

# Why Mental Space Psychology?

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*The most tragic moment in the history of science occurred when psychology was seduced by physics to adopt the same research method. (Gregory Bateson)*

## A Slow Breakthrough

Many believe: 'psychology is in its infancy.' Others envision this science to rise up to the levels of chemistry, microbiology or quantum physics. Will an adult psychology stop pressing its subject matter into too tight experimental designs? How will research progress if nothing is banned for the sake of scientific acceptance? Can psychology adopt a band-wide of methods that includes the full range of psychological phenomena? What breakthrough does that take? In our view this may take paradigm shifts like the one that occurred unexpectedly over the last 15 years in some areas of psychotherapy: there 'mental space' came to the fore as the backbone of cognition. It is an undeniable insight that is changing psychotherapy itself from a *word-game* into a *space-game*. This radical shift in vision and practice emerged, while most people had their eyes on the million-dollar high tech labs of neuroscience. Indeed, brain scans reveal the local activity in neural tissue and their correlation to cognitive tasks. However, mental space psychology shows the core make up of the thought process it selves.

What makes mental space psychology relevant?

Language just as behavior, are expressions of thinking processes, not thinking it self. Most psychologists largely rely on these 'derivates' for their data. Neural imaging (brain scanning) is another such derivate. Evoked potentials, EEG and GSC again are derivates from cognitive activity. The relevance of Mental Space Psychology is that it can bring us closer to the real thing. It helps us to understand mental phenomena that were out of reach and gives access to therapeutic interventions beyond what was possible before.

Personality is constructed out of spatial representation

The main challenge for clinical psychology is symptoms with "permanence". Think of personality disorders, depression and addiction. Such symptoms are largely regarded as rooting in neuro-anatomical, hormonal and/or genetic causes. For clinical psychology the dilemma is: Do brain scans show anatomic aberrations that cause pathological thinking, or do they show patterns of problematic cognition in intact brains? Mental space psychology however, treats these permanent symptoms as a stemming from learning. Although this position matches that of classical psychoanalysis, mental space psychology arrived here by an entirely different route. And the way this plays out in practice diverts from any accepted method. The now used 'spatial interventions' allow a therapist to help modify the seemingly 'permanent' obstacles in a client's psyche in a few hours. As written above, this turns psychotherapy from "a prolonged word game" into "a brief space game". Where in mental space a person represents their self images, others in general, the future, the present or the past, seem to highly determine important personality variables, like selfcenteredness, sociability, motivation, presence, etc. Those things that were always thought of as in a way 'amorphous' properties of a person, now could be described as if it was a construction in and around that person, that caused a steady outlook on the world.

## Why space?

Well... It struck several clinical researchers that, whenever therapists use spatial interventions, miracles happen. Miracles in the sense of immediate positive shifts in emotion and behavior that surprisingly also seem to last. Spatial therapeutic methods like those used in, Clean Space, Family Constellation Therapy, Time Line Therapy, Coaching Spaces, Structural Constellations, Social Panorama and Hypno-systemic work, produced a load of case studies and for those involved their effectiveness is beyond debate. But the mechanisms causing these magical effects proved hard to grasp. None of the accepted psychotherapeutic paradigms offer satisfying explanations for this. Which caused the guardians of these theories to block these phenomena out as if they are from alien origin. However, among the fans, a growing urge to understand the underlying principles raised a host of esoteric theories that mainly nourish semi-religious new age desires. And the lack of acceptable theories and experimental confirmation drove the type of psychologists away that prefer certainty above the challenge of the unknown.

May a lack of plausible theories and experimental research be used as an excuse to ignore these striking psychological phenomena?

In 2004 the International laboratory for Mental Space Research was founded with the aim to find appropriate research methods for studying the mental space phenomena. The Social Panorama and the Personal Time Line were their major focus, since these had the best link to academic psychology and were pretty concrete. Then it took 10 years to catalogue the mental space phenomena and put an acceptable developmental framework around them. Most up to date psychologists will agree on one of its basic premises, saying, that all early learning starts in the spatial environment of the womb.

## Learning in space.

As soon as ones central nervous system is capable of the strengthening of synaptic connections – which must be very early – the unborn will automatically start to create a map of itself and its environment. It has no choice: it must do this because of the wiring of its central nervous system. However, the things that are learned in the womb are easily overlooked by science. Since this earliest learning must lead to totally obvious concepts that later in life however, become our most universal unconscious background ideas, like the difference between *here* and *there* and *up* and *down* and *front* and *back*. It is assumed in mental space psychology that the repeated perception of the same sensation leads to the formation of steady cognitive structures. The 'spatial embodied' nature of these background concepts, will, according to Lakoff and Johnson (1998) and Bergen (2012), form the foundation of all later logic and knowledge up to the most sophisticated parts of philosophy.

The brain produces 3-D embodied simulations.

Right after conception some basic cognitive structures will begin to form, under the influence of constant stimulation. In the womb – the embryo's private bathtub – sounds may originate from all directions with a great variation in frequency and intensity. But the direction of sounds only makes sense because of the steady position of the sense organs in the head and the clear difference between at the front and at the back side. Beside that, the location of the inner organs is also a quite

permanent given – that all in connection with recently discovered “place neurons” and “grid-neurons” will help the embryo to orient itself within the womb. Then comes the difference between what is, and what is not controllable by the embryo. But even more basic than that is: All this experience is of a spatial nature. Everything the phetous experiences, is sensed “somewhere”. The 3-D mapping of the body and everything around it leads to the basic dimensions of mental space.

Clinical practice suggests quite strongly that these entirely habituated obvious structures, on which we build all our knowledge, are consisting of generalized 3-D imagery. The images behave according to the laws of spatial cognition. For instance, an image becomes more influential when it is bigger, closer and more centrally located.

### 3-D imagery in mental space.

Mental space is defined as the 3-D area within and around a person in which, all cognition takes place. Some of that is happening entirely habituated in the unconscious background. That is why it may remain fully unnoticed – and it is at most called “normal” or “just thinking” by the subject to whom it appears to have been always like that as a basic given truth. However, mental space psychologists came to the conclusion, that all the abstracted concepts that form the backbone of all a person knows, are learned and just as open to therapeutic change as more concrete forms of imagery. Even the most basic concepts like “up” or “front” are as open to change as sophisticated beliefs or traumatic imagery. The latter suggests that we can have access to the “mind stuff” that is making up personality. And many trials with spatial interventions are in support of that.

### The future?

From the year 2004 onwards a group of scientist, that combine clinical experience with up to date psychology, started to work at mental space psychology. To many academic researchers the methodology used is unconventional, since it builds more on standardized clinical techniques than experimental laboratory paradigms.

However, this work is productive in bringing new theories in the world that in turn influence psychotherapeutic practice and will forward psychology in general. Mental space psychology removes behavior, language and metaphor from the central stage of psychotherapy, to make place for the analysis and modification of spatial cognitive constructs.

Thanks to the groundbreaking clinical work of Milton H. Erickson in the middle of the 20th century, the unconscious mind could receive its righteous place in psychotherapy, that, nowadays shows to match all recent findings of experimental psychology. Today clinical work leads the way in the exploration of mental space. All signs point at spatial imagery to function as the backbone of the unconscious cognition that Erickson had in mind.

The term *mental space psychology* was chosen in 2013, by members of the International Laboratory for Mental Space Research and The Society for Mental Space Psychology, to help give an impulse to the social sciences.