

# The Practice of Thinking



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*Cultivating the Extraordinary*

Edited by Marta Lenartowicz and Weaver D.R. Weinbaum



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# Wider than the Sky: A Toast to the Unknown

Weaver D.R. Weinbaum and Marta Lenartowicz

*The Brain is wider than the Sky  
For put them side by side  
The one the other will contain  
With ease and you beside*

- Emily Dickinson

Nothing could better express the vast expanse of thinking than the words of a poet. From the incessant activity of sense-making that constitutes the existential praxis of individual living beings to the complex networks of dynamic patterns that constitute civilizations, thinking is all present. A primal self-catalysing movement, both creative and conservative, that animates minds and brains, while bringing forth and destroying worlds...

In the short history of human thinking a pattern has emerged that seems to follow a deeper trajectory of the life of our species. At quite an early stage of human civilization, humans have forsaken their nomadic way of life as hunter-gatherers and developed an overwhelming preference for the relative safety of sedentary settlement. This was not anyone's choice but rather a culmination of the biological imperative to survive. Settlement and agricultural practices offered an undeniable advantage in this respect making life less uncertain. This had a decisive effect on the course of the development of human cognition and understanding of the world. The permanent and the familiar slowly gained the upper hand in value over the transitory and the yet to be explored.

In modern discourse we observe and understand this bias towards the permanent in evolutionary, cybernetic, cognitive, psychological, social, economic and political terms among others. There is no aspect of human thought and human interaction that does not reflect this bias. In everyday situations we will more often than not find ourselves sticking with whatever works for us in the situation and this tendency to

‘stick with’ is so strong and so rooted that even when things do not work quite well, even when they often do not work at all, one still sticks with them. Almost nothing is deemed more expensive in life resources than changing a habit, moving away from one sedentary point to another. Although we are deeply aware of the fact that everything is in flux and nothing remains constant, we resist change. There is no wonder in that; from a metaphysical point of view resistance to change is perhaps the very essence of existence, of being something rather than nothing. The critical question we wish to tackle here is that of the fine balance between the conservative and the creative tendencies of our thinking, between reliable established worldviews and open-ended experimentation.

It is worth mentioning here that against almost any criterion, be it biological, psychological, social or other, the established habits of cognition constitute, on average, an extremely successful and well-tested strategy — that is, if the average is what one is really after. This success, however, comes at a price. Following well-trodden paths has the detrimental side effect of placing limits on thought itself, and of thought distancing itself from its raw creative core — its transformative, evolutionary element. If left undisturbed, sedentary thinking soon turns dogmatic, conservative, overly specialised and often tending towards the banal as criticised by Deleuze: ‘thought is thereby filled with no more than an image of itself, one in which it recognises itself the more it recognises things: this is a finger, this is a table, [...]’.

For thinking that moves and creates new worlds, for thoughts that are alive, affirmative, creative and open ended, standing still and safeguarding a position is never the ultimate goal, end point or limit. At the core of thought there is that which allows thought itself to transform and reach ever further horizons of creativity, understanding, action and affect. The raw element at the core of thought is always disguised — enveloped by the patterns of thinking familiar to us. These familiar forms are powerful tools. Yet being powerful, reliable and effective is precisely what also makes them limits — limits of what thought can make us do and of what we can become.

In light of this perspective, and inspired by it, we invite the reader for a guided peek into the School of Thinking<sup>1</sup> — an academic experimental initiative in the making, aiming to cultivate the extraordinary in thinking. What does the word ‘extraordinary’ stand for? We do not mean merely making available a progressive toolkit of cutting-edge methods and frameworks. Though we definitely see in such a toolkit the hard

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1 [www.schoolofthinking.be](http://www.schoolofthinking.be)

core of the initiative and though we facilitate the dissemination of such progressive thinking methods, this is not our final goal. In cultivating extraordinary thinking we address the critical need to reach beyond method and beyond the concept of thought as it is commonly understood.

