



# Thinking at the edge in the context of embodied critical thinking: Finding words for the felt dimension of thinking within research

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## Abstract

This paper introduces the Thinking at the Edge (TAE) method, developed by Eugene Gendlin with Mary Hendricks and Kye Nelson. In the context of the international research project and training initiative Embodied Critical Thinking (ECT), TAE is understood as a political and critical practice. Our objective is to move beyond a criticism of reductionism, into a practice of thinking that can complement empirical, conceptual and logical implications with what is implied by the vibrant complexity of one's lived experience in one's place and time. The second person helps the first to explore, elaborate and clarify very carefully felt dimensions of thinking, which hold intricate structures, contexts, perplexities and intuitions that prove relevant for one's research. The second person also supports the first to become sensitive to the effects of the language and concepts she uses. A non-imposing, tentative use of language that touches the intricate texture of lived experience is at the core of this method, allowing to widen one's conceptual structure. In this paper, the cluster of TAE moves are characterized with examples of accounts of TAE processes. The description of the TAE phases includes concepts of Gendlin's embodied theory of meaning that explain the efficacy of the moves ("direct reference," "explication," "crossing").

**Keywords** Felt sense · Meaning · Direct reference · Explication · Responsiveness · Embodied critical thinking

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## 1 Introduction

Thinking at the Edge (TAE) was developed by Eugene Gendlin, Mary Hendricks and Kye Nelson in the late 1990s and early 2000s, having its genesis in a method of theory construction at the University of Chicago taught by Gendlin in the 1970s (Gendlin, 2004b). The goal of TAE, in short, is to support the researcher via a series of phases and steps to individually clarify and develop an idea, a problem, a question. It is a method to access lived experience for the sake of explicating intuitions, widening the conceptual framework of thinking and also of one's habitual understanding of key-concepts, before or at any point within one's research. The method of TAE works with different kinds of moves, using straightforward instructions that guide an exploration of the "thinker at the edge". The instructions support the process of getting in touch with embodied, affective and experiential understandings partaking in one's research, in order to reflect, clarify and elaborate felt dimensions of one's thinking. This exploration is accompanied by a listener who plays an important role, as we will see below.

The philosophical foundations of this method are anchored within the turn to embodiment in phenomenological, pragmatist and hermeneutical epistemology, and within the 4EA cognition of the cognitive sciences. Understanding meaning as embodied and enactive went hand in hand, in Gendlin's work, with the development of practices such as Focusing and Thinking at the Edge (Gendlin, 2004a, b; Krycka, 2006). These methods teach how to shift between different modes of thinking, between conceptual, logical on the one hand, and experiential, felt implications on the other. This goes along with training the attention to notice a "felt sense" (Gendlin, 1965/66, 2012; Schoeller, 2020). A felt sense indicates what contemporary thinkers also describe as tacit dimensions of knowing, pre-propositional backgrounds or horizons, which function in one's grasp of concepts, in one's approach and understanding of phenomena (Schoeller, 2018). Gendlin's fine-grained phenomenological studies show how the "logical precision" of conceptual systems is not undone by, but is actually grounded in and enriched by, the "implicit precision" of pre-reflexive, not-yet-sayable experience (Gendlin, 2017a, b). The "yet" here indicates the practice-dimension involved in becoming able to explicate felt and experienced meanings that at first seem intricately difficult to put in words.

In what follows, I will elaborate briefly some critical-philosophical dimensions of this practice, to address its unusual standing among other research-practices described in this volume (Sect. 2). I will then characterize how first and second person processes continuously work together in this practice (Sect. 3). Subsequently, I will introduce the three main TAE phases with their moves, while also briefly laying out relevant concepts of Gendlin's embodied theory of meaning. Most moves will be exemplified by accounts and transcripts of processes (Sect. 4). Finally, I will conclude by summarizing the relevance of TAE as a method within the context of academic research today (Sect. 5).

## 2 Objectives of thinking at the edge in the context of embodied critical thinking

The body is not a thing, it is a situation: it is our grasp on the world and our sketch of our project. (de Beauvoir, 2010, p. 68)

TAE is a cornerstone method in an international research project ([www.ect.hi.is](http://www.ect.hi.is)) and a related European training initiative in Embodied Critical Thinking (ECT) in which five universities are collaborating ([www.trainingect.com](http://www.trainingect.com)). The ECT project takes a leap from theories of the 4EA cognition, and from epistemologies of embodied relationality and interaction, to an embodied, situated, and interactional practice of research in the context of higher education. With this leap, we systematically interconnect the theoretical and abstract approach to problems and issues, with a dimension of practice that supports students and researchers to connect their work to a level of relevance that is experienced, lived and felt.

TAE as a method in this context can make diverse contributions to critical thinking in the context of research, including:

- specifying and precisioning one’s research topic/question;
- explicating tacit dimensions of knowing that function in one’s thinking, in order to make this kind of knowledge more shareable and thinkable;
- adding phenomenological awareness of how one perceives and experiences a research topic/subject matter and its meaningfulness and challenges;
- differentiating one’s use of language and concepts to counteract a reductionism of the phenomenon one cares about;
- learning to interlink experiential intricacy and logical coherence; and
- learning to think with webs and entanglement surrounding one’s sense of relevance or challenge of a topic or subject matter.

Having noted these contributions briefly, I want to underline how ‘out of place’ this mode of thinking is from the perspective of many valorised epistemologies and methods. Methodologically, researchers in many traditions are schooled in cultivating an ‘objective standpoint’ using a process of gradual detachment (Nagel, 1986). TAE, like Micro-phenomenology, is used for cultivating the opposite movement—disciplined exploration of embodied, situated, embeddedness—as a way to inform scientific thinking about matters which traditions of detachment elide. Yet, TAE has a different objective than Micro-phenomenology: its aim is not obtaining detailed description of a past single instance of lived experience for the purpose of documentation and comparison, rather, its aim is to elicit an in-depth reflexive process that is capable of drawing on the felt dimension of thinking, and on the richness of concrete lived experiences.

