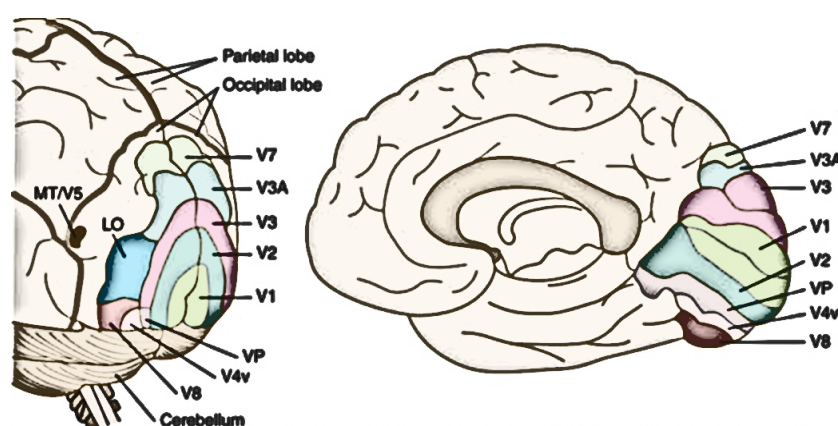


It is also noteworthy to consider that quasi-pictures are not necessarily real pictures. Visual buffer with its communication processes with retinotopic areas of the visual cortex

creates 2-dimensional maps which usually display increased neural activity in V1 under imagery (refer to figure 3). Overall, the descriptions in the preceding lines emphasize the importance of imagery in hypnotherapy. As per representationalism, imagery could elicit the same by activating deeper representations in the long-term memory which activates retinotopic areas of the visual cortex.

**Figure 3**

*Retinotopic areas of the visual cortex*



Activating retinotopic areas through imagery is important as this is a crucial element in getting the client to absorb to the narration of the hypnotherapist. In that sense, understanding the science behind how such imagery is successful in eliciting relaxation responses in individuals who experience hypnosis. Similar to imagery, language manipulation can also be incorporated to further enhance the effectiveness of hypnotherapy. As per the language of thought (LOTH) hypothesis, a thought contains a syntax very similar to that of language. Every language has a combinatorial structure where at one level it has meaningless simple sounds, and once they are combined it forms meaningful words and sentences which forms the second level. It can be displayed as follows (figure 4).

**Figure 4**

*Combinatorial structure in languages*



The combinatorial structure of language can further be assisted by depicting the derivation of a complete sentence. Understanding this helps the hypnotherapist to effectively manipulate language to guide imagery in such a way that the listener can be absorbed effectively to dissociate rapidly in trance. Therefore, the full derivation of a sentence can be further displayed as follows as per the example, there are clearly visible steps and rules.

Given below is an example of a sentence derivation: “The young swimmer accepted the silver medal” (Carroll, 2007).

Phrase structure rule 1: (PS 1),  $S \rightarrow NP + VP$   
 Phrase structure rule 2: (PS 2),  $NP \rightarrow \text{det} + (\text{adj}) + N$   
 Phrase structure rule 3: (PS 3),  $VP \rightarrow V + NP$   
 Phrase structure rule 4: (PS 4),  $N \rightarrow \text{swimmer, medal}$   
 Phrase structure rule 5: (PS 5),  $V \rightarrow \text{accepted}$   
 Phrase structure rule 6: (PS 6),  $\text{adj} \rightarrow \text{young}$   
 Phrase structure rule 7: (PS 7),  $\text{det} \rightarrow \text{the}$

In the above sentence derivation, PS 5 + PS 6 + PS 7 forms lexical insertion rules which help to put words to the already built structure. Similarly, PS 1 + ..... PS 7 forms the full sentence which visibly has a clear sequence. In most sense, a thought also could be similar to the derivation demonstrated above. However, it might contain not just words but representations as well. Thus, thoughts and thinking can be further elaborated through the computational theory of mind (CTM). As per CTM, thoughts occur within linguistic systems which have three unique hypotheses: the language of thought hypothesis (LOTH), causal syntactic theory of mental processes (CSTM), and representational theory of mind (RTM).

