Norms of Belief and Non-propositional Primal Beliefs[1]

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Abstract:

Traditional normative theories of belief in epistemology presume that belief-forming includes a reflective component and a mental agency component. Beliefs are regarded as conscious doxastic attitudes with propositional contents. Let`s call this view the Transcendental View about Belief (TVB). First, I argue that reputed norms of belief as the truth norm, the knowledge norm and the rationality norm all incorporate TVB. Further, I argue that the empirical evidence concerning belief-forming collected in the last two decades by Rüdiger Seitz, Hans-Ferdinant Angel, Raymond Paloutzian and their colleagues suggests that primal beliefs do not correspond to the description provided by TVB. Primal beliefs are byproducts of perceptive and affective type 1 processing. As such, they are non-propositional multilayer relational states of a cognitive system S that do not presuppose conscious awareness. Thus, I sustain that TVB is normatively inadequate, because it is descriptively false. I presume that a

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good normative account of beliefs should be able to accommodate primal beliefs and provide a norm of primal belief. I conclude by attempting to outline such positive account.

Keywords:

According to the traditional picture in epistemology, all beliefs are characterized as a) reflective, b) conscious doxastic attitudes towards a proposition (thus as c) having propositional contents). We can call such a widespread view the Transcendental View about Belief (TVB)[2]. TVB presumes propositionalism about *doxastic* attitudes. According to strong forms of propositionalism, all intentional attitudes are propositional (Grzankowski and Montague, 2018, 1). In what follows, I suggest that even if TVB is to remain neutral about strong forms of propositionalism (or to reject them), it would still face an important challenge: to show that all beliefs, disbeliefs and suspensions are propositional.

In the following paper, I argue that TVB is false and that [primal[3]] beliefs are neither a) nor b) nor c). Instead, I show that they should be regarded as multilayer relational states of a cognitive system S with non-propositional representational content. I propose a theoretical framework of primal beliefs built on the empirical data provided by Rüdiger Seitz and Hans-Ferdinant Angel`s research (2016, 2020, 2023). The reason for selecting the research of Seitz, Angel, Paloutzian and their colleagues in particular is that – to the best of my knowledge – they are if not the only, then one of the very few teams of neuroscientists and cognitive scientists that has, for more than 10 years now, persistently studied specifically belief-forming. According to the view I am defending, primal beliefs are byproducts of perceptive and affective type 1 processing. As such, they do not presuppose conscious awareness.

There exist other views that propose an argument for the possibility of non-propositional beliefs. Following Brentano, Uriah Kriegel is trying to show that beliefs-in are non-propositional in the sense that they are *cognitive objectual attitudes* (Kriegel, 2018, 198). Kriegel also suggests that beliefs-in may turn out to be more fundamental (Ibid, 199). Unlike Kriegel, I neither take non-propositional beliefs to be existential, nor objectual.

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[2] Following Hilary Kornblith`s criticism of the transcendental view about knowledge (Kornblith, 2011).
[3] As it is going to become apparent later in my analysis, all beliefs *that* are grounded on primal beliefs.

I am much more sympathetic to a proposal forwarded by Fred Sommers (2005, 2009) which he calls *mondialism*. To clarify, I agree with Sommers that *de mundo* beliefs are non-propositional beliefs about the world and, in a sense, I even agree that such beliefs are more primitive (Sommers, 2009, 269-270). Unlike him I do not presuppose that such beliefs are taken as factive. Primal beliefs are environmental representations that may be more or less accurate. More importantly, I argue that Sommers was wrong to construe *de mundo* and *de dicto* beliefs as "two very different kind of beliefs" (Ibid, 268). Primal beliefs are more primitive in the etiological sense[4].

Part 1 of the paper is focused on metaepistemology. I examine the three desiderata that an adequate normative account of belief must meet. I draw two important distinctions: one that considers differences in belief-forming, belief maintenance and belief revision and a second between descriptive and normative claims about belief. I conclude by examining how (if at all) normative claims are dependent on descriptive.

Part 2 provides an overview of epistemic accounts about the normativity of belief. Truth norms, Rationality norms and Knowledge norms of belief are presented and examined together with some objections. I argue that even if all other challenges that each account faces are to be resolved, they would still be confronted by one and the same problem: as subspecies of TVB, all these accounts presuppose a mental agency component and a reflective component. Thus, they have no means to account for the normativity of non-propositional beliefs. The challenge stands independently on how exactly one is defining mental agency or reflection, because primal beliefs would simply lack such characteristics. In addition, I allude to an additional challenge about the normative virtue of second-order beliefs that has been presumed by TVB.