The Embodied Critical Thinking initiative applies TAE in the context of research, to encourage careful reflection of subject matters on the basis of the scientists embodied understanding and experiences, because “there are things about the world and life and ourselves that cannot be adequately understood from a maximally objective standpoint, however much it may extend our understanding beyond the point

from which we started. A great deal is essentially connected to a particular point of view (...).” (Nagel, 1986 p.7) TAE supports a differentiated and systematic unfolding of backgrounds partaking in one’s research topic, in order to clarify how and why it matters from a standpoint within specific, situated contexts of the researcher’s lifeworld. The method draws on the intricacy of experiential instances that call for patterns of understanding that are often challenging to formulate. As an important side effect, this method is also a practice to overcome a chronic disconnect from lived experience when moving from the richness of situated understanding to the abstraction involved in formulating theories (Petitmengin, 2021; Schoeller, 2021).

This indicates why we consider TAE a practice of critical thinking in the context of research. The contemporary philosopher and sociologist Jürgen Habermas analyzed a core movement of critique consisting of the explication of “unausgesprochene Selbstverständlichkeiten” [taken-for-granted self-evidences] (Habermas, 2012, p. 56). The latter refers to what one understands or questions in an implicit, obvious way without necessarily being aware of it. This kind of understanding or questioning holds forms of inference that are powerfully embodied in cultural and scientific institutions, practices and structures of one’s lifeworld (Lebenswelt). When these become explicit, communicative practices have the possibility to expand the scope of discourses and of transformative actions widens. Feminist critical thinkers point into the same direction. Tapping into situated knowledge, which is an embodied sense of an entanglement of contexts, values and meanings, opens up new fields of knowing of “networks of connections” (Haraway, 1988, 580) that are not easy to communicate.

In the context of Embodied Critical Thinking, TAE is understood as a practice to enact this kind of critical movement. A special care is thus directed towards not cutting off what does not easily fit habituated ways of framing something within one’s expert language and the scientific conceptualizations at hand. We use TAE to put into practice a key concern of critical and feminist thinking to not cut off aspects of an embodied and experienced lifeworld that do not accommodate to a given theoretical framework, an underlying word-view, and its values and hierarchies.

You might wonder at this point, however, what a method of embodied critical thinking is doing in a special issue dedicated to “Working with others’ experiences”? It seems as if TAE itself is more a technique for working, exploring and elaborating one’s own experience in the process of thinking. So let me add: TAE is a method in which one practices two forms of engagement: working with one’s own and facilitating the other’s working with their experience. Below I will elaborate how one practices a double role throughout the TAE process. Half of the time one is exploring and elaborating one’s own felt and experiential dimension of thinking, in the other half, one is facilitating this exploration and elaboration for the other person (see Sect. 3.2). First and second person continuously swap roles. Each has an important function in enabling the other person’s working with their experience. As this practice continuously brings you to the edge of habituated ways of framing and conceptualizing something, the empathy, patience and solidarity with each other grow, while each in turn is struggling to find words to explicate and make sense of the experiencing and feeling involved in their thinking. In the process, one is granted a deep insight not only in one’s own, yet also into the other person’s experiences while

thinking at the edge. For this reason, TAE is also used as a tool in teams for understanding each other's thinking better (Deloch, 2018). Documenting such processes would be an important contribution to the field as they showcase the experiential, embodied dimensions of thinking and the conditions needed to clarify these.

### 3 Practice of TAE

Come back. It's not so hard. Stay right here, and you won't be absorbed into the old scenarios, the redundant phrases, the familiar gestures, bodies already encoded in a system. Try to be attentive to yourself, to me. Don't be distracted by norms and habits. (Irigaray, 1980, p. 69)

TAE proves helpful at the beginning of a research project, by supporting a careful laying out and formulation of a still fuzzy idea, sense of a problem, felt relevance of an issue. The experienced researcher will find this method helpful in supporting the explication of tacit dimensions of their experienced knowing (Polanyi, 1966). Younger researchers often describe the experience of finding one's own voice during the deep reflexive process that TAE initiates (Schoeller et al., 2022). TAE is not yet widespread in its use today. It is used in organisations, as pedagogical tool within higher education, in the context of qualitative research and other research settings, it is also used by people privately for an in depth-approach to projects that matter in their lifeworld (Deloch, 2010, 2018; Fendler-Lee, 2012; Krycka, 2006; Lindner, 2018; Lou, 2004; Tokumaru, 2011). In the research and training of Embodied Critical Thinking, this method is used by master students, by phd students, by postdocs, but also by experienced researchers to clarify their approach and to establish a conceptual framework of a project that holds and unfolds what matters most within that project. However, TAE can also be helpful in moments of stuckness in the midst of a project, for example when predetermined conceptual schemes blind one to see what really matters, or the mass of observed facts lead nowhere. That is when John Dewey strongly recommends to step back and focus on the felt dimension of one's work: "The way, and the only way, to escape these two evils, is sensitivity to the quality of a situation as a whole. In ordinary language, a problem must be felt before it can be stated" (Dewey, 1991, p. 76)". TAE cultivates throughout its moves the sensitivity to the quality of a situation in which one's topic is embedded, strongly supporting to gain or re-gain a feeling of the whole problem, of a red thread guiding the selection of data or a coherent conceptualization. Getting to know an entire TAE process with its different phases and moves, enables researchers to become creative in using these whenever needed.

TAE has three phases. In the first one, one learns to attend the felt sense dimension of a topic and to formulate it in a language without losing the intricate quality of the felt sense. In the second phase one draws out the relevance of one's topic by working with actual experiences, situations, real life instances connected with one's sense of relevance. In the third phase, one builds a clear conceptual structure that calibrates conceptual inferences and experiential implications of what is involved in one's topic.

In the context of Training in Embodied Critical Thinking, the method is first introduced in a webinar-setting, in which one practices simple moves. Thereafter, TAE is taught in a weeklong workshop. Researchers come with projects they want to work on. A week is a good time span to immerse oneself into the process that is prompted by the different TAE phases and their specific moves. Yet time is difficult to predetermine in the context of this practice. A week can seem too short, or too exhausting. A weekend can also be a good beginning to get a taste of the fruitful challenge involved when working with the felt dimension of a topic that matters. Some researchers spend weeks and months going through the moves slowly, in regular sessions with a partner.

Before describing the three main phases of the TAE practice, and demonstrating specific moves involved, let me first characterize two basic and interconnected skills that are being introduced before and trained while one practices this method.

