Depression treated within the mental space paradigm: effectiveness and training requirements.

Lucas Derks Ph.D., Robbert Masselink Ph.D., Christine Beenhakker MA, Dienie van Wijngaarden MA, Jacqueline Heemskerk, Claudia Wilimsig Ph.D.

Communication to: sociaalpanorama@hetnet.nl

Part One

Introduction

The original article, written by Lucas Derks in 2020, is divided into three parts of which this is the first part to be published in the news magazine. Here, we lay the groundwork for presenting the process and outcomes of the two studies conducted in part two and three to come.

The general question that is discussed in part one is whether or not it is possible to treat depression successfully within a single treatment session. The context from which this question has to be asked is composed of the dominant propositions with regard to the nature and classification of depression, and the assumptions on which its major treatments are based. Derks gives a thorough introduction of the common background from which this question is normally answered, which leads up to the unsurmountable answer that it is no more than a miracle if this should happen. However, there are numerous therapists in the world who attain this result in a convincing enough manner to make one very curious how this is done and why. And how come that, despite all the evidence, this feat is in the academic world still considered to be fantastical.

Next, Derks discusses two dominant treatments, neuro-chemical treatment and psychotherapy, and explains that for both kinds a diagnosis is needed in advance in order to select the proper treatment. What is interesting, though, in his discussion of depression, are those situations in which a clear cause for the development of depression can't be given other than stories about what has happened in a person's life that contributed to the development of what we now call depression. Without having a clear cause for the depression, it becomes difficult to know how and where to begin treatment. Then, a different paradigm might help therapists to begin treatment based on different assumptions.

Derks gives a thorough introduction of this new paradigm, called 'the mental space paradigm'. How from this worldview the therapist looks differently at language, brain and mind, hence leading up to a very different kind of treatment. Basic assumptions, such as about the length of the treatment, will likely be rejected from this paradigm based upon personal clinical experience. Also, Derks gives a brief overview of the development of the mental space paradigm, making a connection to the field of NLP and discussing other scientific developments that are relevant here. The advantage of this introductory part is that the reader can understand where the research conducted, to be

discussed in the parts two and three, comes from and how the outcomes should be interpreted from the common notion on the treatment of depression in the Western world.

The significance of the mental-space paradigm

Apart from the necessity of proving by experiment that applications of the mental-space paradigm really do work in therapy, we have to be aware of how the dramatic shift in our understanding of the workings of the mind, caused by the mental-space paradigm, is going to have an effect on society at large. One could say that we are discovering the spatial aspects of our mind like we can discover a new building in a town. Just another observation, no big deal! However, because we are growing alive to how 'three-dimensionality' operates within ourselves, this discovery starts changing the way we, our bodies and minds, handle the world.

Although it is primarily in the field of therapy that thinking and feeling 'spatially' is emerging as a new, wondrous way of achieving impressive results, its impact on our mental processes is bound to spread worldwide.
While universities seem to be reluctant to investigate the therapeutical use of mental three-dimensionality, with the exception of a few 'righteous' ones, officially approved science will ultimately be unable to steer clear of this rising wave of the mind's evolution. True as this might be, the lack of the acceptance of NLP by the established brands of psychology, again with the exception of a few enclaves, forebodes a long-drawn-out integration of the newborn baby in the domain of 'standard' science.

Above, the word 'emerge' was used describing the coming into being of mental-space psychology. 'Emerge' might sound as if this birth was an automatic process, like the evolution of languages. Of course, it partially was and is, but the real impetus came from individuals and teams doing their research, in laboratories, clinics and private practices. Here, it is not the place to tell the story of its origins, but it definitely is the place to put two pioneers in the limelight: Lucas Derks and Barbara Tversky. Tversky on account of the immense quantity of the research she has done, and her splendid writing about it, in various fields of psychology, with a focus on the spatial aspects and abilities of the mind. Derks, of course, because he has lured mental space out of its theoretical hiding place, meanwhile creating the *Social Panorama*, which uses the spatial aspects of mental processes to great therapeutical effect. The present paper and the upcoming online congress show to what extent the mental-spatial paradigm has advanced from the groundwork of the *Social Panorama*.

Why is the mental-space way of thinking and feeling so momentous for the current state of mind of humanity, by which I mean the way most of us, human beings, cope with life in this world? Needless to say, there are huge differences between cultures in this respect. Still, memes have always propagated themselves through humanity, and are doing so at lightning speed these days. This is due to the fact that modern technology has immensely accelerated in some channels how people make contact. The expression 'in some channels' is not superfluous, because in other channels the speed of making contact has remained the same. As far as the quality of the various contacts is concerned, it seems to have deteriorated in some, or even, many cases.

