



Understanding as explaining: how motives can become causes

Thomas Fuchs¹ 

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Abstract

The distinction of „understanding“ and „explaining“, formulated by Karl Jaspers in his „General Psychopathology“, has had a lasting effect on psychiatry. As a result, phenomenological, hermeneutic, or psychodynamic approaches have often been accorded only descriptive or epiphenomenal status, while the actual causes of mental illness have been sought in neurobiologically or genetically based explanations. In contrast, this paper defends the explanatory role of understanding and phenomenological approaches. To this end, two levels of explanation are distinguished and shown to be equally justified in principle, namely, motivational explanation at the macro-level and physical explanation at the micro-level. The actual causal role of motivational, i.e., understandable connections is then demonstrated by means of a conception of circular causality, which includes downward causality. Finally, the explanatory role of phenomenological analyses is also shown in psychotic disorders that refuse motivational understanding, using the example of schizophrenic delusion.

Keywords Understanding · Explanation · Motivation · Downward causation · Phenomenology · Psychopathology · Delusion

1 Introduction

The opposition of „understanding“ and „explaining“, originally formulated by Wilhelm Dilthey and taken up by Karl Jaspers in his „General Psychopathology“, has had a lasting effect on psychiatry to this day. It has usually served to distinguish the psychological or hermeneutic understanding of motivational mental connections –

✉ Thomas Fuchs
thomas.fuchs@urz.uni-heidelberg.de

¹ Phenomenological Psychopathology and Psychotherapy, Psychiatric Clinic, University of Heidelberg, Voss-Str. 4, D-69115 Heidelberg, Germany

thus, between experiences, beliefs, emotions, desires, and reasons for action – from the scientific explanation in terms of causality, as it was already marked out in Jaspers' formulation:

- (1) We immerse ourselves into the psychological situation and understand genetically by empathy how one psychic event emerges from another. (2) We find by repeated experience that a number of phenomena are regularly linked together, and on this basis we explain causally (Jaspers 1968: 301).

While psychological understanding is directed to the comprehension of a concrete psychological experience and behavior, explaining, according to Jaspers, requires repeated experiences – it is achieved by „observation of events, by experiment and the collection of numerous examples“ (Jaspers 1968: 302). For in this way, disregarding the concrete individual case, natural science arrives at explanations from regularities or lawful causality. Phenomenological psychopathology, for its part, has only a descriptive function in Jaspers; it aims neither at genetic-psychological understanding nor at causal explanation, but at what he calls “static understanding” (Jaspers 1968: 27).

In the further development of psychiatry, Jaspers' opposition became more and more solidified into a dichotomy, and with the increasing dominance of the neurobiological paradigm, understanding was assigned only a marginal role. Accordingly, everyday psychology helps us to understand other people in terms of their desires, beliefs, motives and actions, but the real explanation for their experience and behavior – or their disorders – is to be found in the neuronal processes, in the functions or malfunctions of their brains. Thus, subject-oriented approaches from the humanities and objectifying approaches from the natural sciences are neatly separated – one explores understandable connections, the other causally effective mechanisms.

This dichotomy has significant consequences. For if it is only the brain processes that let us explain a behavior (instead of „merely“ understanding it), then subjective experience would play *no causal role* for the behavior of a human being – it would have no real effectiveness in the world. Reasons and motives could not act as causes. Understanding would then only satisfy our need for comprehension or empathy, and would only have subjective or intersubjective value. Purposive or motivational accounts of behavior would be no more than placeholders for reductionist accounts in terms of neuronal mechanisms. Now our concepts of reality and effectiveness are closely related: what is real in the proper sense must also be able to effect something.¹ From the point of view of a reductionist naturalism, the dichotomy of explaining and understanding therefore ultimately results in epiphenomenalism: only the explanatory approaches tell us what *really* happens – the understanding approaches apply, as it were, only to the subjective foam that forms on the waves of the actual, material or neuronal reality.

But do neurobiological descriptions really provide sufficient causes for psychological experience? Let us consider an example: A patient with a social phobia feels a paralyzing fear rising in him when he tries to present something in front of others.

¹ In German, *Wirklichkeit* (reality) and *Wirksamkeit* (effectiveness) are also etymologically related.