We hope to empower and emancipate the thinker by unleashing thought from its sedentary practices. We hope to see thinkers confident enough so that they can grasp the limitations of their own concepts and dare to explore beyond them, to tread, so to speak, unexplored paths and engage in ‘stranger and more compromising adventures’. We aim to foster a culture of thinking that re-engages the raw element at the core of thinking — the element Deleuze described as ‘that which forces one to think’ or ‘a thought capable of harming the thinker’ in the sense of compromising her rigid sense of identity, forcing her to give up habits and explore transformative options. Psychologically, it can be challenging as such instances may often be experienced as a disturbance or even a threat to the status quo of one’s common sensibilities. Yet, triggered by a daydream, a wrong turn, an unintended utterance, an unplanned meeting or a joke, the raw element of thought can all the same invigorate, inspire and make one feel intensely alive.

Places and initiatives marked by nomadic, live thinking do not easily fit into any conventional culture because they are unstable, daring and self-disruptive. They thrive on the ground of visionary minds committed to explore and experiment, in the spirit of Buckminster Fuller’s ‘Great Pirates’ and on a reawakened instinct of playfulness; the one we so often give up for the sake of safety and survival. We aim to invite and reach out to those minds that resonate with this vision and wish to engage, contribute, learn and create.

Here is where everyone’s goal-oriented reflex can hardly hold itself back from asking whether we can do anything with this radical notion of the extraordinary? Or does it belong to the category of philosophical musings that merely carry a discursive or aesthetic value? Strictly speaking, the very attempt to harness the extraordinary to preconceived utilitarian ends already betrays it, trying to reduce it to the understandable and already established. Having said that, however, our approach to extraordinary thinking is by no means an attempt to mystify it or make it transcendent. We aim to make extraordinary thinking and its impact a research topic and investigate how such concepts, though evading a simple definition, can find their place within broader theories of psychological and social transformation,

such as Dabrowski's theory of positive disintegration, Kuhn's theory of scientific revolutions and others. Nowadays, with humanity facing ever greater and more complex challenges, the need to cultivate and practise transformative thinking has become more urgent than ever.

The successful conclusion of the first year of our initiative, by all means a humble first baby step in the face of formidable global challenges, for us, is a milestone and a crossroads; a meeting point between an optimistic vision and an exacting reality. Here we offer this volume of articles authored in a collaborative effort by instructors, students and fellow contributors of the School of Thinking as the first fruit of our shared adventure. In as much as no idea arises in isolation, the practice of thinking is born and thrives in a space made of a multitude of minds and ideas and is enriched by idiosyncratic perspectives and styles of expression. The value we intend to highlight in this volume does not lie exclusively in the collection of individual contributions but also in the fabric that holds them together. This fabric was weaved in long and lively conversations held during our School of Thinking seminars. We have included transcripts of several of these exchanges as an integral part of this volume.

The question we would like to ask the reader is one that seems deceptively simple at first examination but is both profound and intricate. Can we change our minds? Can we bring others to change theirs? Here, in changing one's mind, we mean affecting neither a particular decision nor an opinion or a belief but the very manner in which one interacts in the world, with other beings, with oneself. In other words, affecting changes in one's worldview, one's modes of perception and action, one's horizons of expression, adaptability and tolerance, sensitivity to ethical considerations and above all, perhaps, one's openness to the unknown — the different, the complex and the uncertain that harbour the promise of the extraordinary in thought and being. Changing our minds is and must be in essence a philosophical practice. It must touch the ground of mind and soar as high and far as a mind can conceive and dare the beyond. Such philosophical practice is a never-ending dialogue that embodies and facilitates individuation, transformation and integration while recursively improving itself. We hope that those honouring our team by reading this volume or parts of it will hold this question in mind as a connecting thread between the diversity of ideas it voices and the synergistic sense it offers.