### 3.1 Doubled attention

Practicing TAE involves, what for many people is a nonhabitual form of awareness: noticing “what it is like” to formulate an idea, a question or a crux of one’s research (Gendlin, 1997). As one is mostly absorbed in the content one is thinking about or trying to convey, one does not typically notice the tacit response and the experiential change that happens when formulating thoughts and ideas. One so obviously thinks *with* these responses and changes. Yet, as Gendlin expresses very boldly: experience “speaks back” to how it is formulated (Gendlin, 1997). Throughout the process of TAE, there is a “zigzagging” play of attention (Gendlin, 1995). The focus on finding words and formulating sentences alternates with the focus on one’s ongoing experience of these formulations. This double attention on *what* one is conceptualizing and *how* this effects the experience of one’s thinking, effectively loosens the language-barriers in relation to the subtlety and complexity of lived experience that partakes in one’s thinking, while at the same time opening new frameworks of thinking itself (Schoeller & Thorgeirsdottir, 2020).

### 3.2 Listening: the second person supporting the first

TAE is a practice of supporting each other to face questions beneath the surface and to attend to intuitions that challenge our ability to conceptualize as usual. In a first step, this practice goes hand in hand with a special focus on listening. Before one begins, one practices listening to each other in a disciplined manner. One does not come in with suggestions, own ideas, or critiques while the other is developing something. One can do so after the process is finished. During the process, core concepts of one’s research are established and defined, patterns are generated, relevant connections are made, and a solid conceptual structure is developed. Gendlin writes in his introduction to TAE:

In half the time I respond *only* to you. I follow you silently with my bodily understanding, and I tell you when I cannot follow. I speak from this understanding now and then but only to check if I follow. In TAE, I write down

all your exact words as they emerge (because otherwise they might be gone a moment later) and I read anything back to you when you want it. Then in the other half of the time you do *only* this for me. (Gendlin, 2004a, b, p. 4, original emphasis)

By saying back the words that the first person uses—a method Gendlin learned from Carl Rogers, one of the founders of Humanistic Psychology (Gendlin, 1984; Kirschenbaum & Henderson, 1989)—the second person precisely reflects and thereby also slows down the process. This kind of listening cultivates a space between the first and the second person, for the first person to strongly concentrate on her own process and to tentatively refine formulations and draw out differentiated meanings which often expand one's habituated use of language. This is a similar procedure as in Micro-phenomenology. Saying back words or sentences whenever needed, enables the first person to check what the words do—if they sound right or 'resonate,' if there is more to it, or if an aspect is getting lost in the formulation, or in sentences that may sound good but lose the point.

In each phase of the TAE method, the second person's listening supports the first person's above mention doubled attention towards the experiential effects of her own words, to notice if something meaningful opens, shrivels away, or is unhelpfully changed by the way it is said. All the while, the second person helps the first to stay 'at the edge', which signifies the phases of thinking in which one can feel more meaning or relevance than one can yet easily say.

Cultivating these felt and open 'edges' at every stage of TAE allows for very careful developments of core aspects of an intuition, idea or perplexity. The sounding-board role of the second person supports the first to draw on a felt meaning at the "source" of their thoughts (Petitmengin, 2007) and to not jump ahead to ready-made conceptualisations for the sake of easy intersubjective understanding (Casey & Schoeller, 2017). The slowing down, the resonating that is going on, and the consistent reference to the felt-sense-dimension, allows the TAE practitioners to experience a process of emergence of reasons, concepts, systematic and coherent structures of something that started off as a "soup" of pre-reflective and pre-conceptual knowing (Varela, 1999).

The TAE kind of listening and saying back can seem strange to newcomers. Very soon, researchers notice the relief that this mode of practice provides for both sides. Not having to comment and come in with ideas or opinions makes listening easier. After getting used to it, researchers often report that the experience of listening in this way is newly stimulating. For the second person, this opens different levels of understanding of the thinking of another, while the first person is undisturbed as they pursue threads and connect loose ends, in order to harness insights on the basis of their pre-reflective experiential material. A strong sustained focus on emerging insights is enabled by not needing to respond to anything from the second person, while having the benefit of a listener and a sounding-board.

In this way, the TAE setting is not a dialogue or interview. The listening of the second person is experienced as a tacit energy that helps the first person to process, and to stay with their topic, even when feeling stuck or confused. At the same time, the second person's care for the process of the first person can encourage the

first person to cultivate a similar attitude of patience, empathy, curiosity and interest towards their own process. This attitude of mutual care for the thinking process I call reflexive care (Schoeller, 2019; Schoeller & Thorgeirsdottir, 2019).

The second person's supportive participation is also important in another sense. Here we again touch on the critical dimensions of this practice. A contemporary demand to become clear quickly—to be able to pitch one's ideas during the infamous lift ride, a one-sided emphasis on clarity and structure in the humanities that neglects the conditions for the emergence of clarity, and the time and production pressures in academia in general—do not create easy conditions for deep processes of clarifying ideas or deep-seated questions. Becoming able to face unclear issues below the surface implies slowing down and taking seriously one's discomfort or critical intuitions concerning extant approaches and practices, and it implies the courage to swim against the stream. In this context, the TAE setting of the first and second person working together is a critical practice in the sense Hannah Arendt suggests: mutual solidarity supports thinking-for-oneself and not succumbing to conditioning pressures that foster what Arendt calls "thoughtlessness" (Arendt, 2003).

#### 4 TAE's phases and moves

Since cultural situations are very complex, and each situation implicitly involves others too, which are also complex, a very great deal more is bodily lived and felt in this "inaction" way than is ever sequenced as such in those rather few "slotted" sequences we consider our feelings. (Gendlin, 2017a, p. 200)

In the following, let me demonstrate the different phases of TAE, and characterize the different focus of each phase with its different steps or moves. In the context of Embodied Critical Thinking, rather than speaking of steps, we prefer to speak of moves. Firstly, this term indicates that what one is doing in each phase involves and moves a whole body of considerations. Also, these moves are non-habituated at first. By practicing them one can realize the effects of these moves, a bit like in Yoga. One begins to experience the interconnectedness of seemingly disconnected areas of thinking, one grows a sensitivity for the effects of the language one uses, and one develops a capacity to touch the experiential basis of one's thinking, even when dealing with abstract and theoretical issues.