The propagation of memes in more detail: Each individual's mind is closely connected to the surroundings of its individual body, in which this particular mind lives, as it were. From the very beginning, the growing child's mind is extensively moulded by everything it comes in contact with. By touching, sensing, seeing, hearing, tasting, digesting and whatever other ways of connecting we don't yet know of, our bio-mental systems get along in the world. All these kinds of perceiving are inextricably linked to their commensurate actions. All of these actions reshape the world in their specific ways. The mental-space meme transforms the minds it sneaks in.

It's like the sea-changes triggered in psychology by people like Freud, Jung and William James. While therapists were slowly discovering the potential of the paradigm of the unconscious, the general public followed, although even more slowly, in their wake. Likewise, while therapists these days are slowly discovering the potential of the paradigm of mental space, the general public will follow suit. Why is this so important? An example will do: A mother has lost her baby. She mourns the loss of her child. In the natural course of things, she will come to terms with it. However, sometimes the coping mechanism miscarries, and the painful memories of her child become compulsory and oppressive to such an extent that her life is crippled. When she discovers, whether in therapy or on her own, that her child is clinging to her neck, a whole new avenue of possible solutions presents itself, so she is a lot better off.

Of course, language is filled with metaphors like 'the worries press on me', but mostly the metaphor does not go beyond a manner of speaking: "The worries, as it were, press on me." Usually there is no image of a heavy mass, or whatever, that pushes the person down. Undoubtedly, such an image is hiding somewhere, but you don't spot it if you have not discovered that your whole life runs its course simultaneously in your mental and physical spaces. In other words, when you are aware of your mental space, you discover things that steer you, so you can take action and are a lot better off. Our ancestors seem to have had this awareness of mental space and its uses, naturally in a form appertaining to their evolutionary status. Apparently, while evolving we have lost it to a large extent: the price we paid for progress in other areas. We stand to gain a lot by recovering our mental space abilities!

The present mental-space paradigm is the rebirth of our heritage of mental space abilities in a shape fit for our times.
Here we are, the more the human race will absorb the mental-space paradigm, the more its mental health will prosper!

Part 1

of the actual paper by Derks, written in 2020

Abstract

Research question: Therapists using the so called "mental space paradigm" claimed success with a single session treatment protocol for depression. The research question this paper answers is: What do other experienced psychotherapists need in order to achieve similar results? Two related studies were carried out. Study one answers the question: To what extent can professional therapists help reduce the level of depression by using this particular method? Study two focuses on the question: How well does this method fit in a private practice, either, in- and outside the experimental limitations?

Tested treatment: The therapeutic protocol under scrutiny starts with looking for *dark zones* in the clients' mental space; these zones are used as indicators of repressed, too difficult life-issues, which, due to their repression result in a *depression with an unknown cause (= when asked for, the client reports no causes)*. The cause of these *dark zones* is found with the aid of specialized questions. After the hidden life-issues are revealed, they are treated with cognitive techniques: mainly *the new behaviour generator* and *change personal history*. When completed, the intensity of the remaining depressed feelings and the residues of the dark zones are used as measures for therapeutic progress.

Research methods: 1) Qualified therapists received a one-day training in the mental-spatial treatment method under scrutiny. 2) They learned how to hold on to the experimental protocol in their private practices. 3) The therapeutic results were collected and evaluated in a quantitative *waiting-list control* design (Study 1). 4) Eight months later, the experiences of the therapists were evaluated with the aid of an independent researcher that used an 18-item, partly qualitative survey (Study 2).

Followed procedure in study one: A selection of fifty experienced therapists were familiarized in one single day with the treatment method under investigation and with the used experimental protocol. They were instructed how to apply the method with newly arrived depressed clients, in their own private practices. All together 47 such clients were included in this study, randomized over an immediate treatment group (n=27) and over a waiting-list control group (n=20). For all clients the severity of depression was measured at arrival on two scales: a 10 points semantic differential and the BDI (Beck Depression Inventory), and 30 days after treatment the same measurements were taken. The waiting-list control group was post-tested after 30 days of waiting, and after that also treated with the same method, to be tested again after another 30 days.

Results of study one: The immediate-treatment group showed a significant higher reduction of the level of depression than the waiting-list control group, on both the 10-point semantic differential and the BDI scale, that could not be attributed to spontaneous remission or placebo. [1]

Results study two: The evaluation of the one-day training indicated that some therapists could apply the treatment successfully within the limitations of the research protocol,

[1] Although Derks hasn't described the procedure of study 2 in this abstract, we leave his mention of the results here.

but they were a minority. Apart from the experimental set up, the method was mostly considered easy to use and effective.

Further theoretical conclusion: Depression with an unknown cause correlates with *zones of darkness* in the clients' mental space.

Introduction.

