

## Universidade de Brasília

## Instituto de Psicologia

Programa de Pós-Graduação em Psicologia Clínica e Cultura

Ericksonian Hypnotherapy, Chronic Pain and Habits:
a Reading Through the Perspective of Charles Peirce

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Orientador: Prof. Dr. Maurício S. Neubern

Brasília - DF

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Thesis presented to the Psychology Institute of the University of Brasília as partial requirement for attaining the title of Doctor in Clinical Psychology and Culture.

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# Universidade de Brasília Instituto de Psicologia

# Ericksonian Hypnotherapy, Chronic Pain and Habits: a Reading Through the Perspective of Charles Peirce

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#### Acknowledgements

First of all, I would like to thank my advisor Maurício Neubern for trusting in my work and for teaching me what it means to be a psychologist and a researcher over the last 10 years. I thank him immensely for his example, patience and excellence.

I would like to thank my family, my parents Paulo Roberto Gonçalves and Helena Cristina Nogueira Gonçalves, my brother Caio Nogueira Gonçalves and Lucirene Barbosa for supporting me at all times during this long period of study, especially during the pandemic.

I would like to thank Elizabeth Quintiliano, a dear friend who dedicated herself so diligently to the debates on the topics covered here so that we could achieve the desired level of precision and depth.

I thank the great masters whose works only show how much I still have to learn and how tiny our knowledge still is when it comes to our own constitution in this world.

I thank Laura Voigt for her friendship during the difficult periods of doubt that plagued me during this endeavor. At the same time, we celebrated our victories with great joy. New adventures await us on the morrow.

J'aimerais remercier aussi le Professeur Antoine Bioy, qui m'a bien accueilli en France dans une période difficile, m'a bien aidé et m'a montré une perspective différente de l'hypnose. Merci pour toutes les livres et les expériences enrichissantes.

And last, but not least, I would like to thank Roxanna Erickson for her support and promptness to clarify aspects of Milton Erickson's history and his approach to chronic pain.

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001

#### **Abstract**

**Title:** Ericksonian Hypnotherapy, Chronic Pain and Habits: A Reading Through the Perspective of Charles Peirce

Based on Charles Peirce's notion of habit, this thesis aims to understand the relationship between Milton Erickson's hypnotherapy and the reconfigurations of chronic pain experiences. The study considers the singular and ephemeral character of the hypnotic experience in investigating the subjective processes involved. This is a theoretical study that seeks to elucidate the dynamics of organization and reorganization of processes related to subjective and vital dispositions from the experiences of the subject. To this end, Milton Erickson's hypnotherapeutic cases of chronic pain were studied, and three illustrative cases with their procedures and interventions detailed in the scientific literature were chosen. These cases were analyzed clinically and semiotically, focusing on hypnotic communication and reorganizations of chronic pain habits. The discussion of the cases demonstrates the articulation of hypnotic communication with the singular clinical context of the subject in which the therapist's interventions are related to vital and subjective processes of the subject's chronic pain. By direct and indirect demonstrations of the subject's own capabilities, and addressing the social disarray caused by the chronic pain, the therapeutic interventions construct a context favoring habit-change, leading to the reorganization of habits in a more desirable configuration.

Keywords: Ericksonian Hypnotherapy; chronic pain; habits; semiotics; Charles Peirce

#### Resumo

**Título:** Hipnoterapia Ericksoniana, Dores Crônicas e Hábitos: Uma Leitura pela Perspectiva de Charles Peirce

Partindo da noção de hábito de Charles Peirce, essa tese visa compreender a relação entre a hipnoterapia de Milton Erickson e as reconfigurações das experiências de dores crônicas. O estudo considera o caráter singular e efêmero da experiência hipnótica na investigação dos processos subjetivos envolvidos. Trata-se um estudo teórico que busca elucidar as dinâmicas de organização e reorganização de processos relacionados a disposições subjetivas e vitais a partir das experiências do sujeito. Para tal, foram estudados os casos hipnoterápicos de dor crônica de Milton Erickson e escolhidos três casos ilustrativos com seus procedimentos e intervenções detalhadas em literatura científica. Estes casos foram analisados clinicamente e semioticamente focando a comunicação hipnótica e as reorganizações de hábitos de dor crônica. A discussão dos casos demonstra a articulação da comunicação hipnótica com o contexto clínico singular do sujeito, no qual as intervenções do terapeuta estão relacionadas aos processos vitais e subjetivos da dor crônica do sujeito. Por meio de demonstrações diretas e indiretas das próprias capacidades do sujeito e da abordagem da desordem social causada pela dor crônica, as intervenções terapêuticas constroem um contexto favorável à mudança de hábitos, levando à reorganização dos hábitos em uma configuração mais desejável.

Palavras-chave: Hipnoterapia de Erickson; dores crônicas; hábitos; semiótica; Charles Peirce

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#### Introduction

Contemporary research into hypnosis in chronic pain has mostly focused on measuring the effectiveness of specific hypnotic techniques (Langlois et al., 2022). Although important for highlighting hypnosis as a legitimate treatment possibility, such research overlooks the subjective dimension of the chronic pain experience, which is relevant to therapeutic success, including the possibility of lasting reduction of physical and emotional pain (Erickson & Rossi, 1980; Neubern 2018). Bioy & Wood (2008) explain how the use of hypnosis under a logic of drug prescription can be iatrogenic, as it ignores its relational aspect and, although it may have a punctual analgesic effect, it does not promote changes in fundamental pain processes.

Subjective aspects such as feelings, context, social relationships and personal interpretations are present in the constitution and coexistence with chronic pain (Bioy & Lignier, 2020; Neubern, 2016a; 2016b; 2018). Chronic pain can give rise to inner searches for its purpose, as well as existential questions that are intertwined with the cultural, social and family lessons that imbue it with meaning (e.g. God is punishing me). In the same way, the occurrence of chronic pain in the subject's life can play a role in family and social contexts that can be intrinsically related to the constitution of pain. Including these aspects in scientific research is necessary in order to understand more clearly the capacity of communicative processes to influence the subject's vital experience.

Milton Erickson's clinical practice displayed an approach towards human processes in which patients' subjectivity, memory of life events and bodily learnings seem to be interconnected in ways that become more accessible through hypnotic experiences. Such fluidity between symbolic and bodily processes is hard to grasp when looked upon with a stereotypical cartesian perspective, but Charles Peirce's phenomenology and sign theory may present a path for advancement once we take into account his concept of habit, and likeness as

the most basic form of communication. By suggesting ideas, hypnotic and real-life experiences, and, sometimes, avoiding certain themes or trigger words, Erickson was able to promote significant changes in both symbolic and bodily processes of his patients, bridging this cartesian division in psychotherapy to some extent. Despite Erickson's approach being considered a-theoretical amongst ericksonian therapists, his work alludes to a consistent comprehension of self, the unconscious, human processes, and conditions and limits of therapeutic change. Although it is presented in an elusive nature, such baggage instills great untapped value to his perspective, which is not explored if studied merely as technical contributions to hypnotherapy. In a previous study, Neubern (2017) has argued how this lack of conceptual systematization in Erickson's work was most likely a conscious choice of the author due to the rigidity persecutory character of regulatory institutions of the time. By focusing on case descriptions and loose definitions to illustrate techniques and specific phenomena, Erickson's practice was still intriguing enough to restore interest in hypnosis, and to call into question dominant psychological approaches.

Amongst the vast types of cases that Erickson has covered, the interest of this study lies in how he treated his chronic pain patients. Perhaps because he was a psychiatrist, Erickson received many pain-related demands that commonly do not arrive to psychologists, and treated them with hypnotherapy achieving results involving improvement of quality of life, pain reduction, absence of pain, recovery of body movements and requiring less medicine (O'Hanlon & Hexum, 1990). His comprehension of bodily processes and how they organize in complex systems with subjective phenomena and life experiences is diffused in articles, each with their singularity and particular considerations of the patient's uniqueness. This lack of objective general concepts leads some authors to believe Erickson's rationale was purely intuitive, without a coherent base of thought. Neubern has disputed this attribution of an irrational magical-like nature to Erickson's figure, and has developed the concept of

configuration, based on González-Rey's work on subjectivity (2019), the theory of complexity of Edgar Morin (2005), and Peirce's semiotics (1958). Configuration refers to dynamic unfinished systems where processes of relational, symbolic, and vital dimensions are intertwined with its own logic of functioning and certain levels of autonomy. It seems Erickson was able to quickly formulate a notion of the patient's configuration due to his uncommon observational skills and his understanding of human processes, which allowed him to find optimal interventions considering the patient's unique health condition, history and living situation. This study seeks to help clarify Erickson's understanding and rationale of chronic pain cases with the aid of Peirce's phenomenology and semiotics, allowing us to draw further distinctions to the signs available to Erickson and possible representations of them in his interventions with chronic pain patients.

Peirce's concept of habit and the processes of habit-formation have been extensively studied by Peircean authors concerning ecological systems, general laws, and mental phenomena (Santaella, 2016). In Peirce's work, habit refers to the tendency that phenomena have to acquire generalities, form laws and systems, and rule other processes (CP 1.390)<sup>1</sup>. As Kilpinen (2016) points out, this retreats habit from a routine or repetitive character, regarding it more as a process character concept. The common usage of the term habit as mechanical repetition in a predictable manner is still a habit under Peirce's definition, but so do phenomena of chance, living and non-living phenomena, as well as mental and material phenomena, for they have tendencies, or general laws, to act a certain way. Concerning the formation of mental habits, Peirce describes how mental rehearsals and signs of material nature both have the same potential and influence over the mind, which is coherent with what is experienced in hypnotherapy.

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<sup>&</sup>lt;sup>1</sup> Conventional reference format to the Collected Papers of Charles Peirce (1958) amongst semioticians containing volume followed by paragraph number.

#### **Objectives**

Therefore, it is the **general objective** of this thesis to study the processes of reconfiguration of the subject with chronic pain in Milton Erickson's hypnotherapeutic treatments through Peirce's perspective of habits. And its **specific objectives** are 1) Identify habits related to the change of chronic pain configuration of the subject, 2) and comprehend the influence of hypnotherapeutic interventions in habit reconfiguration of the subject with chronic pain.

#### Method

The study is theoretical and qualitative (Demo, 2012), utilizing cases present in the scientific literature of Milton H. Erickson to illustrate initial concepts being drafted in the approximation of the perspectives of Charles Peirce and Milton Erickson. This approximation is justified by the epistemological pertinence between their perspectives of self and reality present in their work (Gonçalves, 2022). Hypnotic phenomena occur in a relational context where communications affect the dispositions of the subject differently, resulting in experiences that arise in trance cannot be discerned as imaginary or real. Trance experiences are fleeting, taking place in a dream-like state that does not favor reproduction or objective observation, as it is constituted by various instances of agency along with the transmitted suggestions and context in which it is being conducted. Furthermore, its relational nature implicates that the different phenomena will manifest themselves in the hypnotic experience according the method by which it is approached (Neubern, 2020). Peirce's phenomenological categories and semiotics contemplate these characteristics of trance experience, and assist in the comprehension of the effects and meanings that the produce. In terms of the self, both authors comprehended the subject as a singular being constantly subjected to an extensive flow

of experiences that internally are organized as habits with varying levels of integrity and autonomy to fulfill the subject's needs (Colapietro, 1989/2014).

To achieve the proposed objectives, the study included a bibliographic review of all chronic pain cases of Milton Erickson in his scientific literature. As a basis for this search, the book *Uncommon Casebook* by O'Hanlon and Hexum (1990) was utilized, it consists in a compilation, summarization and categorization of all cases by Milton Erickson in scientific literature. Below the summarized version of the cases, the author's included the bibliographic references of each time they were published. Every publication of chronic pain cases was collected to be analyzed in their full version. The only occasion the summarized versions could be utilized for analysis would be if the only source material was a personal communication, e.g. a letter from Erickson to someone else.

The analysis conducted on the cases was clinically based on the ericksonian approach of hypnotherapy (Erickson & Rossi, 1980) and under the semiotics of Charles Peirce (1958), including surrounding concepts from his work (Colapietro, 2000; Nöth, 2016). The clinical interpretation of the cases sought to comprehend Erickson's decisions on interventions, how they were articulated, the suggestions imbued in therapeutic interventions, how the patient responded and what effect they have achieved towards the therapeutic reconfiguration. On the semiotic side of the analysis, the interventions and communications were classified and discussed utilizing Peirce's ten-class sign system, and the concept of habit to discuss the interventions and the reconfiguration with due pertinence.

Three cases were selected to illustrate the theoretical discussion brought forth in terms of habits in chronic pain, the criteria for their selection were to include cases with different diagnoses of chronic pain, and cases with as many details as possible about how the therapeutic process occurred, trance experiences, and the respective conveyed suggestions. Each case is

presented with a discussion of their own, leading to a more general discussion about their habit reconfiguration processes.

#### Milton Hyland Erickson

Milton Hyland Erickson (1901-1980) was an american psychiatrist mostly known for his dedication to hypnotherapy and his extraordinary hypnotic abilities. Erickson's achievements in treating a broad scope of cases varying from individual and family matters, as well as psychological and medical demands, brought attention to his clinical perspective and a resurgence of interest for clinical hypnosis. Even though Erickson began working with research very early in his life, his lifetime work reached a bigger audience once Jay Haley published the book Uncommon Therapy in 1973 about Erickson's case studies. Due to the number of students that sought to learn from him or researches in hope to decipher his enigmatic approach, Erickson would organize teaching seminars at home, and pass on his experience in his own terms until his death in 1980.

Erickson treated chronic pain in the same unconventional way he approached psychotherapy: with hypnotherapy, task prescriptions, storytelling and, in general, elusive indirect communication. The lack of objectivity in his way of speaking was confusing, if not shocking, for others, who had trouble understanding how his enigmatic communication could accomplish the results seen in his cases and interfere in bodily processes such as pain without medical prescription. Despite being a medical doctor, his innovative approach was hardly accepted by his peers due to lack of objectivity in his practice, often generating unreasonable judgements of his character. As Nicholas Cummings, past president of the American Psychological Association, explained: "Everyone called him the crazy man out in Phoenix. You could not have had a gathering in the 60s, in the 70s, where Milton Erickson's name came up and the idea of whether or not he was psychotic didn't come up" (Vesely, 2014). On the other

hand, the perplexing aspect of Erickson's clinical practice led some therapists to regard him as a psychic, mystical, sorcerous figure, his skills were frequently viewed as supernatural, his character was thought of as a guru, consequently disconnecting his work from science or doable for a regular human, which displeased him. As his late wife, Elizabeth Moore Erickson (Keeney & Erickson, 2006) states:

Milton was adamant that he not be regarded as a guru, a mystic, or a person who did magical things. He insisted that everything he did was a result of observing the other person carefully and responding to that person's own communications. He believed there were explanations that would eventually be supported by research and science, and that eventually we would be able to describe the inner workings of the mind much more fully than we can today. (p.6)

To deconstruct some of the mysticism built around the figure of Milton Erickson, this chapter includes a brief history of both personal and professional life, then it describes the details of his hypnotic approach with some considerations on chronic pain, ending with current comprehensions of hypnosis and chronic pain that developed from his work. The need to cover some of his personal life along with his professional deeds comes from a lack of such division in Erickson's practice himself. His family knew a great number of his patients, and often helped in their treatments as hypnotic subject for demonstrations. Also, Erickson had extraordinary observational skills that are often questioned by skeptics that suspect his case studies are fiction, his birth conditions and childhood helps us understand how he learned such skills, which he kept exercising through activities he would create for himself.

Milton Erickson was born in Aurum, Nevada, in a house close to where his father, Albert Erickson, worked as a silver miner. His mother, Clara Erickson, took care of provisions for the miners (Zeig, 1980). Milton was the second son of nine, the family moved to a farming community in Beaver Dam, Wisconsin while he was very young. He was born colorblind, tone

deaf, and in school he had learning difficulties which nowadays we identify as dyslexia. He could discern the color purple, so he wore it frequently, but had trouble understanding why people liked some songs that for him only sounded like screeches. His experience of living, of being in the world, was very different in many fundamental aspects due to his disabilities, which likely led him to focus in different facets of reality and to interpret things in other ways. One significative moment from his childhood that he used to tell friends and colleagues, was how he had trouble distinguishing an M from an E until his teacher associated the M with the silhouette of a horse grazing and the E with a horse rearing, Erickson used to say the realization came to him as blinding light. This was, perhaps, the earliest experience of utilization that Erickson had, which became a guiding principle in his approach to therapy and hypnosis.

At the age of 17, Erickson had a very bad case of polio. Three city doctors examined him in bed at home and said to his mother that he would not last the night. Erickson became incredibly angry and determined to see the sunrise, because that would mean these doctors were wrong to say such a terrible thing to his mother. He made it through the night and survived, but his body was paralyzed from the neck down, except for a little range of movement in one of his feet. They lived in a farm house in a rural area, there was not much a paralyzed person could do to pass the time, the family would work all day and leave Erickson in a rocking chair by the window to have a view out of the room. Erickson used to watch his siblings and family all day long and realized that what people said often contradicted their body language. He learned to distinguish the sounds of the footsteps of his family members and how that indicated their mood. This particular moment in Erickson's history is very important, he was a very active kid before paralysis, and to occupy himself he would challenge himself in his observation skills, which honed them a great deal.

During his paralysis, Erickson also experienced what later he understands to be autohypnosis, and used it to recover most of his movements. Erickson would close his eyes and get absorbed in the memories of playing around in the farm, noticing later that his body responded slightly to the memories. With further experimentation, he recovered arms and hands movements by revisiting memories of him climbing trees, grabbing and swinging from branches. Sometime later he could walk again with the help of crutches, although his body was still very weak. Erickson got a canoe and told his mother he would be doing a trip in the Mississippi river with a friend, the friend cancelled and Erickson went alone, arriving at multiple stops and playing a game with himself of receiving aid without directly asking for it. He made many acquaintances along the way and became much healthier during the trip, no longer requiring crutches and being able to walk with a cane, Erickson walked with a cane all his adulthood, changing to a wheelchair after his health decayed in his 70s.

Soon after the canoe trip, Erickson started attending the University of Wisconsin-Madison, where he got graduate degrees in psychology and medicine. During his period in University, Erickson met Clark Hull during a training seminar on hypnosis and worked on research with him for some time, but Hull had a strict view of hypnosis and of its research, employing rigid scripts and measuring suggestionability (Zeig, 1985). Because of the differences of their views over hypnosis, Hull and Erickson parted ways, although Erickson kept researching it independently, adapting hypnotic inductions and investigating the nature of hypnosis. Erickson got his M.D. degree in 1928 in the University of Wisconsin School of Medicine, with an emphasis on Neurology and Psychiatry. In the next two decades, he took psychiatry positions in state hospitals and kept working on experimental hypnosis research and clinical case studies, Erickson founded the American Society of Clinical Hypnosis and its magazine, The American Journal of Clinical Hypnosis, where he published many of his articles and also worked on as an editor for ten years. Although Erickson got more recognition in his latest stage of life, his practice and research at this time did get some attention to medical hypnosis, and Erickson travelled to teach it to professionals.

In 1948, Erickson got incredibly sick from post-polio syndrome and his family decided to move to Phoenix, Arizona where they had contacts and the weather was better suited to Erickson's health. He started a private practice in his home, the living room was the waiting room and his family often met the patients. Erickson and his wife, Elizabeth, taught their children how to identify if someone wanted to be left alone or not (Zeig, 1980). Sometimes they would help in therapy by conducting specific tasks in day-to-day life, helping patients in their tasks, sharing their perspective in a certain subject or being a hypnotic subject for a demonstration in their session. Some patients became close family friends and important people in Erickson's sons and daughters lives (Vesely, 2014).

