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Nonlocality of Creativity: The Phenomenology of Triggers

INTRODUCTION

In this conceptual methodological paper, we introduce the first building block of what we hope to become "quantum phenomenology" one day. Our starting point comprises two phenomenological studies on creativity, one of top chefs and another of top scientists. In both of these studies we have observed that what triggers the creativity in the respective domains of the top chefs or top scientists may come from very different fields; for instance, a fragrance may give an idea for a dish and a symphony may bring about a new measurement in quantum physics. All these are parts of the Lebenswelt, in terms of phenomenology, but they are obviously of different kinds and importance. These domains somewhat resemble the contexts in which we play different roles and thus acquire different identities, such as being a parent, a researcher, or a director of an institute. We started to think about these as different 'localities' of the Lebenswelt, and therefore found the concept of nonlocality from quantum physics very suitable to describe what happens when something in one locality triggers something in another locality. In this paper, we outline a conceptual framework in which nonlocality within the Lebenswelt can be conceptualized in order to explain the phenomenon of creativity. This is an early exploratory inquiry that we intend to bring to the EURAM community for a discussion which will help us further refine the idea.

This paper engages with the conversation on aesthetics of creativity. Being one of the five main branches of philosophy, aesthetics is one of oldest knowledge domains of humankind. In philosophy, sometimes considered together with ethics within axiology, where axiology is the study of values, ethics the study of moral values (good and evil), while aesthetics is the study aesthetic values, such as beauty, ugliness, harmony, simplicity, etc. More recently,

aesthetics is referred to as "sensory knowledge and felt meaning of objects and experiences" (Hansen et al. 2007: 545) and is therefore considered indispensable for better understanding the multi-facetted bodily and sensorial qualities of human experience (Strati 2007), which makes it an essential phenomenological category, as phenomenology is the study of the lived experience. Creativity produces aesthetic values (see Svejenova et al. 2007) which closely relates with the market value of companies in the creative industries, such as haute couture or haute cuisine (Shalley et al. 2004, Zhou et al. 2012).

Much of creativity research to date has focused on the creative outcome (Binnewies et al. 2007, Shalley et al. 2004), looking at the creative product and on the antecedents of creativity such as personality and the socio-cultural context (Binnewies et al. 2007, Elsbach and Flynn 2013, Runco 2004, Shalley et al. 2004). The role of aesthetics was reduced to the evaluation of aesthetic qualities of a creative outcome by domain experts or judges (Amabile 1983, Cropley and Cropley 2008, Csíkszentmihályi 1997). At the same time, very little attention has been paid to the lived experience of the creator and to the creative process (Binnewies and Wörnlein 2011, Hirst et al. 2009, Taggar 2002, Zhou and Shalley 2008). As a result, the extant literature on creativity, with its focus on personality, cognition, affect and social context (see Anderson et al. 2014), is not well equipped to explain the creative process heavily influenced by aesthetic knowing and thus the lived experience of the creators. This is not to say that the importance of aesthetics is not acknowledged by creativity scholars, aesthetic distinctiveness is regarded a key quality of iconic creative works (Bazin and Korica 2021, Ravasi et al. 2019, Stierand et al. 2020) and a source of competitive advantage for many firms (Haans 2019, Hargadon and Douglas 2001, Rindova and Petkova 2007). It is even noted that aesthetic values are a source of intrinsic satisfaction for creative professionals (Elsbach 2009, Vincent and Kouchaki 2016), although this satisfactory experience has not been studied at a great depth.