**Table 1**

*Three hypotheses of the computational theory of mind (CTM)*

Computational Theory of Mind		
LOTH	CSTM	RTM
Thoughts are made of structures similar to that of language.	Similar to digital information processing in a computer, thoughts follow linguistically structured processes with sensitivity to the structures of representations.	Thoughts could be imagery that may also contain mentalese captions.

Out of the three hypotheses given above, the author picks the language of thought hypothesis (LOTH) to elaborate on the proposed novel approach to psychotherapy. For instance, consider the sentence “*Debby donated a big amount of money to Greenpeace, an organization which protects the environment,*” which contains the following propositions.

**Proposition 1:** Debby donated money to Greenpeace

**Proposition 2:** The amount of money was big

**Proposition 3:** Greenpeace protects the environment

In the above example, similar to that of the structure of a cogent argument, the sentence “Debby donated a big amount of money to Greenpeace, an organization which protects the environment” given above is false in case a proposition is erroneous. Consider figure 4 given below. Each circle in the figure below stands for a proposition as per LOTH making a mentalese representation similar to the structure of that language. Further, the sentence also provides information about person, place, time, social, and discourse deictic elements. Understanding such deictic elements require comprehension of the sentence in relation to the context it appears.

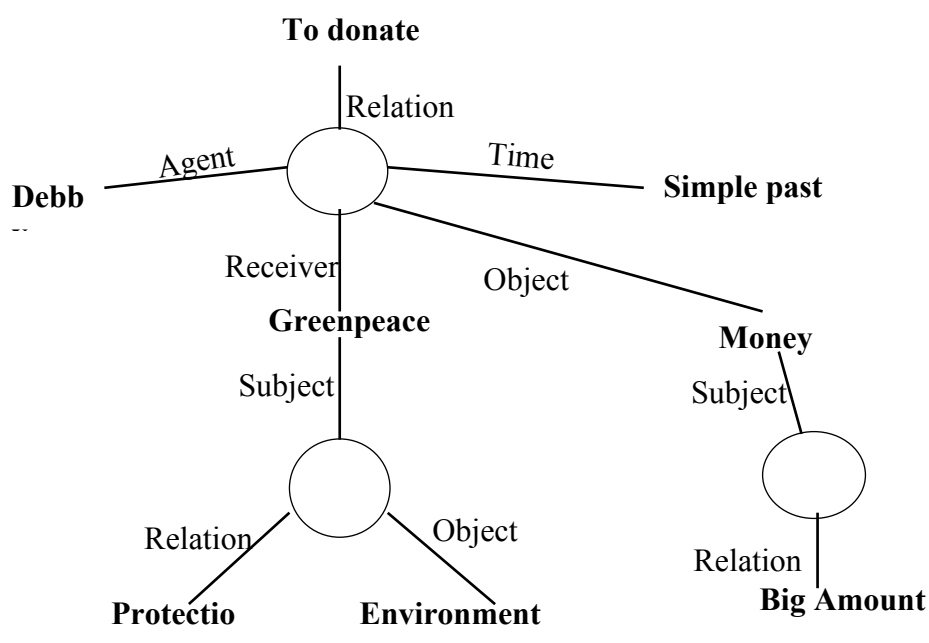
As per figure 4, the person whose mind experiences the sentence “Debbie donated a big amount of money to Greenpeace, an organization which protects the environment” also perceives the same as a thought. Since the thought is made of a clear set of lexical rules within a computational framework, the same person who experiences this thought can also logically compute the below-given thoughts.

**Thought 1:** Debby wants to protect the environment too.

**Thought 2:** Debby has lots of money too.

**Figure 4**

*Propositional structure of the sentence, “Debbie donated a big amount of money to Greenpeace, an organization which protects the environment.”*



If thoughts have structures as presented above, one could also say that metaphors can be used to elicit stronger imagery in one’s perceptual processes to challenge maladaptive thought patterns. Metaphors utilize language, and even if it does not directly address the problem, metaphors can encourage an individual to generate thoughts that would apply to the context the client is in. Thus, the therapist can carefully construct a metaphor that explains a specific context the client is in while implying logical statements for the client to derive at their own will. Such metaphors, in that case, carry no referential index thereby making it easier for the client to impose a self-reference effect in all metaphors he/she listens. The same technique is explained in Ericksonian hypnotherapy (Bandler, Grinder, 1975). In some sense, the author’s attempt to describe the computational process of thoughts further strengthens Ericksonian hypnotherapy and its application.