Erickson was friends with the researchers Margaret Mead (1901-1978) and Gregory Bateson (1904-1980), who often visited and collaborated with each other. Bateson, who studied communication and mind processes, had invited Jay Haley (1923-2007) to work with him, and Jay Haley, saw one Erickson's hypnosis seminars and judged it an important way of communication to be considered in their projects (Haley, 1973). Therefore, Haley also visited Erickson in Phoenix with a certain frequency, later publishing the book Uncommon Therapy (Haley, 1973) as a result of their conversations. After Erickson's passing, Haley also published a three-book series called Conversations with Milton H. Erickson M.D. in 1985, containing the transcripts of their conversations.

Further on, Erickson kept having health difficulties accompanied with muscle loss, chronic pain and other difficulties, leading him to change to a wheelchair in 1970 and the family changed to an adapted house in the same year. In 1974, Erickson ceased his activities as a private practician and dedicated himself to the teaching seminars, which were very popular and booked months in advance, therefore, becoming a five days per week job (Zeig, 1985). In the seminars, Erickson would teach his perspective on therapy and hypnosis, frequently telling stories, reminiscing about his cases, doing demonstrations and utilizing indirect

communication to elicit resources in his students in a very similar way to which he did with his patients (Zeig, 1980, 1985).

Meanwhile, as Erickson focused on teaching during this period of his life, he was still publishing works on his techniques and case studies in collaboration with Ernest Rossi (1933-2020), and meeting with Jeffrey Zeig. While Rossi edited and co-wrote most of the books related to Erickson's techniques, Zeig founded the Erickson Foundation in 1979, organized congresses centered in his work, and published books of his experiences with him after Erickson passed away in 1980. Although Erickson himself never wanted a therapeutic approach carrying his name, his former students did so to keep his views of therapy alive in their uniqueness. Other honorable mentions in carrying on ericksonian therapy are William O'Hanlon, Sidney Rosen (1926-2022), Stephen Lankton and Erickson's daughters, Betty Alice Erickson and Roxanna Erickson.

#### **Principles**

While Erickson did share his thoughts on the nature of hypnosis and suggestion, on therapy and his techniques, his approach was considered atheoretical due to the lack of systematization of his practice and clear definition of concepts he utilized. For example, the terms conscious and unconscious were very present in his writings and explanations, but what exactly Erickson meant by those terms was never clarified in a precise concept. The unconscious in Erickson's work is a broader part of the person, more aware and knowledgeable than the conscious part, and this unconscious mind had many resources, life-long acquired learnings and experiences, that can be used for their benefit (Erickson & Rossi, 1979). However, in some of Erickson's cases, the unconscious is treated as being its own mind or having its own rationality, and how it communicated in indirect ways (Erickson, 1964)). His former students and disciples bring some light into this matter, rigid ideas did not appeal to

Erickson, and this reflected on his way of teaching and of therapy, as his wife, Elizabeth Erickson (Keeney & Erickson, 2006) explained:

Milton was unafraid to challenge habitual perceptions – his own as well as those of others. He strongly believed that no psychological theory could possibly encompass the enormous diversities that human beings present. Therefore, methods of dealing with people and their problems have to be individually tailored. Theories about people's thinking and behaviors are limiting and can lock a person into perceptions and responses that aren't accurate. (p.4)

When teaching, Erickson was stern with his students if they developed a fixed understanding regarding patients (Vesely, 2014), and often would not give objective answers concerning complex subjects, instead he provided experiences or contexts in which the student could expand their resources on the matter and formulate their own answers (O'Hanlon, 1994). He did not want his students to commit to a reduced, simplistic, and deterministic perspective of what psychotherapy is, so he did not act in a way that favored his students to develop such linear thoughts about his practice. One core principle of Erickson is that every person is singular in their own way of being, therefore he believed every psychotherapist had to create and refine their own methods and theories, as long as they took into account the patient's singularity as well. Paraphrasing Erickson, the interaction between a therapist is something to be discovered, and not to be approved by someone else's comprehensive theory of psychology (Vesely, 2014). The principle of singularity implies acceptance for who the patient is, in their own way of expressing themselves, the particular learnings they acquired throughout their lives, and their understanding of the world. These characteristics can help the therapist recognize useful elements to build rapport, collateral aspects important to the patient's demand, and helpful resources for therapeutic interventions.

There is an important remark on the matter of singularity, the consideration of singularity does not imply the impossibility of generality or similarity. Erickson does not, in any way, deny the role of cultural and social phenomena, what comes into question is how each person relates to these influences. To illustrate, let's consider two hypothetical people, both from catholic families and taken to the same church every Sunday since they were young. One could go into therapy and talk about this aspect of their lives as a great contribution to who they are today, telling detailed stories about meaningful events that happened in that context. The other could shiver and explain that the church drove them away from religion overall, and describe moments where they felt oppressed, or like they had to conform to the communities' social norms. Both have had very different experiences in the same social context, and these experiences can represent themselves in many subtle ways of their presence now. Erickson learned very young that people communicate their feelings, or their state of mind, in concurrent ways, be it verbally or non-verbally, and people often contradict themselves in what they communicate as a whole. Someone can verbally state that they are willing to do something, but their tone of voice and body language say otherwise.

The disposition of observing the patient for who they present themselves to be as whole is tied to the principle of utilization, which is one of Erickson's greatest contributions to psychotherapy. Utilization refers to utilizing the elements that the patient provides you for their own therapeutic process, because a person is more willing to accept elements that evoke some level of familiarity than something that is alien to them (Erickson & Rossi, 1979). The demand in question, the resources available, the possible means of change, all arise from the patient during the therapeutic process, it is the therapist's job to observe and articulate these resources in an adequate way so that the patient can achieve a solution to his demand and a better level of autonomy to go on with his life. At first, it is hard for beginner therapists to understand what the patient's resources really are, or how someone's resistance can be a resource to aid their

trance induction. By stating their difficulties or some protective instinct, the patient is cooperating by sharing something that is real to them, if the therapist acknowledges and accepts it, the rapport can be further developed and suggestions can either include or circumvent these inner realities according to the patient's needs.

And the last principle concerns Erickson's view on the nature of hypnosis. To him, hypnosis is a natural phenomenon, present in daily life of human beings even they are unaware of it. For example, everyday people get themselves in trance while commuting to work in public transportation, either resting or daydreaming about their affairs, magically awakening themselves in the right stop and moving on with their days. Therefore, everyone is hypnotizable as long as it is not against their will, and their needs are taken into account (Erickson & Rossi, 1979; O'Hanlon, 1994). A patient's needs may require different techniques, which will be discussed in the following section.

#### **Techniques**

Erickson's hypnotic techniques are very flexible and are used to induce trance experience, direct it and, most important, construct a safe environment in which therapeutical change can take place. Trance itself is not an intrinsically therapeutical experience, although it has great therapeutic potential since it engages the patient's dispositions in an entirely different manner than in their waking state (Neubern, 2020). A first important mention, as it regards Erickson's way of therapy in general, is indirect communication. Being aware of the multiple subtle ways a person's presence communicates information about themselves, Erickson developed techniques to convey ideas both in waking state and in trance that are not necessarily understood by the conscious mind. Erickson & Rossi (1979) describe indirect communication as communication in an unconscious level in which the response is subjective and synthetized within the patient. Indirect communication can be verbal and non-verbal, including, but not

limited to, intonation of one's voice, cadence of words, pauses in speech, selection and insertion of terms, body language, posture, attire, facial expressions, environmental elements and objects. Indirect suggestions utilize indirect communications to aid therapeutic processes in a non-imposing manner, facilitating rapport building, trance inductions, and promoting the arousal of unconscious resources and processes. Since the responses to indirect suggestions come from the subject himself, they are more acceptable to their processes than someone else's ideas which can be accompanied with suspicion of control and elicit defensive measures. Indirect suggestions can direct the patient's attention while evoking resources and providing diagrams to therapeutic experiences in trance.

Interspersal speech is what Erickson considered his most important contribution to hypnotherapeutic techniques (Erickson, 1966, Erickson & Rossi, 1979). This technique refers to the insertion of associative terms or concepts in regular conversation or storytelling that will indirectly evoke resources that might be relevant to therapy. In a phrase such as "you can sit down, if you wish, and explain everything as *calmly* as you want", the interspersed word *calmly* suggests how the act of explaining could be conducted, at the same time associating the positive connotation of calmness with the situation. The multiple connections that the subject has with the term are engaged in his own singular way, perhaps he feels more inclined to explain things thoroughly instead of summarizing information he believes is more relevant for the therapist.

When telling stories, Erickson used interspersal speech to insert common ideas in all of them to evoke processes related to them and observe if this was relevant to therapy or not. For example, instead of asking the patient about their family, Erickson would talk about his own family and by association the patient could give information about his own family bonds. This information could possibly be communicated indirectly by body language of comfort or discomfort, or comments on their own relationship with their children or their parents. As this is asked indirectly, patient's defenses aren't raised the same way as they are when questioned

in a straightforward manner, the ideas and experiences with family were raised by association and they share their experiences about the topic in discussion as if it was not part of the therapeutic process. Furthermore, storytelling is a powerful and versatile tool to hypnotherapy considering the way it accommodates complex suggestions. They portray descriptive scenarios to which the patient can relate in various ways, be it because the story partakes of elements of the patient's own reality, or by experiencing the story as if he is part of it.

Through storytelling, the therapist can also indirectly refer to broader aspects of human life, be them in a symbolic or subjective dimension, such as self-image, relation the world and others, as well as feeling of purpose. Erickson used to combine stories with wordplays, jokes, puns, double-meanings, metaphors, and analogies arriving at some valuable wisdom which helps the patient grow his understanding of the world. Regarding metaphors, Erickson & Rossi (1979) explain: "They can evoke new patterns and dimensions of consciousness. The very derivation of the word metaphor (meta, beyond, over; pherin, to bring, bear) suggests how new meaning developed within the unconscious is brought over to consciousness by means of metaphor."

Allegories, analogies, and metaphors, each are capable of conveying ideas and bringing forth new meanings with different relations between their elements. Analogies intertwine two different fields of elements and describe a relation between them, e.g., "Pedro eats like a monster". The relation between "Pedro" and "monster" is of similarity when it comes to eating, however, what exact characteristics Pedro has of monster are still vague and left to subjective interpretation, considering the connotations the word monster has, and which ones are most significant to the listener. Metaphors act in a vaguer way, by simply interposing two fields of elements without describing how they are related, e.g., "he is a rocket" or "a wave of arrows". In both sentences two fields are interposed and the meaning arises from the creative effort of the listener. In allegories, the fields are not interposed, nor is the relation between them

described, the listener automatically associates the elements of his own experiences with the story due to likeness or pertinence of the elements presented in the story with those his own reality. A story about birds of the same species may bring him recollections of his family or friends, a man carrying a heavy boulder may relate to their relationship with work or others, and so on. Although there may be conscious effort from the patient to make rational connections amidst the stories, the conscious mind is limited and its attention is narrow, letting many suggestions go unnoticed, yet perceived by the unconscious mind. Thus, the creative effort of building relations between the vagueness makes the patient the protagonist of the development of meaning, which can come to consciousness as an insight, or work strictly in reorganization of unconscious processes.

Concerning chronic pain cases, Erickson would also utilize the techniques above to evoke resources of sensations, comfort, warmth to disrupt established circuits of pain. In trance, experiences also engage our vital processes and can exert a level of influence over them that varies according to each case. In the next section, let us revisit some of his contributions over hypnotherapy and pain.

#### **Considerations Concerning Pain**

The unusual conditions of Erickson's physique since birth were already mentioned, still it becomes important to highlight that chronic pain was present in the majority of Erickson's life and how it shaped his view of hypnosis and clinical practice. As an established researcher, his understanding of the role that hypnosis played in chronic pain treatment was a matured conception of the experiences that helped him out of polio paralysis as a 17-year-old, Erickson presented it as follows:

The average person is unaware of the extent of his capacities of accomplishment which have been learned through the experiential conditionings of this body behavior through his life experiences. To the average person in his thinking, pain is an immediate subjective experience, all-encompassing of his attention, distressing, and to the best of his belief and understanding, an experience uncontrollable by the person himself. Yet as a result of experiential events of his past life, there has been built up within his body—although all unrecognized—certain psychological, physiological, and neurological learnings, associations, and conditionings that render it possible for pain to be controlled and even abolished (Erickson, 1967).

Hypnosis is but a mean to communicate ideas in a way that prompts the patient to explore his body potentials and utilize them for his own well-being. This does not mean in any way that such body potentials will become available to consciousness and readily engageable at the patient's will, but that they can be involved in experiential and unconscious processes that improve the patient's quality of life (Erickson & Rossi, 1977). To exemplify resources that come from life experiences when dealing with pain, Erickson mentions day-to-day moments in which pain is forgotten or lessened by divergence of attention, like when someone is watching an intriguing drama movie and the headache they had is lessened or disappeared. Or in a stressful situation, like a soldier that realizes he is wounded only after the battle is already over (Erickson, 1960, 1967).

Erickson understood pain as a subjective experience involving an entanglement of temporal, emotional, psychological and somatic phenomena, refraining the notion of pain as simply an organic stimulus. Pain undergoes changes through time, subjected to experiential learning and conditionings, especially if experienced chronically. According to Erickson, pain is "a complex, a construct, composed of past remembered pain, of present pain experience, and of anticipated pain of the future" (Erickson, 1967). Its threatening and incapacitating aspect incites fear and anxiety of future pain, which in most cases intensifies it. Erickson's

considerations on pain then were already in line with the current definition, according to the International Association for the Study of Pain (IASP), who revised their terms in 2011:

An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage. Six key notes:

- Pain is always a personal experience that is influenced to varying degrees by biological, psychological, and social factors.
- Pain and nociception are different phenomena. Pain cannot be inferred solely from activity in sensory neurons.
- Through their life experiences, individuals learn the concept of pain.
- A person's report of an experience as pain should be respected.
- Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological well-being.
- Verbal description is only one of several behaviors to express pain; inability to communicate does not negate the possibility that a human or a nonhuman animal experiences pain. (IASP, 2023)

Regarding long continued pain in a specific area of the body, Erickson remarked how interpretative habits can change all sensations experienced in that area to painful ones. Due to habit formations and transformations, the original pain may not even present anymore, but the processes they have set in motion still endure in somatic and subjective instances. An apparently unexpected mention is iatrogenic disorders caused by the physician's "poorly concealed concern and distress over his patient" (Erickson, 1967, pg.3). Such behavior adds to the patient's fear and anxiety, intensifying the situation's threatening aspect, possibly producing iatrogenic pain in itself. However, in his writings, Erickson reminds us frequently that this associative, fluid and subjective dimension of pain as a phenomenon is what provides opportunity for hypnotic intervention. The same principle of influence that can generate

iatrogenic pain from fear and tension, can also produce freedom from it, and produce a configuration of health and comfort. Considering these temporal, emotional and social aspects of pain, here is what Erickson saw as possibilities for interventions in pain cases in a general spectrum.

#### Hypnotic Phenomena and Possible Interventions for Chronic Pain

The foundation for hypnotherapy in Erickson's approach is observation, and chronic pain cases are no exception. How the pain affects the patient's daily life, mobility, mood, if it has a pattern, if it affects other body functions, how is the pain described, if it is dull, continuous, burning, stabbing, all of this information is potential resource for hypnotic interventions. "Cultural and individual psychological patterns are of as much and perhaps greater importance than the physiological experience of pain" (Erickson, 1959). In what form this will be utilized in hypnotic suggestions will depend on each patient's singular situation and context.

Direct suggestions of pain abolition are possible, but are often refused and its failure creates a certain animosity towards further attempts of hypnotherapeutic interventions. Meanwhile, indirect suggestions of pain abolition are more effective, as they can be interspersed in general conversation, and its refusal is unlikely to generate any form of antagonism to future suggestions. According to Erickson, total pain removal is the goal, but so is lasting change, often, lasting change is more likely to be achieved by lessening chronic pain than removing it completely (Erickson, 1967; Erickson & Rossi, 1979). Hence, small changes in patient's experience of pain can break a rigid frame of mind and increase cooperation, allowing greater changes of the pain experience as whole.

Taking into account past experiences of pain, in some cases, Erickson would induce amnesia, shifting one's attention to more absorbing experiences and incentivizing pain to be

forgotten. Induced amnesia is not necessarily complete amnesia, it can be employed partially and selectively, possibly focusing specific subjective sensations or elements connected to painful events. In a specific case, pain would come as a surprise and be forgotten shortly after so the patient could return to what he was doing previously, thus avoiding the development of anticipation and fear of future pain (Erickson, 1959).

Still referring to its temporal implications, pain experience can assume an attention pulling character that changes the subject's reference of time passing. It can make five seconds seem like a minute, and five minutes seem like an entire hour. It is not uncommon for chronic pain to stablish intervals with varying levels of strictness, hence periods in between painful events are subjected to time distortion too. An interval of one hour can be experienced as awfully short when expecting to feel pain right after it. In these cases, Erickson would employ suggestions of time distortion that would alter the perception of time, frequently affecting the pain intervals themselves (Erickson, 1959, 1967).

Anesthesia and analgesia can usually be achieved by building emotional situations which contradict the experience of pain. Anesthesia itself is more challenging, but analgesia preserves more sensations, like tactile sensitivity, being more relatable to life experiences where some level of numbness, heaviness and relaxation are present. Analgesia is more flexible and more likely to provide relief, even when applied partially. Then it can develop into a more complete experience (Erickson & Rossi, 1979).

Pain displacement refers to the displacement of pain felt in an area of the body to another. In cases where pain afflicts an specific location, the suggestion of dislocation of such pain may constitute a small change in sensation that enables further treatments. The displacement of pain can favor the reduction of the area it affects, reduction of interval, reduction of intensity, may favor its elimination, or simply experiencing it in an area that affects less of the patient's daily life. A painful hand and wrist can possibly be displaced to a painful

finger, a painful all-encompassing migraine might be reduced to a specific spot of the head with less intensity. Different areas of occurrence also evoke different emotional reactions and subjective responses that influence pain experience. Internal abdominal pain is often more threatening than experiencing pain in one's arm, therefore displacing the pain to one's arm is likely to relief the patient overall.

Patients can also experience dissociation from their body, be it as a whole or from specific parts of it, by experiencing themselves apart from their bodies, the pain is relieved. Erickson explains this phenomenon as it was suggested for cases of intractable and unendurable pain, although it can be used in many other situations. To achieve such an experience, he mentions resources of life experiences before their condition reached this intensity of pain with the employment of posthypnotic suggestions and autohypnosis. After initial interventions, his patients learned during the hypnotherapeutic process how to go into trance when the pain increased, and there they could live a pleasant experience far from the aching body. These experiences usually involved time distortion suggestions also, according to each patient's needs (Haley, 1973; Zeig, 1980).