Motivation: In these two studies a *single-session* psychotherapeutic protocol for depression is evaluated. The protocol was composed from classical NLP-methods enriched with a particular mental spatial diagnostic feature: the search for repressed life-issues behind *zones of darkness* in the clients' mental space. This approach emerged from therapists who claimed to have treated their own and their clients' depressions successfully this way. These therapists were familiar with the mental spatial paradigm and the aetiology and symptomatology of depression (Derks, 2016; Beenhakker, 2017; Beenhakker & Manea, 2018). These positive clinical results paved the way for the development and propagation of a standardized treatment protocol for *depression with an unknown cause* (called *Depression in Awareness-space*, or, alternatively *Mental-Space-Psychology Depression treatment*, abbreviated as MSP-D). The clinical results obtained by other therapists who were trained in this protocol proved to be surprisingly good. Consequently, a need arose to gather scientific evidence for the clinical effectiveness of this standardized treatment (Beenhakker, 2017). In other words: May we expect the mentioned protocol to be as effective in the hands of mental-health-care professionals with less affinity with the mental space paradigm?

View on depression: When confronted with the single session option for the treatment of depression, many mental health professionals react with "impossible". Such reactions are rooted in assumptions about the nature of depression. Simplified: Biological psychiatrists tend to view depression as "a state" resulting from prolonged fluctuations in the brains' chemistry and activity caused by genetic make-up, nutrition and lifestyle. The main alternative is the cognitive view that sees depression as a mental disorder stemming from "deep-rooted, lifelong negative core beliefs" and the resulting inability to cope with the challenges of life. Many therapists combine these two views, implying that the treatment of depression requires extensive pharmacological or psychological therapy. Hence, a single-session method demands a fundamental shift in the basic assumptions about the nature of depression. When clients cannot specify what is causing their depression, we must consider it to be caused by *too difficult life issues that were repressed*, probably a considerable time ago (Derks, 2016). Examples of these life-issues are grief, disrupted future perspective or comorbidity with other (mental) health conditions. Likewise, symptoms like fatigue, dysphoric moods, eating and sleeping disorders, lack of future perspective, addiction, lack of motivation, etc., should be regarded as due to the prolonged repression of the aforementioned life-issues (Singer, 1990).

Best practice: When it comes to psychotherapy with depressed clients, cognitive schema therapy (Stein & Young, 1992; Young, 1999; Young, 2003) is often considered the current best evidence-based practice. Schema therapists see depression as caused by deep cognitive patterns dating from childhood. Although there are strong overlaps between this schema-therapy view and the one studied in this article, what is different is (1) the mental-spatial diagnostic part that uses zones of darkness to help reveal the

repressed issues, and (2) the vision that prolonged repression is responsible for many of the symptoms of depression. The crucial logistical difference between the two is that schema therapists reserve at least 15 sessions of 50 minutes for the treatment of depression (Barlow, 2008) while in the MSP-D procedure (under scrutiny) only one session is needed. Just like in EMDR in the treatment of PTSD the protocol is presented as "single-session". However, repeated application in several sessions of the same steps on separate issues is common practice (van der Kolk, 2015; Shapiro, 2001). Discussions about the number of necessary sessions in psychotherapy confront us with premises about "dosage". It reveals a classical undercurrent in medical thinking that relates the severity of the symptoms to the dosage of the treatment. However, within the medical tradition one can witness that the correlation between dosage and symptoms fades with a better understanding of a particular disease and the refinement of the treatment.

History: Until about 1980, a single session cure for anxiety or post-traumatic stress was considered ludicrous. Despite that, in the year 2021, for many mental-health professionals such cures are common practice. It is debated whether it works this fast for all clients, but it does for enough of them to make it a reality. These findings are supported by existing clinical studies (Wake, et al. 2013). Historically, hypnotherapy (Erickson, 1967), imagination therapy (Sheikh, 2002) and EMDR and neuro-linguistic programming (Bandler & Grinder, 1979) were at the root of this development.

Neuro-linguistic programming (NLP) and depression: While we assume "modelling" (analysing the cognitive and behavioural patterns in the work of experts and then teaching these patterns to students) to be the major method for skill acquisition in NLP, this has not yet produced a specialized treatment protocol for depression. And one can ask: Did NLP-practitioners miss out the experts to be modelled for healing depression? But given the prevalence of depression and the widespread therapeutic use of NLP this is unlikely. Logically, over the last four decades tens of thousands of NLP sessions must have been spent with depressed clients; maybe without this diagnosis and maybe without success. We don't know, since there are no records available. What we do know, however, is that, when in the early 1980s the topic depression came up in NLP seminars, it was generally regarded as an unfortunate "thinking strategy" that led to a "negative state". This view is still popular and also common among other cognitive therapists (Stein & Young, 1992). The proposed interventions were aimed at improving the cognitive strategies and also at interrupting the patterns leading up to a depressive state.