In each phase of TAE, one alternates between attending to the felt dimensions of one's topic and its explication. For the sake of explicating, one literally experiments with conceptualizations. Attending to the felt sense dimension of one's thinking gives the practitioner's experienced meaning of a topic more opportunity to function generatively in the coming of specific, explicating words. One of the functions of situated experience that Gendlin describes is so basic that it is most difficult to notice: situated experience *lets words come*. If we don't attend to the specificity of *how* we experience something, whether a situation, a relation or a question, we cannot come up with words for it (Gendlin, 1962/1997, p. 106). The more we attend to



an experience, the more precise our descriptions get. Only by experiencing something do words for it come, a process Gendlin calls “explicating”. Amazingly, we need not go through thousands of words to find the ones that fit. Gendlin makes us aware of this amazing functionality of experiencing for our capacity to come up with words in situations:

The coming of words is so clever! They come specifically and newly phrased to make just your point! The words come with their past uses taken into account. Much that you have read and know is taken account of, as well as the present situation, what you just heard these people say[,] what you know of them from other times, even the peculiar way in which *this* group uses certain words. (Gendlin, 1991, p. 104, original emphasis)

#### 4.1 First phase: Birthing and explicating

In the following, I will describe each TAE phase more closely, indicating some of the prompts given and demonstrate what happens with some examples. Birthing is an embodied metaphor (Nelson, 2003). It comes along with different connotations than cognitive metaphors that draw from agent driven activities like *constructing*, *structuring*, *making* definitions and so on. Birthing implies an opening that needs time and that one does not have in total control. In the birthing phase, one practices “direct reference” as a first step for further elaboration. Direct reference means, the researcher is invited to attend to the felt sense of the whole—be it a question, puzzlement, intuition or vague idea.

Gendlin writes:

For example, a researcher pursues ‘an idea’. It’s not really an idea. It’s a pregnant bodily sense acquired in the lab. If it is new, the bodily sense is at first inarticulate. ‘It’ will be *carried forward* by many odd thoughts and moves in the lab, until ‘it’ develops into a feasible project. (Gendlin, 1999, p. 234).

In the first phase of TAE, symbols function merely as a ‘handle’ to get a hold on something meaningful that is mainly experienced. In these cases, one might say ‘*something* does not feel right’, ‘I do not know how to say *this*’, ‘saying *it* like this does not quite work’, ‘I don’t have the words for *that*’. The main load of the meaning in these speech-acts is felt, not yet in the concepts. Words such as ‘*this*’ or ‘*something*’ only point. Still, they have an important function: they render a felt meaning into a *this* or *it*. Gendlin’s concept of “direct reference” (Gendlin, 1962/1997, p. 91), stresses the openness of this kind of reference. ‘Direct’ only indicates that one needs to first feel or experience something in order to formulate, unfold and find words for whatever ‘*this*’ is. The felt meaning and the pointing words function together, in order to hold on to something and to elaborate on it further.

In his major philosophical work, *A Process Model*, Gendlin describes felt meaning with the dancer Isadora Duncan. Before dancing, she pauses for a considerable stretch of time. To avoid thoughtlessly moving according to established steps and moves, Duncan immerses into sensing the felt source of her dancing movements. Even though she seems still while doing this, she is highly active. Gendlin writes:

“This seeking, waiting for, looking, and letting is a kind of action” (Gendlin, 2017a, p. 200). Duncan could have danced at any point. Yet her still engagement allows for the source-dimension of her dance to become more tangible, while at the same time letting novel and non-habitual moves emerge. In the last Chapter of *A Process Model* Gendlin carefully elaborates the significant shifts that can happen in this still, attentive and pausing engagement with the feeling of a whole situation contextualizing a problem, intuition or puzzlement. Not only novel cognitive movements, but also a different space of movement is generated (Gendlin, 2017a, chapter VIII).

At the beginning of a TAE workshop, prompts like the following help to direct the attention to the felt dimension to open the thinking process: *Do you have a felt meaning of your topic/issue that you cannot explicate yet? How in your body do you sense the issue/idea/problem? What is the live point withing the felt sense of the issue for you? Notice the feeling, tone, background feeling coming along with your topic.*

When one begins to engage with the felt sense dimension of one’s topic in the dyadic listening setting mentioned above, one soon comes to notice contextual connections, fuzzy implications, complex aspects of one’s issue. In this phase, quite naturally, experiences and situations are also verbalized that seem connected to the subject matter. They will play an important role later in the process (see 4.2.). TAE invites researchers to look out for the more-than logical structure in the backgrounds of what they are thinking about. This encouragement deepens the focus on the felt and experiential dimensions involved. The philosopher Dilthey explicated an understanding inherent in the experiential process which is foundational to logical thinking, even though or maybe even because this kind of understanding comprises what logically is conceived as contradictory, mutually exclusiv and impossible. For instance, self-identity is logically odd. It encompasses oneself as young and old, in continuity with a multiplicity of sometimes contradictory experiential events that are not connected by inference or causality. A sense of some kind of continuous self, relying on continuous lived experiencing, forms the basis of thinking, also of logical thinking. Yet, selfhood relies on connections that can be non-logical and at the same time experientially all too obvious (Dilthey, 1982). To help the researcher notice a non-linear, sometimes paradoxical dimension that is implicit in the felt dimension of their thinking, a second move in the TAE practice may be prompted as follows: *Be sensitive to everything in your topic that disturbs conceptual streamlining. Notice paradoxical qualities and entanglements, acknowledge the crux of the matter.*

Opening the field of thinking in this way, is followed by prompts that encourage to get some kind of grip, a formulation that functions like a handle, taking along what feels most relevant so far. This third move is very important and characteristic of the practice. Every move that widens the scope of reflection, is followed by establishing a firm focus on what is most important in the developed material, so one does not drown in the contexts and backgrounds one has opened. Focusing on what matters most in each phase of TAE, is supported by prompts that remind the practitioner to be sensitive of the language one uses to not reduce, but take along what matters. This proves to be the special challenge of this method. For this third move, participants in an ECT workshop may be prompted with suggestions such as these: *Formulate boldly ‘into’ the experienced and felt meaning of your issue, by sensing*

*what matters most. Say it in one sentence. What happens to the felt meaning of your subject matter while formulating the sentence? Experiment with the sentence and notice if what you mean narrows down, opens up, shifts, thickens or clarifies.*

Let me demonstrate this first phase with the following account of a TAE session of a French speaking environmental scientist. This session took place in the summer school of the first year's training program of Embodied Critical Thinking in 2021 ([www.trainingect.com](http://www.trainingect.com)). The following account demonstrates a kind of transformative realization happening right in the first phase of TAE. However, asked to open up to the experiential felt sense of the topic, and noticing experiences and feelings that may come along with it, wasn't at all easy for the researcher. Despite of many years of research practice, she immediately encountered a block which was difficult to overcome in the first day of practice. Noticing the paradoxical, non-linear characteristics of the felt dimension of the issue, as she experienced it, was particularly difficult, even painful. In the account, the researcher's phrases are in *italics*, as is the case with all the examples later in the sections that follow.