Signature creations are imbued with an aesthetic imprint, which helps the consumers balance stability and novelty, which, in turn, relates to accepting new creative products (Fine 1992, Glynn and Navis 2013). Aesthetic imprints may be personal or impersonal, the personal associates the creation with the person who created it, while the impersonal embodies the organization's image. For example, Frank Gehry's architectural designs have an idiosyncratic personal aesthetic style composed by curvilinear shapes, fragmented forms, a brazen use of color, and a sense of unfinished playfulness (Hartoonian 2002, Wong 2021, Yoo et al. 2006). Conversely, Apple's products have a recognizable Zen- and Bauhaus-like impersonal aesthetic style that captivates users in ways that subsume but also transcend functionality (Weber 2020). Nearly all creativity research has focused on the organizational level and thus on the impersonal aesthetic imprint. As in this study we are interested in the lived experience, which is personal, we are interested in a personal aesthetic imprint, about which we have conducted an empirical study (AUTHORS' SELF REFERENCE), which led us to exploring the methodological considerations in this paper.

In what follows, we first introduce two empirical studies that underline the current conceptual inquiry into the methodological considerations of studying creativity. Next, we offer a brief overview of basic concepts of phenomenology, to prepare the ground for developing a new conceptual framework. Then we provide a nontechnical introduction to the concept of nonlocality from quantum physics; this is done building up the concept from the ground, but quickly getting to the immense complexity of the notion, assuming an audience of management and organization scholars who lack prior knowledge but learn fast. Finally, we apply the newly developed conceptual framework to the notion of indwelling.

TWO UNDERLYING STUDIES

While much of the findings we have obtained about the aesthetics of creativity stem from the first study, in which we studied the creativity of top chefs, there was a second study, trying to understand the creativity of top scientists, and the two studies ran concurrently and substantially informed each other in terms of the issues addressed in this paper. Both studies have been conducted within the phenomenological tradition with an interpretivist underpinning, and aimed at understanding the lived experiences of extraordinary achievers in their respective contexts (Csíkszentmihályi 1997, Dörfler and Stierand 2019, Gardner 1993, 1995, 1997, Maslow 1968, 1970, Nakamura et al. 2009). In both studies specific phenomenological methods have been developed to allow for the deepest insights from the respective data set. The method developed for the top chef project is called Insider Explanatory Phenomenology (Stierand and Dörfler 2014), as it explicitly incorporates the insider view of the researcher, who previously worked as a chef in Michelin starred restaurants and the purpose was to develop an interpretive-explanatory model. The method developed for the top scientists project is called Intuitive Cyclic Phenomenology (Dörfler and Eden 2014), emphasizing that it explicitly incorporates the intuition of the researchers and it has a number of embedded cycles in the process. In the current study, we bring these two projects together, adopting an approach similar to a qualitative meta-synthesis, comparing the emergent patterns of both projects, seeking synergies and contradictions, and looking for additional insights from new emerging patterns (Bondas and Hall 2007, Park and Gretzel 2007, Sandelowski and Barroso 2007). In this section we briefly introduce the two studies.

Creativity of top chefs: Insider Explanatory Phenomenology

The first study the 42 top chefs have been interviewed in total, the initial set consisting of 18 interviews with Michelin starred chefs, in order to understand their creativity (Stierand 2015,

Stierand and Dörfler 2016, Stierand et al. 2014). Insider Explanatory Phenomenology starts with open-ended loosely structured interviews and it explicitly builds on the interviewer's professional history, being a chef in Michelin starred restaurants before embarking on an academic career. This is emphasized by the 'insider' notion in the name of the method. We have been repeatedly criticized for the 'lack of objectivity' of our approach, because of the interviewer's history as a chef. At the same time, we have seen this as a major advantage, a source of insight, as "inherited background" (Wittgenstein 1979: §94). Furthermore, the insiderness helped with the interviewee access, both in terms of getting the initial agreement for participation as well as building rapport with the interviewees, and thus allowing cognitive access.