Part 3 provides an argument in favour of non-propositionalism about belief. I examine empirical data of primal belief-forming and conclude that a normative account of beliefs should be applicable to primal beliefs. Further, I argue that if this is the case, then we are in request for a very different type of account that rejects the Transcendental View altogether.

In the final part 4 I provide some clues about how a positive account of primal beliefs should look. I conclude by suggesting that such an account should have a proper function

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[4] I realize that this is a radical claim. Later, when I discuss belief-forming, maintenance and revision, I will provide an argument to motivate it and examine possible objections to it.

component as well as an environmental component and call this proposal *Functional Environmentalism*.

1. Metaepistemological Considerations

A good normative account of belief-forming[5] should satisfy three simple conditions:

1.1. Desiderata

Consider *Jurassica* – a hypothetical environment inhabited by the magnificent creatures of the Jurassic period. Imagine a group of Xiaosauruses (small herbivore dinosaurs) hiding from a large predatorial dinosaur. Hearing the footsteps of the predator, one of them formed a belief that it is time to find a good hiding place. Based on its testimony the other members of the herd[6] gained knowledge of the upcoming danger. All of them also knew quite well that if they were to make a sound while hiding, they are most certainly going to alert the predator of their location.

Epistemic phenomena like forming beliefs, gathering evidence, accommodating testimony, making predictions and especially knowledge possession are not restrictively human phenomena. It is quite probable that there are interesting normative questions concerning specifically human practices[7]. However, I consider the ones related to belief-forming to belong to a broader category. Some bad cat beliefs will also be considered bad human beliefs and maybe *for the same reasons*.

Thus, the first condition of the desiderata is that we should look for a normative account of belief-forming that explains *shared mechanisms of human and non-human animal belief*. By 'shared mechanisms', I simply mean the ways in which a belief is being acquired and I presuppose that belief-forming mechanisms can function more or less optimally. And while I do think that the same *type* of mechanisms is responsible for human and non-human

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[5] A distinction between belief-forming, maintenance and revision would be proposed later on. For the purposes of the current paper, I am only interested in normative accounts of belief-forming. I consider it an open question if there is a place for (distinct) normative accounts of belief maintenance and revision.

[6] This speculative story is nevertheless based on evidence for herd-living being presented amongst herbivore dinosaurs in the Jurassic (see Pol et al. 2021).

[7] To tell if that is the case, we should dive deeper into metaphysical question about the nature of human and non-human animal belief.

animal belief-forming (as it is going to become clear in 4.), of course that does not require any exact similarities between *token* mechanisms[8].

The second condition of the desiderata is a *moderate form of content naturalism*. It is inspired by Nina Emery`s examination of normative theories in her *Naturalism Beyond the Limits of Science* (2023) and defined as follows:

> „Content naturalism [states that] we should not accept metaphysical theories that conflict with the content of our best scientific theories." (Emery, 2023: 23).

It is important to stress out that I am not necessarily endorsing a radical version of content naturalism[9], nor do I need to for the purpose of this paper. For now, I am simply assuming that Emery may be right and that there may be metaphysical content that goes beyond the empirical data. What matters for my account of belief-forming is that a good metaphysical explanation of how beliefs come to be (and what they are) should not contradict our best scientific theories about the nature of beliefs and should take into account the empirical data that we possess regarding this question. In other words: I hold that while the metaphysics of belief[10] should surely not be decided once and for all by the neuropsychology and neurophysiology of belief, it should nevertheless proceed in an empirically informed way.

The final condition of the desiderata is that a normative account of belief-forming should *presume doxastic involuntarism*: we do not choose which beliefs we form[11]. A similar consideration about normative accounts of belief has been motivated recently in great detail by Matthew Chrisman (2022) and Neil Levy (2021). Albeit very different from one another, both of their accounts of belief are developed in the framework of the dual-process theory of cognition. As related to type 1 processing, belief-forming cannot be the product of direct doxastic control and is heavily influenced by one`s epistemic environment (see e.g. Levy, 2021: 29 and Chrisman, 2022: 7, 21). I agree with all of that but unlike Chrisman and Levy my account of belief is individual, not social[12]. I also accept the dual-process framework of

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[8] E.g. think of a toad`s visual system and a human`s visual system. The similarity concerns the modus of delivering information about the environment. The actual hard-wiring is pretty different, but maybe we can introduce the same accuracy conditions regarding toad perception and human perception.