To be more specific: NLP's early model for (cognitive) strategies assumed that for any skill, the person used his/her sensory systems in a more or less generalized or fixed order. A way to do a "skilled depression" could start with self-talk (Ad) [I blew it again…], that caused negative feelings (K-) [Heaviness in neck, arms and back…]. Often negative visual memories are involved (Vr-) [Memory images from other times when 'I blew it' before…] (Dilts, 1983). As an instance of an intervention, the eyes and body posture of the client were led from kinaesthetic, negative (K-) [downwards on bad feelings] to visual constructed (Vc) [upwards looking to images projected in the future] (Bandler & Grinder, 1979). The used negative self-talk can for instance be altered with the so-called *reframing techniques* (Bandler & Grinder, 1982) or the more advanced *slight of mouth* approach. [You keep very good and detailed records of your failures. Do you do that to enable yourself to repeat them every time in exactly the same way, or to help yourself to know how to do a better job?] (Dilts, 1990, 2017; Hollander et al., 1990).

As an alternative, a positive sense of the future could be created with the *personal timeline* (Andreas & Andreas, 1987; James & Woodsmall, 1988) [Create colourful and attractive images of 2 weeks in the future, 6 weeks in the future, a year in the future and 10 years in the future] or with the so-called *visual swish* [See yourself after having successfully dealt with your depression] (Bandler, 1985: McDonald, 1997). Now, what do you want to see happening in your future? Mention five such things."] And then all these changes in mindset need to be connected to the stimuli that previously evoked the depressed state.

Depression fast and slow

Most clinical research reports on depression start with epidemiological numbers, like: "Depression is a common illness worldwide, with more than 264 million people affected" (who.net, depression, 2020). This will convince most therapists that depression is a very serious problem. Also, recent research confirms the strong correlation between therapists' expectation of the effect of their therapy and the speed of their clients' recovery (Connor & Callahan, 2015). Which makes the following question urgent: Can therapists really believe something as serious as a depression to be healed within one session?

Some arguments for the fast-healing possibility: An understanding of what it takes to quickly heal from a depression can be achieved with a survey of "fast" healing clients. However, if such people really exist then the question is how and where to find them. For such a survey we better ask a large number of members of the general public: "Were you ever depressed? And if yes, how did you get over it?" In that way one may get first hand testimonies of very slow recoveries but also of instant cures. Although stories of instant healing may already circulate among the general public, it does not appear to be possible yet to replicate them by means of single-session protocols. Most professionals would consider such stories "anecdotal", implying that they have little value for real clinical practice. Miracle cures of depression are more associated with spiritual and religious healing than with psychotherapy; anecdotal or not. In order to come to a more effective cure for depression it may be necessary to look at the structure of these spiritual and religious cures. The NLP-applications called *core transformation* and the *wholeness process* make use of what one may call spiritual resources (Andreas, 2019). In the procedure under scrutiny in this study, it is a common observation that many successful clients use spiritual role models in the *generator of new behaviour* part of the method (Derks, 2016).

Whiteford (2013) analysed 19 existing studies for the spontaneous remission in untreated major depression. He checked depressed adults, children and elderly people that were waitlisted or who served as controls in clinical studies. His analysis revealed that 23% of untreated adults experience remission within three months, 32% in six months and 53% in a year. It also became apparent that individuals with severe symptoms were 25% less likely to remit than those with mild symptoms. What these clients did in order to get over their depression without treatment was not asked, so there were no data that could be used to develop a method to speed up the process, even to the point where it could be completed in one single session.

Instances of brief electro-chemical treatments: Quick relief of depression is promised by electrical, electro-magnetic and purely magnetic stimulation of the brain (from the

outside) and also by the administration of some anaesthetics. To be more specific: 80% success is expected after the deployment of the classical (once forsaken and then reintroduced) Electro-Convulsive Shock Therapy. Dosage: 6 to 12 treatments of about 60 seconds under brief general anaesthesia. Indication: *treatment resistant depressions*. Some recovery is also expected after Transcranial Magnetic Stimulation. Dosage: five days a week, for one hour over six weeks: effectiveness still unproven (Basil et al. 2005). Also, the method called, Low Field Magnetic Stimulation promises instant relief after one single 20 minutes session. However, a critical evaluation showed that only in a few cases 3 treatments of 20 minutes changed the clients' mood (Dubin et al., 2019). Beside all of that, relief is reported from the clandestine party drug ketamine. When administered with an intranasal spray, the antidepressant effect comes in 40 percent of the clients after 24 hours, with a tendency to relapse after three weeks. These treatments demonstrate that brief treatments may work and that an electro-chemical organ (the brain) can be somewhat "reset" with electro-magnetic-chemical means.