To understand this further, read the caption given below. This is a script developed by the lead author to help a client let go off of a problem. Given below is a sample paragraph extracted from the script.



*“The advice was taken and choices were made to make oneself relax and travel deeper into calmness. A choice one made to correct oneself.....to loosen any existing tension as if a tree dances comfortably to the tunes of the wind....slowly making ethereal sounds that heal a person who really knew how to listen and let go of a problem.....As you feel your body getting more and more relaxed the more you hear my voice.....he knew that the decision to let go was already taken made him get zoomed into trance.....a trance does no longer require conscious thoughts.....making the unconscious receive messages.”*

**Extract 1:** Sample hypnotherapy script

Apart from trance-inducing statements, this has rich imagery, and the majority of the imagery is subjected to interpretation as it lacks a referential index. For instance, consider the sentence, *“a choice one made to correct oneself.....to loosen any existing tension as if a tree dances comfortably to the tunes of the wind.”* In this sentence, it is clear that someone has decided to correct oneself and to make oneself better. Now, the question is who this person is? On most occasions, the listener automatically assumes that it could be him/her. However, one could still ask, if someone thinks critically, how come one would just assume that the sentence refers to him/her. In an ideal sense, it is doubtful whether one would willingly accept a sentence to be applicable to him/her; however, the purpose of hypnosis is to suppress such ability to be critical, and imagery supports this further by dissociating the listener and creating richer imagery. This is further supported by recent literature which states that dissociation could limit the activity of the frontal cortex of the brain (Gruzelier, 2006).

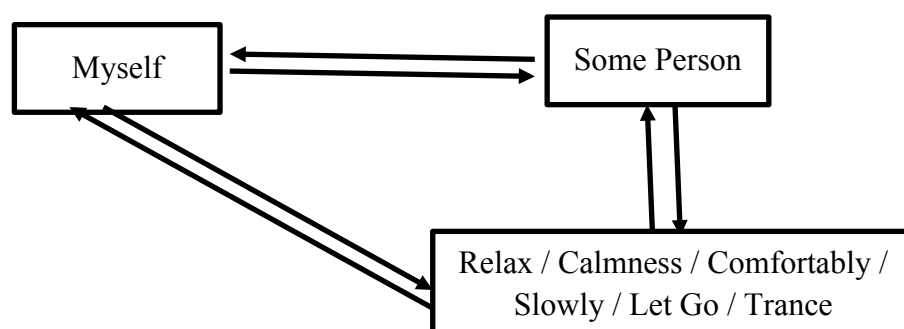
Thus, the above elaboration supports **premise 2** which states that thoughts result due to a computational process facilitated by an independent linguistic system. Hence it can be manipulated in ways that benefit a client with psychological disturbance as demonstrated in the example above. Considering the complexity of linguistic processes, the author assumes language is an independent system. The arguments on such independence are up to debate and the author does not intend to discuss such independency in this paper. However, since it is now clear language can be manipulated in the hands of a skillful therapist, the techniques used in such manipulation can be taken a step further by applying relational frame theory to hypnotherapy. Thus, the author now takes the reader to premise 3.

**Premise 3:**

Individual experiences affect linguistic processes, which precede thoughts, and may amend one's interpretation of an event.

**Figure 5**

*Relational frame theory (Barnes-Holmes et. al., 2004; Sidman, 2018)*



To explain premise 3, one has to first understand relational frame theory (RFT). This theory assists in comprehending the construction of language and how such linguistic patterns can amend one's interpretation of events. The same strategies, therefore, can be induced in a hypnotic trance to help clients amend future behaviors.