Is the cause of his fear the activation of the amygdala, which could be detected in his brain with appropriate methods? In the following I will argue that this is not the case. It is not the amygdala that causes fear, but primarily the *subjective perception and evaluation* of a threatening situation. Undoubtedly, the activation of the amygdala is a necessary condition for the experience of fear (Feinstein et al., 2011), but its actual cause is not to be found at the level of the amygdala. Similarly, the cause of a grief reaction is not the activation of the cingulate cortex that can be observed (Freed et al., 2009), but a loss perceived as painful. Thus, the „meaningful connections of mental life“, as Jaspers called them, become indeed higher-order *explanations*. In other words: Understanding and explaining are not mutually exclusive – on the contrary, without understanding we could not explain certain mental phenomena at all. I will investigate this in more detail in the following, looking at the particular concept of causality that is required for attributing an explanatory role to understanding. On this basis, I will then demonstrate the role of phenomenology for explanations in psychopathology.

2 Levels of explanation

First of all, it must be conceded to Jaspers that he did not deny an explanatory role to psychological understanding. The „meaningful connections of mental life“ can make the behavior of people comprehensible to us and in this sense indeed also help to explain it. This can be seen in the following passage:

In the natural sciences we find causal connections only but in psychology [we find] a quite different sort of connection. Psychic events ‘emerge’ out of each other in a way, which we understand. Attacked people become angry and spring to the defense, cheated persons grow suspicious ... (Jaspers 1968: 302).

For Jaspers, however, the fact that a behavior „emerges“ motivationally from an experience in this way is only an explanation related to the concrete individual case, not a regular or lawful causal explanation. Only the natural sciences can enlighten us about this lawful causality. In another context Jaspers writes that the “meaningful psychic connections” might also be called a kind of “causality from within”; however, there is an “unbridgeable abyss (...) between these connections, *which can only be called causal by analogy, and the real causal connections*, the causality from without” (Jaspers, 1963: 329; my italics). Nevertheless, the question remains whether we should be satisfied with his understanding of causality. For, if we take a closer look, the division of hermeneutic understanding and causal explanation is based on a concept of cause that is narrowed down to the natural sciences from the outset.

Originally, the concept of cause, Latin *causa*, derives from the Roman legal system: *causa* was the name of the trial, i.e. the procedure that clarifies who the perpetrator was and why he committed the act. The primary, i.e., life-world concept of cause can then be defined as a *sufficient and satisfactory answer to the question: „why did this happen?“* As Aristotle has shown, there are a number of types of causes (material, efficient, formal, and final) that are candidates for such responses. Especially in

the case of human actions, it is usually motivational, i.e. final causes, and not neurobiological (efficient) causes that provide such answers. If, for example, a judge wants to know whether it was Mr. Miller who robbed a bank, and if so, why he did so, he is hardly served by analyzing Miller's brain processes. Rather, the judge will want to establish the course of events as unequivocally as possible and find out the reasons and motives for the robbery. Why did Mr. Miller commit the crime? Let's say because he was completely in debt after a bankruptcy and he saw no other way to feed his family. The answer to the question „why did this happen?“ and thus the understandable cause for the crime was its motive, namely a subjectively felt emergency – and of course the undoubtedly illegal conclusions the defendant drew from this situation.

Is this a satisfactory explanation, i.e. a sufficient answer to the question „why?“? In a life-world sense, no doubt – why should the judge be interested in the amygdala or other centers in Mr. Miller's brain beyond that? He will hardly say: „I have understood Mr. Miller's behavior, but now we want to know how it really happened and ask a neurobiologist. He should tell us what happened in Miller's brain before and during the crime. Everything else is only subjective experiences, or rather subjective illusions, which have also given Mr. Miller the erroneous feeling that he himself decided on his deed, while in reality it was his brain that brought it about.“ Following a distinction made by Husserl, this would mean a shift from a „personalistic“ to a „naturalistic“ attitude (Husserl 1989), and thus, from the macro-level of human actions and motives to the micro-level of neuronal or even molecular processes. But it is primarily in the personalistic attitude, namely through empathic understanding that we grasp the motivational nexus of human behavior – and thus also *explain* it. Because for Husserl, to 'explain' here means „to clarify motivations, to make intelligible how the people in question 'came to do it,' came to behave in such and such a way“ (Husserl 1989: 241).

Obviously, the judge's question of „why?“ is of the latter kind: He tries to understand the action motivationally and to explain it in this way. Neuronal processes become relevant for him at most if a psychiatric examination of the defendant should give rise to the suspicion of a manic illness, for example. This could have led to a physiological disinhibition, to the perpetrator's overestimation of himself and thus to his act, without psychological motives resulting from his personal situation playing a major role. Should this suspicion be confirmed, a naturalistic explanation will replace the personalistic or understanding explanation. Nevertheless, in principle both options can be *sufficient explanations* and thus answers to the why-question. Because in the normal case subjective experiences, motives and reasons explain an action arising from them, and they are therefore completely legitimate causes.