#### **4.1.1 Example: an environmental scientist transforms a personal blockage into a relevant entry**

The environmental scientist at first explains that what drives her research is *transmitting something about the relation between humans and animals and nature that helps to shift the [usual] perception*. Yet there is something blocking her, some kind of question, she does *not know how to address*. An image arises at this point, connected to the felt sense of what is blocking her: it is like *a tumultuous river that is there, and I do not know how to hold it*. On the one hand, she says she possesses an abundance of knowledge about her topic, it is something she has been invested in for years. On the other hand, she explains, something is blatantly blocking her. Pauses in her speaking make the struggle apparent. She repeats sentences such as: *I do not know how..., I have no words ...*, while at the same time affirming how *very moved* she is by the *idea to share what I know, to find words for the whole thing*.

At this point, she has a more successful go at formulating the question that is moving her: *How to say something on the relation between humans, animals and plants in a way that can be heard by others..... It is so difficult from within the main cultural frame.... There is such deep misunderstanding*. After a long pause, she continues: *We need to find new words, to build something....* With a voice getting tense, she adds: *Yet there is a feeling of paralysis... It's big... It's big.... and so muting; a feeling of being muted and not being able to speak....* (long pause, clearing her throat) *I associate this with the animals that are not heard, that are muted, that cannot speak. And when they "speak", there is misunderstanding*. With a vivid expression she exclaims: *this is all in the paralysis!...* She now also notices a pressure on her chest accompanying her speaking, and says: *the paralysis has something to do with: Not being able to move, to have space, to create space, being completely taken by structures that are bigger....., very hard....., solid....., rigid....., one cannot move....*

*everything is made difficult because you don't have space within the words that are available.*

After another pause, she surprisingly adds: *The paralysis is a good place to begin!* Touching this vast felt difficulty, enables her to now name the specific challenge of her research: *There is something to do: Not destroying what has to be said by saying it!* At this point, she also senses in a more lively way a contrary quality playing in her research, *like a fresh river...a feeling of moving... inside me.* With a brightening expression, she indicates that something new emerges. The contradictory quality of the felt dimension of her topic is not a stumbling block anymore, it has become a key: *When I think about experiencing the knowledge that I think that I have, there is wonder and paralysis that come together. They are connected.* Having formulated this connection, she begins to smile. Now she starts to articulate unconventional, bold, humorous and challenging questions, she was not able to formulate before.

The stuckness she had experienced evaporated, not by ignoring it, but by attending to the feeling in a way that allowed it to become articulate. Direct reference to the felt difficulty accompanying her work made her realize that what stood in the way was not just a personal feeling and blockage, the dimension of which she at first could hardly put in words. Precisely this felt stumbling block turned out to be a highly accurate situated understanding, and relevant for her entire project. It literally embodied the challenge of the socio-economic and also academic context her project was embedded in. Clearly, it needs courage to address this kind of difficulty. Reflecting on the process, she concluded: *Acknowledging the paralysis is the turning point: it is not about me, it's me-in-the-situation.*

#### 4.1.2 Deepening key concepts by dropping them and dipping into experienced meaning

We can feel a question apart from its verbal expression, and the difficulty is to pose it without turning it into something superficial, or inviting answers that may seem adequate to its verbal form but that don't really meet the problem beneath the surface. (Nagel, 1986, p. 56)

After one has explicated a sentence that works to get you in touch with the intricate experiential ground of your thinking, the next set of prompts help to elaborate key-concepts that deepen this access. In toolkits of critical thinking, when mainly understood as logical thinking and focused upon the relation between premises and conclusions, inference and coherence of arguments (Foresman et al., 2017), the challenge of these kinds of explicative steps are ignored. Yet this is the foundation for everything to come. We also call it the pre-argumentative phase of thinking (Schoeller & Thorgeirsdottir, 2019). Something needs to form to make a good point, to contribute something. The contribution can imply a re-arranging of context-patterns that function in the background, it can even imply a change of habituated logical connections. The importance of this phase has been noticed by many thinkers in the humanities and in the natural science (Schoeller, 2019). Werner Heisenberg is

a good example of a scientist attuned to the creative phase of explication. With his team, he has created a procedure for this phase of thinking. In an unpublished manuscript of a speech to Heisenberg's 80<sup>th</sup> birthday in Leipzig, his student, the physicist Hans Peter Dürr, remembers that in the center of these conversations.

was the joint problem and the wish to grasp and clarify it. One made careful approaches, passing it on, like in a friendly ping-pong game, where each one only has to take care that the ball stays in the game. The whole attention was directed towards really understanding the conversation partner, and not making him trip by some sophistic critique on his insufficient means of expression. One was allowed to stutter, one could be vague, one could not make sense, and the other would guess what he wanted to say, say it with other words, so that one could say with relief: 'Yes, exactly...!'. During such an extended and intensive exchange of thought the conceptions and notions became more precise, so that their contours became more clearly recognizable.

The first phase of TAE moves, seeking to explicate key sentences and embrace any paradoxes that come at this formative stage, is addressed to exactly this kind of research situation that Heisenberg cultivated. An implicit and pre-verbal understanding of a problem, puzzlement or intuition is given the chance to solidify and find its form by formulating key-sentences and deepening key concepts. In this phase, one does not yet have arguments, definitions or premises. New explications and new relations between phenomena emerge that carry the thinking forward in ways that might lead to surprising approaches and arguments.