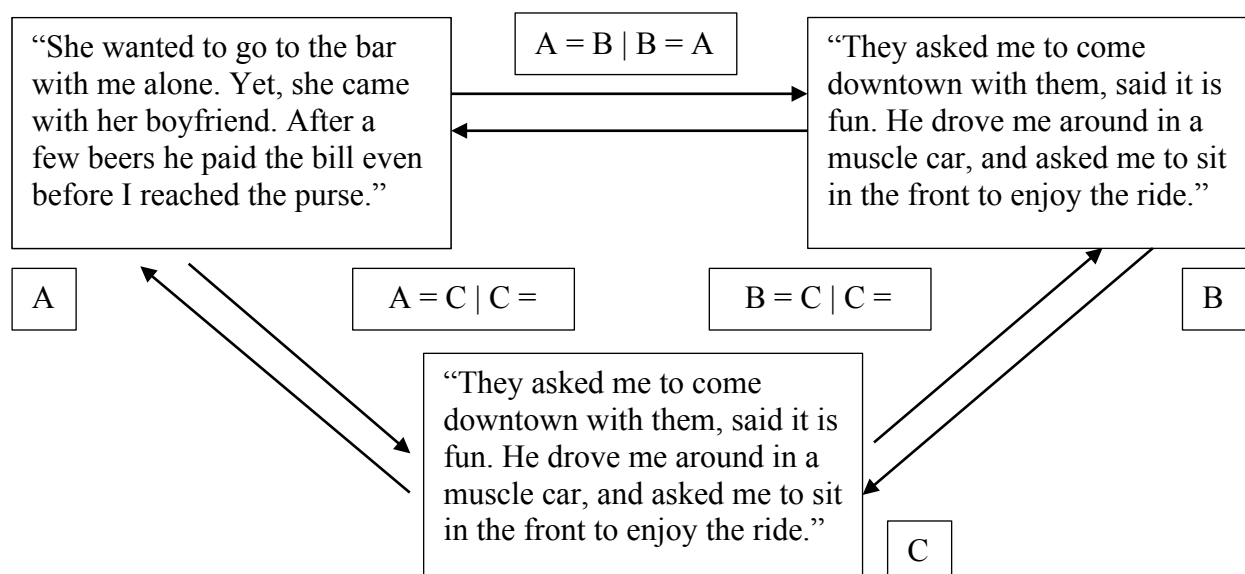
RFT provides the foundation for 3<sup>rd</sup> wave behavioral therapies such as Acceptance & Commitment Therapy (ACT). RFT studies derived-stimulus relations which further explains how individuals master certain aspects such as grammar and reasoning with minimal or no formal guidance. These, stimulus-response relations influence language, both semantic and symbolic to a greater extent enabling individuals to create relational links between incidents, thoughts, & semantics. As a result of this, words associated with symbolic representations in one's mind could activate emotional and physiological responses (i.e., anxiety). Thus, words have a key stake in one's thoughts and thinking. As per the 2<sup>nd</sup> premise of this paper, a relational theory further complements the thought and thinking is a computation process hypothesis and assists in applying it in hypnotherapy.

The fundamental principles of RFT are explained in the paper authored by Barnes-Holmes et al. 2004. To have a solid grasp of this theory, the author recommends readers read the paper by Barnes-Holmes et al. 2004. Similarly, as per McEnteggart (2018), psychological suffering can also be explained through RFT. For instance, think of a woman who complains of feeling trapped in multiple aspects of her life (i.e., work, family life, education, etc.). Since she always uses the word "trapped" she will feel panicked or anxious when she is in closed spaces. This is not because she has a specific problem with closed spaces, but because the relational network that connects work, family life, and education activates are all coordinated by the word "trapped" and thus activates the same functions (i.e., emotional response) when "trapped" is elicited in situations other than work, family life, and education (McEnteggart, 2018).

Let's understand this further through another example. Refer to the figure 6 given below.

**Figure 6**

*Example of equivalence as per relational frame theory (RFT)*



In this example, an individual is seriously in love with a girl. However, the response from the girl is mixed. He experiences 3 separate incidents with this girl which can be denoted as A, B, and C. Each event is independent of the other. However, the symbolic representation of each of the events is similar. In this example, the individual perceives each event as a “slap” to his face. Such similarity in symbolic representations makes the person who experiences it recognize a pattern in these events which creates a relational link. Now, as per the example given above, there are certain words associated with this representation (i.e., *slap*). Considering the relational link formed, and the words that are associated with the events, the word “slap” even heard outside of romantic situations could elicit anxiousness or unpleasantness in the individual. With continued exposure, the individual learns to behave in such a way in the presence of certain words and situations. Thus, this is an excellent way to display how behavioral units of language can influence derived-stimulus relations.