Of course, it is possible to give other causes for the action of the bank robber, such as the physiological processes that took place in his muscles during the act and made it possible for him to enter the bank and draw the pistol. But these processes on the micro-level would be only subordinate causes, namely not motivational causes of the perpetrator's *action*, but physiological causes of his *movements* (Davidson, 1980). They consist, for example, in the biochemical processes at the motor endplates of his muscles, but also in the neuronal activities that take place in his brain during the act. Such causal connections only come into view through focusing on the micro-level that disregards the perpetrator's psychological and social situation, and instead

examines the micro-processes in his body. In these processes, the action as such no longer appears and therefore cannot become comprehensible at all in the sense of its motivation. The causes investigated in each case are thus located on quite different levels and cover different *sections* of the event – in one case the person, his life situation and resulting motives, in the other case the causal concatenation of physiological processes in his body.²

Now, can the existence of subordinate causes at the physiological level invalidate the personalistic explanation – or, conversely, does the psychological, meaningful nexus of motive and action affect physiological processes? For an answer we must try to grasp more closely the connection between the explanations and concepts of causes on the two levels.

3 Circular causality

For the question we can first refer to another important distinction found in Husserl (1980, 1989), namely between:

- (1) *physical causality* between material objects,
- (2) *motivational causality* for mental experiences that emerge meaningfully from each other, and
- (3) *psychophysical causality*, which denotes the regular connection between (physical) bodily processes and psychic experience.

The latter, however, is only a conditional nexus, not an efficient causality. According to Husserl, it only indicates an „if-then“ connection, which cannot be further elucidated on either the physical or psychological level. A needle prick in the finger is the condition for the felt pain, but it does not *cause* it in the same sense as it causes tissue damage in the skin. Likewise, there is no causal effect anywhere on the path of the neuronal excitations from the skin to the brain, which demonstrably turns physiological processes into psychological experience. The same applies to the reverse conditional nexus, for instance between the felt pain and the motor response to it, namely the withdrawal of the finger; or between the bank robber’s intentions and the muscle movements that made him enter the bank. Here, too, we can initially establish only if-then relationships.

Now the conditional linkage ultimately stops at a parallelism of the mental and the physical. Can it also be conceived as a causal relationship in the proper sense,

² Compare also Hornsby’s (2000) distinction, going back to D. Dennett, between *personal* and *subpersonal* levels of explanation, by which “one ensures that the kind of explanation distinctive of people and their sensations and activities is not confused with explanation of a different kind” (Hornsby, 2000, 7). Such personal explanations are based on the “needs, desires, intentions and beliefs of an actor in an environment” (Dennett, 1969, 164). Unfortunately, Dennett himself later abolished his original categorical distinction by assuming an “intentional stance” to be possible for any complex objects, even non-personal ones (Dennett, 1987). For a critical discussion of his proposal of a “heterophenomenology”, which should reduce first-person experience to third-personal data in the study of consciousness, see Gallagher (2011).

namely in such a way that the felt pain and avoidance tendency actually represent the sufficient causes for the physical finger movement? – From a contemporary view of embodiment theory, the conditional connection can certainly be interpreted causally, using the concept of *circular causality* between the different levels that characterizes living beings in particular (Thompson, 2007; Murphy et al., 2009; Fuchs, 2018, 2020a).

This term firstly describes the interrelation between the whole and the parts of a living system. A living being can be regarded as a self-organizing (autopoietic) system that continuously reproduces the parts of which it is composed (organs, cells, macromolecules), while conversely these components constitute and maintain the system as a whole (Varela 1997).³ The whole is thus the condition of its parts, but it is also realized by them. Circular causality now means (a) that the organism forms, structures, and integrates its components into superordinate functions, which affect the behavior of the components at the micro-level (*top down* or *downward causality*). At the same time, (b) the components themselves interact on the micro-level in such a way that the overarching processes emerge (*bottom-up* or *upward causality*). To give some examples:

- Circular causality characterizes, for instance, the relationship between genes and organism: the genetic structure of the individual cell nucleus controls the construction of specialized cell organs and functions (upward causation). Conversely, the configuration and functions of the entire organism determine which genes are relevant for the development and regulation of a particular individual cell, for example, whether it develops into a muscle, bone or nerve cell (downward causation). These *epigenetic processes* are mediated by gene regulatory networks, which through signaling molecules respond to higher-level conditions and contexts (Berridge, 2005; Noble, 2008, 2012). In this way, cells differentiate to fit their assigned role in the surrounding organ.
- Another example is the immune system, where an antigen invasion triggers a hyper-mutation process in single immune cells who are then selected by the system to reproduce and multiply, depending on whether they are suitable for the overall immune response or not (Noble & Noble, 2021). This downward causation works via Darwinian selection: a “reproduce or die” signal leads to the suppression of cells that do not produce an antibody to the antigen.
- A similar Darwinian selection occurs in the early shaping of the brain structure, where a significant part of neurons (of which there is, at first, a surplus) dies in the first months after birth due to lack of use (‘apoptosis’; Edelman & Tononi 2000). This is another example of downward causality: The infant’s embodied experiences, as situated in the environment, constitute the superordinate process, whose recurrent patterns select the suitable neuronal links on the micro-level (see also Fuchs 2020a).

³ It remains to be noted that this systemic conception operationally elucidates the concept of the living, but does not exhaust it, since the essential characteristics of the teleological constitution of living beings are just as missing as their particular temporality or overarching temporal Gestalt (see Jonas 2001).

- At the social level, a downward effect may be found when manipulating a monkey's position within a status hierarchy, which alters its gene expression controlling serotonin levels. For example, when a dominant male is removed from a monkey group, the serotonin level of the next higher male rises rapidly, allowing him to adequately fill his new status through dominant behavior (McGuire et al., 1983; Raleigh et al., 1984). Thus, the higher-order context, subjectively experienced by this male as a new motivation, alters gene expression at the micro-level in the sense of top-down causation. Conversely, the increased serotonin production contributes bottom-up to more dominant behavior.

Downward causation is often regarded with skepticism in philosophy of science, since it either seems to presuppose unknown physical forces, or it falls victim to Occam's razor: it would simply be dispensable for the actual causal effects brought about by the micro-elements (Kim, 1998, 1999). The underlying assumption is the alleged causal closure of physics at the bottom level. However, circular causality does not mean the appearance of new natural forces that contradict the laws of physics. Rather, macro-structures are in a position to *select* certain properties of their components and to *constrain* others through their form and configuration (Moreno & Umerez 2000). The components thus acquire new, emergent qualities: for example, iron embedded in hemoglobin is able to *reversibly* bind oxygen from the air we breathe, i.e., to release it again at a suitable point in the organism—while inorganic iron irreversibly rusts (Fuchs, 2020a). For such emergent properties no physical miracle is required but only a higher-order structure (in this case hemoglobin) which integrates its own structural elements into specific patterns of behavior. One can also understand downward causality in terms of Aristotelian *causa formalis*, as a formative or structuring cause.

In the same way, the processes of consciousness as embodied superordinate structures can also have a formative effect in the physical behavior of the living being (Ellis, 2016; Ellis & Gabriel, 2021). Of course, the mental does not act as an external force upon brain or bodily processes but as a formative principle *in and through them*. When I speak, for example, the muscles of my tongue and larynx show certain ordered patterns of movement. Their proximate or efficient cause (*causa efficiens*) is the neuronally triggered release of acetylcholine at the motor end plates of the muscle fibers. However, it is also true to say that my tongue and larynx move in this way *because I am speaking certain words* and I am intentionally directed towards their content. This “because”, however, no longer signifies an efficient, but a *higher-order selecting and forming cause*: the muscles are always ready for excitation, they could contract in manifold other ways, but they are drawn into a selective, superordinate dynamics. Thus, the organizing cause of the muscle actions is my speaking (*downward*) which in turn is realized by a complex, but constrained dynamics of physiological mechanisms (*upward*).

But the same is true for the *neuronal* processes in the motor or other areas of my brain that are necessary for this (including opening or closing of ion channels in axons, etc.): they are entrained to realize the higher level purpose of *my speaking these words*. There is no single center in the brain that could produce or control this utterance: Each neuronal subsystem and process, just like the tongue and larynx, is only a necessary but not sufficient condition for the realization of my speech. The

sufficient condition is nothing else but the living organism with its muscles, tendons, neural networks, mental dispositions and intentions *that I am*. The complete cause of my speech is therefore neither my tongue nor my brain (even if both are necessary to realize it) but I am this cause myself. In every conscious activity (speaking, writing, walking, thinking) the living person himself acts as the integral cause of the activity. As embodied processes of life, conscious processes can be effective in the behavior of a person without influencing brain processes „from the outside.” The so-called “mental causation”, which evokes the idea of a disembodied action of the “mind”, should therefore be better redefined as *personal causation*.⁴