#### **Current Developments on Hypnosis and Chronic Pain Experience**

It is undeniable that Erickson contributed greatly to the development of hypnotherapy, he showcased unseen possibilities of therapeutic interventions that allude to a new perspective of human processes. Erickson's hesitancy in theorizing his approach at the time, although it served its purpose in his teaching style, left a considerable gap to hypnosis' theoretical development. Theoretical discussions on the nature of hypnosis tend to focus on the current state/non-state debate, a development of the historic state/suggestion debate led in the XIX century<sup>2</sup>. Determining the nature of hypnosis as state or non-state seems to fall back on a

<sup>&</sup>lt;sup>2</sup> The school of Paris, led by Charcot (1825-1893) explained hypnosis as a special state due to physiological reasons, while the school of Nancy, led by Liébault (1823-1904) and Bernheim

cartesian division where bodily and social processes cannot be conceived in a more integral system as they are understood to operate in contradicting logics. However, hypnotic processes take place in relational contexts where it is not always possible to distinguish fabrication or revelation of its elements, experiences that arise during trance cannot be determined as imaginary or real. Attempting to overcome this dichotomy, Neubern has made a considerable amount of effort in developing theoretical concepts concerning hypnotic phenomena that take into account its relational and fleeting nature.

Neubern understands the phenomenon of hypnosis as constituted by two intrinsic processes: hypnotic communication and trance experience (Neubern, 2020). Trance experience involves the alteration of ego-world relations, using as reference the relations classified by the psychiatric phenomenologists (Ellenberger, 1958), the ego-world relations are temporality, spatiality, causality and materiality. In waking state, these relations are set in a more rigid way, while in trance they become more flexible and dominant processes can be hindered, allowing inhibited processes to arise, make new connections and set different references for experiences. Moreover, hypnotic communication refers to the processes relating to the evocation, conduction and maintenance of trance experience. These communicative processes can be further broken down into internal and external ones. The internal processes concern the subject's deliberations on suggestions and image productions, while the external processes pertain the techniques utilized and the context in which they take place.

Parting from Gonzalez-Rey's (2018) propositions on subjectivity and configurations, Edgar Morin's theory of complexity (Morin, 2005), and recently from Peirce's work (1958), Neubern has developed a concept of configuration where the subject's experiences form systems of subjective processes that acquire a certain level of autonomy and operate in their

(1840-1919), understood hypnosis as the outcome of social processes involving authority, complacency, and expectations (Bioy, 2017; Neubern, 2009).

own internal logic. Configurations can involve vital and social processes, being more or less permeated by varying aspects of human activity, becoming more or less rigid, and reorganizing themselves throughout experiences. In so, subjective processes are not perceived as epiphenomena, as they are not isolated in an inner world, nor spawning spontaneously, but as constituted by elements presented in past experiences and articulated with feelings, perceptions and thoughts. In face of Peirce's work, configurations resonate with his concept of habit, both in the dynamics of habit change and in the complexity of their constitution. Even though habits comprise cultural and linguistic processes, Peirce's concept approaches it as a phenomenon of reality where habits are in the realm of general laws, present in living and non-living aspects of experience.

In this perspective, configurations of chronic pain can be comprehended as habits since they articulate vital and subjective processes in a more complex organization, involving patterns, feelings, emotional responses, conditions and symbolic elements in their processes. Mental habits are subjected to sign actions from inner and outer processes, changing through time as configurations of chronic pain do. Understanding chronic pain as a semiotic organization may allow us to further comprehend how psychotherapy and hypnosis, which are relational and communicational in nature, promote change in chronic pain configurations. To comprehend how habits are permeated by external influences and change in an evolutive way, it is crucial to become acquainted with Peirce's work.

#### **Charles Peirce**

Charles Sanders Peirce (1839-1914) was a philosopher and logician born in Massachusetts, in the United States of America. His father was the Harvard professor Benjamin Peirce (1809-1880), a known mathematician of their time. C.S. Peirce had early contact with Kantian philosophy, by the time he was sixteen years old he already knew *The Critique of Pure* 

*Reason* by heart. He graduated in chemistry and moved on to pursue his interest in philosophy, but with reflections based on some methods from modern science (Barrena & Nubiola, 2007).

Later, Peirce spent thirteen years developing and trying to disprove his phenomenological categories. In his letters to Lady Welby, Peirce explains them as modes of being as follows:

Firstness is the mode of being of that which is such as it is, positively and without reference to anything else. Secondness is the mode of being of that which is such as it is, with respect to a second but regardless of any third. Thirdness is the mode of being of that which is such as it is, in bringing a second and third into relation to each other (CP 8.328).

By explaining the categories through the relations of their elements, Peirce facilitates the understanding of the growing complexity from firstness to thirdness and how they build upon each other. While elements of firstness exist as is, secondness requires firstness to exist, and accordingly, thirdness requires both secondness and firstness. This hierarchy sets firstness as the foundation of every phenomenon, and thirdness as a category of relations requiring the previous ones. Each category deserves proper description as they are very dense in their proposition of covering every phenomenon.

Firstness is the category of monads, qualities, feelings, pure potentiality previous to mediation of consciousness. To understand qualities in firstness it is necessary to abstract them from the factuality of objects where they manifest themselves (CP 1.25). A bucket of the most vivid red paint still does not represent *redness* perfectly. Even a full palette of red tones would represent *redness* with its material restrictions. *Redness* itself is a quality of firstness, existing independently from the bucket of paint as a potentiality. Timewise, Firstness relates to the inapprehensible immediate present, as Peirce clarifies in one of his lectures: "The immediate present, could we seize it, would have no character but its Firstness. Not that I mean to say that

immediate consciousness (a pure fiction, by the way), would be Firstness, but that the quality of what we are immediately conscious of, which is no fiction, is Firstness" (CP 1.343). Thus, one cannot truly experience firstness, it composes an asymptote, to which phenomena and experiences can infinitely come close to, but never truly reach it. The closest shared human experience we can associate with firstness is a dream, where many of its elements are barely apprehensible, evanescent and fleeting to a point that one can dream and not remember it. Hence, this characteristic concerning the ephemeral, fading, and transitory is also of firstness.

Secondness is the phenomenological category of effort, resistance, relation, existence and alterity. When illustrating the concept of Secondness to Lady Welby, Peirce highlights the aspect of effort, for it is in secondness where actuality imposes itself.

The experience of effort cannot exist without the experience of resistance. Effort only is effort by virtue of its being opposed; and no third element enters. Note that I speak of the *experience*, not of the *feeling*, of effort. Imagine yourself to be seated alone at night in the basket of a balloon, far above earth, calmly enjoying the absolute calm and stillness. Suddenly the piercing shriek of a steam-whistle breaks upon you, and continues for a good while. The impression of stillness was an idea of Firstness, a quality of feeling. The piercing whistle does not allow you to think or do anything but suffer. (CP 8.330)

In nature, secondness involves existence and the encounter between existing things into experience, the clash of forces and reactions which give meaning to the idea of causality, singular events which enact laws of nature such as gravity. Peirce's example describes secondness from a conscious perspective, how man's thoughts suffer opposition by compelling experience, be it by simple resistance or brute action. Someone may wish to arrive at home after a long day of work, heat up their dinner, eat, fall on their bed and sleep, only to stand in front of their locked door and not be able to find their keys. These moments of conflict with

harsh reality demands a different course of action considering restrictions imposed something other than ourselves. It is in this sense that secondness is also a category of alterity.

There can be no resistance without effort; there can be no effort without resistance. They are only two ways of describing the same experience. It is a double consciousness. We become aware of ourself in becoming aware of the not-self. The waking state is a consciousness of reaction; and as the consciousness *itself* is two-sided, so it has also two varieties; namely, action, where our modification of other things is more prominent than their reaction on us, and perception, where their effect on us is overwhelmingly greater than our effect on them. And this notion, of being such as other things make us, is such a prominent part of our life that we conceive other things also to exist by virtue of their reactions against each other. The idea of other, of *not*, becomes a very pivot of thought. To this element I give the name of Secondness (CP 1.324).

Timewise, secondness relates to actuality, to an event, and in so, refers to the here and there, the experienceable now. Reference to past or future lies in thirdness, where intelligibility and rational formulations are possible. Secondness can, at most, indicate something through its occurrence. Going back to the locked door example, it is difference of the door not opening to realizing that it is locked and wondering what could have happened. The moment of "not" is secondness, while pondering its reasons is thirdness, as much as it involves elements of secondness.

Thirdness is the phenomenological category of mediation, law, generality, thought, signs, habits, continuity and growth. If events can indicate us something, it is in thirdness where we make attempts of giving meaning and reason for these events, or where we understand a succession of events as regularity, as parts of a general. Meaning-making, development and learning are fundamental to understand Peirce's realism, and are related to his triadic relation of sign. Thirdness involves mental phenomena but is not limited to them, nature and the cosmos

are full of phenomena of systematizations, regularities, and growth. The development and formation of tendencies, systems, ideas and knowledge are regarded in terms of their generality and capability of ruling over events as law.

[...] the essence of law consists in its being a conditional truth about the indefinite future, and never can become matter of actual fact. Or we may say it is such a truth that upon the knowledge of it a perpetual or indefinitely lasting conditional expectation may be founded. We say "indefinitely lasting" because as a general rule our laws are vaguely understood to endure only so long as "the present state of things" continues; but that state of things may endure forever, or if it ceases, may return some day (1904, MS 1476:10)<sup>3</sup>.

Observe that Peirce describes law and general rules comprising the possibility of change conditioned to "the present state of things", leading to idea that general rule should not be regarded as equal to absolute or universal rule. Our past experiences, knowledge, and beliefs compose systems and general rules on how to address reality, be it by acquisition of complemental information or by conflict and contradiction of further experiences, these general rules are likely to undergo change through time. To understand the dynamics of signs, objects and generals and how fallibility comes into play, we must discuss Peirce's triadic relation of sign action.

#### Sign, Object and Interpretant

Peirce's semiotic system consists of an irreducible triad composed by sign, object and the interpretant. His concept of sign had gone over more than seventy changes, considering definitions and descriptions throughout his writings. Since much of Peirce's work was recognized after his passing, some writings from 1906 were found in which Peirce expressed

<sup>&</sup>lt;sup>3</sup> Conventional reference format for Peirce's personal manuscripts.

concern over the terminology employed in his earlier work as he pondered if the term sign should not have been *medium* (MS 339: 526). Nonetheless, in 1908, in a letter to Lady Welby, Peirce explains the sign as follows:

I define a *Sign* as anything which on the one hand is so determined by an Object and on the other hand so determines an idea in a person's mind, that this latter determination, which I term the *Interpretant* of the sign, is thereby mediately determined by that Object. A sign, therefore, has a triadic relation to its Object and to its Interpretant (CP 8.343).

A sign is then what mediates between an object and its interpretant, the interpretant itself being a new sign generated in relation to the object. The object should not be confused as a thing, neither the sign nor the object are necessarily material in nature since ideas and thoughts are also contemplated as signs. How the relation of determination occurs between sign and object varies according to situational circumstances, the object of a sign may be something created by the sign itself. If the sign in question is erroneous or misleading, the object is being determined by the sign as the erroneous idea being communicated (CP 8.178). The effect of the sign representing the object generates the interpretant, a new sign that synthetizes the effect of the sign. Rightfully, Peirce hesitated to describe the interpretant as the sign's meaning, the interpretant can be meaning, but it can also be an emotion or effort, "no existing word is sufficiently appropriate. Permit me to call this total proper effect of the sign taken by itself the *interpretant* of the sign" (EP 2:429)<sup>4</sup>. Peirce later named this process of sign action semiosis, although this triadic structure had already been present in his work since its early days.

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<sup>&</sup>lt;sup>4</sup> Conventional reference to *The Essential Peirce* (1998) followed by volume and page number.

In semiosis, the interpretant generated is never a perfect copy of the object, a perfect equivalence between object and interpretant would lead to an infallible process, reducing the irreducible triad to binarism and determinism, without the creation of new signs. What Peirce proposes is that semiosis never stops, the interpretant continuously seeks to approximate the object, implicating fallibility in the sign action and singularity in the interpretant's conception (Gonçalves, 2022). Another important consequence of this dynamic of the interpretant's development is how it implies that sign action does not happen instantaneously, it is a process situated in time, which matures into an initial effect, with the possibility of evolving and growing through its reiterations.

In 1906, in a section of the text *Prolegomena to an Apology for Pragmaticism*, Peirce shared further comprehensions on the triadic structure, presenting the idea of two objects and three interpretants. These distinctions, starting by the objects, are the following:

[...] We have to distinguish the Immediate Object, which is the Object as the Sign itself represents it, and whose Being is thus dependent upon the Representation of it in the Sign, from the Dynamical Object, which is the Reality which by some means contrives to determine the Sign to its Representation (CP 4.536).

The immediate object refers to the characteristics or qualities of the sign, the object imbued in the sign. Meanwhile, the dynamical object that which determines the sign to represent it, as if previous to that specific sign, or outside of it. To illustrate the concept in an example, let us imagine the drawing of a chair in a paper sheet, independently of how realistic or not are its traces, it brings forth its recognition of a chair. The traces, shapes, colors present in the paper are the immediate object, the idea of chair that determined that drawing as the drawing of a chair" is the dynamical object. The dynamical object can only be mediated by the sign, it cannot be conveyed in its totality. The immediate object, however, is entirely within the experience as part of the sign.

Moving on to the three interpretants, they are divided in similar manner. Peirce described them as the immediate interpretant, the dynamical interpretant, and the final interpretant. His initial depiction of the three interpretants in 1906 was still hazy, e.g. the immediate interpretant was described as "the interpretant as it is revealed in the right understanding of the Sign itself, and is ordinarily called the meaning of the sign" (CP 4.536), such notion would be problematic if the sign is vague to a point that its right understanding is unclear and its meaning ambiguous. Later, in 1908 in other letters to Lady Welby his explanations were more consistent.

It is likewise requisite to distinguish the *Immediate Interpretant*, i.e. the Interpretant represented or signified in the Sign, from the **Dynamic Interpretant**, or effect actually produced on the mind by the Sign; and both of these from the *Normal Interpretant*<sup>5</sup>, or effect that would be produced on the mind by the Sign after sufficient development of thought (CP 8.343).

The immediate interpretant is the potential interpretability contained in the sign, how apt the sign is to produce its effects, in terms of the signs internal structure. The dynamical interpretant is the effect produced in the semiosis in a given stage of its consideration. The dynamical interpretant does not necessarily recognize all the potentiality imbued in the sign, the immediate interpretant. The final interpretant is the effect that would take place in case the sign is appreciated in full potential (Santaella, 2000). In so, the final interpretant never effectively comes to be, existing only in abstract as a tendency to future dynamic interpretants. Both the immediate and the final interpretants are general and abstract in nature, which may seem redundant to the first-time reader, however, their distinction resembles the difference between the categories of firstness and thirdness. If we take a poem as a sign for an example,

<sup>&</sup>lt;sup>5</sup> In this letter the final interpretant is called normal interpretant, this term was not used again after this letter and Peirce went back to using the term final interpretant.

the immediate interpretant is the potentiality of the effects that the poem can produce, it is restricted to that poem and its presentation. The dynamical interpretant is the effect it produces on someone who just read it, which can focus certain aspects of the poem while overlooking others. Any time it is reread also constitutes a dynamical interpretant. And the final interpretant would be the ideal effect of the poem, in which it is considered in all its meaningfulness, fully and truly exhausting its potentiality.

### **Classes of Signs**

Before publishing the subdivisions of the object and the interpretant in 1907, Peirce had already classified the relations between the three elements of the triadic structure. The classes of signs were published in 1903 in the text *Syllabus*, where Peirce describes the three trichotomies: the sign itself, the sign in relation to its object, and the sign in relation to its interpretant. Once the order of determination was applied, these trichotomies generated a ten class sign system, each of these signs were studied and explored in detail by Peirce. After subdividing the object and the interpretant in 1907, these three previous trichotomies were identified as the trichotomy of the sign itself, the sign in relation to its dynamic object, the sign in relation to its final interpretant. Afterwards, Peirce developed seven other trichotomies, some still in their early stages, pointing to the possibility of a sixty-six class system which he knew he would not be able to detail in life, and so entrusted this task for future researchers (EP 2.482).

Although the present work explains the subdivisions of the object and the interpretant, it will not delve into or utilize the sixty-six class system considering that working with incipient trichotomies is a challenging endeavor to semioticians themselves, and applying the sixty six sign classes with proper justification would be a thesis on its own. To the present endeavor, the ten class system and the subdivisions of the hypoicon are sufficiently robust to address the phenomena in discussion and allow theoretical discussions from their distinctions. The

subdivisions of the object and of the interpretant may be cited in certain cases when their heuristic value is pertinent.

Each division in Peirce's trichotomies is related to a phenomenological category, meaning that their divisions are divided into firstness, secondness and thirdness. The trichotomies of the sign (S), the sign in relation to the dynamic object (S-DO), and the sign in relation to the final interpretant (S-FI) can be displayed at table 1.

Table 1

The three trichotomies

Categories/Trichotomies	$\mathbf{S}$	S-DO	S-FI
Firstness	Qualisign	Icon	Rheme
Secondness	Sinsign	Index	Dicent
Thirdness	Legisign	Symbol	Argument

Before describing the difference between each division, it seems important to make clear how the three trichotomies originate ten classes of sign instead of twenty-seven, which would be the full extent of their combinations. There is a general rule when classifying signs that Liszka calls the qualification rule. Simply stating, "the presentative aspect of a sign [S]<sup>6</sup> can only be combined with representative aspects [S-DO] which are equal to or lower than the presentative's [S] phenomenological type; the representative aspect of the sign [S-DO] can only be combined with interpretative aspects [S-FI] which are equal to or lower than the representative's [S-DO] phenomenological type" (Liszka, 1996). Therefore, a qualisign cannot be combined with divisions higher than firstness, every qualisign is necessarily iconic and rhematic. Sinsigns can be combined with divisions of secondness and firstness, but an iconic sinsign cannot be dicentic. Lastly, legisigns can be combined with divisions of every category, as long as its interpretative division is equal or lower in phenomenological category to its

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<sup>&</sup>lt;sup>6</sup> Insertions in between brackets were made by the author.

representative division. These exclusions in the determination order of sign classification reduces the possible sign classes to ten.

Similar to the manner in which thirdness requires secondness and firstness, sign classes include elements of its lower phenomenological categories. Indexical signs involve icons, argumentative ones involve dicents and rhemes (CP 2.248-253). Liszka (1996) calls this the inclusion rule, which is important to understand the complexity of signs and avoid possible attempts to simplify experiences by classifying them into hermetic classes. In so, classifying a sign does not reduce or detract value of other elements that constitute the sign.

## S - Qualisigns, Sinsigns and Legisigns

The first trichotomy refers to the sign itself, differentiating if the sign is "a mere quality, is an actual existent, or is a general law" (EP 2:291). The sign as a mere quality is named a qualisign, but it cannot truly act as a sign since it is not embodied in an existent or an event. Nonetheless, it can be abstracted from an experience as a feeling. It is, for example, sweetness abstracted from the event in which it was tasted, the tone of a musical note abstracted from whence it was heard, anger abstracted from the event in which it was felt, as a quality only. Sinsigns, on the other hand, are these singular events or existents that involve qualisigns.

A *Sinsign* (where the syllable *sin* is taken as meaning "being only once," as in *single*, *simple*, Latin *semel*, etc.) is an actual existent thing or event which is a sign. It can only be so through its qualities; so that it involves a qualisign, or rather, several qualisigns. But these qualisigns are of a peculiar kind and only form a sign through being actually embodied (EP 2:291).