The same is emphasized in *figure 5*, which is an ideal example of display how RFT can be applied in a hypnosis session. The therapist narrates extract 1, here the listener makes a relational network and realizes one’s responsibility in getting themselves calm and relaxed. It is implied in the narration, but never stated explicitly. In some sense, getting the client to wonder more about this extract can also enhance the absorption process, and thus increases the chances of dissociation. Both examples in *figure 5* and *figure 6* supports premise 2 that language is a computational process. Similarly, since the reader now can comprehend the effect language may have on another’s behavior, through hypnotherapy, the therapist can provide positive metaphors under trance utilizing the same strategy displayed in *figure 5* and *figure 6*. These metaphors amend or transform existing negative symbolic representations, relational networks, and associated words. In that sense, the therapist creates an individual experience to the client which affects his/her linguistic process which precedes thoughts and may possess the capacity to change his /her interpretation of the event. Therefore, this elaboration also emphasizes the importance of hypnotherapy in directing its focus on symbolic interactions within the client’s mind. For instance, a person may have negative feelings for a person not for who he is, but for the symbolic image the person generates in the thinker’s mind. This can slowly be eliminated through carefully curated stories that contain metaphors which can be delivered to a person under trance. This is further addressed in premise 4.

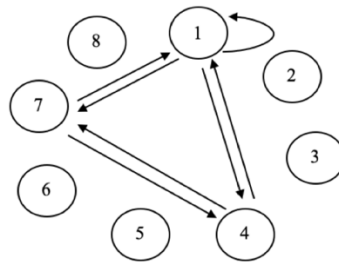
Going back to the example in the previous *figure 6*, A, B, and C are independent events. The person may experience events similar to that of A, making him realizing that  $A \sim A$ . This is an example of a reflexive relation. Similar to that, this person will experience more experiences repeatedly that will emphasize events similar A, B, and C. With repeated exposure, the person will start to think  $A \sim B$  and  $B \sim C$  and vice versa  $B \sim A$  and  $C \sim B$ . This is an example of a symmetric relation. As the exposure to A, B, and C continues, the person may also start to think  $A \sim C$ . Thinking the first event is related to or has an influence on the event that connotes C is an example of transitivity. Similarly, the individual may also realize that  $C \sim A$  which demonstrates equivalence. Thus, the person makes the relational link confirming the three independent events are similar in nature based on its symbolic meaning communicated. Thus,  $A = B = C$ . Considering the real incidents that happened in the example above, the existence of the environment’s influence on language and human behavior is clear. Each of the above incidents may associate with a variety of words that may also have multiple meanings. These events and semantics also convey a symbolic meaning which guides human behavior to a greater extent (Sidman, 2018). This can also be demonstrated mathematically as displayed below.

For instance, let  $m$ ,  $n$ , and  $d$  be integers with  $d \neq 0$ . If  $d$  divides  $(m-n)$ , it can be denoted by  $d \mid (m-n)$ , i.e.,  $m-n = dk$  where  $k$  is the resulting integer of  $(m-n)$ . To understand this further, let  $R$  be the relation of congruence modulo 3 on the set of  $\mathbb{Z}$  of all integers, i.e.

$$A = \{1, 2, 3, 4, 5, 6, 7, 8\}$$

**Figure 7**

*Digraph demonstrating equivalence*



The output of the above calculation can be written below as follows.

$$\begin{aligned}
 (1, 1) &\rightarrow 3 \mid (1-1) = 3 \mid 0 \rightarrow \text{divides by } 3 \\
 (1, 4) &\rightarrow 3 \mid (1-4) = 3 \mid -3 \rightarrow \text{divides by } 3 \\
 (1, 7) &\rightarrow 3 \mid (1-7) = 3 \mid -6 \rightarrow \text{divides by } 3 \\
 (4, 1) &\rightarrow 3 \mid (4-1) = 3 \mid 3 \rightarrow \text{divides by } 3 \\
 (4, 7) &\rightarrow 3 \mid (4-7) = 3 \mid -3 \rightarrow \text{divides by } 3 \\
 (7, 1) &\rightarrow 3 \mid (7-1) = 3 \mid 6 \rightarrow \text{divides by } 3
 \end{aligned}$$