# THINKING ABOUT THINKING

*Thought is but a flash between two long nights,  
but this flash is everything.*

- Henri Poincare



# Thinking About Thinking: Scaffoldings of Metacognition

Marta Lenartowicz, Weaver D.R. Weinbaum, Maciej Świeży, Meredith Root-Bernstein, Michele Root-Bernstein, Veerle Meurs, Gys Godderis, Francis Heylighen, Luc De Proost, Tom Van Damme, Gella Dybman, Karin Verelst, Iwona Sołtysińska, Lotte Van Lith, Pierre Cock, and Robert Root-Bernstein

*A 'Thinking Studio' seminar*

**Marta Lenartowicz:** To initiate our conversation, I propose we join rooms with another seminar series, held by the physicist David Bohm in 1990 in Ojai, California. Reading its transcripts makes me wish that our School of Thinking could in some respects pick up from where it left off. Let us follow for a few moments a conversation there (Bohm & Jenks, 1994):

*Bohm: One of the troubles is that [...] thought process is going on and we don't know at all how it's working. And when we don't know how it is working we very quickly regard it as something else: as non-thought. [...] [O]ne of the key difficulties has always been that thought does something and then says that what it is doing is not thought. Thought creates a problem and then tries to do something about it while continuing to make the problem, because it doesn't know what it is doing. It's all a bunch of reflexes working. [...] Remember that 'thought' is a past participle. It's what has been registered in the memory. That registration is through a set of reflexes [...].*

*I'm discussing how thought would properly work [...] because to understand what has gone wrong we should have some understanding of how it would work when it is right.*

**Q:** *Is this the difference between thinking and thought [...].?*

*Bohm: Thought just works automatically. But when you're thinking, you are ready to see when it doesn't work and you're ready to start changing it. 'Thinking' means that when the thing isn't working, something more is coming in – which is ready to look at the situation and change the thought if necessary.*

**Q:** *Is thinking an element that's outside of thought?*

*Bohm: It's a bit beyond thought. Let's put it that thinking is not purely the past; it's not purely a set of reflexes in the past.*

*Q: Would thinking be more 'of the moment', more energised, and thought more passive in the past?*

*Bohm: The past is active. That's the trouble. The past is not really the past – it's the effect of the past in the present. The past has left a trace in the present.*

*Q: Then the thinking would be even more energised?*

*Bohm: Yes. The thinking will be more energised because thinking is more directly in the present, because it includes the incoherence that thought is actually making. It may also include allowing new reflexes to form, new arrangements, new ideas. If the reflexes are all somewhat open and flexible and changeable, then it will work nicely.*

*Q: If I understand you clearly, you're saying that by looking at these primal feelings and thoughts and images, we have a certain opportunity to look at them again with more energy.*

*Bohm: Yes. We see them right there, and we are able to look at them with something which may be beyond the conditioning. Then the way we look would not be entirely conditioned, therefore we say it's more alive, or whatever. We're saying that we need to look in this way because it is very important to come into actual contact with this system which really rules our lives. It's very necessary – I've explained all the good things it can do, and how it works when it works properly, and so on.*

*Q: Can thought deceive us that it's thinking when it is not really thinking?*

*Bohm: It can deceive us about anything and everything. There is no limit to its power of deception. You could say that every trick we know, thought knows in the next moment. If we see a trick, then in the next moment thought has it there in the reflexes. In other words, thought is us – thought is not different from us. (Bohm & Jenks, 1994)*

**Marta Lenartowicz:** I like these exchanges because of Bohm's radical and yet almost ungraspable staging of the practice of thinking. On the one hand, he asserts that the 'system of thought', as he calls the entire cognitive complex we will be inquiring into, does nothing short of ruling our existence. This might suggest that in attempting to understand and refine the human condition, comprehending our thinking should be the matter of highest importance. On the other hand, Bohm is refreshingly honest in not just admitting, but insisting that we do not and cannot comprehend how thinking is in fact situated. Thinking remains mysteriously opaque in removing itself from the spotlights it sheds and in presenting its own compositions as the states of affairs for us to act upon – as problems to be tackled, as conclusions to be made, as emotional



arousals to be expressed, or as our own characteristics to be actualised. It makes us believe that it is then and only then – once the problems, clues, perceptions, stimuli and properties are already in place, waiting – that our thinking commences. But who has arranged the stage? Who has chosen the decorations and props? Who has assigned the role to be played? The English past participle is indeed an appropriate grammar to ask these questions. It refers to a past action, which is imprinting on the present.