In the sinsign, it is not the qualities themselves that act as the sign, but their situation in time and space, embodying a singular event or existent (Santaella, 2000). Following the previous examples, an apple being eaten is a sinsign, it involves qualisigns of sweetness,

texture, crunchiness and other aspects of the experience that are actualized in that singular moment. An emotional reaction like anger, as much as it does not involve materiality per se, situates the emotion in time and as a response to something else, constituting an event. It is also relevant to mention sinsigns as the actualization of a general law. A traffic sign of "do not park" placed in front of a garage entrance involves in itself many general laws, e.g. the allusions to the existence of a traffic code, and the conventions of how a sign should be designed and placed, but it actualizes these general laws onto that specific time and place. The sign does not mean that you cannot park in general, it enacts the law onto that specific location, the specific garage entrance. This specific form of sinsign is called a replica, the general law it represents is a legisign.

In Peirce's words, "a *Legisign* is a law that is a sign. This law is usually established by men. Every conventional sign is a legisign. It is not a single object, but a general type which, it has been agreed, shall be significant" (EP 2:291). Laws, patterns, regularities, tendencies, concepts and any type of learning are all legisigns due to their general character. As generals, they need replicas to be embodied and applied and, possibly, make its existence known. Going back to the example of the "do not park" sign in the front of the garage entrance, a hypothetical foreigner may see such sign once and through further experience realize they are common in every garage entrance of the city. Every traffic sign is slightly different, some may older and degraded from time passing, others may be bent or missing a few letters, formed by different qualisigns, but they still fulfill their role as a replica. Consequently, the said foreigner may become aware of the law, but of the pattern and common practice of their placement, coming to expect it in further experiences. And so, the foreigner becomes aware of these legisigns through their replicas.

## S-DO – Icons, Indexes and Symbols

The second trichotomy is the most known of Peirce's work, it was first shared in 1867 in the text *On a New List of Categories* and took part in his reflections as his his work matured in the following years. These divisions discern the sign's relation to the dynamical object, in other words, through what means the object determines the sign to represent it. Peirce explains these divisions in a letter to Lady Welby starting from the icon:

In respect to their relations to their dynamic objects, I divide signs into Icons, Indices, and Symbols [...]. I define an Icon as a sign which is determined by its dynamic object by virtue of its own internal nature. Such is any qualisign, like a vision, - or the sentiment excited by a piece of music considered as representing what the composer intended. Such may be a sinsign, like an individual diagram; say a curve of the distribution of errors (CP 8.335).

**Icons.** Iconic signs are determined by their resemblance to the object. Icons like a stick figure resembles a general human being with a few traces, a cloud can resemble many general images through its shapes, shadows and lighting. They mediate the object regardless of its material existence, and do not allow solid interpretations about the object's existence. In the text *Syllabus* from 1903, Peirce shared a new set of divisions for hypoicons, a name given to iconic sinsigns and legisigns, these divisions were only presented once and were not used or developed further by Peirce, only by commentators. Although Peirce seems to have abandoned this division, it provides distinctions of great heuristic value in hypnotic communication where indirect suggestions occur mainly as icons, thus these divisions will be considered in this work along with a variant developed by Jappy (2013) for the same reason.

*Hypoicons – Images, Diagrams, and Metaphors.* The only time Peirce discussed hypoicons, he described their divisions in the following manner:

Hypoicons may be roughly divided according to the mode of Firstness of which they partake. Those which partake of simple qualities, or First Firstnesses, are *images*; those

which represent the relations, mainly dyadic, or so regarded, of the parts of one thing by analogous relations in their own parts, are *diagrams*; those which represent the representative character of a representamen [sign] by representing a parallelism in something else, are *metaphors* (CP 2.277; EP 2:273).

If an icon is defined by its similarity to its object, the divisions of the hypoicon discern how that similarity takes place. The simplest form of similarity would be in its partaken qualities like textures, colors, smells, shapes, feelings, and sounds, which, according to Peirce, would be images. The diagram however, is similar to the object by the relations of its internal structures, it is not the qualities in themselves that evoke the dynamical object, but their inner relations. Good examples of diagrams are graphs, descriptive phrases, sequences and patterns, the relations in between their elements are required to properly relate to their objects, differentiating them from mere images. The semiotician Colapietro (2011) helps us understand these divisions as a matter of distancing from the definition of icon. The image would the closest to it, the diagram would be in an intermediate distance as it requires dyadic relations, while the metaphor would be at the greatest distance in terms of immediate resemblance.

The metaphor presents a more complex degree of resemblance, involving vagueness, a certain level of previous experience, and unrealized meaning. It is not surprising that it can easily be confused as a symbol or be part of one. Peirce's definition of metaphor suggests a sign composed by the juxtaposition of two given signs, combining their representative character (Colapietro, 2011; Jappy, 2013). A crest with symmetrical rampant lions and a royal crown suggests likeness in between partial qualities of the lion and that of the crown, however, it does not specify which qualities they partake, leaving that to the interpreter. One may understand the lion as the apex predator and king of the jungle, assimilating that power and dominance with the human royalty, while others may associate it with braveness and courage.

If the vagueness in between the juxtaposed signs were to be objectified, the metaphor itself would be undone and become an analogy, which would lessen it to a diagram.

Jappy (2013, p. 178) suggests the allegory as another form of metaphorical sign, where there is a parallel made but without juxtaposition in the sign. The representative character being associated with another sign is inferred entirely by collateral experience, involving diagrammatic resemblance between the two, yet to consider it merely diagrammatical would ignore its parallel structure. Aesop's fables are a great example of allegories if presented without the moral of the story, such fables display relations in between its characters that interpreters relate to their own life experiences due to a vague partial resemblance.

Erickson often used allegories as a form of indirect communication and suggestion. As a quick example, one of his patients was a 31-year-old woman completely paralyzed from the waist down an incontinent, she believed her dream of finding a partner was impossible due to her physical conditions (Erickson & Rossi, 1979). Among other suggestions in trance on how Ubangi duckbilled women and Burmese giraffe-necked women were considered attractive and loved in their tribes, Erickson ended with the following allegory: "And please don't ever tell Mr. Hippopotamus that Miss Hippopotamus does not have a lovely smile. [There was no way to ensure, only to hope that the patient in the deep trance might grasp the triple pun so pertinent to her in her condition hip-pot-mus (mess)...]" (Erickson & Rossi, 1979, pp. 428-442). In his explanation in the case study, Erickson reveals to the reader that which he could not reveal to the patient, which is all the allusions that the suggestion contained implying she was Miss Hippopotamus and that she should not downplay what others could admire her for. As these forms of signs are recurrent in his work, the hypoicon subdivisions and Jappy's allegory variant allows us to distinguish icons in different forms of hypnotic suggestions, possibly enabling further understanding of their therapeutic potential.

Indexes. In 1909, in the text A Sketch of Logical Critics, Peirce defines indexes (or indices) by how they "[...] represent their objects independently of any resemblance to them, only by virtue of real connections with them [...]" (EP 2:461). Indexes are fairly the easiest type signs to exemplify, as they are mainly sinsigns directly related to their objects. A photograph, a thermometer, names, pointing arrows, a call for attention, a cry for help, a reaction, are all indexes. Indexes have a dyadical relation to their object, it is the connection with the object that represents it, if this connection is material or mental it does not make a difference, although cause and effect can be involved in the connection. Santaella (2000) explains that every index possesses two elements: "one of them serves as substitute for the object, the other constitutes an icon that represents the sign itself as quality of the object (p. 131)". It is such manner that a bullet hole represents a shot fired, but it is not the icon itself that leads the sign to act as an index, it is connection between the bullet and the hole. In simpler and more strict terms, the index indicates its object.

**Symbols.** In the text *Prolegomena to an Apology for Pragmaticism* from 1906, Peirce gave a detailed definition of the symbol:

[When the object determines the sign] by more or less approximate certainty that it will be interpreted as denoting the object, in consequence of a habit (which term I use as including a natural disposition), when I call the sign a *Symbol* [...]. A Symbol incorporates a habit, and is indispensable to the application of any *intellectual* habit, *at least*. Moreover, Symbols afford the means of thinking about thoughts in ways in which we could not otherwise think of them. They enable us, for example, to create Abstractions, without which we should lack a great engine of discovery. These enable us to count; they teach us that collections are individuals (individual = individual object), and in many respects they are the very warp of reason (CP 4.531).

Then, for a symbol to relate to its object by force of habit, such habit must first be acquired. The sign itself bears no resemblance or actual connection to the object, its connection must first be learned through experience or taught by another. If an illiterate person is presented the written word "bookshelf", this sign will be associated with the said piece of furniture, although it would if spoken verbally. Languages are symbols which allow us further abstractions and generalizations where knowledge can be built upon, like the formulation of concepts, concepts can be organized in theories and so on. The creation of symbols is not exclusive to humans, animals create symbols through their life experience to survive, identifying predators, risks and conditions of safety. Note that one crucial consequence of symbols is how they allow new interpretations of signs, also retroacting and changing interpretations of past experiences.

## S-FI – Rhemes, Dicents, and Arguments

The third trichotomy of the ten-class system is that of the signs relation to its final interpretant. The reader must keep in mind that by referring to the sign's relation to the final interpretant, this trichotomy concerns the interpretative limit of the sign, what role it can fulfill if it was possible to be understood in its entirety, and not the dynamic interpretant, i.e. the actual effect it produces in a given stage of its interpretation. A sign in terms of its relation to its final interpretant can be rhemes, dicents, and arguments.

"A *Rheme* is a Sign which, for its Interpretant, is a Sign of qualitative Possibility, that is, is understood as representing such and such a kind of possible Object. Any rheme, perhaps, will afford some information; but it is not interpreted as doing so" (EP 2:292). A rheme cannot propose more than a possibility, the sign presents qualities that could be part of a possible object. The level of information it can provide is that of a possible quality, even if the sign in question is indexical or symbolic. An indexical sign like an emotional reaction, e.g. a grunt of

anger, in terms of its final interpretant it can be interpreted as the feeling of anger in itself, a quality. This does not exhaust the sign of having a possible dicentical character, rhemes are necessarily involved in dicents and arguments.

Peirce explained the Dicent sign to Lady Welby as a sign capable of being asserted. A dicent is not necessarily an assertion, but an assertion is a dicent. The dicent carries some information about an existent or an event, unlike the rheme, which cannot provide more than a possibility. In the text Syllabus, Peirce clarifies the identification of a dicent with more depth:

The readiest characteristic test showing whether a sign is a Dicisign<sup>7</sup> or not, is that a Dicisign is either true or false, but does not directly furnish reasons for its being so. This shows that a Dicisign must profess to refer or relate to something as having a real being independently of the representation of it as such, and further that this reference or relation must not be shown as rational, but must appear as a blind Secondness. (EP 2:275).

As the dicent provides some sort of information or reference, it can be discerned as false or not. The thermometer is a typical example of an indexical sign, in normal conditions, a thermometer will display room temperature correctly, it does so without providing any justification or argument onto itself as a sign. Its purpose is strictly referential, which is the closest it can come to blind secondness.

Arguments possess that which dicents lack, they relate to general laws or ideas while furnishing reasons for some form of change. The dicents present in the argument provide it referential value, and the rhemes furnish its qualitative aspects. Thus, the sign is understood as a law, compelling the interpreter a change in conduct or thought based in its rationality and logic. In *Syllabus*, Peirce clarifies:

<sup>&</sup>lt;sup>7</sup> Dicisign is a variant term for dicent.

An Argument is a sign whose interpretant represents its object as being an ulterior sign through a law, namely, the law that the passage from all such premisses to such conclusions tends to the truth. Manifestly, then, its object must be general; that is, the Argument must be a Symbol. As a Symbol it must, further, be a Legisign. Its Replica is a Dicent Sinsign (EP 2:296).

Following the inclusion rule, arguments are combined only with legisigns and symbols since their object is a general. Then the legisign's replicas are dicent sinsigns, referencing to whatever the general applies. Like symbols, arguments are involved in the creation and development of reasoning and general laws, it can act upon the interpreter's self-control proposing changes. According to Santaella (2000, p.148), Peirce divided arguments in three types, abductive, inductive and deductive, as they were regarded as three types of rationale, afterwards they were integrated as interdependent stages of scientific investigation. Briefly speaking, abductive reasoning "consists in examining a mass of facts and in allowing these facts to suggest a theory. In this way we gain new ideas; but there is no force in the reasoning" (CP 8.209). Abduction is a vaguer and more uncertain approach in which hypotheses are still in a rudimentary level looking for a theory. On the other hand, Inductive reasoning "the inference of the truth of the major premise of a syllogism of which the minor premise is made to be true and the conclusion is found to be true" (CP 8.209). Induction starts from a set premise and seeks facts onto which it proves itself, validating its major premise. Deductive reasoning parts from a major premise that if true will apply to a said particular case rendering its conclusion also true. For example, all mammals regulate body temperature, dolphins are mammals, therefore, dolphins regulate body temperature.

With all the trichotomies clarified, the reader is now more apt to understand the combination process that results in the ten sign classes utilized in this study to discern finer elements present in living experience. Table 2 exemplifies each sign class:

Table 2

Examples of the ten-class sign system

			<b>Examples in</b>
	Sign Class	Examples	Hypnotherapy for
			Chronic Pain
1	D1	A f. 1: f 1	The feeling of
1	Rhematic Iconic Qualisign	A feeling of redness	daydreaming
			Qualitative element of
2	Rhematic Iconic Sinsign	An individual diagram	pain (i.e stabbing,
			shocking, burning)
3	Dhomatic Indeviced Singian	A spontonoous on	A feeling of spontaneous
3	Rhematic Indexical Sinsign	A spontaneous cry	pain
4	Dicentic Indexical Sinsign	A weathercock	Location of painful feeling
	Rhematic Iconic Legisign	A diagram abatmatad fram	Qualitative element of
5		A diagram abstracted from	chronic pain abstracted
		its individuality	from its individuality
-	Rhematic Indexical	A 1	A feeling when chronic
6	Legisign	A demonstrative pronoun	pain acts
7	Disentia Indevied Legisian	A street shout from a	Circuit of chronic pain
/	Dicentic Indexical Legisign	market vendor	when it acts
8	Rhematic Symbolic	A common noun	A diamagia
0	Legisign	A common noun	A diagnosis
0	Dicentic Symbolic	Annonosition	A condition for change
9	Legisign	A proposition	
10	Argumentative Symbolic	A avilla aigue	Therapy
10	Legisign	A syllogism	

# Habit

Habit is a concept present in Peirce's work through almost the entirety of its development, first mentioned in its early days in 1868 and still being improved upon on 1913 by the end of Peirce's life. The evolution of Peirce's concept of habit is trespassed by the

varying focuses of his reflections through the years, becoming more articulated and an important element for his doctrine of continuity of reality.

In a more general scale concerning reality, Peirce thought of habit as the characteristic of phenomena to attend to general laws, and thus allows for regularity, continuity and tendencies (1.409). In so, phenomena of pure chance become progressively determined by general laws, and this tendency itself is able to produce more generalizations. In this regard, habit applies to all phenomena, including non-living processes of nature, like general laws of physics, chemical reactions and nature's cycles.

Concerning humans, habit is the tendency to act in a certain way if subjected to certain conditions. Peirce includes that the mind does not differentiate the origin of interpretants as imaginary or real for habit-formation, valuing mental rehearsals and inner world reiterations equally, he explains:

An expectation is a habit of imagining. A habit is not an affection of consciousness; it is a general law of action, such that on a certain general kind of occasion a man will be more or less apt to act in a certain general way. [...] Of course, every expectation is a matter of inference. [...] For our present purpose it is sufficient to say that the inferential process involves the formation of a habit. For it produces a belief, or opinion; and a genuine belief, or opinion, is something on which a man is prepared to act, and is therefore, in a general sense, a habit. A belief need not be conscious. [...] A belief habit formed in the imagination simply, as when I consider how I ought to act under imaginary circumstances, will equally affect my real action should those circumstances be realized. [...] Under a logical aspect your opinion in question is that general cognitions of potentialities *in futuro*, if duly constructed, will under imaginary conditions determine *schemata* or imaginary skeleton diagrams with which percepts will accord when the real conditions accord with those imaginary conditions; or, stating

the essence of the matter in a nutshell, you opine that percepts follow certain general laws (EP 2:222).

Therefore, the formation of mental habits is influenced by beliefs and expectations on how certain dispositions will relate to pertinent general laws. They influence levels of integration with other habits, their flexibility, and level of autonomy in different scenarios. Nöth (2016) and Colapietro (2017) explain that mental habits form a hierarchy where some habits take the role of deliberating and executing the formation, change or abandonment of other habits, seeking a more cohesive functioning. These habits are self-control, self-criticism and self-conscience, they are subjected to growth and fallibility like any other sign, and evolve through our continued engagement with reality.

#### **Case Studies**

Table 3 contains the summarized information of Erickson's chronic pain cases found by the references of the *Uncommon Casebook* (O'Hanlon & Hexum, 1990). It was found 29 cases reporting some form of chronic pain, 27 of them were properly treated by Erickson, as he refused to attend to 2 cases (numbers 26 and 29).

Table 3

Chronic pain cases by Milton Erickson

#	Age/ gender	Problem	Treatment Length	Techniques	Result	Follow-up
1	37 F	Pain from terminal cancer	One session, four hours	Hypnosis; Anesthesia	More lucid, less medicament and enjoyed last days with family.	Died six weeks later.
2	80 M	Pain from terminal prostatic cancer	NA	Hypnosis; time distortion; body dissociation; splitting.	Successful pain relief.	Died some weeks later after treatment.