In terms of analysis, this contextualist research approach consists of two phases, the first we call idiographic description, the second idiographic explanation. The first phase builds on Giorgi's (1985, 1994) descriptive phenomenology as we have found it particularly suitable for research questions that aim to identify the essential structures underlying the experiences of a phenomenon, and thus as preferred over other phenomenological approaches that, for instance, aim to capture individual variations between co-researchers (Finlay 2008). In addition, we have applied a second interpretive-explanatory level of analysis, building on the interviewer's past experience as chef. The purpose of the second level was to explain what has been learned about the lived experiences of personal creativity from the interviewees' accounts and their self-observations. In this sense, the second level of analysis is a 'meta-level' of the findings from the first level, that may be seen as a pattern existing beyond the descriptive findings, or as particular implications of the descriptive findings, their essence, their structure, or loosely coupled associations. The second level of analysis was dominantly intuitive, during which, instead of rejecting the subjective expertise in the domain, the interviewer had to get immersed in it so completely, that it was possible to grasp the essential nature of the

phenomenon. Obtained this way, the concept of the personal creativity of chefs, was brought to the surface, however, it was embedded in the Lebenswelt and in the Dasein of the top chefs in their particular culinary restaurant. We were very interested in what this means for creativity research more generally, as well as to the wide scope of management and organization studies.

Creativity of top scientists: Insider Explanatory Phenomenology

For the second study, 20 top scientists were interviewed, including 17 Nobel Laureates, trying to understand cognitive complexity at the highest level of knowledge (Dörfler and Eden 2017, 2019). In order to obtain the richest data loosely structured open-ended in-depth interviews (e.g. as in Fontana and Frey 1994) were employed from the outset, although the earlier interviews inevitably informed the later ones. However, we deliberately tried to keep the interviews as open as possible, simply to have meaningful conversations with the interviewees on any topic related to their approach to research, to let salient characteristics naturally emerge. One of the authors conducted all the interviews and learned in advance as much as possible both about the research and personal histories of the interviewees and so this pre-reading was also a source of data and pre-understanding.

To preserve most of the richness of the interview experience, the other author of the top scientists project conducted a series of interviews and concept mapping sessions with the interviewer, trying to capture the changes in his intuitive understanding of cognitive complexity. The concepts from the conversations and from the maps were then used as the basis for a more formal coding the interviews using a variant of thematic analysis. During the coding process additional codes emerged, which were discussed in subsequent meetings between the two researchers and added to the concept maps. There were numerous iterative cycles employed resulting in a stable structure of findings. Some of the findings were unexpected and emergent, such as identifying the characteristics of successful research as seen

by the interviewed Nobel Laureates. Finally, additional concept maps were created for the needs of the publications reporting on the research project, organizing various subsets of the results along lines of arguments intended for the specific publications. It is perhaps apparent that in the process of managed conversations and concept mapping sessions the preunderstandings of the interviewer and particularly his intuition have been discussed – that is, the researchers engaged in bracketing. The essence of the query became what management and organization scholars can learn from how the top scientists in diverse other fields see what constitutes excellent research.

Notes on the context

The first study has been conducted in the context of haute cuisine, the second one in the context of scientific research. Yet, our interest lied in what this can mean for the management and organization studies. Gradually, we have operationalized the phenomenological concept of bracketing through transpersonal reflexivity to help us with this transition (Dörfler and Stierand 2021). At the time we have simply thought of bracketing as a tool for achieving the greatest possible insight, actively making use of the insiderness of the authors rather than regarding it as an obstacle that hinders objectivity. Only later we started thinking of this process as a shift of locality; i.e., similarly to our interviewees getting inspired by triggers from a variety of fields, we were trying to transfer our findings from the study context into our context of interest. These were not extremely different fields, but they were also not the same. Furthermore, we have found very interesting patterns from comparing the insights from the two studies, and this also entailed a shift of locality. Thus, this study was at the same time an attempt to understand our own methodological approach better and also an endeavor to grasp additional insights regarding the creative processes of our research participants.