In both our personal and scientific sense-making we of course have some notions as to what thinking is and how it comes about. We may point to the rational, proposition-by-proposition mental sequences, adhering to the distinction between the more diffused conscious awareness as well as feeling, sensing and perceiving on the one hand and the more contoured, symbolically expressible thinking on the other. We can assign the more persistent patterns to the thinker (her cognitive style, intelligence, temperament, creativity, personality, ego or the 'self'), to the thinker-environment coupling (culture, social circumstances, the situation), to the collectively composed assemblages of knowledge (categories, taxonomies, types and rules of inferences, language), or to outputs of thinking (utterances, books, notes, melodies, diagrams), highlighting what seems to remain – only the most agile motion – as thought proper. We can further distinguish between timescales of changeability, removing the slowly accumulating ones into the box we name 'learning' or 'cognitive development', and singling out only the more transitory ones as thinking. Such structurations diverge into distinct theoretical frameworks and academic disciplines, aimed at investigating different aspects of human existence. Turned into linguistic, cultural and intellectual conventions, these aspects become then the scaffoldings of our minds: the ways we think about thinking. Or maybe: the ways thinking situates itself within itself.

But, as Bohm insists, such metacognitive scaffoldings are themselves 'past participle' formations of thought and they play out as if this was not the case. They seem to present themselves as non-thoughts, as structures from within which thinking commences; structures which 'are just there', by themselves. Elements of these scaffoldings seem to be akin to parts and organs of our body: our intelligence, our creativity, temperaments, personalities, egos. Some of them form the protagonist, the thinking subject at the centre of the scene, and others fashion the decorations and props.

Yet, if we include generating and sustaining all these into our notion of thinking, how is that thinking situated?

**Weaver D.R. Weinbaum:** We might dare to admit that we do not know.

# 1. Conceptual Scaffoldings

**Marta Lenartowicz:** It seems, however, that the state of not-knowing never really sticks to human minds for long. We strive to know, we are compelled to understand, especially when the stakes are no less than understanding our human condition as such. By situating the thinking process within a wider context, we frame and focus on what is most perplexing and most pressing for us to comprehend. I believe it is worthwhile, then, to investigate and account for our own scaffoldings, to see if and how they differ, and to realise how they shape our attention. Listening to people talk about how they think about thinking is very interesting: you notice how idiosyncratic minds are. We are really very diverse. To sketch a general orientation map, some people will exclude the thinker, the whole make-up of a person, such as personality, values, cultural norms, their goals and desires, even the state of affairs in the world, etc. For them, these are all already 'in there' and then thinking is experienced as a reasoning operation towards a specific goal. For others, it sounds more like thinking is basically a synonym of 'being' or of 'living'. But there is a whole spectrum in between and there are territories outside of this axis, too.

This is of course a question of what we include in the notion of thinking. I am curious how you, the instructors and students of the School of Thinking, would account for the staging that you yourself have presumed in your writings and observations. Could you reflect on that?

**Maciej Świeży:** For me, thinking does have some deliberateness. If we consider other psychological activities, such as imagining something, remembering something, perceiving something, or even meditating and trying deliberately not to think, it becomes clear that thinking cannot be everything that happens in my head. It has to have some distinctive qualities. And I think those distinctive qualities are trying to do something with your mind; to produce some outcome that was not there before. So I presume that in the mind of the thinker there already is some sort of an idea about the world and the thinker is actively trying to combine it with something else, probably towards some outcome, be it more playful or more instrumental. But there is some goal-oriented process happening, which is actually interesting because this allows for introducing functional distinctions, so you can say, for example, 'I'm thinking effectively'. Which is useful, because I can be asking myself many questions from 'Am I thinking correctly?' or 'Is my thinking in touch with outside reality' to 'Is this type of thinking useful for me?' 'Is it helping me achieve the goal or the excellence that I am working towards?'