Of course, downward (including personal) causation requires some degree of indeterminacy at the micro-level; otherwise higher-level constraints would amount to an overdetermination, thus falling prey to Occam’s razor (Kim, 1998). Now, the often proclaimed causal closure of micro-physics is by no means an established truth, on the contrary: The required freedom lies in micro-indeterminism, be it stochasticity or quantum uncertainty (Ellis 2021, Ellis & Gabriel, 2021). This stochasticity of elementary processes is even increased in organisms, because they are open, far-from-equilibrium systems (Nobel & Nobel 2021). Within the brain, this has been shown to lead to labile neural networks whose indeterminacy can be harnessed by higher-level selection and causation, including the person’s desires and intentions (Noble & Noble, 2021; Braun, 2021).⁵

Circular causality, as we can see, means neither external causation nor mind-body interaction; rather, we can consider it as a relation of *implication*, as de Haan (2020) has aptly put it. The suitable micro-level mechanisms are *included or involved* in the higher-level, goal-directed processes. Let us consider the example of the phobic patient once again. The upcoming presentation puts him in growing fear, and this fear is obviously meaningfully motivated by his previous, for example shameful, experiences and his perception of the current situation (motivational causality). On the other hand, a neuroscientist might examine his brain in an fMRI scanner and find increased activity in the amygdala. However, this activity is not the sufficient explanation for the fear. The neuroscientist only turns to the physiological events, with a narrow focus on certain brain activities involved, and leaves out the relationship of person and environment. The amygdala as such does not account for the situation the patient finds himself in; it is only activated as *involved or implied* in this higher-level situation. Only the more comprehensive view, namely the consideration of the embodied subjectivity, its history and current situatedness, provides a sufficient explanation of the patient’s fear, i.e. a satisfying answer to the question „why“. On the other hand, it is not his fear that activates his amygdala – at least not in the usual sense of causality, where cause and effect can be separated and one follows the other. Rather, embodied subjectivity *constrains or implies* the patterns of brain activity involved.

⁴ “The phenomenon called mental causation is on view only at the personal level; and a person’s trying to do something or her believing something, cannot be thought of either physicalistically or as something that is mental in Descartes’s sense and alien to the world of causes” (Hornsby, 2000, 14).

⁵ Thus, another of Kim’s (1998, 1999) arguments against the possibility of mental causation can be rejected. For a more detailed critical discussion of his arguments, see also Thompson (2007), pp. 431–441. Moreover, Kim’s exclusion of overdeterminism by higher levels is discussed and convincingly refuted by List & Menzies (2009).

Thus, there is no external causal relationship between the experiential and the neurophysiological level, because both refer to one and the same life process, which is only viewed with a broader or narrower focus (de Haan 2020). The patient's embodied and situated experience implies certain brain activities, in the sense of circular causality. The brain processes thus enable his experience (upward causality), but the experiential aspect is broader in both space and time: Only the patient's intentional relationship to the current situation and his history of interactions with similar situations can explain his fear and the neural processes involved (downward causality). And only his fear as a future-directed subjective experience is able *to motivate and to organize* the bodily actions necessary to avoid the threats he expects – e.g., to flee the room of presentation. Thus, the *causa formalis* also becomes a *causa finalis* – a goal- and future-directed efficacy of embodied subjectivity.

It is important to see that reasons and motives thus become indeed causes in a certain sense, even if they do not *necessitate* a behavior, but only *incline* us to it. In an extended notion of cause, motives that do not determine us in the sense of natural lawfulness can nevertheless be considered legitimate causes, namely in the sense of laws of probability: Motivational explanations are, as Williams rightly notes, “often *ceteris paribus*, probabilistic, or statistical explanations” (Williams, 2020: 16). They allow for exceptions and indeterminacies, not least for the possibility of *free choice*, which makes certain motives the decisive reasons for an action in the first place. Freedom of will should not be regarded as a purely mental feat, however, but rather as an ‘embodied freedom’, which integrates the person's entire bodily, affective and cognitive situation in the decision and its execution (see Fuchs 2018: 236–243 for further explanation). The concept of embodied freedom is thus based on circular causality as well; it regards decisions as superordinate, intentionally directed acts that are enabled by the stochasticity or indeterminacy of the neuronal micro-processes involved (Braun, 2021; Noble & Noble, 2021).⁶

4 The role of phenomenology for explanation

I have advanced a specific interpretation to the concept of conditional linkage provided by Husserl. It allows motivational understanding to be taken as a genuine explanation: Instead of merely describing an epiphenomenal experience – the foam on the surface of physical processes, so to speak – this understanding captures the *actual causes* for the thoughts, ideas, intentions, and actions that meaningfully result from a mental context. These superordinate, motivational causes become effective in the world, because as embodied connections of experience they represent order principles for physiological processes at the same time, in the sense of a *causa formalis* as well as *causa finalis*.