PHENOMENOLOGY: A BRIEF OVERVIEW

In this section we very briefly review the idea of phenomenology through examining the four fundamental concepts of phenomenology: *qualia*, *Dasein*, *Lebenswelt*, and *bracketing*. As there is no great translation of the concepts of Dasein and Lebenswelt, we keep using the German terms, as it is customary in the phenomenological tradition.

In its original form, phenomenology came about in a positivist-dominated world of science and philosophy. Husserl, the founding father of phenomenology, was the student of Brentano. Brentano (1973)¹, was primarily interested in intentionality, and this interest significantly influenced Husserl's phenomenology. However, consistent with his time, Brentano had a positivist attitude, seeing the role of psychology in establishing exact laws of the mind, similarly to how physics establishes the exact laws of nature. Husserl's phenomenology was, in our view, a powerful departure from the positivist worldview². He faced strong opposition from the heavily positivist academic world, when he attempted to establish new foundations of scientific inquiry by focusing on the notion of lived experience. Phenomenology is still sometimes used on positivist ontological and epistemological basis, although this cannot be considered dominant anymore, today most phenomenological inquiries are positioned within a variant of interpretivism (Dörfler 2023), although the degree of subjectivity of the various authors that adopt a phenomenologist stance varies greatly.

The most elusive aspect of the lived experience is captured in the first central concept of phenomenology called *qualia*, which is a term that refers to the part of the lived experience that cannot be put into words. Qualia³ form the part of experience that appears in our

¹ Brentano's book was originally published in 1874 in German: Psychologie vom empirischen Standpunkte. The basis of the translation used here is the second edition published in 1924.

² In order to be sure, one of the authors, who is native German, read Husserl's work in original.

³ Qualia is plural, the singular would be 'quale'. The default use in phenomenology is the plural form.

consciousness, accessible only via introspection, describable only in subjective terms (Eliasmith and Mandik 2006), and even a conscious introspection only leads to a 'feel', to a metaphor and tacitly recognized patterns (Sadler-Smith 2008, Varela and Shear 1999a, b). For instance, you cannot fully explain to someone what it feels like having butterflies in your tummy when kissing your lover or the joy you felt as a child when you smelled your grandmother's strawberry cake and realized that summer is around the corner. The term qualia, introduced by Lewis (1929), is probably easiest to understand through Jackson's (1982) famous thought experiment about Mary and the rose. Mary had grown up in a completely black-andwhite environment; she was never allowed to leave her room or to see the nature. She had never seen any color apart from black and white. At the same time, she had been educated about the physics of colors, about perceiving them, about the biology of seeing and anything that can be explicitly taught about colors. She had learned everything that can be learned about the colors from others, without actually experiencing anything in color herself. Then, for the first time in her life, she leaves her room. She sees a red rose and passes out. Although the story remains in some ways unfinished, i.e. we do not find out what finally happened to Mary, the message is clear: There is something in the lived experience that cannot be explained verbally, something that needs to be experienced personally (see also Chalmers 2003). Phenomenologists usually argue that qualia are the essences of the lived experience. It is an interesting intellectual exercise to relate the phenomenological concept of qualia to Russell's (1923: 100) four "egocentric particulars" – the positivist Russell suggested that we cannot even start to think without these four little words: I, this, here, and now.

Then there are two further fundamental concepts in phenomenology; these account for the impossibility of divorcing the lived experience from its context. There are two 'layers' of this context; the immediate context, *Dasein*, is often translated into English as 'context', which is fundamentally wrong, as Dasein is not the context itself, but a mode of being which is contextualized – so it includes the experiencer, refers to the process of being, which cannot be fully distinguished from experiencing, and it incorporates the context, as the lived experience cannot be adequately divorced from its context. The wider context, including the personal history, social aspects, identities, and the pre-understandings of the experiencer, is referred to as *Lebenswelt* (often translated into English as 'life-world' which is not entirely incorrect but does not offer the richness and life-fullness of the original German term).