The role of psychiatric diagnosis: By definition, all life-issues may cause feelings of dysphoria, melancholia, powerlessness and worthlessness. Thus a "depressed state" can be an epiphenomenon of having problems of all sorts. But what does it take to deserve the diagnosis? To determine that, cognitive therapists tend to diagnose with the Beck Depression Inventory or the Hamilton Rating Scale for Depression and they also ask for the duration of the depressive complaints. Test scores plus duration of the symptoms predict the course of treatment.

Since most NLP-practitioners omit a formal psychiatric diagnosis, they do not stumble over the overlap between diagnostic criteria like those found in the current APA Diagnostic and Statistical Manual of Mental Disorders (DSM-5). Such an overlap is seen between PTSS, bereavement, avoidant personality disorder and depression – making a differential diagnosis a challenge. Only ten years ago, the connection with *depression* in the old DSM-IV/ICD-10 "Manic Depressive Disorder" was found confusing, because some bipolar clients are never depressed but can be manic and others vice versa. That is why in the new DSM-V *depression* was taken out of "Bipolar Disorder". Still, the categories of "Major Depressive Disorder", "Disruptive Mood Disregulation Disorder", "Premenstrual Dysphoric Disorder", "Major Depressive Episodes", "Persistent Depressive Disorder", "Other-and Unspecified Depressive Disorder" may not exclude each other and do not prove the existence of discrete illnesses called – some sort of – depression. Which all together argues against seeing depression as a standalone disorder (Timini, 2014).

Lacking a reliable differential diagnosis among "depressions" is only a problem as far as it would influence the choice of treatment. Most psycho-pharmaceutical therapy is only slightly affected by knowing the difference among types of depression, since determining the prescriptions and their dosage is, more often than not, a process of trial and error based on the status of the client. However, the real danger of the diagnosis of depression is that, once a satisfying name is given to the illness, one may forget to ask clients what causes their misery. Asking this question may be quite illuminating and speed up the treatment, maybe up to the duration of one psychotherapy session. This search for what the clients think to be the cause of their depression, results in either, (1) a clear categorical answer about causality (like bereavement, trauma, negative future prospects) or (2) no answer at all. In the latter case, when a depression appears to have no clear cause, this by itself can be seen as a particular type of issue: to be diagnosed from here onwards as a *depression with an unknown cause*. But when clients mention

their depression started with a traumatic event, the loss of their future prospects or a loved one, this logically implies to treat them for trauma or grief and the like. However, with *an unknown cause*, it appears as if the depressed state sneaked into their life and left them unable to shake it off ever since. Logically this feeds the clients' impression that there is no clear reason for feeling that way: and it suggests that being depressed is more or less similar to an infection.

No known cause: The mental space paradigm opened up a widened view on mental processes by prioritizing "where something is experienced in mental space" over brain processes or verbal descriptions. When the client cannot identify clear triggers, like painful memories or repeated negative cognitions, then it is hard to know where psychotherapy should start. As a consequence, in such cases, clients and mental health workers alike often prefer a neurobiological concept of depression (endogenous). And since neuroscientists found many correlations between brain regions, their level of activity and depression, and neurobiologists found correlations between the levels of certain (receptors for) neurotransmitters and depression, these findings helped to legitimize neuro-physiological and neurochemical (pharmacological) interventions. Besides, the general public and decision makers alike expect that drugs may have an immediate positive impact (although it may take six weeks before the effect is sensed), where psychotherapy is believed to take several months at best. Psychotherapy is also portrayed as more costly. However, when the lower relapse rate after psychotherapy is taken into account, and the fact that antidepressants should be continued between 9 and 12 months after recovery (according to the WHO-recommendations, 2012), the financial advantages of drugs are not so clear.

Towards a mental spatial paradigm

Language versus space: As a descendant from philosophy, psychology inherited a strong focus on language, where some psychologists went as far as equating all cognition with inner speech (Sokolov, 1975). From the 1960s onward social science got to grips with non-verbal communication, bodily experience, unconscious representations, emotional expression, spatial behaviour, states of consciousness and imagination in all senses. That is why NLP-ers found lots of consistent research support for a host of their practical tools (Bolstad, 2001; Gray, 2008). Crucial for the development of the mental space paradigm was Bandler's (1985) clinical work with the sub-divisions of sensory experience (light-dark, coloured-black and white, hot-cold, far away-close by, moving-still, etc., etc.) called "sub-modalities". By reflecting on that work, several authors mentioned the prominent role of the "sub-modality location", which means where in the sphere of awareness around the person something appears (Bandler, 1985; Derks & Hollander, 1996). Although only a few NLP-ers were aware of the academic interest in "location", this recognition helped to link spatial psychotherapy with the upcoming academic field of "spatial cognition" (Derks, 2016; Tversky, 1991, 1997, 1999, 2009; Spivey et al., 2010). This field of spatial cognition builds on a growing realization that cognition is grounded in the capability of all moving creatures to navigate their three-dimensional environment. This broad insight funnels into one solid conclusion, which is that the brain is in fact a navigation device (Burgess, 2014; Bellmund et al., 2018). In other words, all moving animals create a 3-dimensional model of their surroundings; called their spatial map (O'Keefe & Nadel, 1976). Their navigational skills help organisms to get food, safety and mates.