⁶ It should only be mentioned in passing that the circular structure described applies in principle also to unconscious processes, insofar as they can also be considered as motivational or goal-directed processes. Conscious intentional anticipations are here replaced by unconscious protentions and tendencies or the “operative intentionality” of the lived body (Merleau-Ponty, 1962, pp. xvii, 137, 243). Such unconscious anticipations are also capable of organizing micro-processes according to superordinate bodily dispositions and desires (cf. on this, Fuchs & De Jaegher 2009).

The concept of circular causality thus provides a basis for overcoming the inappropriate division between understanding and explaining. As a consequence, both psychodynamic and phenomenological approaches gain a new status as primary explanatory sciences. Sigmund Freud, who in his early neurological days was known to have worked intensively on the neural basis of neurotic symptoms, especially anxiety, later wrote:

But today I must say that I know of nothing that could be more indifferent to the psychological understanding of anxiety than knowledge of the nervous pathway along which its excitations take place. (Freud 1917/1963: 393).

This is true in principle, because it is not the activation of the amygdala as such that causes anxiety, but primarily the subjective experience of a threatening situation – and this is not to be found in the amygdala. Nevertheless, the opposition expressed in Freud's quotation is no longer necessary. For his „psychological understanding“ also indicates the motivational causal relations, which are manifested top-down in corresponding physiological processes: Fear means the embodied and meaningful experience of a threatening situation, and the amygdala is activated because it is involved in this superordinate situation, as a necessary, but not sufficient condition of the experienced fear.

Such meaningful connections can be found through psychological understanding, supported by careful phenomenological description. Now, one could object that by no means all mental disorders and illnesses are accessible to such an understanding – as is well known, Jaspers regarded in particular “primary schizophrenic delusions” as incomprehensible *per se*, and also in the case of the aforementioned bank robber, the diagnosis of a manic illness would invalidate purely psychological explanations for his deed. In fact, especially psychotic forms of experience can no longer be integrated into a continuous motivational context.

Phenomenological psychopathology, however, has long since gone beyond the description of psychic experience in the sense of Jaspers, namely by exploring the transcendental basic structures of consciousness such as embodiment, temporality, self-experience and intersubjectivity. Thus, it still starts from subjective experience, but aims at the constitutive processes at its basis, such as the formation of perceptual gestalts, the temporal continuity of experience, the sensorimotor functions of the lived body, or the connections between self-experience and intersubjectivity.⁷ By analyzing the constitution of self- and world-experience, phenomenology is able to explicate the critical points at which this constitution is vulnerable and susceptible to psychotic aberrations (Fuchs, 2010). By gaining access to this pre-reflexive dimension of experience, the psychiatrist can extend his understanding to phenomena that might otherwise be regarded only as incomprehensible products of brain dysfunction.

⁷ Correspondingly, Husserl later expanded his original descriptive approach into a „genetic“ or „constitutive“ phenomenology and opposed a sharp division between understanding description and causal explanation (Husserl 1989: 402).

However, this no longer means a psychological understanding, but an understanding that is based on an *explication* of the implicit structures of experience.⁸ The basal disturbances of these structures in turn give rise to the actual psychotic symptoms in a comprehensible way. In other words, the symptoms „articulate themselves through the implicative relations to other experiences and structures of consciousness“ (Parnas & Sass, 2008: 257). Therefore, phenomenological analysis also leads to explanations of real causal connections, admittedly no longer in the sense of a psychological, but rather a *phenomenological explanation*. I want to illustrate this briefly by means of the genesis of schizophrenic delusion.⁹

4.1 Case study: The subjectivation of perception in schizophrenia

I start with the characteristic phenomena at the beginning of a schizophrenic psychosis, which in their totality amount to a radical *subjectivation of perception* (Fuchs, 2020b). Jaspers (1968) has described this experience with the term „delusional mood“. In the uncanny atmosphere of the delusional mood, the patients experience their surroundings as strangely unreal, as if they were seeing merely artificial or illusory images instead of real objects. Things seem unreal, somehow manufactured or staged; the other persons behave unnaturally, posed, as if they were only actors or impostors.