Historically the notion of Lebenswelt appeared first, as the notable attempt of phenomenology to combat the notion of isolability of phenomena, which has been considered inadequate. Husserl (e.g. 1913a, b, 2006) assigned central importance to the theme of Lebenswelt, the spatio-temporal context in which the lived experience happens, in his view of phenomenology. Intentionality is also a component of the Lebenswelt, which connects phenomenology with the intentionality inherited from Brentano. In turn, Merleau-Ponty (1945: vii) argues that phenomenology is a study of essences but also "a philosophy which puts essences back into existence", so into their Lebenswelt. This argument provides an excellent description of the phenomenological quest. Finally, Gadamer (1989: 239) sees the Lebenswelt as "the antithesis of all objectivism", and observes how Husserl was influenced by Kant's transcendental idealism in developing the idea of phenomenology.

Introducing the concept of Dasein, Heidegger describes a narrower context from the Lebenswelt, as a primary sense of being for what is observed in that context. Furthermore, Dasein which "itself is out for and going toward something" (Heidegger 1923: 51) also helps Heidegger getting away from the object-subject dichotomy by bringing intentionality into the Dasein (Heidegger 1975: 64). There is an important link between qualia and Dasein, they form a dyadic relationship which demonstrates the ephemeral nature of the lived experience in the moment.

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One of the potential strengths of a phenomenological inquiry, if conducted properly, stems from the three fundamental concepts of phenomenology described so far: qualia embedded in the Dasein and in the broader Lebenswelt. The fourth and final fundamental concept of phenomenology is bracketing. The role of bracketing has been from the outset to understand the essences of the experience, however, this does not mean, as a positivist would put it, getting rid of subjectivity, to the contrary, it is about embracing subjectivity and understanding its influence, not to remove the preunderstandings but to use them and acknowledge their effect on the insights. Husserl (1913a) talked about three forms of bracketing: the epoché or phenomenological attitude; the phenomenological psychological reduction; and the transcendental phenomenological reduction. Operationalizing the philosophical concept of bracketing is not trivial. We have implemented it in two stages (Dörfler and Stierand 2021, Olekanma et al. 2022), where the first stage, primarily corresponding to epoché, was practiced by the interviewer; this stage was primarily focused on suspending the judgement in order to arrive at an intuitive understanding of the interviewees' subjective accounts. Therefore, it is essentially achieved through personal reflexivity. The second stage mainly corresponds to the phenomenological psychological reduction. The purpose of the second stage of bracketing was to raise the awareness of presumptions, previous knowledge and beliefs that the interviewer is not aware of. Reflexivity here is conceptualized as a deeper process than simple reflectivity, and beyond the subject of reflection it also includes self-reflection. (see e.g. Brannick and Coghlan 2007, Hibbert and Cunliffe 2015, Hibbert et al. 2014) Furthermore, the attached 'transpersonal' attribute is rooted in Polányi's (1962a, 1966) notion of 'personal knowledge'. Transpersonal goes beyond the notion of interpersonal, as the persons involved in the process engage in 'thinking together' (Pyrko et al. 2017) in which the personal boundaries are transcended resulting in a single thinking process in which two or more

person are involved. Such deep engagement is necessary as the two researchers need to attain the same essences.

NONLOCALITY

Lebenswelt may appear as a simple unitary construct from the previous explanation, and from the phenomenology literature in general, but as it comprises the full personal history and all aspects of a person's life, it must be assumed to be complex and may not be unitary at all. We all play a number of different roles in our lives, acquiring different identities in the process, which all seem to develop on their own terms, albeit not independently from each other. Similarly, to our various roles, we may have a number of interests. In terms of grandmasters, such as the above-described top chefs and top scientists, there will be one discipline in which they have achieved the highest level of mastery but most chefs and scientists also read novels, listen to music, some play sports or games, and many tell stories and listen to others' stories.