**Meredith Root-Bernstein:** Reflecting on a staging that we might have presumed in our chapter,<sup>2</sup> I think we actually did not address that issue. I mean, I guess that anybody is or can be thinking in the manners we discuss, everyone can use these manners as tools. However, what I think is interesting is that when you describe those two ends of the spectrum, it immediately reminds me of the difference in methodological approaches between sciences like ecology, as I am an ecologist, versus anthropology, which I observe in doing field work together with anthropologists. At first it astounded me that they did almost no planning ahead. They did not have a hypothesis in mind that they were interested in investigating. They would just let the problem and its analysis emerge from interacting very randomly, apparently with no guiding point or plan whatsoever in the field, which is the opposite of what you are meant to do in experimentally focused science. In science, you have to know ahead of time exactly what you are going to do. You really should not do anything else. And then you may notice extraneous questions, but you are not supposed to act on them until some other point.

So this is like a completely different style of staging, as you put it. But I also think that both of those approaches are in fact much more mixed. I mean, they are staging both in the sense like staging a theatre play. You know, there is something fake about both. It is a performance. I mean, obviously, for the anthropologist it is not that the question really organically emerges of itself. Clearly, they are going to see the question and answer as a function of their theoretical background, what readings they have been doing, what they are able to attend to and not attend to, based on their training and their experience. At the same time, of course, the rational, predesigned conduct of science is also very much a performance. Moreover, there is a whole other set of experiences which go into forming hypotheses and developing the experiments, which are not part of that performance but are necessary for it to make sense. So in actuality they both seem to be performances for specific purposes and they both include the characteristics that you have assigned to the two ends of the spectrum. But there are also, I think, ways of thinking that do not clearly belong to one type of performance or the other.

**Michele Root-Bernstein:** If I understand the question properly, I feel that we do have a sense of who the thinker is. Basically, I feel that whether you call it a goal or something else, there is usually a problem involved. If you are thinking, you are trying to solve something or decide what to do, so you have some kind of a problem. You are problem-oriented; the thinker is problem-oriented.

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<sup>2</sup> In this volume: *Creative Imagination and Practice as Embodied Cognition: Towards the Education of Homo Synosius*, Meredith Root-Bernstein, Michele Root-Bernstein and Robert Root-Bernstein.

And then, I think, in the context of what we wrote about, all these embodied ways of thinking can come in, which are often intuitive, sometimes unconscious. We have proposed this kind of a model, I guess, of the thinker who toggles between this embodied kind of thinking and a more deliberate, conscious, possibly rational and logical type. What we have found when reading about many creative individuals is they often talk about the necessity of translating between those two kinds of thinking, because intuitive thinking tends to be more bodily oriented and imagistic, without necessarily the use of words and symbols. The other kind of thinking is more word-oriented, more symbolic, more logical, more rational. And creative individuals learn to toggle between the two. Sometimes in solving a problem their embodied personal knowledge gets there first, but then they really have to spend time finding the words, finding the maths, whatever public communication is necessary, to convince other people.

So that is the kind of situation that we see for a thinker. It is vis-à-vis a problem and then somehow having to connect two subsystems, which are not always in conversation.

**Veerle Meurs:** For me, when I think of the act of thinking, how and where it is performed, it is really a relational activity that happens at the contact boundary. That is not some solipsistic act, but there is contact between me as a person and the environment that affects me. Then, I think maybe thinking can be considered as one of the methods to dissipate energy; the energy that comes from the flow of interaction of being affected by the environment. We could compare consciousness with the oil in the pan. When it is affected by energy, it produces new figures and presents these figures back to the environment. The energy is transforming. And when I start thinking about this, about thinking, I become very excited. If what we are thinking can be understood as a transmission of information on this complex boundary, then maybe we could say that the agent here is not the brain, but the contact. Then, our consciousness is a medium between the boundaries. Well, if we start to see our brain not as an agent but as a medium between different agents, then it becomes more like a transit zone that transforms energy; and we can train that medium. The thinking process can be trained. Then, the question becomes, how do we train this medium and what needs to be trained? In this regard I think it is very important to train the awareness about how, what and with which energy we affect what we are affecting and to pay attention to what needs to be transformed and what wants to be transmitted. So thinking may initially indeed have to do more with sensing and connecting.