Wherever you look, everything already looks so unreal. The whole environment, everything seems strange, and you get terribly frightened ... Somehow everything is there for me, like being arranged for me. Everything around you suddenly has something to do with you. You are in the center of a plot like under backdrops. (Klosterkötter, 1988: 69)

Such „Truman Show“ or „Matrix“ experiences, as they are often called by the patients themselves, indicate a fundamental change in perception (Madeira et al. 2016). Everyday things and situations lose their familiar meanings and seem to hint at something novel, yet still enigmatic and puzzling – perplexity, anxiety and increasing agitation is the patient’s usual reaction. One could say that the perception no longer grasps the objects as such, but only their appearances (Fuchs, 2005). This demonstrates the ability of *normal* perception to transcend the merely subjective impression and to grasp things as such: namely, as objective things of a common, intersubjective world, which in principle can be experienced by all other subjects. But if perception loses its transcending, objectifying structure, then the patients must necessarily expe-

⁸ According to Husserl, „consciousness consist(s) of [...] a network of interdependent moments [...] founded on intentional *intertwining*, *motivation* and *mutual implication*, in a way that has no analogue to the physical (Husserl, 1977, Sect. 37). Precisely these implications, which are also constitutive of psychotic experience, need to be explicated in phenomenological psychopathology.

⁹ I limit myself to what Jaspers calls „primary delusions“ or „delusions proper“ (Jaspers 1968: 96, 98), which he considered “psychologically irreducible”, as distinct from “delusion-like ideas” of patients with paranoia, psychotic mania or depression. The latter he regarded to be in principle psychologically motivated and understandable.

rience themselves as the „center of the world“ and relate everything in the environment to themselves in some way.

Not infrequently, this subjectivation of perception culminates in the impression that the existence of the objects or the world as a whole depends on the perceiver:

Whenever I took my eyes of them [the hospital guards], they disappeared. In fact, everything at which I did not direct my entire attention seemed not to exist. (Landis, 1964: 90; quoted after Sass & Pienkos 2013)

If I perceive a door and then look away, then it's almost as if the door ceases to exist. (Henriksen, 2011: 24)

The last patient had the impression that she was the only person who really exists and that she was „responsible for the world moving on“. The explanation is obvious: If perception has lost its objectivity, and this means, its *implicit intersubjectivity* (Husserl, 1973; Fuchs, 2021), then the objects seem to exist and to move only for me, or even „by my grace“.

In all these cases we can see that perception no longer transcends itself and reaches the objects themselves. The objectivity and thus also the intersubjective givenness of the world is lost, and the patients are increasingly enclosed in their pseudo-perceptions like in a solipsistic inner world. This fundamental alteration of perception can also be described as a *disturbance of the intentionality* of consciousness and can be traced back phenomenologically as well as neurobiologically to further, basal disturbances (Parnas and Sass 2003, 2008; Fuchs, 2020b). However, this will not be pursued here, because I am concerned with the comprehensible transition of this basal disorder into schizophrenic delusion. As a typical example of such a transition we can consider the following:

It seemed ever more unreal to me, like a foreign country ... Then it occurred to me that this was no longer my familiar environment ... it might be no longer our house. Someone might set this up for me as a scenery. A scenery, or maybe it could be transmitted to me as a television play. ... Then I touched the walls in order to check whether this was really a surface. (Klosterkötter, 1988, 64 f.)

Again, the patient's perception is subjectivized and derealized. But in this case, the inversion of the intentional field – everything relates to me – already creates the impression of an external power being responsible for it. Getting more and more terrified, the patient desperately tried to understand her uncanny situation. Finally, she was struck by the sudden evidence that a foreign secret service abused her for experimental purposes, and that they were projecting illusory images into her brain with X-rays (Klosterkötter, 1988). This insight felt like „scales falling from her eyes“ and immediately reduced the tension and terror she felt before, if only at the prize of the certainty that she was actually persecuted.

Against the background of the fundamental uncertainty of the delusional mood, this relieving effect of delusion is based on the fact that it transforms the disturbance of perception itself into an alleged *happening in the world*, namely into the assumed

persecution by certain enemies or powers. In other words: The alteration of perception, which is not recognized by the patient himself, is transformed *into a reinterpretation of what is perceived*. The coherence and sense-making of perception is thus restored – as the German term „Wahnsinn“ aptly expresses it – but in a way that is fundamentally decoupled from the common world.

This is not to claim that the patient’s delusion develops in a psychologically understandable way, for example, as the „best explanation“ she finds for her abnormal experiences (Maher, 1988, 1999). The incorrectability of the delusion, its often bizarre content, and its inaccessibility to an intersubjective alignment with other perspectives show that it is not a normal psychological belief based on inferences. The attempt of a psychodynamic understanding is also misleading: Freud’s explanation of psychosis as a „wishful replacement of reality“ (Freud 1924) seems inconsistent with the horror experienced by most schizophrenia patients in their delusions and hallucinations.¹⁰ Nevertheless, the subjective experience of the pre-delusional state is indispensable for an explanation of delusion, namely to make the emergence of the delusional conviction comprehensible through phenomenological analysis.