During the practice of TAE, the researcher often finds that the felt meaning of words hold surprises even if one knows the word well. With the dropping- and dipping-move, researchers dive deeply into the tacit knowing of a key concept in order to become aware of aspects of meaning that have the potential to clarify, refresh or sometimes even transform their understanding of the concept. During a TAE workshop, prompts as the following introduce these kinds of moves: *Choose a key concept that holds a lot of meaning for your project. Dip into the felt meaning of the concept. What matters to you when you use the notion? Drop it and feel the gap when it is missing. Formulate another concept that functions to express the felt meaning of that concept. Dip into the felt meaning of that second concept. Drop that one too! Formulate another concept that functions to express the felt meaning of the second concept. Do this as often as you like, and with as many concepts you like. You now have at least three concepts. Dip into the felt relevance of each concept, to now specifically differentiate and define their meaning in the context of your research in your own words. Stay responsive to experiential backgrounds and embodied contexts that carry their meaning.*

Diving into the felt meaning of concepts often makes one grope for words, while sensing "all the strings attached" to the multi-layered contexts involved. One vividly experiences how an important concept says *more* than one word, yet one does not end there. One's faces the challenge of saying "more" of what the concept means. The dropping and dipping moves counteract the reducing of phenomena and what is at stake within a research project according to thin conceptual forms and mainstream notions that are used without much thinking. Critical theorists, feminist and

phenomenological thinkers have fiercely made us aware of the reductionist consequences of a thoughtless use of concepts in science and society, demonstrating how this narrows down and impacts the experience of a reality (Adorno, 1981; Husserl, 1962; Irigaray, 1974; James, 1950; Merleau-Ponty, 1976).

Gendlin's theory of meaning supports a move beyond shallow language games by making us see that words are also functional in letting a specific kind of experiencing come (Gendlin, 1962/1997). The sight and sound of a particular word is not enough to convey meaning. Words come along with a tacit kind of felt meaning, with trans-modal perceptions of images, smells, situations, memories, contexts. This is easily noticeable in ordinary words like *school*, *tomato*, *summer*, *gasoline station* etc. With a little bit attention, one notices a felt dimension also in more abstract terms that matter to oneself. Words which come with no felt meaning are words we do not know or understand, foreign or technical terms or new words. So, the felt meaning of a word functions as a kind of *knowing how* to understand the word, enabling to say its specific meaning in other words. "Recognition" is a Gendlian concept that makes apparent the pre-conceptual, experiential and situated dimension of meaning within its conceptual and symbolic form (Gendlin, 1962/1997, p. 100). Dropping and dipping draws on this dimension to cultivate a well thought out use of concepts. Researchers report the re-refreshing experience of this move, making concepts come newly alive in the context of their research.

#### 4.1.3 Example: a bio-medical student conceptualizes the feeling of being at home

Let me give you an example how specific and creative formulations become, if one experiments with concepts in such a way. In the context of a weeklong ECT workshop, a bio-medical PhD student from Israel who is interested in developing a psycho-somatic understanding of stress related to moving, researches the phenomenon of feeling at home. In order to become more able to describe the extensive kind of internal discomfort that comes along with having to leave a home, he explores his own situated understanding of "my home". He hopes that this first-person inquiry at the beginning of his research project will help him conceptualize the phenomenon he is interested in, in more sensitive terms than those available to him, to accordingly design his qualitative and empirical approach for "measuring" this kind of stress.

First, he drops this concept and describes situations when arriving or waking up at his place after having been gone, the smell, the familiar sounds, the perception of seasons, informed by memories, like the end of summer with going back to school, schedules, friends... He moves into a first tentative explication: *my place is a place, where I sense more than at any other place, it is a place where I have the deepest connection to*. From here he comes up with a first unusual concept. *The sense of my home is vertical*, he says, indicating a depth-feeling of connection. Prompted to drop this term again, he dips into the felt meaning of what he is trying to convey with it. He thereby realizes the movement connected to what he means by vertical: *a motion up and down, like with roots, drawing something up, but also taking something down...*

He now experiments with a new strange term holding this more complex sense and comes up with: *pipe work*. Dipping into that, he explains that the sense of “my home” is *not just vertical, it goes all over, like blood vessels, openings*. He now realizes, *this is not confined to my body. This happening is a transferring in and out, changing the feeling inside me and changing the place*. What he originally signified as “vertical”, is really *permeable*, like *membranes*, like a *vascular xylem*. “Vertical”, “pipework”, “permeable like a vascular xylem” are unusual words to characterize the qualitative dimension of a home and yet they open a field of understanding, touching on the deeply embodied comfort of a home, while at the same time making it extremely apparent why it is painfully complicated to move.

A further implication inherent in these terms now become explicable. It is the interdependence of the permeable pipework and the place: *the pipelines, they conform to it... there is no need to create new ones*. He explains that in contrast, going somewhere else means to create new ones or to have no contact to the place. At home, however, there is *no rushing through without contact, it's already open to receive, conforming with the place... there is no struggle*. Summarizing the conceptual patterns that allow him to explicate his felt meaning of home, he says: *I carry with me a pipework that conforms with my place..... like a key in a lock. There is an interlocking within my sense of my place*.

Gendlin's *A Process Model* demonstrates that making something explicit is a change, a transformation: “a vast number of now-sayable aspects are created (...) and can be said, thought, or acted” (Gendlin, 2017a, p. 235). Opening up the meaning of *home* in this way, has sensitized the young researcher's expert language and his sense of the scope of the problem. Listening to him was an eye-opener for me. The special vocabulary he developed grasped the conformity with a home that is pre-reflexive and embodied, which also makes it difficult for people to understand the depth of the experience, if they never left a home. His fine-grained descriptions also made the invisible wound graspable which is afflicted on people who are politically or economically driven away from their homes. Despite or perhaps because his explications were personal and anchored in lived experience, they touched the challenge of moving in ways that had medical, social and political implications at the same time. He mentioned later that the key-concepts and definitions he began to work with, enriched and situated his thinking in all these three dimensions, making him more aware of the “horizons” participating in his research (Kordeš & Demšar, 2018). He thus felt differently prepared to narrow down his project, and to form parameters and criteria for his qualitative interviews and empirical research settings.