	3	F	Trigeminal Neuralgia	Five days, five one- hour sessions	Hypnosis; Amnesia; implication; splitting	Free from pain and related disabilities.	NA
	4	60's M	Phantom limb pain	1st period, 3 sessions in two months; 2nd period, nine months later, 4 sessions; 3rd period, two years later.	Hypnosis; hypermnesia	Pain control and freedom from drugs for period of time with episodes of recurrences. Phantom limb was never totally relieved.	Around one year after third treatment he was seen socially, MHE did not mention relapse or recurrence.
	5	F	Pain from terminal lung cancer	NA	Hypnosis; anesthesia	Free from pain and narcotics.	Died five weeks later. Enjoyed her family in her last days.
-	6	M	Heart and chest pains	NA	Implication; pain dislocation	Heart pain was eliminated and therapy proceeded to other demands.	NA
-	7	35 F	Pain from terminal cancer	One session of 11 hours	Hypnosis; anesthesia. Dissociation; body disorientation; positive and negative hallucination	Spent her last days relatively free from pain and drugs.	Died five weeks later.
_	8	M	Pain from terminal cancer	Two sessions	Hypnosis; indirect suggestions	Pain was lessened and QoL improved.	Died three months later
_	9	70 M	Tic douloureux	One session	Direct suggestion; reframing	Pain stopped after 14 years.	Free of pain until his death seven years later.
	10	F	Chronic pain in hip with no medical evidence	One session of two hours	Metaphor; analogy	Pain was lessened.	NA

11	36 F	Pain from terminal cancer	Five sessions in four months	Hypnosis; time distortion; anesthesia; positive hallucination; treatment demonstration.	Pain was greatly lessened and reduced to an itch.	Died five months later.
12	F	Pain from terminal cancer	NA	Hypnosis; dissociation; positive and negative hallucination; amnesia; analogy; treatment demonstration	Pain was greatly lessened, entered trance when pain was too intense; lived to see her daughter's marriage	Died 10 months later.
13	M	Pain from spinal cord injury	NA	Hypnosis; treatment demonstration	Pain was greatly lessened and changed pattern. Wife and husband were taught how to reinforce suggestions.	Pain recurred a few months later and the couple came in for treatment. It was dealt with success.
14	52 F	Pain from terminal cancer	One session	Attention redirection; positive hallucination.	Pain was greatly lessened and she would often refuse medication for it.	NA
15	M	Pain from cystitis and pyelitis	NA	Attention redirection	Pain was lessened.	NA
16	F	Pain from terminal cancer; bladder urgency; insomnia	Two sessions	Hypnosis; treatment demonstration; anesthesia; dissociation; splitting; positive hallucination	Less pain, lower urinary frequency; able to sleep more.	NA
17	F	Pain from defecation after cancer extraction	One session	Hypnosis; posthypnotic suggestions	Pain reduced and her colon healed.	NA

18	M	Pain from spinal cord injury	One session	Task assignment	Pain reduction and found new hobby.	NA
19	F	Pain with no medical origin after car accident	A few two and one- hour sessions, 19 hours total	Reframing; attention redirection; task assignment	Free from pain and began to lead an active life.	NA
20	F	Pain from jaw damaged in a car accident; required dental surgery but had phobia for dentists	Five sessions	Hypnosis; analgesia; symptom displacement	Was able to go comfortably through dental surgery without chemical anesthesia, healed well.	15 years later the patient still had no fear of dentists
21	50 F	Incapacitating migraines ranging from three hours to three days; often hospitalized from dehydration and vomiting	Six weeks, three sessions	Hypnosis; time distortion; amnesia	Migraines reduced to short headaches that did not disrupt her life.	Over two years
22	F	Migraines in the right side only	NA	Hypnosis; indirect suggestions	Migraines were eventually eliminated.	NA
23	F	Headaches with irritability since leaving parents house	Six weeks	Hypnosis; pattern intervention; posthypnotic suggestions	Headaches and social issues disappeared.	Patient kept in touch, after one and a half years had only normal headaches.
24	M	Migraines followed by emotional outbursts and vomiting	One session	Hypnosis; indirect suggestions; posthypnotic suggestions; pattern intervention	Patient did not develop further migraines.	NA
25	F	Three days of headache every week	NA	Indirect suggestion; symptom prescription;	Headaches became less frequent	NA

				task		
				assignment		
26	F	Chronic headaches	NA	Refused to work with patient	Erickson refused to work with the patient after realizing she had set all her previous doctors to fail.	23 years later the patient still had headaches and social issues.
27	M	Chronic headaches	NA	Hypnosis; utilization of competitive	Headaches disappeared.	Six years later the man was still free of the headaches.
28	M	Chronic headaches since age seven; cocaine and Percodan addiction; family issues	NA	Reframing; task assignments; indirect suggestions	Headaches stopped. Patient had quit cocaine and Percodan, his marriage improved	NA
29	38 M	Migraines; depression	NA	Refused to work with patient	Erickson refused to take the case, he was sure the man intended to fail.	NA

to alz

The information disclosed in Erickson's chronic pain cases vary considerably due to the format and purpose of the publications where they find themselves. In his literature altogether, they are presented amidst seminars, conversation transcripts, exerts of case studies, and articles. In articles specifically, regardless of the subject, his cases were consistently presented with an overview of the patient's demand and what has been achieved with therapy. The proceedings are mostly described in sequence, giving a general idea of how outcomes were achieved, but often leaving out how suggestions were employed and finer details of the patient-therapist relationship. Cases in transcripts of seminars and conversations with researchers are in certain level the exception as in these scenarios Erickson reports the cases retelling conversations

verbatim and precising key suggestions utilized to achieve therapeutic goals. Cases number 1, 5, 6, 7, 19, and 23 did not describe how suggestions were conveyed, merely describing what was suggested or what hypnotic phenomena were evoked. Cases 2, 4, and 20 left out some hypnotic proceedings, such as the first hypnotic experiences or specific suggestions related to pain relief, but still detailed interventions and conveyed suggestions key to understand how therapeutic change took place. Some cases reports in articles emphasized specific techniques because the subject of the article was said technique, and the case presented was utilized as illustration of the technique in clinical setting.

Out of the 27 cases reported above, the following case studies concern cases 3, 13, and 12 respectively.

#### Case A

Erickson's patient in this case will be referred by the alias of Megan, her case was reported in the article *An hypnotic technique for resistant patients* from 1964 used to illustrate and discuss the technique in question. Megan had trigeminal neuralgia and was hopeless about her situation, also she did not believe hypnosis could help her based on previous medical opinions, the organic nature of her pain and her knowledge acquired in medical books. Her consultation with Erickson came as a last-ditch effort, as this summary will demonstrate.

# **Case Summary**

In her first day, Megan came in the office stepping lightly, Erickson noticed her body was rigid, the right side of her face was immobile, yet under control, and the blink of her right-eye was reduced. She could speak clearly and lucidly, but was mouthing her words to the left side. The movements of the left arm were hesitant and constrained, notably so when directed towards her face. Erickson asked since when she had trigeminal neuralgia and assured her that

she could answer slowly and using just a few words. Megan replied "Mayos', 1958, advised against surgery, against alcohol injections, told there was no treatment, have to put up with it and endure it all my life, (tears rolled down her cheeks), a psychiatrist friend said maybe you help" (Erickson, 1964, p. 25). A quick conversation ensued where she stated her need of help and agreed to accept Erickson's pace for therapy. Once Erickson questioned if she was ready to start, she replied "Yes, please, but no good, all clinics say hopeless, painful. Everybody enjoy himself but I can't. I can't live with my husband, nothing, just pain, no hope, doctors laugh at me see you for hypnosis". Megan was then asked if anyone suspected if the pain was of psychogenic origin, she said all other clinics deemed it was organic, Erickson asked what advice she was given, her reply was "endure, surgery, alcohol, last resort". Megan did not believe hypnosis would help, justifying that her disease is organic and hypnosis is psychological. Megan was nourishing herself from liquids, but a single glass of milk in the morning took her more than one hour to finish. Her pain had trigger spots in her cheeks, nose and forehead. Erickson asked why she had gone there if she believed hypnosis would be useless, she answered "Nothing helps, one more try only cost a little more money. Everybody says no cure. I read medical books". In his report, Erickson explains his perspective of the situation until this point:

This was far from a satisfactory history, but the simplicity and honesty of her answers and her entire manner and behavior were convincing of the nature of her illness, its acute and disabling character, the reality of her agonizing pain, and her feeling of desperation. Her pain was beyond her control, it did not constitute a condition favorable to hypnosis; she was well-conditioned over a period of 30 to 40 out of 60 months (as was afterward learned) by the experience of severe uncontrollable pain with occasional brief remissions, and all respected medical authorities had pronounced her condition as incurable and had advised her "to learn to live with it and only as a last resort to try

surgery or alcoholic injections." She had been informed that not even surgery was always successful, and surgical residuals were often troublesome. One man only, a psychiatrist who knew the author, advised her to try hypnosis as a "possible help" (Erickson, 1964, p.25).

Next, Erickson explains how direct hypnosis is not recommended in Megan's situation due to her well-established background of learning and conditioning based upon long experience. And so he employed the technique for resistant patients described in the article. The technique itself consists of acknowledging to the patient his resistance, understanding that it might come despite his will to cooperate, but diverting his attention while starting to utilize dissociative language in an indirect manner, for example, 'Since you have come for therapy and you state that you are a fault-finding uncooperative patient, let me explain some things before we begin. So that I can have your attention, just sit with your feet flat on the floor with your hands on your thighs, just don't let your hands touch each other in any way" (p. 10). As it progresses, Erickson does the same suggesting a division between the conscious mind and the unconscious.

To the conscious mind it is addressed demotivating and depotentializing suggestions, stating that it might get bored or distracted with other noises as the therapist wants to talk to the unconscious mind, and that conscious mind does not have a clear understanding of the patient's problem, otherwise they would not be there. The patient's attention is diverted with ambiguous and disarming statements like "If your eyes get tired it will be all right to close them but be sure to keep a good alert", while suggesting comfort and indifference to the conscious mind. At some point it suggested that the unconscious mind can learn to understand the patient's problems, implying that therapy is possible and dissociation is a path to achieve it.

The last step is a lengthier description filled with suggestions on how the unconscious can communicate yes or no with simple movements, citing examples of the body parts it could

do so, indirectly suggesting them. While mentioning that a question will be made, it is established that whatever the answer, it comes from the unconscious, and both the therapist and the patient's conscious mind will wait for it. This entire process puts the unconscious in the forefront of importance and decision-making. If the conscious mind is aware of the answer, the unconscious allowed it so, and if the patient moves it on his own, it is also a proper answer. After some repetition the question is "Does your unconscious mind *think* it will raise your hand or your finger or move your head?" (Erickson, 1964, p.14). The response usually evokes other hypnotic phenomena like catalepsy and allows more depth to the treatment.

In Megan's case, this was applied as verbatim as possible, she responded well, had undergone trance and answered with head movements, also developing arm catalepsy. Some additions were made in reference to her situation, Erickson added:

There was added to the technique the additional statements that an inadequate history had been taken, that her unconscious mind would search through all of its memories, and that she would communicate freely [...] any and all information desired, there should be a careful search of her unconscious mind of all possible ways and means of controlling, altering, changing, modifying, re-interpreting, lessening, or in any other way doing whatever was possible to meet her needs. She was then given the posthypnotic suggestion that she would again sit in the same chair and depend upon her unconscious mind to understand the author and his wishes. Slowly, perseveratively, she nodded her head in the affirmative (p. 26).

Erickson cued her to rise from trance by repeating some sentences from the beginning of their conversation, Megan woke up, adjusted herself, and when she talked, she did so normally and without any pain. After startling herself, she noticed the neuralgia was still present, but her trigger spots were less sensitive, exclaiming that it was impossible. Erickson

replied it was impossible, but not in his office, and told her to come again in the next day, ushering her out.

On day two, Erickson asked Megan how she slept, she explained she kept waking up tired, as if staying awake a while was to rest from sleeping. Erickson complimented her unconscious on the hard work it was did, and asked her for her full history. Megan explained some life events and that she was a psychiatric social worker, her pain started in 1958, continuing for 18 months, she consulted with medics from many different fields and they ruled out psychogenic factors, they also shunned and mocked hypnosis as an alternative. She was beloved at work and used to whistle merry tunes frequently. She pondered about how meeting a doctor knowledgeable in hypnosis helped her already, talking wasn't such hardship anymore and she had her glass of milk in 5 minutes that morning. Erickson answered "I'm glad of that" and she went into deep trance.

In this session Erickson described activities with suggestions and implications in them, e.g. how cracking hickory nuts with teeth on the right side would be very painful and "not at all like eating", or how it was too bad that the first bite of fillet mignon would be so painful when the rest of it would be so good. When she rose from trance, she was shocked an hour went by, Erickson simply replied as she ushered her out that "the lost time went to join the lost pain".

Day 3 started with Megan celebrating that in the previous night she had fillet mignon and while combing her hair realized her forehead is not a trigger spot anymore. Four one-hour sessions later, Megan's pain had all subsided and she started bringing up her wish go home. Erickson said playfully that she had not learned how to get over the recurrences yet and sent her into deep trance. After saying "It always feels good so good when you stop hitting your thumb with a hammer" (p. 27), Megan's body contracted in pain, relaxed and she smiled. Erickson told her to do that six more times until she realized it was enough practice. Next, she

dried face briskly with tissues, indifferent to her nose and right cheek, showing they were no longer trigger spots. Megan rose from trance and was again dismissed.

In day 6, it was mentioned it was her 'doubt day' and she was asked to slap her left cheek hard, she did so immediately. Erickson asked her to do the same with her right side, she hesitated in the moment of contact, weakening her slap. Erickson mocked her playfully and asked how it felt, the trigger spots were definitely gone. Megan did it again without holding back, adding a punch to her forehead and was satisfied all her doubts were gone. Shortly after she was put into trance again. Erickson asked her to make up a tune she could whistle containing the lyrics "I can have you anytime I want you, But, Baby there ain't never gonna be a time when I want you" (Erickson, 1964, p.28). Out of trance, before she said anything, Erickson recited the following wordplay "Well, the deed is done and cannot be undone, so let the dead past bury its dead. Bring me only one more good tomorrow and you will go home tomorrow with another good tomorrow and another and another, and all the other good tomorrows are forever yours. Same time." Implying she should be there the following day. The following day was the last day of therapy, in trance she did a systematic, comprehensive review of everything she had achieved and Erickson pleaded her to believe in intensity in her own body's potentials in meeting her needs. She was also requested to be very amused when skeptics suggest she would have remissions and relapses. Before ending the report, Erickson mentioned to the reader how iatrogenic and deadly these skeptical remarks can produce iatrogenic diseases. Further correspondence with Megan showed her amusement when a neurologist offered a long argument against hypnosis and stated that what relief she had was transitory. She did not mind this and did not experience recurrences or relapses.

#### **Discussion**

A proper analysis concerning habits and the reconfigurations present in Megan's case requires us to observe events and information in the form they are presented in her therapeutic process and take in what she experienced to understand what her needs were. Megan's case is heavily weighted by her trajectory through previous consultations, a strict understanding of her own situation and her disbelief in hypnosis, which led Erickson to consider her a resistant patient. So, first let us clarify what pertinent information is available in Megan's background.

Megan was a psychiatric social worker beloved by her colleagues, it can be assumed that she was familiarized with medical reasoning since her job was to coordinate the care of patients, where she stood side-to-side with colleagues in the patient-doctor relationship. She is very prone to regard medical staff as knowledgeable authority when it concerns health processes, attributing higher value to their statements on the matter. This may seem obvious to the reader who understands the progress of medicine through time, however, it is important to distinguish how Megan views medical staff and medical discourse from someone who, in the other hand, does not trust them, be it for bad experiences with medicine in the past or for favoring other perspectives of healing. Once her pain starts and she goes to consultations, a series of events take place where many doctors are repeating to her that her condition is uncurable, saying her treatment options were more likely to harm her than to aid her, and advising she should endure the extreme pain for the rest of her life. The impact of these statements while being conveyed by an authority that the listener considers legitimate is higher than if it came from source considered doubtful or questionable.

Concurrently, we have the vulnerability resulting from the extreme pain, while extreme acute pain can generate a traumatic event, chronic pain in such intensity threatens expectations that are the foundation of lifelong projects, goals, and social relations. Megan was vulnerable because her condition was likely putting into question what kind of future she would have, and the answers she was given by her doctors did not lead to a viable future, every alternative was

shut down as laughable, or dangerous and likely to fail last resorts, instilling hopelessness and desperation. All these consequences the pain was having in her life were not taken into account when she was told she should endure the pain and learn to live with it. Hence why Erickson brings up the topic of iatrogenic diseases, and how her needs were not being met. In these clinical relationships, Megan is being approached in such manner where, as a person, her singularity fades and she lives in the shadow of her condition as a trigeminal neuralgia patient. Overall, Megan did not find treatments or helpful information about to her situation, instead, it renewed the idea of powerlessness against the pain and she received a prophecy of failure that fulfilled itself every time an alternative did not yield significant results. Past failure instilled further failure that would retroact upon itself and confirm the reality of a future of life-long suffering.

So far, the full configuration of what Erickson categorized as resistance was Megan's long-time conditioning of pain, the effects of the statements that her disease was organic and incurable, the prophecy of failure for any attempt of alternatives, and the cartesian understanding that hypnosis would have no effect on her condition because one was psychologic and the other was of organic nature. Megan whole-heartedly believed her pain could only be cured or relieved by interventions that acted upon its organic nature, partaking in a linear cause-effect relation, her assessment of the reality she found herself in followed the same problem-solving logic as the doctors she consulted with. In her perspective, hypnosis could only have an effect on whatever found itself in the plane of ideas, thoughts and emotions, her conception of pain was not included in it, in the virtue of its reduction to a mere reaction to stimuli. Consequently, her rationality had already predicted it would be another failure and held that expectation against whatever Erickson would propose.

To elaborate on the case on semiotic terms, Megan's previous experience of care is a compelling argument whose premises resonated deeply with her habits of interpretation of the

situation, i.e her medical knowledge and her understanding of such condition. As an argument, it is also a symbol and a legisign, each to be explained. As a legisign, it includes elements of law, her experience is permeated by general understandings being professed by experts in the field. As a symbol, it allows her further interpretations, abstractions and generalizations concerning her situation, regardless of it being truthful or fictitious. And as argument, it compels her into some change of habit, furnished with propositions, references and qualities for such change.

One might oppose the idea that the iatrogenic remarks made to Megan are argumentative due to that not being the intention of their conveyer. However, as much as a given sign may have intentionality in its utterance, its final interpretant may include such intentionality to some extent, but it does not necessarily rely on it. In so meaning that such given sign may have an interpretability that greatly surpasses or diverges from its sender's intentionality, as it occurs frequently in philosophy, literature, or art, for example. Regardless of the intentions of the doctors she consulted with, Megan was assessing what expectations she could have of her life henceforth.

This imaginary exercise, conscious or not, is habit-forming, it is mental rehearsing and organizing dispositions for exertions of that future. And as a convincing argument, her experience in these consultations did produce habits according to what had been proposed. There was no mention on how she could go through daily tasks, continue work, or enjoy social activities, Megan's future was delineated as "endure this pain" with no guidance on how to successfully achieve this feat. Any exert of pursuing alternatives was unworthy, and under this cartesian conception, her pain was uncontrollable. The state Megan found herself in when she met Erickson is coherent with what had been conveyed to her, directly and indirectly. Such coherence cannot be understood as her conscious habits of interpretation of her situation have a direct influence on her state, but they hinder the production of interpretants that do not refer

to the restrictive laws of causality on how to experience her own body. On the other hand, the manner in which Erickson approaches the situation utilizes these social processes to address her needs and lessen her pain.

First, concerning the clinical relationship. The therapeutic interventions focused almost entirely on unconscious processes, yet Megan was the protagonist of the changes she achieved. During the first meeting, the manner in which she would participate was defined, she agreed to Erickson's terms concerning the pacing of the therapy and, in trance, she would do the work going through memories, reassessing the situation, and reorganizing processes utilizing these resources. This marks a different relation of care from that which she was used to, where aid or decisions came strictly from outside in, and she had agency, remaining passive during its course. Here she had an active role in her own care, relieving the feeling of powerlessness to measures that exceeded the duration of the therapeutic process in itself. While her role pertained to the investigation and execution of the changes, Erickson would guide them.

Throughout this entire case, Erickson's suggestions are very diagrametic, they do not necessarily demand that Megan does something, but they provide a way in which elements can be related even if something else is being proposed at a rational level (thirdness). For example, in Erickson's technique for resistant patients, used in the first induction, he is arguing why her conscious mind does not know much about the situation, while saying how it can get bored, what it could do while bored, that he can have her attention, how the unconscious can use movements to communicate itself. The choice of movements as means of communication engages vital processes as part of the hypnotic experience right from the start, lessening the separation of subjective and vital habits as her initial response of catalepsy manifests itself. When indicating that a search should be conducted in her unconscious, he specifies the objective is to meet her needs, yet this index is furnished with many verbs showing possibilities on how it could be done: "[...] controlling, altering, changing, modifying, re-interpreting,

lessening, or in any other way doing whatever was possible [...]" (Erickson, 1964, p.26). The vagueness of these diagrams allows the interpreter to fill the vacancy with their own subjectivity and carry the semiosis through. The suggestions of the second day are another noteworthy example of how Erickson utilizes embedded diagrams for habit change. A painful activity, like cracking nuts with one's teeth, is related as opposition to eating, and the first bite of the fillet mignon is an entirely different experience than the rest of it. The painful experience is separated from the pleasing activity as preparation for future exertions of this activity. The same was done with day-to-day activities utilizing resources involving experiences that reconfigured the sensitivity and the interpretation of stimuli.