One of the aspects of the grandmaster identity is that the 'personal self' and the 'professional self' are inseparable, thus for them any experience somehow links to their disciplines. This is perhaps why we have noticed that triggers from all sorts of areas may bring about the new ideas, but later we have seen that this does not only apply to grandmasters but to anyone who engages in creative processes. Thus, we figured that any phenomenology of creativity must account for this. As we tried to dig deeper, and we could not find anything other than 'triggers from any field may bring about a creative process', we started considering alternative models. A particularly appealing idea was to adapt the idea of nonlocality from quantum physics. For this purpose, the Lebenswelt is considered a complex multidimensional construct that may be unitary but cannot be studied as such do to the high level of complexity. Instead, the different localities of the Lebenswelt can be more easily conceptualized, which

raises the problem of moving between those localities. In this section we review the idea of nonlocality from quantum physics, without the technical language and the technical details.

Classical physics postulates a locality principle, according to which only things that are close to each other may affect each other. Although this is not exactly trivial in the case of e.g., gravity or electromagnetism, the concepts of fields and elementary particles called bosons help maintaining the idea. However, once we get into quantum physics, we can observe what Einstein called "spooky action at a distance" (Musser 2015), i.e. that things that should not be able to affect each other as they are apparently far away from each other, they do appear to be linked. This is the essence of the Einstein-Podolsky-Rosen or EPR thought experiment, according to which, if the idea of quantum physics was correct, two spatially separated quantum systems could "have both perfectly correlated positions and momenta" (Einstein et al. 1935). The EPR thought experiment suggested to bring together two quantum systems, such as two electrons, meaning that a "quantum entanglement" forms a bond between them, then move these two infinitely far from each other and they will still remain fully correlated (i.e., if we check them, the spin will be opposite for both electrons). At the time it was not possible to conduct this experiment in the real world but later it became possible, and the result was exactly what the EPR paradox suggested. What this means is that apparently the two elementary particles, after the initial quantum entanglement remain somehow connected and thus, they can affect each other. More broadly, nonlocal effects can be understood as a quantum leap from one locality to another, like when an electron jumps over a potential barrier that it does not have the energy to surpass. Importantly, these effects are incredibly fast, if we wanted to describe the process by one quantum system passing on information to the other one, this would require speed significantly higher than the speed of light – instead, the nonlocality introduces the effect that is instantaneous, as if the two quantum systems were in spatial proximity.

As the nonlocal connection between the two localities is instantaneous, and it is almost mysterious how this is even possible, we started thinking this way about how an experience in one field may trigger a creative idea in a completely different field in the grandmaster's mind. Or, more broadly, how different localities of the Lebenswelt may affect each other. Of course, this is all happening in the mind of the creator, so it is not in the physical realm, thus this conceptual framework is metaphorical rather than literal, but we find it a useful way to think about creativity and possibly other mental phenomena.

INDWELLING

Before we can apply the proposed conceptual framework in which phenomenology incorporates nonlocality, we need to look at the two noted studies one more time. The aesthetic value of creative outcomes is most obvious when we think about visual and auditory fields, we know what we mean by a beautiful painting or a beautiful music. It is less trivial but not completely alien to think of beautifully tasting food – although most of us would simply call it tasty. The point is that the aesthetic value is not confined to the visual and auditory realms, it makes sense in the case of all senses. And here we need to reconsider what senses are. Although it is an outdated notion, many of us still think of "five senses".

Sensing, i.e. sensory input is indispensable aspect of all knowing and is necessarily employed on par with intellect (Bas et al. 2023). The sensory grounding of knowledge is significant; although we do not plan to engage in the empiricist-rationalist debate here, we note that we do not believe that it is either-or, we can accept that both sensory experiencing and rational thought can lead to meaningful knowing. Polányi (1966: 15) argues that the body is the ultimate instrument of all external knowledge. Strati (2007) suggests that it is the body that enables both intellectual reasoning and sensory-based knowledge. Sensing itself is not a