## 4.2 Second phase: Working with actual experiences

Reading insights through one another diffractively is about experimenting with different patterns of relationality, opening things up, turning them over and over again, to see how the patterns shift. This is not about solving paradoxes or synthesizing different points of view from the outside, as it were, but rather

about the material intra-implication of putting “oneself” at risk, troubling “oneself,” one’s ideas, one’s dreams, all the different ways of touching and being in touch, and sensing the differences and entanglements from within. (Barad, 2012, p. 77)

Gendlin’s notion of crossing is a concept that acknowledges an *entangled* fabric of understanding that comes with first person experience (Gendlin, 1995, 1997, 2017a, b). Each situation implies many others, and each use of a word also brings with it contextual implyings. In a situation, the respective thickness of experienced meaning crosses here and now with the words we use, to create new, unforeseeable aspects of meaning, that allow further thinking and experiencing. A feeling of relevance is also a crossing of many aspects which function together to fine-tune the wording and phrasing of what one means (Gendlin, 1995). Gendlin borrows the term crossing from genetics: “phantastic differentiations” (Gendlin, 2017a, p. 186) are possible when situations interact with words. One can go on and on explicating a situation that was meaningful: words in situations work in a way that one can say more and more, the formulation lets one feel, experience and think into the many interlaced layers of meaning that shift and open to let even more appear. Similarly, Karen Barad uses the term “diffraction” to describe a methodological approach that positions oneself within the experience of interrelated insights. Insights tacitly informing one’s thinking are already informed by and related to other aspects and facets of knowing and experiencing. She describes vividly the moves and shifts of the subject matter that materialize in this diffracting way (Barad, 2007, p. 71).

In TAE, one deliberately notices just a few meaningful experiential insights and uses them as lenses to discern more of the network of patterns. Looking through the lens of one meaningful experience on to another, one can notice features and structures one would not see by taking a distance and comparing the experiences at stake. If you compare, you gain a common denominator of what you compare by dropping the specific richness of each. If you cross, you do not distance yourself, you move deeper into the phenomenal awareness of a situation, an instance, an experience and let its intricacy contribute fine-grained patterns. Crossing is a way to allow the richness to give rise to more specific and differentiated insights about what matters within a situated understanding informing one’s thinking.

#### 4.2.1 Instancing, relevanting and crossing

After the first phase of explicative moves in which one attends to the felt sense of one’s issue, practicing to formulate in a way that nothing important gets lost, experimenting with concepts, another phase of moves begins. In this cluster one now works with actual experiences that specifically situate the relevance of one’s issue. The challenges of opening the intricacy of the felt sense and staying responsive to the experience of its formulation, remain the same. However, now one is asked to focus on at least two real-life instances or situations that come into mind in the context of one’s research. The following prompts are given to the researcher in this second phase of the TAE process: *What actual experiences, situations, instances matter to your topic? They can be ordinary or extraordinary,*



early experiences, fresh ones, an aspect of a situation, a specific moment. Let these instances arise from the felt dimension of your thinking about your topic. Let yourself be surprised by what comes. Choose two instances.

Frequently, already in the first phase of explication, situations and actual experiences that matter in the context of one's research surface rather naturally. In this phase now, after choosing two instances, the TAE prompts invite the researcher to consider the following questions: *How is each instance on its own relevant for your topic? Which details specifically matter? Consider how each instance is a good instance of something in the context of your research? Is there something universal, a pattern, an insight, a point each instance exemplifies in relation to your topic? For each instance, draw out a pattern/principle/point from the experienced meaning of the example you chose. Can you stay close to the experience while you articulate the pattern, point or principle that you recognize in the instance? Speak-from it, not about it. Stay responsive to what the words do: Do they narrow down or open the felt relevance of the instance?*

By being asked *how* these situations matter, encourages one to inductively create points, structures or principles that explicate what this specific experience stands for in the context of one's work. With this move, one practices a non-reductive bottom-up conceptuality. By not imposing ready-at-hand concepts, one gives a voice to patterns that lie on the bottom of things, so to say. Odd and non-linear patterns emerge which expand the space of thinking.

After having created this space by conceptualizing how specific experiences contribute highly relevant insights with some degree of universality, the practitioner "crosses" two experiences. As mentioned above, this is not comparing, yet using the instances like lenses to look at each other. Prompts as the following help the researcher to do this non-habitual cognitive task: *Locate yourself within the experience of the first instance and then draw the other one close: what happens? What do you notice? Do you 'see', experience, feel something more or new in the other, or in the insights that have already emerged? Explore what happens if you do it the other way around. Stay receptive to what emerges.*

The way I like to practice this step is by first evoking the first experience again, while reminding the practitioner of the formulated insight, and at the same time have the other experience "come close". Hands can help enact this move. In one hand, (which is identical to the first experience), one "sits", while letting the other hand (the second experience) approach. One must do nothing else. This is the difficulty. The passivity makes the move challenging. One does not need to jump to commonalities, or move into abstraction, or analysis. One only attends to "what happens" if one brings both experiences to one's awareness, while being situated in the relevance one of them, and drawing the other close by. This cognitive move is an experiencing brought about by relating, crossing what otherwise would not deliberately interact. That is why this step can be powerfully transformative in shifting perspectives. To explicate the challenge involved, let me quote John Dewey's strong metaphor: actual experiences are "pregnant" with connections (Dewey, 1917, p. 7). The term *pregnant* indicates kinds of connections which are embodied, not conceptually explicit, inherent within the experiencing, feeling,

sensing, enacting. The term also indicates that a process is needed to become aware of these kinds of connections and to make them explicit.

#### 4.2.2 Example: a graduate student of political science and theatre studies crosses two experiences

Let me illustrate this TAE move with the experience of a graduate student of Political Science and Theatre Studies from Germany. His research is about populist right-wings movements in Germany. We are halfway through a weeklong workshop. This process happens on the fourth day. The graduate student has already completed the afore mentioned moves, thus being open and very curious to the felt sense dimension partaking in his research. He chose the following strong experiences. The first was the experience of working as a director in the production of a play:

The play was about the SS time. It was written by a playwriting professor who asked if I wanted to direct it. Within the play there was a couple who were both party members, very choleric, they treated their staff badly etc.. I had a hard time staging this yelling-around-style. Inside I kind of pushed this option away. There's nothing like that, I thought, it comes from movies that stage Nazis like a screaming crowd. Within the piece, it was clear that one was barren, hence, I thought, all the frustration. I psychologized because I thought there was still something human underneath.

The other instance happened a month later.

It was in the news, an incident on the bus...in Saxony, refugees were brought to a small town, they were asylum seekers, and there was this mob on the street, beating against bus windows, shouting. And then there was police violence against the refugees who were being herded into accommodation. While watching, I became very angry.