Around day five, when the topic of how to deal with recurrences comes up, Erickson makes a suggestion in the form of a statement: "It always feels good so good when you stop hitting your thumb with a hammer" (p.27). Semiotically it could be classified as dicentic symbolic legisign, it proposes something without providing any reason to it, which she proceeds to find out by herself in this hypnotic scenario. Concurrently, the icons of the suggestion constitute an allegory relating to Megan's own experience of chronic pain. While going through this, she is willingly producing, stopping and feeling relief from pain until she felt it was enough practice, hence, when the previously uncontrollable pain is under control. This sort of exercise relates to habits even in the form of repetitive exertion, but on an unconscious level since Megan develops amnesia after every trance.

Megan may have not understood consciously how her pain was resolved, but in the doubt day her lasting hesitancy was both revealed and solved, the therapeutic work done from an unconscious level establishes some coherence with conscious habits. She spent years conditioning actions and reactions to guard her face, and at that moment they were no longer necessary. One particular suggestion during this intervention that contributed to its success was Erickson's body language. When Erickson was asking Megan to slap her right side, her was

purposely stretching and yawning, acting in an incredibly casual manner. This communicates an interesting set of implications that ultimately rely on social conventions and belief. The basis being that no one acts so casually and carefree when asking someone to do something dangerous, unless they are unscrupulous, which Erickson is not, therefore, this must really be harmless. It is a suggestion that utilizes the context and the trust built in the clinical relationship to favor a desirable outcome without eliciting fear.

To avoid recurrences originating from iatrogenic remarks, such as people expressing disbelief in hypnosis and that her pain would come back eventually, Erickson assigned a task that involved something she had pleasure doing before the trigeminal neuralgia. The lyrics of the whistle would act as a rhematic symbol including a subtle allegory indirectly reminding what she had learned and achieved in therapy associating the lost pain as an unwanted expartner, she could have the pain again if she wanted to, but she would never wish for that. At the last session, the overview of what she has achieved and a request for her to trust her own potential solidifies the reconfiguration of habits in a comprehensive manner while instigating Megan to respect her own experiences and learnings above what others may impose to her about her own achievements in this regard.

To summarize Megan's case in terms of habit-change, her understanding of her own situation relied heavily on habits that firmly assured her vital dispositions could only react to interventions of material nature such as medicines and surgery, such general law overlooked and inhibited Megan's own bodily capabilities of modifying the painful sensation and the sensibility in the respective areas. Mental habits, as general laws, sustain themselves in so far as they are able to assess, comprehend and, in certain measure, predict singular events. After a certain level of trust was established, the statements asserting that a bad history had been taken and suggesting what else could be done had highlighted the inadequacies of such habits and allowed its reorganization. The post-hypnotic suggestions greatly contributed so that the

reorganizations did not maintain the narrowed perspective that could lead to recurrences, leaning the reorganization to prioritize Megan's own experiences when it came to her vital processes. Hence, the singular events experienced in the therapeutic process helped Megan to establish more coherent general laws concerning her neuralgia.

#### Case B

The following case was told in four different sources throughout Erickson's work, the most complete ones are in *A Teaching Seminar with Milton H. Erickson* (Zeig, 1980, pp. 180-184) and Jay Haley's *Uncommon Therapy* (1973, pp. 306-310). However, in between the two, the case report in *Uncommon Therapy* presents much more details on the chronologic aspect of the sessions and how suggestions were conveyed to both participants to achieve the therapeutic results. This patient was not attributed an alias in the case report, to aid the case discussion she will henceforth be called Barbara. Here is the summarized version of her case with some additions of information found in the seminar's version.

### **Case Summary**

Barbara was an intelligent woman with a master's degree in English, who had published a couple of books of poetry. She had carcinoma of the uterus, with inoperable metastasis in her bones. She was in great pain, morphine and demerol did not relieve it. She also didn't believe that hypnosis could help that pain, although her doctor referred her to Erickson for help.

Arriving at her house the woman was in bed, and her18-year-old daughter was there, very concerned about her mother. It Was October, and the woman had been told she would not make it past December, and she had only two real desires: to see her daughter married, and to see her son graduate from college, both in June. Barbara was Mormon and her children too.

She said, "I don't know any way I can cooperate with you in being hypnotized. To be honest, I don't believe there is such a thing as hypnosis that can undo pain the way I have it".

Erickson said to her, "You don't believe you can be hypnotized, and the painful results of cancer don't give you grounds for thinking you can be relieved of that type of pain. But you know, there's a lot of talk about 'seeing is believing'. So, suppose you watch your daughter as she sits down in this chair, and don't miss a thing because I want you to see and notice everything. What you'll see you won't like at all, and because you won't like it, you're going to believe it. You'll know it's very real if you dislike it so much. Seeing is believing, and seeing this situation will definitely be believing."

Erickson said to the daughter, "You want to help your mother. Now, I suppose you've never gone into hypnosis before today. So perfectly willing for you to take as much time as you want to. But I expect that you'll want your mother to see you go in as rapidly as possible. Be sure to respond to my suggestions carefully and completely, and if you find out that you're not succeeding, just slow down and take your time. Now, you just look straight across the room at one spot in that picture. You just watch it, and you'll notice while you're watching it, without shifting your gaze, that you've altered your rhythm of breathing and that your eyelids are blinking in a different than ordinary rate. I can see from the pulse at your ankle that your heart rate is decreased. Your eyelids are closing slowly, shortly they'll be shut and remain shut. As you know, they have closed and are staying closed; you feel a compelling need to take n deep breath and go deeply asleep. Then you will take another deep breath to enjoy being deeply asleep. Then take another deep breath and enjoy knowing that you are here alone with me, and that you feel comfortable and at ease, even though you do not seem to be able to move except in the matter of a careful, slow breathing and perhaps an awareness of your heartbeat and an awareness that you're no longer swallowing. Now you're beginning to lose all feeling throughout your body. Your entire body is losing all sense of feeling, and you'll be as

completely unaware of stimuli - physical stimuli - to your body as you are to the sensations of the bedclothes at night, or your clothes in the daytime. Then, all sensation will disappear completely, and you'll have no more feeling than a sculptured marble figure would have. Even though I told you we were alone in this room, if I happen to turn my head away from you and direct my speech to another area, you will not hear it. 'And now, mother - I want you to watch this very carefully". Erickson moved the girl's skirt up to her thighs. Barbara thought he was making advances, and did not like it. Then he slapped the girl's thigh hard. Barbara watched the girl's face and there was not the slightest evidence of any response. Erickson said to Barbara, "This is rather incredible, isn't it? Let's try the arm." And slapped the arm. Barbara asked, "Did you feel that?" The girl didn't answer. Erickson said, "Mother, when I'm talking to you, she can't even hear me."

He said to the girl, "We are alone in this bedroom. You nod your head signifying your answer." She nodded, and he said to the mother, "We can repeat that until you're really sure that you believe what you see. You know that's so, and you realize that seeing is believing." Again, he slapped the girl's thighs hard. The mother watched the girl's face. The sound of that slap was hard. Erickson said to the girl, "When you open your eyes, what do you see?" She opened them and said, "You." "Are we alone here?" "Yes." "Now, you can look at your hand?" "Yes." "All right, look at your hand now. Look down toward the bottom, and as your eyes move downward tell me what you see." "My blouse, my skirt, and my thighs, and my knees, and my feet."

Erickson said, "Would you like to see something you would enjoy?" I gave her another hard slap on the thigh, and she said, "I didn't feel that, is there something wrong?" "No, but you saw what I did. Do you believe it? You know you didn't feel it, so after you are awake, I want you to explain to your mother that you're comfortable, that you're ready to go into a trance. Then I want you to notice your lap. You'll notice something there that will distress you, but you won't be able to do anything about it. You'll find you'll have to ask me to do it for you." She

awakened, told her mother she was ready to go into trance and said, "My skirt is up, I can't pull it down, I don't know how. Will you pull it down? I don't want my legs uncovered."

Erickson said, "Your mother has seen an astonishing thing, because seeing is believing. You know, I don't think there is any feeling in your thighs." She said, "How did my skirt get up? You must have hypnotized me and anesthetized my legs. I can't move my hand. I just don't understand." He said, "You can't feel it when I slap your thighs; tell your mother." She said, "I don't know how it was done, but you sure slapped my thighs hard and I didn't feel it, and, Mother, I do wish you'd tell me that you believe it, because I'd like to pull my skirt down." The mother said, "But I do believe it!" Erickson pulled the skirt down and said, "Just close your eyes a moment. When you open them, you won't remember what has been going on. Your mother will try to tell you something but you won't believe her. Take a few deep breaths and wake up." Barbara said, "How did you not feel those slaps on your bare thighs when he slapped you like that?" The daughter said, "He didn't slap me on my bare thighs." The mother saw the redness of her face and heard the tone of her voice. To the reader, Erickson adds in the report, "Hearing is believing too, just as feeling is believing".

The first visit was less than four hours long. The next step was to have the girl see herself in a chair on the other side of the room, and then to experience herself as being over there. Erickson would talk to her facing that direction and she could hear him. But she could not hear him when he faced toward where she was actually sitting, and the mother could see that. He had her hallucinate the slapping of her bare legs, and explained that she could question him about things that happened to her. She said, "I heard you talking to me. I heard the sound of you slapping my thighs. But I couldn't feel any pain." He replied, "That's right, any time I want to take the feeling out of your body and put it on the other side of the room, is that permissible? If you can teach your mother? All right, I'm going to take the feeling out of your back right now and put it over on the other side of the room." She tried to push her back against

the chair, but she couldn't locate it somatically. "Then should I reach behind you and test you, or should I just tell your joints to loosen so you can lean against the back of the chair?" He had taken the feeling out of her back. "Suppose I bring the feeling back to your body and you think you're wide awake, so you can understand the experience when you are awake and when you're in a trance also. You can understand it best in a trance. Then you can remember when you are awake and can talk to me and ask me questions. Now, suppose I took all the body except your head and neck and shoulders and arms, and put all that lower part of your body over on the other side of the room on the bed there. Now, suppose I put your head and shoulders in a wheel chair so that you can start wheeling the chair out into the living room." They put her shoulders and arms in the wheel chair and the rest of her body on the bed, figuratively. "Your mother has been watching this, she understands. Ask her if she understands." Barbara said, "I understand."

He called the girl back to sit beside him. "I want to thank you very much for helping me with your mother. You can wake up now, feeling fine, and go back to the kitchen and prepare your mother's evening meal." When she awakened, Erickson thanked her again and she went to the kitchen. He said to Barbara, "You don't know it yet, but you are in a very deep trance and you are not feeling pain. Now, you know the power of words as you know words, and you also know the power of words in hypnosis. I can't be with you always, and it isn't really necessary, because I am going to tell you something that is very, very important".

"Now listen to me carefully. Your pain is going to return. There is nothing that I can do to stop that. Now when that pain comes, I want you to take your head and shoulders, put them in a wheelchair, and wheel out to the living room. I am going to leave a special TV there. You will see it in the far corner of the living room. Nobody else will be able to see that TV. You can turn on that TV mentally. It has wonderful poems and literature. You put your head and shoulders in the wheelchair and go out to the living room, turn on that TV; there will be no commercials on any of the programs (a woman who has written a volume of verse has an

imagination — and can have a memory). And you watch the TV program. Every favorite program you have ever wanted to hear will be on the TV at your wish, and you will watch it for a while. After a while you will get tired and you will turn off the TV, and take your head and shoulders back into the bedroom and join your body. You will be tired and you will fall asleep. Have a nice restful sleep. After you awaken, you will be thirsty or hungry, or you will be lonesome for company. Your friends can come and visit you and any time pain threatens to come, you will take your head and shoulders, put them in a wheelchair, go out into the living room, and turn on the TV."

Barbara learned that all the painful feelings could go with her body when she put it in bed. She could get in her wheel chair with her head and shoulders and neck, and go out in the living room and watch a TV program. In July she was with friends in the living room (as far as she was concerned) and enjoying the conversation. They were actually beside her bed. She suddenly went into a coma and two hours later was dead. She had her two wishes that June. She had seen her son graduate - by hallucinating the graduation scene. Her daughter had been married in the bedroom in her presence (Haley. 1973, pp.306-310; Zeig, 1980, pp.180-184).

## **Discussion**

Two aspects that instantly call our attention in Barbara's case is the involvement of her daughter in the majority of her treatment and the actions taken with the daughter to elicit the therapeutic reconfigurations from Barbara. A small, yet necessary addendum, this is one of Erickson's cases that whenever it surfaces it raises debates surrounding the ethics of psychotherapy and hypnosis. This particular subject, despite its recognizable importance, will not be discussed in this analysis as it greatly digresses from the objective of the overall study itself. We shall attain to a comprehension of how identifiable habits tied to the subject's pain have been reconfigured by the therapeutic process, or, in the very least, attempt doing so.

Barbara's needs revolved around her family, she did not want the cancer to keep her from seeing her daughter get married and her son graduate. She was intelligent, educated, creative and partook in a religion that encourages its followers to dress in a modest manner, avoiding the display of one's body, specially to women. Barbara was convinced she would not last past December, that she would continue to feel pain until then, and she had a resistant attitude towards hypnosis, but her daughter was present, and very willing to do anything that would help her mother, who was in great pain despite trying strong narcotics. It seems Erickson saw the girl's distress and willingness to help as an opportunity to let the girl participate in her mother's therapy in a meaningful way, where before she felt powerless towards the mother's illness. Hence, the girl's involvement is not that of a tool to be used in a thoughtless manner, but that of someone desperate to contribute to their loved one's welfare and now was able to do so. In addition, by previously announcing to Barbara that she would see something she would not like and that seeing is believing, Erickson alluded to a reason behind his actions at the same time that he communicated conditions for her to be convinced.

The induction with Barbara's daughter starts with truisms concerning her desire to help her mother, her lack of experience of hypnosis, and a suggestion tying her performance with her mother's belief. Erickson asks her to do as asked and not refrain from taking her time if she has any difficulty doing so. All communication is done in a range where Barbara hears it all, while her daughter is told to fixate her gaze somewhere, Barbara's eyes are fixated on them, receiving the same suggestions, but relating to it differently due to her alertness concerning what is it that she will not like that will be done to her daughter. Erickson starts suggesting slight alterations that reiterate the sensation of undergoing trance and that involves processes in that feeling, later he already suggests phenomena more directly, stating that they are alone in the room, to lose feeling of her body and to become unaware of physical stimuli. To facilitate the acceptance of these suggestions, he provides two diagrams, shortly conveyed, assimilating

the unawareness of feeling with a moment and object where it happens normally, bedclothes and regular clothing. These suggestions are not necessarily directed to Barbara, but they have a level of vagueness which applies to her as she is in bed, focusing on her daughter, likely unaware of how exactly her bedclothes feel.

Once the skirt is moved and Erickson slaps the girl's thigh, Barbara's alertness changes to shock, surprise, and, perhaps, anger. Her attention is now totally out of herself and turned to the situation her daughter is in. However, the girl did not react at all to the hard slaps and the mother's questions, leading into the conditions that Erickson established in the beginning that she would have to believe in what she saw. Barbara did not believe hypnosis could help the kind of pain she had, and now she witnesses it completely sheltering her daughter from painful stimuli. The dissociation and negative hallucination phenomena are not necessarily a display of control from Erickson's part, but a prelude of what Barbara could develop herself as shelter from the pain.

The entire intervention so far is structured as a multi-leveled argument to convince Barbara that hypnosis could help her, but it does not precisely follow a step-by-step of first convincing her rationally and only later actually starting her therapeutic process, she is already being distracted from her pain and being communicated hypnotic suggestions during her daughter's trance experience. The dicents and rhemes included in this argument relate to her suffering and how it could be soothed now that she is seeing and believing that it is possible to do so. This is done in multiple ways, her daughter can open her eyes, see her surroundings, see the slap, but not feel it, implying she could do the same too. And this goes on for other hypnotic phenomena that will be important for Barbara's welfare. Barbara sees her daughter think she is alone with Erickson, which she will need to enjoy her dissociations without being interrupted, she also sees her forget the trance experience and deny she had been slapped, which will allow her to keep on with her day without questioning her experiences. Barbara watches this while

undergoing some level of trance experience herself, learning from the living example of her daughter. While in a secondness level she is witnessing many events that opposed her beliefs in the matter, in firstness they relate to her situation as possibilities.

Later, Erickson and Barbara's daughter demonstrate to her other forms of dissociation, positive hallucination and anesthesia where she could still interact with others but maintain the feeling only on specific areas of her body. The daughter interacts with them as if in the other side of the room, hears them and speaks as if in the other side of the room, and does so both awake and in trance. Once all has been properly demonstrated he awakes the daughter, thanks her for her help and moves on to Barbara directly. Every hypnotic phenomenon that had been demonstrated with the help of her daughter is then interlaced in the imaginary TV that followed. Any time the pain threatened to come, she could dissociate her head and shoulders from the rest of her body, hallucinate she was going to the living room to watch her special TV while sheltered from the pain by anesthesia.

The TV specifically refers to a characteristic about Barbara that is not described in that version of the case, an exert from the case found in the book *Hypnotherapy* explains that Barbara was "highly addicted to television" (Erickson & Rossi, 1979, p.140). So, the suggestion given already involved an activity she enjoyed frequently and links it to her creative background in a way that her unconscious could produce entertainment for her liking instead of suffering from the pain in the rest of her body. Barbara learned this well and could receive visits again, likely due to the negative hallucination and amnesia suggestions she had no problem drifting away into trance in the presence whenever the pain threatened her to come. Most importantly, she was able to be present in her daughter's marriage ceremony and, although she was not able to be there in fact for her son's graduation, she hallucinated it and he graduated while she was still alive. Her needs were met to the extent that it was possible, and she was able to actually enjoy the months in between.

Semiotically, the communications involved in Barbara's case were predominantly of secondness, her initial indisposition towards hypnosis' ability to help her was met with shocking and compelling evidence that suggested otherwise in many different ways and events. In a more subtle level, elements of firstness had set the sentimental tone in which the interventions transpired so that suggestions would be accepted. The suggestions were given mostly in direct instructions or commands, be it to Barbara or her daughter, unlike Case A, for example, where suggestions were more indirectly conveyed. It was the daughter's feeling of powerlessness, desperation, and her will of helping her mother in whatever way she could that prompted her into trusting Erickson and accepting his suggestions. Likewise, it was Barbara's surprise, or shock, towards Erickson's actions and the absurdity of what was happening that lead her to fully focus her attention in the situation and let her guard down. The hypnotic phenomena that Barbara learned to evoke were demonstrated directly to her, although without a clear explanation such as "this is what you will do", they were only dicents, but on a firstness level they related to her situation metaphorically and diagrammatically, as they juxtaposed the quality of pain and communicated a relation of their internal elements that Barbara did not deem conceivable before. In a level of thirdness, the therapeutic interventions aided Barbara in utilizing her resources so she could both be comfortable and have a higher chance of fulfilling her wishes of seeing her daughter marry and her son graduate without suffering as she was before.

Ultimately, the therapeutic process as it occurred contemplated the familiar suffering as a whole instead of dealing with Barbara's pain as if it was isolated from the daughter's suffering, or Barbara's conviction that she was to die before December. The reconfigurations done were able to improve the family's quality of life until Barbara's last moments.