The unconscious and background nature of the navigational activity in our minds, coincides with unconscious and background spatial thinking of all sorts (Tversky, 1997). From there follows that all manner of conscious and unconscious thought is located/projected somewhere in the space in and around the person (Fauconnier, 1998; Groh, 2014). In the mental space paradigm, this spatial structure is seen as the foundation on which even the most abstract and complex forms of cognition are built (Lakoff & Johnson, 1999; Gallese, 2015). Thus, 3-D cognitive maps help to orient ourselves in the world, but they are also fundamental in how to distinguish, recollect, organize, store and reconsolidate all manner of memory: All memory concepts are located somewhere in the space in and around a person. However, only a few spatial-cognition-informed psychologists with a clinical background noticed that the spatial nature of cognition surfaces most remarkably in the psychotherapeutic techniques like the *personal timeline* (James & Woodsmall, 1988) and *social panorama* (Derks, 2002), in which clients are guided to relocate problematic memory images in the field of awareness that surrounds their bodies. Although this moving and shifting of images was epitomized in the *personal timeline* and *social panorama* models, it was recognized that these shifts in location also happen in an implicit manner, wherever in psychotherapy experience is altered. Any significant change in cognition necessarily implies the relocation of the relevant concepts. Beside these explicit movements in guided mental imagery, the same aforementioned orientation skills are paramount in the structuring of psychotherapeutic processes with spatial anchors, walking over timelines and in the routines with seats, pieces of paper, family sculptures and constellations, sand play and spatial grids. And all of that together exposes in a univocal way the outstanding role of space in human cognition, emotion and experience (Derks, 2016).

A paradigm shift: After a century of trying out ever more advanced technologies, psychologists must admit that it is hard to understand the psyche from just looking inside the brain alone (Kelly et al. 2009; Gallese, 2015). For psychologists to make the move from the current dominant neuro-scientific/linguistic perspective to the mental spatial paradigm, it is mandatory to study the brain in combination with the surrounding space and at the same time see how language, with a focus on spatial grammar, functions to communicate spatial configurations (Lakoff, 1987; Barsalou, 2012). This means that in the mental space paradigm, space is given priority over language when it comes to organizing and structuring our thoughts.

Research paradigm: Normally, people can tell nothing about what is going on in their brains, but they can explain rather clearly WHERE something is happening in the imaginary space around them, in which the brain projects everything that goes on inside it. The emerging research paradigm in mental space psychology tends to use questions like: Point out where you notice your favourite food. Point out where you sense your loved one. Where is your trauma located? Where is grammar school in your memory?

From where in the brain to where in mental space: In the present neuroscientific-linguistic paradigm the focus seems to be on finding the areas of activity in the brain during a particular cognitive task or mental state. Apparently, it is believed that, when the areas of activity, or lacking activity, in the brain are pinpointed, the most critical correlate of thought is captured. However, for the mental-spatial paradigm, cognitive scientists need to step back several meters from the brain, to become aware of the area around it, where an even more important aspect of the brains' activity can be found by asking the subject: Where…?

Camera and projector: It has already been demonstrated enough that a perception and a memory/image of that perception are processed by 90% of the same neurons in the brain: this is also called the unity of perception and memory/imagination (Ganis, et al., 2004). The metaphor most people grasp easiest with regard to this point of view is that a brain is a camera and a projector at the same time. Perception and memory are inseparable; at the locations where objects are perceived in physical space, they also get projected by the brain. And even after you have closed your eyes, you still can see what you just observed with your eyes open. Part of that is an afterimage, but more important is that the now imagined object is experienced at the location where it was perceived. Thus, the location of neural activity within the brain goes together with locations of experience in the space surrounding it. The locations of activity within the brain can be found using high-tech measurements (PET, fMRI). However, the locations outside the brain can be pointed out directly by the person themselves. Which gives substance to the question: *Where is your depression located?*

The next step on the way to the mental-spatial paradigm is the insight that the human mind is very capable of moving, relocating, turning, colouring, up and down scaling, in short, of transforming and morphing all mental images by the power of intention. This process can be combined with inner speech, (I want it bigger) or suggestions uttered by someone else (make it more important) (Mckellar, 1957). The movement of concepts and their relocation can be seen as the core of cognitive processes like "composing" and of "reasoning" when combined with inner speech (Tversky, 2019).