Schizophrenic delusion is thus not *per se* incomprehensible, as Jaspers assumed. It is certainly not the result of normal intentional or motivational connections. Nevertheless, the phenomenological approach allows us to understand how delusional beliefs arise from profoundly altered forms of experience and express them in some sense. Such overarching experiences, integrating the patient’s entire current situation, are not reducible to neural processes, even though neurophysiological changes at the subordinate level may contribute to causal explanations. Rather, subjective experience forms the actual field of perceptions, feelings, motives, and actions from which psychosis increasingly unfolds.

The phenomenologically analyzable level of experience thus also becomes the preferred level of explanation, because an investigation of the nervous system could not even grasp those superordinate, subjectively experienced connections. The fact that these also have a *real effectiveness* for the development of delusion is again based on circular causality: The unbearable inner tension, which arises with the loss of the meaningful coherence of the perceptual field, is the precondition for the patient’s imaginative anticipations and search movements, from which the delusion results. The tension leads to a new sense „snapping in“; on the neuronal system level, this corresponds most closely to a „dysfunctional attractor“ (Goertzel, 2014; Adams et al., 2021), to which the system oscillates, and which, once snapped in, can no longer be left. Circular causality thus runs „top down“, but it also includes the reverse direction (bottom up): This becomes apparent from the possibility of neuroleptic treatment of the delusion, which obviously allows a relaxation of the neuronal system by influencing the neurotransmitter functions (Adams et al., 2021). As a result, the attractor can be left again, the delusion loses its rigidity and gradually dissolves.

Of course, the altered structures of perception in schizophrenia could only be outlined here, and the complex causes for this alteration were not my topic here; in any case, they cannot be found in a simple bottom-up explanation either. Nevertheless,

¹⁰ This does not exclude the possibility to elucidate certain elaborations of the delusional experience psychodynamically.

we can already see that there is a peculiar phenomenological understanding of psychotic experience beyond mere description, namely an understanding informed by an *explication of the implicit structures of perception*. These structural changes lead to the schizophrenic delusion in a comprehensible way, even if we are not dealing with a psychological-motivational causality.

5 Conclusions

Against the basic dichotomy of understanding and explaining in psychiatry and psychology, I have defended the explanatory function of understanding and phenomenological approaches. For this purpose, I first distinguished two levels of explanation and proved them to be equally justified in principle, namely (a) the motivational explanation of human experience and behavior on the macro-level and (b) their physiological explanation on the micro-level. As I have further shown, neurophysiological explanations are unable to satisfactorily and sufficiently explain human action due to their lack of intentional contextual reference. The “meaningful psychic connections,” as Jaspers called them, are thus legitimate higher-order explanations for questioning cause – the “why”-question – in the lifeworld context.

The dichotomy of understanding and explanatory approaches is often justified in philosophy of mind by a reductionist conception of supervenience. According to this conception, there is an asymmetrical dependence between mental and physical processes: changes in experience can only result from (neuro-)physiological changes, whereas physiological events are independent of experience. Physiology determines experiencing, but not vice versa. In contrast, I have shown that the concept of circular causality allows to think a downward efficacy of mental processes. Thus, an actual causative role of motivational connections can be substantiated. This also gives motivational understanding a legitimate role as an explanation of behavior not only in a lifeworld context, but also in a general epistemological sense.

In psychopathology, such meaningful connections can be found both through hermeneutic and phenomenological understanding. Against the possible objection that not all mental illnesses are accessible to such understanding, in particular psychotic disorders, I have pointed out that constitutive phenomenology provides still another form of meaningful explanation, name through the *explication* of the implicit structures of conscious experience. Using the example of schizophrenic delusion, I have shown how basal disturbances of these structures give rise to the manifest psychotic symptoms in a comprehensible way. Thus, phenomenological analysis arrives at explanations also in psychosis, admittedly no longer in the sense of a psychological understanding, but rather through *phenomenological explication*. Following these tracks leads beyond Jaspers’ claim for a strict incomprehensibility of primary delusional experience.

Similarly, other dimensions of conscious experience can be explored in their constitution, and hence, in their possible aberration in mental illness. In this way, constitutive phenomenology leads us beyond description and offers a method of explanation which also bridges the ‘explanatory gap’ between mere symptomatology and research in the underlying neural structures of experience. The dichotomy

between understanding and explaining is thus abolished, not only for the motivational understanding of mental disorders such as social phobia, but also for the genetic-constitutive phenomenology of psychoses.

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