As per the output given above,  $R$  is Reflexive  $\rightarrow aRa \mid R$  is Symmetric  $\rightarrow aRa, bRa \mid R$  is Transitive  $\rightarrow$  if  $aRb, bRc$ , then  $aRc$ . Therefore,  $3 \mid (m-n)$  is an equivalence relation. Accordingly, this calculation along with the elaboration in the previous paragraphs completes premise 3 of this paper.

#### **Premise 4:**

Using cognitive-behavioral strategies, under hypnosis, the language a person uses could be used to challenge troubling mental representations. Further, language can be utilized to elicit psychotherapeutically beneficial imagery.

By now, in the preceding premises, authors have demonstrated how conventional psychotherapy can be applied in hypnotherapy. To demonstrate this further, let's consider an example from RFT and how that challenges troubling mental representations. This example utilizes how perspective-taking can be improved using RFT deictic relations. RFT has 3 major deictic relations, "I vs. You," "Now vs. Then," and "Here vs. There." This can be demonstrated in *figure 8*. These deictic relations assist in developing a sense of self in individuals that also helps in making perspectives (Schuppen, Krieken, Sanders, 2019). A person who consciously experiences "I/here/now" starts to also notice his/her own self which also enables the person to have an understanding about others' perspectives. This further assists people to behave socially. For instance, a person who refrains from going out thinking others might criticize him / her could also think of himself / herself and through one's own noticing self the person may develop or start to notice the other's perspective. Perhaps, others also welcome him / her just like he / she would welcome anyone else with similar thinking styles of psychological disturbance like him / her. Also, such perspective taking helps people

secure a psychological space for facing painful emotions or thoughts. In many ways, hypnotherapy can facilitate such a safe haven for a client to visit through trance, and that can be combined with multiple exercises which may also include metaphors.

For instance, consider the extract 2 given below. The following extract is from a hypnosis track developed at Deep Haven Counseling on “Lessons for self-growth, confidence, and love” (Selvaratnam, 2021).

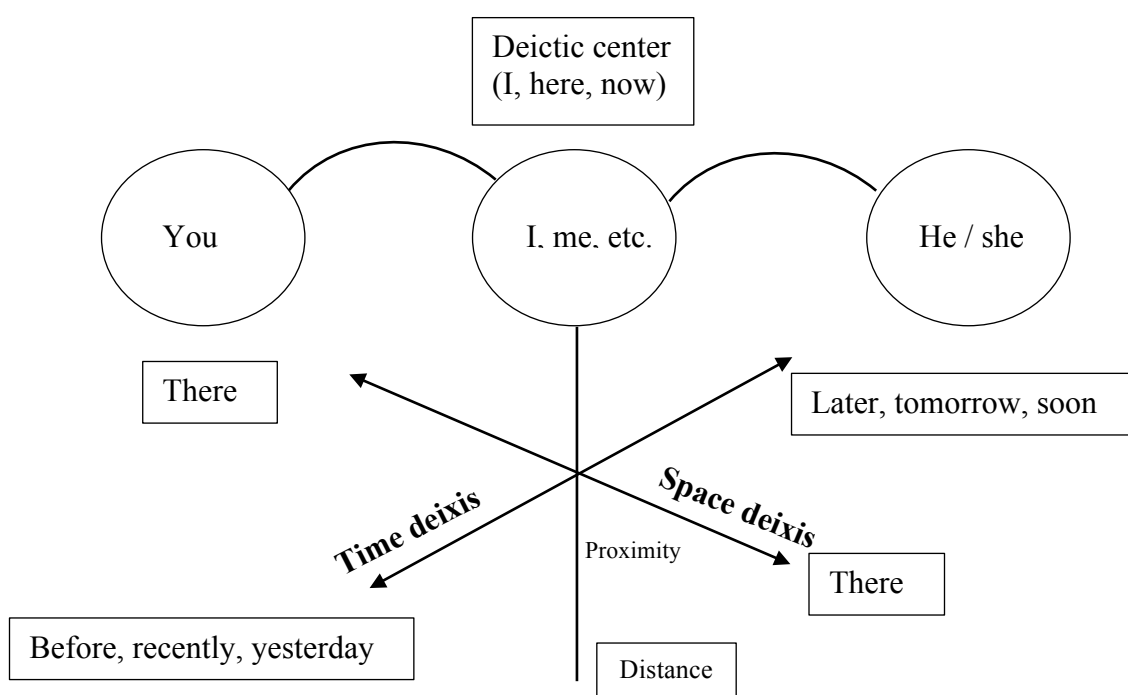
*“I still remember the last day we met. After completing the ceremony, I shook her hands and then I told her “Bye.” I saw her eyes glitter with tears of goodbyes. Her eyes reminded me of the brighter future I missed and the love I said goodbye to. I wonder if the next time I will enjoy the same feeling. I wonder how stupid I am to just remain shut and let her go of my life.”*