This case was published in two different sources, *Hypnotherapy* (Erickson & Rossi, 1979) and *A Teaching Seminar with Milton H. Erickson* (Zeig, 1980, pp. 175-179). In the first, the couple received the alias of Archie and Annie, while in the latter, they were called Jim and Gracie. The latter alias will be used henceforth, Jim and Gracie. The version from the seminar contains a more detailed description of the sequence of events and the suggestions utilized. However, the version from *Hypnotherapy* does contain a few suggestions not included in the seminar's version. Some suggestions contradict the sequence of events described in the seminar; for a proper discussion, they will be inserted in the summarized version below with a disclaimer. In these inserts, their names will be changed to Jim and Gracie so both are represented with the same alias throughout the summary.

# **Case Summary**

Jim was a high school graduate, Gracie was a classmate, both very idealistic and young. Jim had been drafted for the war in Vietnam, and served in noncombat duty. In a truck accident, he had his spinal column broken and his spinal cord severed. He returned to the Veteran's Hospital in a wheelchair suffering from convulsive pain about every five minutes, night and day. They operated on Jim to relieve him of his pain, but it made his pain worse. And then they operated on him a second time with no benefit at all. They were planning on doing a third operation to relieve him of that pain.

Somehow, the couple had heard about Erickson, and told the chief surgeon that they were going to see him for hypnosis. The surgeon spent one whole hour telling them that hypnosis was nonsense, witchcraft, black magic, and that Erickson was a charlatan. That they should not even think about hypnosis. Despite that hour-long lecture against hypnosis, they still decided to go see Erickson.

Erickson describes them coming into the office: "The looks on the faces of both were the looks of fear, of unhappy expectation, the look of resentment, a faint look of hopefulness, a look of antagonism and a look of wariness. They were certainly not in good emotional state to listen to me." (p. 176). They told him about the back injury and the two operations, as well as what the chief surgeon had said about hypnosis and Erickson. So, he told Gracie, "You stand over there on that rug. (He points.) Stand up straight; look straight ahead, your hands beside you. And, Jim, here is a heavy oak cane. I used it when I walked. It's a heavy oak cane. You take it. If you see me doing anything you don't like, clobber me with it."

Jim took the cane and gripped it very tightly, and watched. Erickson said, "Gracie, I'm going to do something to you that you won't like — to which you will object very strenuously. I will stop doing it just as soon as you go into a hypnotic trance. Now you don't know what hypnosis is, nor what a hypnotic trance is, but in the back of your mind you know what it is. So, you stand there and if I do something offensive to you, you can know that I'll stop just as soon as you are in a trance".

Erickson picked up his cane and began sliding it at the point of Gracie's cleavage, trying to expose her breasts. Gracie slowly closed her eyes and was in a deep trance. Erickson stopped, and Jim was watching him attentively. "Where is your hometown? What high school did you go to? Name some of your classmates. How do you like Arizona weather?" Erickson asked, and Gracie answered with her eyes shut.

Erickson took hold of her arm and lifted it up and left it cataleptic, Then, turned to Jim "You heard Gracie speaking to me. Now you talk to her." And put Gracie's hand down. Jim said, "Gracie? Gracie?!" He turned to Erickson and said, "She doesn't hear me". "That's right, Jim. She is in a deep trance, she can't hear you. Ask her any question you want to. She won't hear you". He asked more questions and she kept still.

Erickson asked, "Gracie, how many students were there in your high school?" She answered. He lifted her hand up again, and with one finger put it down again. He told Jim, "Lift Gracie's hand." Jim reached over and could not pull it away from her side. Erickson reached out and lifted her hand with one finger and told Jim to put it down and he tried. Gracie's muscles contracted and she kept her hand where it was.

This back and forth took time. Erickson said, "Gracie, stay in a deep trance, but open your eyes and walk from that rug to over there to that chair. And when you sit down in the chair, close your eyes. Then awaken, open your eyes and start wondering." Gracie sat down, closed her eyes, opened them, and said, "How did I get here? I was over there on that rug. How did I get here?" Jim said, "You walked over there." Gracie said, "I did not. I was standing over there on that rug. How did I get here?" Jim tried to tell her, but Gracie disputed it. "I was standing on the rug. How did I get here?" Erickson let them argue for a while (p. 177).

Gracie's reawakening was described differently in the first published version. In it, Erickson said "Gracie, when you awaken, you can sit in your chair, and no matter what you think, whatever I say is true. Do you agree to that?" She nodded her head repeatedly and slowly. Then, Erickson said, "Now you are awake, Gracie. You don't know what has happened. You can think that you wish you knew, but you don't know". The conversation with Jim is not described, jumping to Erickson's next line, "Aren't you surprised you can't stand up?" Gracie tried to stand up and was surprised she could not do it. "No matter how hard I struck you with this cane, you would not feel it. And suppose you take your hand and hit yourself hard on the thigh. It's difficult for me to come over and do it myself, so go ahead. Hit yourself as hard as you can on your thigh. It won't hurt!" She hit her own thigh, but only felt it in her hand. Erickson told her, "Now Gracie, you can hit your thigh again but won't feel it in either your thigh or your hand". Gracie hit her leg again and exclaimed, "I heard the slap, but I didn't feel it in my hand or my thigh". Erickson turned to Jim, "you heard that, Jim, you can go into trance now". It is

implied Jim went into trance here and Erickson said the following, "Now, Jim, you've had many long years of happy feelings. Why not get those happy feelings back? You've had all the pain you need. I cannot guarantee you against all future pain, but I can tell you to use pain as a warning." And the version concludes saying Jim had pain relief and came back for help with recurrences (Erickson & Rossi, 1979, pp; 123-129).

Back to the seminar's version, after Gracie awakened and they argued, Erickson told Jim, "Look up at the clock. What time is it?" Jim said, "It's twenty-five past nine." He replied, "That's right. You came in at nine o'clock and you had a convulsion of pain. You haven't had any more convulsions". Jim said, "That's right," and went into a convulsion of pain. Erickson said, "How did you like that pain? You were free of it for 20 minutes." He said, "I didn't like it and I don't want it to happen again." "I don't blame you. Now Jim, you look at Gracie. Gracie, you look at Jim. And, Gracie, as you look at Jim you will go slowly into a deep trance. And as you look at Gracie going into a deep trance, Jim, you will go into a trance" (p. 178).

Within a minute, both were in a deep trance. He explained, "Jim, pain is a warning that the body gives. It is like an alarm clock that awakens you in the morning. You awaken, and you turn off the alarm. Then you proceed with preparing for the day's work. Alright Jim, and you listen, Gracie. Jim, when you feel pain beginning, you just turn off the alarm, and let your body go about the day's work of comfort, and anything else that needs to be done. And listen well to me, Gracie, because Jim doesn't have to see me all the time. Since you are his wife, when Jim feels pain coming on, he can ask you to sit down. He can look at you and you can look at him, and you both will go into a trance. After you are in a trance, Gracie, you can repeat some of the things I am going to teach you right now." And he instructed Gracie on how to talk to Jim.

Erickson saw them a few more times to make certain that they had really learned. After the first meeting, they went back to see the chief surgeon and lectured about hypnosis. They told him how ashamed he should be, and how Jim does not have pain convulsions anymore, while he wanted another useless operation. A few days later, Jim and Gracie left to their home in Arizona. The government gave them money to build a home. Jim helped build a great part of it in his wheelchair. They also got a tractor and 15 acres of land. Jim learned how to get onto the tractor on his own and operate it.

At first, every two months, they would drive to Phoenix because Jim thought about hypnosis like he thought about anti-tetanus. He went to Erickson asking for "booster shots". Soon, Jim started showing up only every three months, then twice a year, then Jim started calling him saying, "Gracie is on the extension line. I think I need a booster". Erickson would say, "Are you sitting down, Gracie?" "Yes." "Alright, I'm going to hang up. You and Jim stay in a trance for 15 minutes. You say whatever is necessary to Jim, and Jim, you will listen to what Gracie says. At the end of 15 minutes, you can awaken" (p, 179).

Later, the couple wanted to have a baby, but after many miscarriages and doctor consultations, they adopted a child. Erickson sponsored the adoption. They kept in touch and at the time of this seminar Erickson had sponsored a second adoption by them.

After discussing other cases, the attendants of the seminar asked questions, one of them asked what were the instructions given to Gracie on what to say to Jim in trance. Erickson answered, "I had Gracie literally memorize what I said about an alarm. You awaken, you turn off the alarm, you alter your activities, and do the right things for that day. If you are Catholic, you eat fish. That is one of the right things to do. Since he was building a house and helping cultivate a farm, that was the right thing to do" (Zeig, 1980, p.189).

# **Discussion**

In this case, Erickson uses shock and surprise again to disarm the subject's resistance while inducing a trance experience, and demonstrates hypnosis in a third subject so the main subject can learn about hypnotic phenomena from a trustworthy acquaintance. However, Jim

and Gracie did not express any disbelief in hypnosis, nor assumed that it would not help Jim's case. Jim had already gone through two spinal column surgeries which had only made his pain worse, and they were suggestion a third one. The resistance shown by Jim and Grace in their first consultation with Erickson reflects some influence from the chief surgeon's long lecture on the matter instead. The couple was there defying the stern recommendations of an authority of the Veteran's Hospital, their antagonism and wariness is, possibly, a defensive and cautious posture since there consulting with someone they have been told was a charlatan.

Understanding their wariness, Erickson gave Jim his cane as a weapon, explaining how dangerous it could be with its heaviness, and giving Jim permission to strike him if he saw something he did not like. This establishes Jim as Gracie's protector in a way that she does not need to reject the entire scenario she is in immediately. Erickson makes it clear that he will do something she would outrightly object, and that the way to make him stop was to go into trance, along with some minor suggestions that she is capable of going into trance even without knowing it consciously. Jim and Gracie are then locked in their position due to their desires that led them into Erickson's office. When Erickson starts trying to uncover Gracie, Jim could clobber him as he was permitted to, but he would be taking a very serious action in doing so, and it is very likely that a part of him wondered if Gracie would go into trance as Erickson said she could. On the other hand, Gracie could have taken steps away from Erickson, but Jim was watching over her, and, conventionally, an old doctor would not willingly get himself gravely harmed for nothing, implicating he she could really go into trance, as she does.

Once Gracie was in trance, they took their time as Jim was astonished watching her on that state. The outrageous event that he witnessed got all of his attention fixated on Gracie, who now was behaving differently and could not hear him. In both versions of the case there are not any suggestions described that concerned Gracie hearing Erickson's voice only, or that they were alone in the room. The selective hearing phenomenon might have manifested

spontaneously or its suggestion was left out of the report in both of its versions. Nevertheless, Jim was awestruck from Gracie not hearing him, her cataleptic rigidness to his attempts of moving her, and once she was awake with amnesia, he tried to dispute with her what she had just done. During the time that this transpired and Jim was watching her develop anesthesia, Jim did not experience the convulsive pain. The shocking situation and the fixation of his attention destabilized the habits that exerted the convulsive pain due to a radical change in the frames of reference in a similar manner to what ensued Barbara from Case B. His priorities were entirely overturned from himself to protect his partner, likely discharging some adrenaline in his blood flow, and in sequence she was behaving completely different than what he was used to. Jim only realized that he was free of pain for almost half an hour once Erickson pointed it out to him on the clock, and the reminder itself triggered another painful convulsion. However, the rigidity of the five minutes cycle had already been weakened by the experience Jim just had had, and the demonstrations of anesthesia he witnessed suggested that his pain could be helped likewise.

In the first version, it is shown a suggestion given to Jim when he is in trance concerning the happy moments he had, this suggestion invites Jim to access memories of happiness and directs it with a embedded word play. At the same time that the sentence "Why not get those happy feelings back?" refers to it conventional meaning, getting back in the sense returning something to oneself, but 'back' also refers to Jim's back, where his injury is located. It is a metaphorical icon hidden from consciousness in the proposition that the question poses. Overall, the final interpretant of the suggestion relates to recovering the life-long good feelings Jim has memory of from before his injury and allowing them to be part of the habits that ruled the sensibility and feeling of his back, both in a vital and subjective level.

The suggestion that follows associates Jim's pain with alarm clock, something that a purpose, a specific moment to act, and once its purpose is fulfilled, it settles until it is needed

again. The pain's purpose would be that of a warning that did not require it to fully develop into a convulsion before stopping. Once he felt it coming, it could stop and he would move on with his tasks of the day. Since Jim was building his house, or going to do so, he would be occupied with work that gave him purpose and distracted from thinking about it.

Gracie roll allowed her to overcome whatever powerlessness she felt before, now possessing some means help Jim with his injury in a way that she could not when he was convulsing every five minutes, day and night. Gracie became a symbol of the therapeutic process, acting in Erickson's behalf when needed, although Erickson's role was still required for Jim in a lesser degree.

It is possible that for Jim to conceive the treatment that had received as real medical treatment, he assimilated it as a preventive treatment familiar to him, which was vaccines. It could not be something that he would have total control himself, hence requiring aid from a second person. Both Jim and Gracie learned how to go into trance together, and Gracie had been instructed on what to say to reinforce Jim's suggestions that kept the pain away. The words were verbatim of what Erickson had taught him in therapy, thus Gracie was a mediation sign of Erickson in that context. Nonetheless, Jim needed to hear more from Erickson himself.

Another possibility that does not exclude the previous one is that the recurrences, or the threat of them, became a mean of staying in touch with Erickson, who they had grown to admire. After Gracie's miscarriages, the couple let Erickson sponsor their adoptions and took the babies for him to meet in their visitations, which suggests a certain level of fondness of his figure, in the very least.

Still, the intervals in between their travels to Phoenix kept growing until it started being settled through phone calls. The dwindling frequency of these visitations and the content of the phone call described in the report suggest that Erickson's intervention was not necessarily required for Jim's welfare. Instead, it catered to Jim's understanding that it needed to bed so.

This specific resistance to posthypnotic suggestions did not seem to bring further complications to Jim, Gracie, or Erickson, as long as Jim was free of pain.

An overview of Jim's habit reconfigurations calls attention to the matter of resistance once more. There is no sign in the case indicating or alluding that Jim had any deep-rooted disbelief or animosity towards hypnosis. However, Erickson describes both Jim and Grace as very idealistic, and they were warned by a medical authority that Erickson was a charlatan. Their antagonism in the beginning of the first session was most likely related to their alertness to not fall prey to a charlatan and mental rehearsing of worst-case scenarios, where Erickson would be someone that goes against their ideals. In terms of habits, this hostility is more superficial and temporary than partaking in deterministic beliefs that their pain cannot be influenced by hypnosis, while the first affects habits towards an individual, the latter directs habits of internal processes towards rigidity, lessening the means of change. Their hostility and idealism were utilized in the situation where Erickson handed Jim the cane, in a mix of social conventions, implications, reactions and pre-stated expectations. Once the resistance was resolved, Jim had already experienced a change in his rigid patterns of convulsing pain. His openness to a change of habits came mostly from experiences in secondness that resolved his doubts about the realness of hypnosis and Erickson's character with evidence. Only later Jim was given suggestions for the pain itself, in this aspect, there are symbolic associations with pain as a warning and an alarm, but the iconic dimension of the suggestions is dominant due to the qualities they have related to Jim's back and instilling purpose on his days after the war. Moreover, once Jim had acquired a general understanding of what hypnosis was and what it had done for him, he had also felt his trust had been abused by the chief surgeon, who had imposed his superstition about the matter as if they were facts. And in coherence with his ideals, Jim deemed it was necessary to reach back to him and defend Erickson's practice and show how hypnosis had helped him.

#### **General Discussion**

One characteristic of Erickson's approach to chronic pain that is immediately noticeable is how he does not consider pain as an isolated demand. There is a rupture with the problem-solving logic where context and collateral consequences of the chronic pain are left aside when addressing it clinically. The disruption of basic daily life activities, the suffering and feelings of those in the role of caregiving, and the disarray that chronic pain causes in familiar living are taken into account when formulating therapeutic interventions. Even if chronic pain was the family's burden, or the cause of suffering of this social system, Erickson would formulate interventions that aimed at treating the system as a whole, not only the pain itself. Cases B and C involved the participation of relatives in the therapeutic process, case 16 particularly, also had trance and hypnotic phenomena demonstrated in the subject's daughter (Erickson, 1984). In these cases, the relatives or partners happened to be present during the visit and their anguish was noticeable. By working with them, especially with family members in the role of caregivers, Erickson would give them opportunity of helping in a different way, concurrently they would solidify the therapeutic experience in a familiar consensus instead of an individual learning, rearranging some relations of care in a group agreement.

In cases of individual sessions, like case A and the majority of other cases, this disarray of social life was addressed with suggestions where daily life was enjoyable, had purpose, and the presence of others was enriching. However, the mere description of activities along with positive adjectives does not achieve the systematic change seen in the cases, Erickson would instigate the subject to recall past events, or general memories, where pleasant sensations were experienced and convey means for them to be present in future events, each with a pertinent level of vagueness.

Moreover, in the cases, the task of reviewing the resources in the past and actually reorganizing processes into a more adequate configuration is often attributed to the unconscious mind by Erickson. This decision calls back the topic of how conscious processes have a small reach, if any, on processes tied to how involuntary vital processes take place and how sensoriality will be interpreted or experienced, this undertaking is done by processes that precede consciousness and that operate with a certain degree of autonomy. In trance, Erickson would imply possibilities how a task could be done, sometimes adding what would be achieved if it such possibility was to be considered, fully understanding that the task itself would not come to fruition by his effort or of the patient's conscious mind alone.

A second remark is how every case presents a moment in which the rigidity of the chronic pain is severed and subjects realize that their long-lasting patterns of pain has been interrupted, often effecting a response of shock or surprise. It usually anticipates the suggestions of lasting change and becomes an important milestone for the continuation of the therapeutic process. This initial change in the chronic pain experience is also a turning point for patients that have presented some form of resistance or disbelief in hypnosis, who then become more open to further suggestions and ideas that would be discussed in therapy. The cases are well described enough to allow us to draw some notions on the role of this specific moment for a lasting reconfiguration.

In the cases, the resistance to the idea that hypnosis can achieve some change in the subject's chronic pain is related to three possible reasons that are not mutually exclusive in between them: long-time conditioning of the pain and its surrounding processes; failed attempts of numerous clinical interventions, possibly involving worsening the pain; and a cartesian conception of human constitution where pain is isolated from any form of subjectivity, therefore cannot be changed by communicative processes. The first two are mostly connected with the disappointments and fatigue of seeking treatment unsuccessfully, conforming to the

idea that the pain will always be there, a thought that is challenged if the pain achieves unbearable levels. The latter, the cartesian way of thinking, is learned from social conventions and institutions as common knowledge.

Megan from case A is perhaps the most intricate, she portrayed all three of these reasons and her processes surrounding the trigeminal neuralgia were halted in trance, where, first, her rational knowledge of the situation was questioned and her unconscious processes were given means to respond more autonomously. Whatever information about her process that would come to consciousness would be considered as an information allowed access by her unconscious. Then, her unconscious was given the task of reviewing her history and it was also given hints on what could be done to achieve some change, along with the suggestion that she could talk freely. The moment she awakens a series of realizations occur, she realizes she can speak normally, and that time has passed, and her first answer was "that's impossible". Megan was not given any explanation about what had transpired, nor opportunity to discuss it, and was ushered out of the office. If she was given so, it is likely she could review her experience under current perspective and the overbearing weight of her past experiences with such rationality would impose her conceptions upon it, reducing or ruining the work done by her unconscious mind. This moment of surprise was left as a raw experience for her to process on her own, because in her case, withholding a level of information from her consciousness was necessary until lasting changes were done by the unconscious. After awaking from the first trance experience, she was only given enough information to understand that some results had been achieved, and that continued cooperation would be very beneficial.