A new presupposition for NLP: The cognitivistic and constructivistic paradigm that NLP was implicitly building upon, together with a strong pragmatism, needs to be expanded with the following new presupposition: *Space is the primary organizing principle in the mind*. The so-called *model of the world* is constructed in 3-D and represented in a 3-D manner in the space in and around the person (O'Keefe & Nadel 1978, Thomas & Tsai 2011). Most inter-human communication uses 1-D verbal and written language to give expression to 3-D experience, which calls for a *spatial vocabulary and grammar* (Lakoff, 1987).

In ***Part Two*** the proceedings and outcomes of a study will be discussed in which therapists used the single-session protocol in order to determine the efficacy of the method. In ***Part Three*** a second study will be discussed in which the therapists who participated in the first study evaluate the procedure that was used during the first study.

References

Andreas, S. Andreas, C., (1989). Heart of the Mind. Moab, Utah: Real People Press.

Andreas, C., (2019). Coming to Wholeness.

Bandler, R. & Grinder J., (1979). Frogs into Princes. Moab Utah: Real people press.

Bandler & Grinder, 1982 Reframing: Neuro-Linguistic Programming and the Transformation of Meaning. Moab, Utah: Real People Press

Bandler, R., (1985). Using Your Brain for a Change. Moab, Utah: Real People Press.

Barlow, D.H. edit., (2008). Clinical Handbook of Psychological Disorders, A step by step Treatment Manual. Fourth Edition

Barsalou, L.W., (2012). The human conceptual system. In: M. Spivey, K. McRae, & M. Joanisse (eds.). The Cambridge handbook of psycholinguistics. New York: Cambridge University Press: 239-258.

Basil, B., Mahmud, J., Mathews, M., Rodriguez & C. Adetunji, B., (2005). Is There Evidence for Effectiveness of Transcranial Magnetic Stimulation in the Treatment of Psychiatric Disorders? Psychiatry (Edgmont). 2005 Nov; 2(11): 64–69.

Beenhakker, C., (2016). Black Matter; Depressie en mentale ruimte. Een experimentele pilotstudie naar de psychologische methodiek Depression in Awareness Space als behandelmethode voor depressie in een therapeutische context. Eindscriptie HBO Bachelor Toegepaste Psychologie.

Beenhakker, C. & Manea, A. I., (2017). Dark matter: mental space and depression – a pilot investigation of an experimental psychotherapeutic method based on mental space psychology to reduce the distress of moderate depression. Journal of Experiential Psychotherapy, 20, 21 – 26.

Bellmund, J. L. S., Gärdenfors, P., Moser, E. I., & Doeller, C. F., (2018). Navigating cognition: Spatial codes for human thinking. Science, 362.

Bolstad, R., (2002) Resolve: A new Model of Therapy. Crown House Publications. UK

Burgess, N., (2014). The 2014 Nobel Prize in Physiology or Medicine: A Spatial Model for Cognitive Neuroscience. Institute of Cognitive Neuroscience and Institute of Neurology, University College London.

Connor, D. R., & Callahan, J. L., (2015). Impact of psychotherapist expectations on client outcomes. *Psychotherapy, 52*(3), 351–362. https://doi.org/10.1037/a0038890.

Derks, L.A.C., & Hollander, J. (1996). Essenties van NLP. Servire, Utrecht.

Derks, L.A.C., (2005). Social Panoramas; Changing the unconscious landscape with NLP and psychotherapy. Camarthen, Wales: Crown House Publishing

Derks, L.A.C., (2016). Clinical experiments: what cognitive psychotherapies – like CBT, NLP and Ericksonian hypnotherapy – reveal about the workings of the mind. A theoretical analysis over 35 years of clinical experimentation. Dissertation, Universidad Central de Nicaragua, Nicaragua.

Dilts, R., (1990) Changing Belief Systems with NLP, Meta Publications, Capitola, CA.

Dilts, R., (2017). Sleight of Mouth The Magic of Conversational Belief Change. Meta Publications, Capitola, CA.

Dubin, M. J., Llieva, I., Deng, Z. D., Thomas, J., Cochran, A., Kravers, K., Brody, B. D., Christos, J.H., Kocsis, J.H., Liston, C. & Gunning, F.M., (2019). A Double-Blind Pilot Dosing Study of Low Field Magnetic Stimulation (LFMS) for Treatment-Risistant Depression (TRD). Journal of Affective Disorders doi: 10.1016/j.jad.2019.02.039.

Erickson, M. H., (1967). Advanced techniques of hypnosis and therapy; Selected papers, edited by Haley, J.; Orlando, Florida: Grune & Stratton.

Fauconnier, G., (1997). Mappings in Thought and Language, New York: Cambridge University Press.

Gallese, V., (2015). Embodied simulation and the space around us: The perspective of cognitive neuroscience. Keynote at the ICSC Rome, september 9, 2015.