*“Maybe the reason I didn’t do anything was because I was afraid of getting close to her.....I questioned my ability to express how I feel about her.....this is an example of self-doubt.....and these doubts stop us from expressing ourselves.....The only way to overcome this is by expressing how we feel about someone.....We become what we think.....and.....you especially have the power to change the course of your life by expressing.....and believing in yourself.....Remember, you are the master of your mind and what you think becomes reality. If you have the power to go and speak to the girl that you always wanted to speak to.”*

**Extract 2:** From lessons for self-growth, confidence, and love (Selvaratnam, 2021)

**Figure 8**

Deictic relations “I vs. You,” “Now vs. Then,” and “Here vs. There.”



The above narrations provide perspective needed for a person to challenge one's rigid or inflexible thinking. Inflexibility often is a reason for psychological disturbance (Dobson, Dozois, 2010). Further, psychoeducation can be added to the same narration to further help the client comprehend areas for improvement in behavior. Rather than ordinary psychotherapy, the effects of such narrations is more pronounced since the client is in a trance state which enables deeper learning. Extract 3 further displays psychoeducation in a usual therapist narration in hypnotherapy.

*"Every time, you doubt yourself, I want you to listen to this, or maybe think of what I am saying here. Despite all the problems I mentioned above, I was able to talk to her again and build our relationship. It was all because I communicated..... See, we always need to say how we feel about someone. If you don't do this, you actually eliminate the possibility of creating a brighter future for you. There is no harm in trying."*

*"Remember, what you think becomes reality, and you are the master of your mind. Love is out there, and you gotta speak up for it. What breaks us, improves us, gives us knowledge, makes you stronger. Always remember that."*

**Extract 3:** *From lessons for self-growth, confidence, and love (Selvaratnam, 2021).*

The elaboration above completes premise 4. As explained, narrations in extract 3 and 4 possess the capacity to challenge troubling mental representations. Further, the same narration can be used to elicit imagery which will be beneficial therapeutically to guide the client as explained in premise 1. For this, purpose language can be manipulated effectively as explained in premise 2 and 3. In view of all of the above it can be stated that, if,

- Hypnosis is a focused state of relaxation which utilizes the concept of imagery which activates deeper representations in the long-term memory and retinotopic areas of the visual cortex.
- Thoughts result due to a computational process facilitated by an independent linguistic system.
- Individual experiences affect linguistic process, which precedes thoughts, and may amend one's interpretations of an event.
- Using cognitive-behavioral strategies, under hypnosis the language a person uses could be used to challenge troubling mental representations. Further, language can be utilized to elicit psychotherapeutically beneficial imagery.

Since, the provided elaborations support each of the above given premises throughout the paper, it can be concluded that even though, the imagery argument (representationalism) of perception and LOTH are competing positions, both theories can be applied in hypnotherapy even without a person consciously realizing its usage. Thus, the positive change in behavior could result as a product of the manipulation the thought process which involves language and imagery. For this purpose, cognitive behavioral strategies can be utilized in a process facilitated by hypnosis. Thus, through this paper, authors endeavor to elicit appreciation towards hypnotherapy and encourage scientists in medicine and neuroscience to consider hypnotherapy related research to bring more empirical support to the prior mentioned argument.

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