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unitary construct. Based on Burton (2009: 37) Dörfler and Bas (2020) consider, besides perception based on the five primary senses, also visceral sensations (e.g. hunger), affective sensations (e.g. love), as well as mental sensations (e.g. pride). With this expanded view of sensing, we can easily conclude that everything we know relates to sensing (Bas et al. 2023, de Rond et al. 2019, Strati 2007), as even if we produce a new thought in a purely intellectual way, we will use concepts with sensory grounding. The point is not whether all knowledge has sensory grounding, but that sensory grounding of knowledge exists and plays a significant role in all knowing, it can even be argued that it makes thinking in the human sense of the word impossible for artificial intelligence (Dörfler 2022).

Furthermore, based on Polányi, we introduce the notion of *indwelling*, through the use of which the idea of sensing can be extended to abstract domains, such as mathematics or astrophysics, or microbiology: these are all abstract in the sense that we cannot get in touch with the subject of inquiry through our body, but the phenomenon is essentially the same. When describing personal knowledge and its necessarily tacit nature, Polányi (e.g. 1962a, 1966) uses the notion of indwelling with reference to objects, abstract notions (e.g. theory, mathematical discovery or symphony), as well as other people:

We pour ourselves out into them and assimilate them as parts of our own existence. (Polányi 1962a: 61)

In this sense, indwelling relates to embodiment, and can be understood as sensing extended to all realms, material or not. It is easy to see how top chefs do a great deal of work with their hands, and the interviewed chefs often felt that their knowledge comes through their hands as much as through their minds. Furthermore, chefs are famously peculiar of their knives, using their knives as the extension of their bodies, not making a difference. The interviewed experimental scientists felt the same way, both about their hands and about their tools. Then,

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we realized that the same phenomenon could be observed in more abstract scientific disciplines as well. For instance, Yoichiro Nambu described his thinking in terms of differential equations as if he was sensing them, as if he had a physical contact with an abstract construct. Then, now consciously searching, we have looked at the statements of other theoretical physicists, economists, etc. and found very similar expressions. Furthermore, going back to the literature (academic as well as popular), we have also found many statements of e.g., fighter pilots or Formula 1 drivers describing their relationship with their vehicles as if those were parts of their bodies. In short, knowing and indwelling are inherently linked, particularly when it comes to tacit knowing:

Tacit knowing now appears as an act of indwelling by which we gain access to a new meaning. When exercising a skill we literally dwell in the innumerable muscular acts which contribute to its purpose, a purpose which constitutes their joint meaning. Therefore, since all understanding is tacit knowing, all understanding is achieved by indwelling. The idea developed by Dilthey and Lipps, that we can know human beings and works of art only by indwelling, can thus be justified. (Polányi 1962b: 606)

For the purpose of this study, the generic notion of indwelling is sufficient, but we want to mention that several specialized indwelling concepts have been developed elsewhere in the literature (Dörfler and Stierand 2018, Pyrko et al. 2017, Stierand 2015).

FINAL COMMENTARY

What we tried to achieve in this paper is to outline a methodological idea in an early stage of development, hoping to refine it in a discussion at EURAM. We offer a conceptual framework in which the notion of nonlocality, borrowed from quantum physics, is suggested to be

incorporated beside the four fundamental concepts of phenomenology, qualia, Dasein, Lebenswelt, and bracketing. Importantly, we expect that nonlocality will also affect these concepts, not simply be added to them, as, for instance, it may be a particular kind of qualia that is experienced as reading a love novel we come up with a new philosophical idea, connecting to two distant domains. Dasein, as a mode of being in a context, may have particular characteristics if we "are being" in two distant localities of the Lebenswelt at the same time, making that quantum leap of giving birth to a creative idea. It could be a particular kind of bracketing that may involve a hitherto unknown form of reflexivity as we create something new. We admit that there are more questions coming about than answers – but we also believe that we have an idea that is worth discussing with openminded scholars.

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