[9] Radical versions of content naturalism would insist on excluding any metaphysical content.

[10] One can wonder why should a content-naturalism condition on the metaphysics of belief concern the normative account of belief. Should not the metaphysics of belief depend on the normative account of belief and not the other way around? I would like to thank David deBruijn for suggesting this objection and I will address it in more detail in 1.3.

[11] That leaves open the possibility that doxastic involuntarism is false when it comes to belief-revision.

[12] I am much more interested in the role of perception for belief forming, rather than on agency, social cooperation or communication, thus sticking to traditional epistemology. I will not have the chance to examine the relations between perception and belief here, but I hope to do this in a forthcoming broader research project.

cognition but I prefer to talk about two types of information-processing and not about two different systems *per se*[13].

Apart from the desiderata, one also needs to be aware of two distinctions I will presuppose to be correct in this paper. The first one differentiates between:

1.2. Stages of Believing

My argument is premised on the assumption that we can talk about three stages of believing: belief-forming, belief maintenance and belief revision. As I already pointed out, in this paper I am only going to be interested in belief-forming or belief acquisition, but for the sake of clarity I will draw an explicit distinction between the three stages.

Belief-forming: I sustain that every propositional belief we hold was initially a non-propositional, primal belief. Thus, when we form beliefs, we form primal beliefs. Animals and babies are just as capable of forming such beliefs as they are by-products of perceptive and affective processing. Casting primal beliefs in this light is entirely compatible with beliefs being products of type 1 information processing and allows us to maintain doxastic involuntarism. Therefore, I consider that one of the problems of normative theories about belief in epistemology is that when they turn to belief acquisition, they actually examine a much later stage of believing where a belief has been updated multiple times and is way more refined[14].

Belief maintenance: In this paper, I neither propose nor defend a full-blown account of belief-maintenance. When I talk about a stage of 'maintaining' one`s belief, I only assume that a) maintained beliefs were initially formed as primal, non-propositional ones[15] and b) during their maintenance they do not need to be actively presented in cognition.  In this sense, belief maintenance involves nothing more than sustaining 'tacit' beliefs in Lycan`s sense because it does not require any active reflection (Lycan, 1988). I depart from Chrisman`s terminology where „maintenance" is used to refer to the „*belief*-system maintenance (as opposed to some other mental activity)" and such exercise involves agency („believers are in charge of their beliefs") by having active and holistic nature (Chrisman, 2022: 69-70).

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[13] When one endorses a dual-process theory of cognition, that invites the question "Two types of what have been distinguished?". See Evans, 2009 for a unified theory suggestion; see Bellini-Leite, 2018 for reasons to abandon the 'two systems' assumptions and what follows from it. Here, I go with Bellini-Leite, but nothing in my analysis will depend on that.

[14] More about that would be said in 2. where I offer a detailed examination of norms of belief.

[15] It is interesting to see if during the stage of maintenance beliefs are still non-propositional. I make no claim one way or the other, but I think it sounds plausible that they may be.

Very loosely, I think of the process of belief-maintenance as largely automatic and involving the sustaining of a representational content in memory that is available for retrieval[16].

Belief revision: The final stage or – more precisely – stages that a belief may go through[17] is revision. I think that when epistemologists talk about beliefs and norms of belief they are primarily concerned with that stage of the process of believing. Revisions involve both type 1 as well as type 2 processing. During the stage of revision, a belief is necessarily occurrent and it is been updated based on new evidence. This presupposes that this is the stage when one is becoming conscious of her belief and its content becomes propositional.

The most important question is whether we can acquire a new belief during the stage of revision? In other words, can we say that this is the stage in which one acquires (forms) her propositional beliefs? I think that a positive answer to that question has been implicitly presumed by normative accounts in epistemology. Specific examples of normative accounts my challenge applies to are founded in 2. However, the claim is that it actually applies to almost every available account on the market. Furthermore, I am going to show that if TVB holds, beliefs *are* actually only the newly acquired contents during the revision process. I argue against that by holding that *no new beliefs are acquired* during the revision stage and that norms of belief should not be focused on propositional beliefs. While non-propositional representational contents do become propositional and conscious in this stage, nothing new emerges in the process.