In case B and C, Barbara and Jim had their patterns of pain interrupted by the shock reaction that turned their attention to look after a loved one. Both hypnosis and the means of change were demonstrated on the person their attention was focused in, producing a moment of novelty. The matter of trust is also involved in their specific cases, the disbelief in hypnosis

or Erickson as a person might have not been subdued if the demonstration was done on a subject unknown to them, like a secretary, for example. Suspicions of fakeness and trickery might have endured, impeding the succession of the therapeutic process. However, the subjects demonstrating the hypnotic phenomena to them were close people that had their trust, people that Megan and Jim knew they would not pretend not to hear them or to not feel pain, aiding the consolidation of the hypnotic phenomena as something they truly experienced. If we consider the acknowledgement of the hypnotic phenomena a first moment of realization, the second one is when the subject's attention is called back to his own body and notices the alterations in the chronic pain and its surrounding processes. In these cases, B and C, no explanation was given again, instead, the subjects were invited to develop a trance experience themselves and deepen the experience they had. The experience is left as raw evidence of the inadequacy of the general belief built over time that the chronic pain experience is inalterable, and the therapist utilizes the moment of instability of the configuration to proceed with the interventions, taking into consideration that it is propense to reset and maintain its current form.

Note that the cartesian notion as popularly understood in the common sense differs from the general idea that the subject formulates about the permanency of their chronic illness. The latter usually is produced as an understanding coming from the subject's own experience, it could be understood as abductive reasoning since it draws this general idea as if suggested by the experience itself. The cartesian division is socially conveyed as general knowledge from outside, then applied to a particular object, it is deductive reasoning. While the raw evidence of alteration in the chronic pain experience might already dismantle the idea of permanency of the chronic pain, in case A and B, the cartesian notion required further demonstrations to be disarmed, since its interpretative value tends to preserve itself until it is properly exhausted.

The posthypnotic suggestions were generally employed with the purpose of furnishing the reconfiguration with means to preserve its continuation and resources for protection from

outside perspectives over what had transpired in therapy. In case A, the last three sessions of Megan's therapeutic process contained many posthypnotic suggestions to consolidate her achievements and to prioritize what she learned from her experience over someone else's remarks on what she had gone through. Barbara from case B learned how to ignore unwanted stimuli when she was dissociating to watch her Tv and protect herself from the pain. And the couple, Jim and Gracie, learned how to conduct trance experiences to hold the convulsions back. Jim's peculiarity of seeking Erickson periodically for reinforcing suggestions were answered with repetitions of the process both executed at home, and possibly occurred due to Jim's belief that a condition so debilitating as his would require outside help.

Although most of the processes of reconfiguration are executed by the unconscious, the end of the therapeutic process in Erickson's cases commonly presents a moment where some coherence is established between unconscious and conscious processes before the subject is discharged. The question of the possible roles of conscious processes in the reconfiguration is better discussed in semiotic terms.

## **Habit Reconfiguration in Chronic Pain**

The dynamics of habit change relate to the mind's conflicts with actual events and its attempts of creating encompassing general laws that would both understand such events, and formulate adequate habits to deal with conflicts yet to come While the articulations of said general are phenomena of thirdness, the intrusive and abrupt aspect of actual events that tests the law's adequacy is mainly of secondness. It falls to the self-reflective instances to identify these inadequacies and to draft more coherent or integrated configurations. In cases B and C, this element of secondness was Erickson's shocking interventions, denoting the object that contradicted the patient's habit. As signs, they were accompanied with contextual contingencies of symbolic nature that narrowed the experience towards their observation,

leaning the semiosis to the understanding of characteristics of generals more adequate to their specific situations. In case A, this element of secondness came as statements during Megan's trance induction denoting how little she knew of her condition and that a bad history had been taken. These signs were delivered in a proper context of interpretation that favored reconfiguration, it should be clear that shock and bold statements alone do not incur in habit change, otherwise, therapy itself would not be necessary.

The perspective of unconscious and conscious mind is better distinguished in terms of habits with varying degrees of agency that have various degrees of autonomy and integration. It avoids the dualistic pitfall that tempts us into thinking that human phenomena are either entirely conscious and accessible or completely unconscious and out of reach, and allows us a broader understanding of the complexity of their dynamics. As mentioned before, mental habits are also organized in certain hierarchy where there are habits of habit change (Nöth, 2016), responsible for forming, reorganizing and abandoning habits by their own particular logic and criteria. While these self-reflective instances carry this out in an autonomous manner, here is where conscious processes might play their part therapy when we consider Erickson's approach. It is likely that they constrain, facilitate or participate in the deliberation of direction in habit change.

Once the habits related to the chronic pain are initially altered and the subject is made aware of it, the fallibility of the self-reflective instances is exposed by a more desired configuration in course, revealing the need of reviewing the principles of the self-reflective habits partaken is ways that might entail big repercussions for the subject. To illustrate, let us take as example Megan from case A. Megan had a professional background related to healthcare and hours devoted of her life related to the knowledge and perspectives she had acquired, to question this knowledge generates uncertainty on all these aspects of her life. She might question the tasks she carried out at work, the hours she might wonder if the hours she

devoted studying and consulting respected sources were meaningless, and what other consequences this would have in her perspective of reality. Thus, the immediate pushback claiming that what had been achieved was impossible is a form of defense of these habits, there is a certain pressure for logical coherence between the present experience and past learnings. The urge to understand the experience under her current habits of interpretation is likely to reduce whatever explanation is given at the moment to the constrained interpretants that she is able to conceive then and there, compromising how the experience can be processed therapeutically. Erickson left her to process the event only adding "it is impossible, but not in this office", and the time she should come the next day. At this point, consciously, Megan can only comprehend that she is under treatment and it is going as expected. She is left to conceive her experience on her own pace and terms, alongside the relief she wished for. By the end of her therapy, her self-reflective habits lean more towards prioritizing the knowledge she acquired with her own experience about human processes, raising new defenses involving habits of feelings and things she liked doing reorganized as a symbol of her achievements (the song she would whistle).

The self-reflective habits seem to benefit the most once some alterations in the chronic pain have already been accomplished and new relations to vital dispositions can be configured in a way that is consistent with the subject's needs and sociability. The suggestions that associated the sensoriality of the areas affected with chronic pain to day-to-day or social activities in a pleasing way might favor further relations in between the subjective and vital habits involved, aiding to establish a lasting reconfiguration. In case A, many of these suggestions are present to divide her pain experiences in the trigger spots when eating or brushing her hair; in case B, Barbara can watch her television while dissociated from the pain the metastases; and in case C, Gracie shares a moment with Jim in trance so he can go about

his day when needed. These forms of suggestions helped the self-reflective habits to tend to the subjects needs in a perspective directed to the future.

Habits are both the organization of effects of past experiences and an organization preparing to what may yet come to pass, this is the core aspect for the reason why habit is not a synonym to system, it is a broader concept related to continuity. Note that Erickson's therapeutic interventions address the current state of the subject and directs their dispositions while providing signs that contain elements on which different futures are conceivable to that specific subject. Before habits can draw any tendency to an envisioned future, the means to do so must be conceivable, and Erickson constructs the therapeutic context where these elements can be conveyed in appropriate signs that produce those effects. In case A, he makes statements insinuating separation between the painful experiences and normal basic activities, and in case B and C, he creates a context of shock to get the subjects full attention on him as he demonstrates hypnotic phenomena and conveys hypnotic suggestions that apply to them. In trance, along with the attenuation of domineering waking state habits (Neubern, 2018), the trance experience is a rehearsal ground where habits involving subjective and vital dispositions are unburdened to explore new forms of connections and exertions. Hence why hypnotic experiences are such a fruitful phenomenon for therapeutic purposes.

#### **Final Considerations**

Chronic pain is a complex experience that deeply intertwines elements of subjective, vital, cultural and social dimensions and develops its own autonomy through time. It manifests in singular ways and extends itself into the subject's experiences while pulling their attention towards itself and distorting the subject's relational references to reality and their identities. Hypnotherapy, despite being a field of research with many challenges itself due to its fleeting nature, greatly benefits subjects with chronic pain by: taking into account its complex

composition; addressing both vital and subjective processes in a context that favors new relations between them; and proposing new configurations that include the reinsertion in social life and the restoration of life projects.

Charles Peirce's semiotics has contributed to the distinction of how certain suggestions and events act as signs in the therapeutic process, granting an understanding to their effects and how they are structured as signs to produce such interpretants. The concept of habit provides further insight onto how interpretants in the therapeutic process repercuss with already established systems of processes that possess their own defenses and criteria for change. It reminds us of the fallibility of these organizations and what have to offer in their exertions towards the long-term future. While self-reflective habits such as self-control, self-criticism, and self-consciousness are usually discussed in terms of deliberative agency, Erickson's work alludes to further self-reflective habits related to the organization of life-long experiences, utilizing their resources to structure vital relations reality with a different mode of agency that is more accessible in trance experience.

Colapietro (2000) describes how the failures of self-reflective instances can generate habits that are unsuitable for cohesive functioning with other habits, consequently becoming self-frustrating or self-destructive in their exertions. He further explains how self-frustrating and self-destructive habits are constituted by general laws from narrow interpretants, which fulfill particular functions, such as relieving pressures derived from the constant flow of signs that existence subjects us to, and maintaining an understanding of reality. However, they are still inappropriate due to their partiality and inability to articulate new interpretants in an adequate manner. Self-reflective instances may not recognize such habits as incoherent and generating suffering due to current limitations in self-awareness and self-criticism, or they may recognize them, but not find the means to extirpate or reconfigure them due to rudimentary self-control in this regard.

Although Colapietro discussed self-frustrating habits in terms of deliberative agency, it might provide some basis for a concept of chronic pain as a form of self-frustrating habit. Erickson's approach to chronic pain cases consists in furnishing the subject with means to produce a better reconfiguration for themselves by utilizing the subject's own resources and experiences. However, the reconfiguration is rarely produced deliberatively, the habits related to the pain are rearranged by habits of higher hierarchy that the subject has little agency of, if any. The resources, like the capability to manifest hypnotic phenomena and the vast archive past experiences, are already there, yet poorly utilized and not recognized as useful resources. Hence, the idea of chronic pain as a self-frustrating habit which self-regulatory habits do not find the means to extirpate or reconfigure is not far-fetched.

This line of thought does not mean that the subject is to be deemed responsible for their chronic pain condition, nor that hypnosis has no limit in its transformational capacity. Yet, hypnotherapy in chronic pain promotes the development of habits that bridge subjective and vital processes whom we know very little of, and that displays a fundamental role in the subject's constitution. Further theorical development shows promising returns if it approximates us to achieving therapeutic results close to Erickson's, allowing great improvement of quality of life to subjects with chronic pain.

#### References

Barrena, S., & Nubiola, J. (2007). Antropología pragmatista: El ser humano como signo en crecimiento. In J. F. Sellés (Ed.), *Propuestas antropológicas del siglo XX* (pp. 39-58). Eunsa.

Bioy, A. (2017). L'hypnose. Presses Universitaires de France/ Humensis

Bioy, A., & Lignier, B. (2020). Clinique et Psychopatologie de la douleur. Dunod.

- Bioy, A., & Wood, C. (2008). Iatrogénie et hypnose dans le champ de la douleur. *Douleur et analgésie*, 21(3), 169-173.
- Colapietro, V. (2000). Further consequences of a singular capacity. Em Muller, J. & Brent, J. (Eds.), *Peirce, Semiotics and Psychoanalysis* (pp. 136-x).
- Colapietro, V. (2011). Customary reflection and innovative habits. *Journal of speculative* philosophy, 25(2), 161-173.
- Colapietro, V. (2014) Peirce e a abordagem do self: uma perspectiva semiótica sobre a subjetividade humana. (N. Milanez, Trad.). Intermeios. (Original work published in 1989)
- Colapietro, V. (2017). O retrato pragmatista da racionalidade deliberativa de Peirce. *Cognitio:*\*Revista de Filosofia, 18(1), 13-32. <a href="https://doi.org/10.23925/2316-5278.2017v18i1p13-32">https://doi.org/10.23925/2316-5278.2017v18i1p13-32</a>

  32
- Demo, P. (2012). Praticar Ciência: Metodologias do Conhecimento Científico. Saraiva.
- Ellenberger, H. F. (1958). A clinical introduction to psychiatric phenomenology and existential analysis. In R. May, E. Angel, & H. F. Ellenberger (Eds.), *Existence: A new dimension in psychiatry and psychology* (95-124). Basic Books
- Erickson, M. H. (1959). Hypnosis in painful terminal illness. *The American Journal of Clinical Hypnosis*, 1(3), 117-121.
- Erickson, M. H. (1960). Psychogenic Alteration of Menstrual Functioning: Three Instances.

  \*American Journal of Clinical Hypnosis\*, 2(4), 227-231.

  https://doi.org/10.1080/00029157.1960.10401828
- Erickson, M. H. (1964). An hypnotic technique for resistant patients: The patient, the technique and its rationale and field experiments. *The American Journal of Clinical Hypnosis*, 7(1), 8–32. https://doi.org/10.1080/00029157.1964.10402387

- Erickson, M. (1966). The interspersal hypnotic technique for symptom correction and pain control. *The American Journal of Clinical Hypnosis*. 8, 198-209.
- Erickson, M. H. (1967). An introduction to the study and application of hypnosis for pain control. In Hypnosis and Psychosomatic Medicine: Proceedings of the International Congress for Hypnosis and Psychosomatic Medicine/Mémoires du Congrès International d'Hypnose et de Médecine Psychosomatique/Beiträge zum Internationalen Kongreß für Hypnose und Psychosomatische Medizin (pp. 83-90). Springer Berlin Heidelberg.
- Erickson, M. H., & Rossi, E. (1979). Hypnotherapy: an exploratory casebook. Irvington.
- Erickson, M. H., & Rossi, E. L. (1980). The collected papers of Milton H. Erickson (vol. 1 4). Irvington.
- Erickson, M. H., Rossi. E. L., & Ryan, M. O. (1984). Life Reframing in Hypnosis. Irvington
- Gonçalves, H. N. (2022). Singularidade e falibilismo: um diálogo inicial entre Milton Erickson e Charles Peirce. *Psicologia USP*, *33*, e200047. <a href="https://doi.org/10.1590/0103-6564e200047">https://doi.org/10.1590/0103-6564e200047</a>
- González Rey, F. (2018). Subjectivity as a new theoretical, epistemological, and methodological pathway within cultural historical psychology. In F. González Rey, A. Mitjáns Martinez, & D. Goulart (Eds.), *Theory of subjectivity: new perspectives within social and educational research*. Springer.
- Gonzalez Rey, F. (2019). Subjectivity in debate: Some reconstructed philosophical premises to advance its discussion in psychology. *Journal for the Theory of Social Behaviour*, 49(2), 212-234.
- Haley, J. (1973). Uncommon Therapy: The Psychiatric Techniques of Milton H. Erickson, M.D.. W.W. Norton and Company.

- International Association for the Study of Pain (2023, December, 8). Terminology. Retrieved December, 8, 2023 from URL <a href="https://www.iasp-pain.org/resources/terminology/">https://www.iasp-pain.org/resources/terminology/</a>
- Jappy, T. (2013). *Introduction to peircean visual semiotics*. New York, NY: Bloomsbury.
- Keeney, B., & Erickson, B. A. (2006). *Milton Erickson, M.D.: An American Healer*. Leete'S Island Books
- Kilpínen, E. (2016). In what sense exactly is Peirce's habit-concept revolutionary? In D. West & M. Anderson (eds.), *Consensus on Peirce's Concept of Habit* (199-215). Springer.
- Langlois, P., Perrochon, A., David, R., Rainville, P., Wood, C., Vanhaudenhuyse, A., Pageaux,
  B., Ounajim, A., Lavallière, M., Debarnot, U., Luque-Moreno, C., Rouland, M.,
  Simoneau, M., Goudman, L., Moens, M., Rigoard, P., & Billot, M. (2022). Hypnosis
  to manage musculoskeletal and neuropathic chronic pain: A systematic review and
  meta-analysis. *Neuroscience & Biobehavioral Reviews*, *135*, 104591.
  https://doi.org/10.1016/j.neubiorev.2022.104591
- Liszka, J. J. (1996). A General Introduction to the Semiotic of Charles Sanders Peirce. Indiana University Press.
- Morin, E. (2005). Introdução ao pensamento complexo. Editora Sulina.
- Neubern, M. (2009) *Psicologia, hipnose e subjetividade: revisitando a história*. Belo Horizonte: Diamante.
- Neubern, M. S. (2016a). Hipnose e dores crônicas: rumo a uma perspectiva complexa.

  \*Psicologia em Estudo, 21(2), 303-312.

  https://dx.doi.org/10.4025/psicolestud.v21i2.30820
- Neubern, M. (2016b). Iconicity and complexity in hypnotic communication. *Psicologia:*Teoria e Pesquisa, 32 (esp), 1 9. https://dx.doi.org/10.15900102-3772e32ne217
- Neubern, M. S. (2018). *Hipnose, dores crônicas & complexidade: Técnicas avançadas*. Editora Universidade de Brasília.

- Neubern, M. S. (2020). Interpretação, semiótica e pesquisa qualitativa em hipnose.

  Phenomenologies, Humanities and Sciences. 1(1). 83–94
- Nöth, W. (2016). Habit, habit change, and the habit of habit change according to Peirce. In D. West & M. Anderson (eds.), *Consensus on Peirce's Concept of Habit* (35-63). Springer.
- O'Hanlon, W. (1994). Raízes profundas: Fundamentos da terapia e da hipnose de Milton Erickson. PSY II (Original work published in 1987)
- O'Hanlon, W., & Hexum, A. (1990). An uncommon casebook: The complete clinical work of Milton H. Erickson, M.D.. New York: W.W. Norton & Company.
- Peirce, C. S. (1904). Draft of Nichols Review. MS 1476
- Peirce, C. S. (1906). The logic notebook. MS 339
- Peirce, C. S. (1931–1958). *Collected Papers of Charles Sanders Peirce*. Vols. 1–6, C. Hartshorne & P. Weiss (Eds.). Vols. 7–8, A. Burks (Ed.). Harvard University Press.
- Peirce, C. S. (1998). *The Essential Peirce. Vol. 2*. Peirce Edition Project (eds.). Bloomington: Indiana University Press.
- Pickering, J. (2016). Is nature habit-forming?. In D. West & M. Anderson (eds.), *Consensus on Peirce's Concept of Habit* (89-108). Springer.
- Santaella, L. (2000). Teoria geral dos signos. Pioneira
- Santaella, L. (2016). The originality and relevance of Peirce's concept of habit. In D. West & M. Anderson (eds.), *Consensus on Peirce's Concept of Habit* (153-170). Springer.
- Vesely, A. (2014). Wizard of the desert [DVD]. Noetic Films.
- Zeig, J. (1980). A teaching seminar with Milton H. Erickson M.D.. New York: Brunner/Mazel.
- Zeig, J. K. (1985). Experiencing Erickson: An introduction to the man and his work. Brunner; Mazel.