In crossing both instances the following happened:

a new nuance becomes apparent while drawing closer the second instance while he positioned himself in the first one, that is in the context of the play, his understanding of the figures and his trouble of staging the "yelling around". He increasingly begins to realize his own strong emotions. Surprised about the degree of the emotions he senses in regards to the second instance, he honestly admits: *I would have loved to do to the same to them as they did to the refugees, I would respond by their own means to what they do....* While the listener repeats this, he becomes even more aware, and almost embarrassed at the degree of the aggression he is in touch with while drawing closer the second instance: *I become as aggressive myself! ....* Pause. After a while, a new feeling becomes noticeable. He says: *Now also the feeling of powerlessness becomes stronger....* And after another pause: *There is also a feeling of shock, because I was sure that the world is somehow humanly understandable, and I had to find out that it is not like this....* Shaking his head, he mutters: *My only impulse was: I would go against them now just as they did against those peo-*

*ple on the bus....* The listener repeats and patiently attends another long pause, and some groping for words, until the practitioner finally says: *I am really on the same level as they are! And this is revolting and at the same time it gives a new understanding! An understanding that is very different to the understanding I thought I had in the play.* From this point on, a new insight emerges that he finally articulates as follows: *It is crucial to acknowledge a challenge which consists in recognizing the desperation of the others in one's own desperation.*

This move has re-arranged his approach. His topic now appeared to him in a new light, and the actual problems that needed to be addressed had transformed. It needed this bit of self-insight based on his own actual experiences, to cut through superficial and psychologically dressed up assumptions of the nature of human beings that had accompanied his approach in the first instance. At the same time, the crossing took him beyond re-iterative polarizing patterns that had been implicit in his approach, which he recognized later. Realizing the resemblance of his own pre-reflexive attitude and that of his research subjects, shocked him and at the same time made him more thoughtful. The need for new pathways of approaching his subject matter became clear. This of course did not make his project easier, on the contrary.

### 4.3 Third phase: Calibrating

...what was one single fuzzy sense can engender six or seven terms. These terms bring their own interrelations, usually a quite new patterning. This constitutes a whole new territory where previously there was only a single implicit meaning. One can move in the field created by these terms. Now one can enter further into the experiential sense of each strand and generate even more precise terms. (Gendlin, 2004b, p. 114)

In the final cluster of moves, one builds a core conceptual structure by interrelating key concepts that have emerged so far. One does this by explicating the implicit correspondence of main terms that hold most of the tension of one's project. This move is sometimes difficult to bear if these concepts seem outright contradictory. Yet, drawing concepts together in this way, furthers the emergence of more concepts to draw out the inherent structure. Again, one does this in a twofold way: one works on logical connections while also explicating and integrating the experiential implications of these connections. In this third and final phase of moves one works with prompts such as these: *choose three main concepts from within the widest field of your thinking so far; make sure these concepts hold the crux and the paradoxical aspects of your issue; let the terms become constitutive in relation to one another ( $a=b$ ,  $a=c$ ,  $b=c$ ); generate new concepts from their mutual logical and experiential tensions ( $a=x=b$ ,  $a=y=c$ ,  $b=z=c$ ); continue to equate them by explicating and differentiating the implicit structure of the terms; calibrate logical and experiential tensions and shifts.*

For the sake of coming to an end, I will only point to this important step. One can call it Gendlin's razor. After opening, differentiating and sensitizing the field of one's thinking, the researcher chooses major concepts that draw out the scope of

one's topic. One now relates them in strictly logical ways, thus building a core structure. One feeds in more and more important terms and keeps on interrelating each term with the others, thus drawing out more terms that explicate implicit connections, differences, conditions of relations. The logic is established by the possibilities of inference: if A corresponds to B in this and this respect, and B corresponds to C, then A also corresponds to C in a particular way. Yet the logical structuring is constantly co-constituted by *directly referring to the felt sense of the whole*, as it is right now. While it might logically make sense to equate A with C, it might also not feel right, such that *more is needed to sense into and open up to*, such as an X that interrelates A and C, which of course also retro-actively affects the relation of A and B, which needs to be elaborated accordingly. One can continue as long as one wants with inter-relating conceptual and experiential implications of core-terms. This establishes a theoretical framework that is systematic and conceptually sound while at the same time not cutting off the lived, felt and experienced aspect of meaning and its interconnected texture.

## 5 Concluding remarks

In her book *Staying with the Trouble*, Haraway re-iterates the phrase: “think we must”. She emphasizes, though, that the thinking she means is not equal to “a process for evaluating information and argument, for being right or wrong, for judging oneself or others to be in truth or error” (Haraway, 2016, p. 36). Her metaphor “stringfigures” indicates that it needs people actively supporting each other to hold and process an entanglement of connections.

TAE is a method for thinking in this way. It is a method that enables both the first and second person to bear the complexity involved, to hold the muddle together, and to clarify these entanglings through conceptual re-arrangements and formulations that make a real difference to the thinking body of the scientist. Being in touch with the manifold strings of situated experience widens the space to think, allowing for the emergence of thick concepts for intricate networks of knowing. TAE is a method and exercise for thinking within entanglement, for *staying with the trouble*. As has been demonstrated by some of the examples above: when touching the complex texture of embodied understanding within research, meaning and vulnerability become intertwined. This includes more personal risk than thinking as if “from nowhere”.

This obviously touches the political subtext to this practice: The moves of TAE cultivate a safe space to tap into sensitive resources of meaning and relevance available to the researcher's body, that lives interdependently within manifold environments. A thinking that unsettles, opens and shifts dominant personal/collective (cultural, scientific, political) patterns of doing, thinking and researching needs to be enacted within a space of mutual trust and solidarity (Arendt, 1964, 1978). If we borrow the term “resonance” from Hartmut Rosa (Rosa, 2019) and apply it within the TAE setting, we can say that the second person supports the first person's thinking organism to become a resonant laboratory to experiment with formulations and conceptualizations that connect to the wider ground of one's thinking. Granting more time and care-full consideration to this experiential ground, in the process of

pre- or re-thinking one's theoretical approaches, helps one to think beyond habituated patterns (Gendlin, 1991). The Embodied Critical Thinking group believes academia needs more spaces for such thinking.

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## Declarations

**Conflict of interest** I certify that I have NO affiliations with or involvement in any organization or entity with any financial interest in the subject matter or materials discussed in this manuscript.

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