But what about updating based on new evidence? Surely, it should change the contents in a certain way and one may form new propositional beliefs in the process? I start by answering the first part of the objection: new evidence serves as a trigger for turning a dormant sustained belief into an occurrent propositional one. While it has been 'translated' into a conceptual content, it is still the same belief carrying the exact same information. New evidence can make our credence in it stronger or weaker[18], we can even drop the belief altogether. Turning to the second part of the objection, it is possible that one can form new

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[16] That is also compatible with J. Adam Carter`s notion of „dispositional belief" understood as representational content stored in memory that is not necessarily (occurrently) consciously endorsed (Carter, 2022: 2,7). In Carter`s case this representational content is propositional, while on my account it can turn out to be non-propositional.

[17] I say „may" because I neither consider that it is necessary that every primal belief is maintained afterwards nor that it is revised.

[18] I am aware that such an account departs significantly from the traditional doxastic attitude framework by presupposing that the belief is not the attitude (towards a proposition) itself.

second-order beliefs that may count as new propositional beliefs. While considering new evidence about Bobby cheating on his Epistemology exam, I may acquire the belief that I firmly belief that Bobby cheated. In other words, during revision I may form new beliefs about my own level of credence, for example. What I consider unlikely is that it is possible that I form any new beliefs about the external environment solely by reflecting on the contents of already existing primal beliefs.

Here, I am obliged to face a strong objection that I will call gaining knowledge through reflection[19] or K through R. A classic example of K through R is found in reasoning in detective stories. Let`s imagine a scenario where a detective is trying to find out who is Mary`s killer. The suspects are Mary`s husband and her landlord. Further, let`s also presume that Mary was killed from a great distance with a blowgun by using a poisonous darts. From this point on, a supporter of the traditional view may construe the case as follows: initially, the detective believed that the husband is responsible for the murder because he had a very strong motive (unlike the other suspect that seemed to have none). By doing a fairly simple test, the detective found out that whomever killed Mary should have been not only a good shooter, but also – the killer should have had extremely well-functioning lungs for blowing the darts so far away and with such precision. Next, by presuming that the detective knows that the husband is a smoker and has a bad case of asthma, the defender of the traditional view can argue that the detective can infer that Mary`s husband could not have possibly killed her, gaining not only new belief but also K through R in the process.

While K through R challenges are indeed important, the possibility of gaining *knowledge* through reflection remains open even if I am right about everything that I claim in this paper. More importantly, I think that the particular detective case is unable to show that one can *form new belief* merely by reflection. At the very beginning of the examination of the case, the detective simply has a non-propositional belief about the possible killers. I say "non-propositional", as I refer to the very first moment when the primal belief is formed (before any type 2 processing has yet taken place). After revising this belief based on the evidence concerning the husband`s motive for murder, the detective becomes much more certain that the husband is responsible for the crime. When obtaining the evidence about the lung condition of the murderer, he simply revised the belief that the husband is guilty yet once more, this time dropping the belief altogether. The non-propositional representational

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[19] I am especially indebted to Jack Lyons for making it stronger by using the Sherlock Holmes example. I will adapt the case in point to fit any detective story out there.

environmental component – the initial content of the primal belief - has not changed through the entire process. It is the very same primal belief that has been revised over and over again by shifting the focus on a different relational aspect or rejecting its presence altogether.

A final distinction I draw is between descriptive claims about the nature of beliefs and normative claims about beliefs. We can answer the question what beliefs are descriptively if we look into empirical data about belief-forming. It is possible that we may have to go beyond empirical data and engage in metaphysical considerations in order to get the complete picture. Normative claims about belief are not traditionally concerned with what beliefs in fact are, but with what should one believe or disbelieve and why.

1.3. The Descriptive/Normative Dependence Relation

A defender of TVB can proceed by suggesting that normative claims about belief should determine the nature of belief proper. If that is about right, the following normative dependence relation should hold:

NDR: Norms about a type determine if something should be considered a token of said type.