Ganis, G., Thompson, W. L., & Kosslyn, S. M., (2004). Brain areas undelying visual mental imagery and visual perception: an fMRI study. Cognitive Brain Research, 20, 226 – 241.

Gray, 2008 Gray, R. M., & Bourke, F., (2015). Remediation of intrusive symptoms of PTSD in fewer than five sessions: a 30-person pre-pilot study of the RTM Protocol . Journal of Military, Veteran and Family Health, 1(2): 13-20Groh, J. M., (2014). Making space how the brain knows where things are. Harvard: Harvard University Press.

Hollander, J., Meyer, A. & Derks, L.A.C., (1990) NLP in Nederland. Servire, Utrecht.

James, T., & Woodsmall, W., (1988). Time Line Therapy and the Basis of Personality. Cupertino, CA: Meta Publications.

Kelly, E.F.,Grosso, M., Crabtree, A., Gauld, M.,& Williams Kelly, E., (2009) Rowman and Littlefield Publishers inc. New York.

Lakoff, G., (1987). Woman, Fire and Dangerous Things. Chicago: University of Chicago Press.

Lakoff, G. & Johnson, M., (1999). Philosophy in the Flesh. New York: Basic Books.

McDonald, R., (1997). Brief Therapy; An Introduction to NLP and Emotional Transformation. Workshop handouts: 29, 30 & 31 oktober 1997, IEP, Nijmegen.

Mckellar, P., (1957). Imagination and thinking: a psychological analysis. Oxford: Basic Books.

O'Keefe, J., & Nadel, L., (1978) The Hippocampus as a Cognitive Map, Oxford University Press.

Shapiro, F., (2001). Eye Movement Desensitization and Reprocessing: Basic Principles, Protocols, and Procedures. New York: Guildford Press.

Sheikh, A. A., (2002). Healing Images. Baywood Publishing Company Inc.

Singer, J.L., (1990). Preface: A fresh look at repression, dissociation, and the defenses as mechanisms and as personality styles. In *Repression and Dissociation*. University of Chicago Press.

Sokolov, E. N., (1975). The Neural Mechanisms of the Orienting Reflex. In: E.N. Sokolov, E.N., & Vinogradova, O.S. (eds.), Neural Mechanisms of the Orienting Reflex. New York: Wiley: 217-235

Spivey, M., Richardson, D. & Zednik, C., (2010). Language is spatial, not special: using space for language and memory. In L. Smith, K. Mix & M. Gasser (Eds.), Spatial foundations of cognition and language (p. 16 – 40). Oxford: Oxford University Press.

Stein Dan J. , Young Jeffrey E. (1992) Cognitive Science and Clinical Disorders. London: Academic Press

Thomas, M. & Tsai, C. I., (2011). Psychological distance and subjective experience: How distancing reduces the feeling of difficulty. Journal of Consumer Research, 39, 324 – 340.

Timimi S., (2014). No more psychiatric labels: Why formal psychiatric diagnostic systems should be abolished International Journal of Clinical and Health Psychology 14(3DOI:10.1016/j.ijchp.2014.03.004.

Tversky, B., (1991). Spatial mental models. In: Bower, G.H. (ed.), The Psychology of Learning and Motivation: Advances in Research and Theory 27. New York: Academic Press: 109-145.

Tversky, B., (1997). Spatial constructions. In: Stein, N., Ornstein, Tversky, B. & Brainerd, C. (eds.). Memory for emotion and everyday events. Mahwah, N. J.: Erlbaum: 181-208.

Tversky, B., (1999). Talking about space. Contemporary Psychology, 44: 39-40.

Tversky, B., J. Heiser, L. P., & Daniel. M. P., (2009). Explanations in gesture, diagram, and word. In: Coventry, K.R., Tenbrink, T. & BatemanJ.A. (eds.). Spatial language and dialogue. Oxford: Oxford University Press: 119–131.

Tversky, B., (2019) Mind in Motion: How Action Shapes Thought. Basic Books , New York

van der Kolk, B., (2015) The body keeps the score. Brain, Mind, and Body in the Healing of Trauma

Wake, L., Gray, R. M., & Bourke, F. S., (2013). The Clinical Effectiveness of Neurolinguistic Programming; a critical appraisal. London and New York: Routledge, Taylor & Francis.

Whiteford, H. A., et al., (2013). Estimating remission from untreated major depression: A systematic review and meta-analysis. Psychological Medicine 43.8 (2013): 1569-85. ProQuest. Web.

who.net, depression, 2020

Young, J. E. (1999) Cognitive Therapy for Personality Disorders: A Schema-focused Approach. Professional Resource Press

Young, J. E., Klosko, J.S. & Weishaar, M. E. (2003). Schema Therapy: A Practitioner's Guide. Guilford Press, New York.