The norm should be transcendental in the sense that it precedes any realization of the norm and that it is a priori justified. If TVB and NDR hold, it could be objected to my project that empirical data about belief-forming should be regarded as irrelevant when dealing with normative questions about belief. I would like to try to show why NDR is false.

Let`s take a simple example and suppose for the sake of the argument that there was indeed a normative condition preceding any pizza-token that something is a pizza if and only if it is a round pastry with a sauce on it baked on a very high temperature. Any pastry that satisfies the norm is therefore a pizza. But we should not forget that constitutive (or definitional) norms for which NDR provides the most general model allow us to make evaluative assessments based on if something satisfies the constitutive norm or not[20]. Thus, tokens that do satisfy a type-norm can also be evaluated as *good* tokens. In our example, pastry tokens that satisfy the transcendental norms of pizza-making are not just pizzas, they are *good* pizzas. But if something does not satisfy the norm it is simply not a pizza, so it turns out that each and every pizza is a good pizza. In other words: if NDR is true and normative

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claims about pizzas or beliefs determine what pizzas or beliefs are, then bad pizzas or beliefs should be impossible (because normatively impermissible). They will simply fail to be tokens of the relevant type.

Can a defender of NDR simply bite the bullet by saying that if a pastry goes against the transcendental norms of pizza-making is simply not a pizza? Such response is not only possible, but in the pizza case it may as well sound plausible. However, the case is different if NDR is applied to beliefs. To say that bad beliefs should not be regarded as a token of the belief type is a non-starter. This result does not square well with ascribing epistemic blame for bad belief-forming and for sustaining bad beliefs. We still want a sexist to be regarded as (really) believing that women are incapable of exceeding academically in order to hold them responsible for having such beliefs. If it turns out that a sexist does not have *any belief* of the sort, because they fail the normative condition that would not allow us to blame people for having bad beliefs[21].

Therefore, I conclude that NDR is false and I proceed by suggesting that the opposite descriptive dependence relation holds:

> **DDR:** Normative claims about beliefs are constitutively dependent on descriptive claims about the nature of belief that we endorse.

According to DDR, if our descriptive views about the nature of beliefs are wrong, then it is very probable that our normative claims will also turn out to be wrong[22]. Even if a normative theory of belief grounded on a wrong metaphysical view turns out true, that would be merely felicitous. Let`s turn back to the pizza example and imagine that someone has baked a really good pizza without knowing what a pizza is[23]. It is by sheer luck that Smith followed all the steps for making a good pizza, because he had no idea what he was making in the first place.

Turning to beliefs, when I say that norms of belief are constitutively dependent on the nature of beliefs, I mean that different descriptions of belief presuppose a different normative theory of belief. For example, if believing is *a performance* that would give us one set of norms about how to perform skilfully; if beliefs are *mental states* with propositional contents

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[21] Maybe we can still blame them for failing the normative condition in the first place even if we presume that they lack any beliefs about their female colleagues. We can say for example that the sexist *should have formed* a belief and they *failed to do so*. That may work, but it is not what we usually consider to be going on in these cases.

[22] Note that unlike NDR, DDR does not tell you what positive epistemic norms of belief you should adopt, it only gives you some clues about what kind of epistemic norms would be incompatible with the nature of belief.

[23] We can imagine Smith just putting something together in the kitchen without having any idea what exactly he is doing and while thinking that pizza is actually a type of cake.

that would probably give us a truth norm and so on and so forth. Moving forward, my argument in this paper suggest that TVB and standard normative accounts of belief associated with it are misguided because they are wrong about what beliefs are. They are false as normative claims because they are descriptively false[24].

2. Transcendentalism about Belief

This part of the paper is devoted to providing a clear outline of the traditional normative accounts of belief in epistemology and to propose an overview of existing norms of belief developed in this framework. The label „Transcendental View about Beliefs" (TVB) and parts of my criticism have been inspired and influenced by a project of Hilary Kornblith aiming to show that Transcendental Views about Knowledge (TVK) are false[25]. Transcendentalism is related (in a variety of ways) to the Kantian approach to human cognition (Kornblith, 2011: 116) and tells a story about the importance of second-order beliefs and the forming of beliefs in the realm of reasons:

> „Human beings differ from other animals in a number of fundamental ways. First, human beings are language users, while other animals are not. And second, leaving aside, for a moment, the question of whether nonhuman animals have genuine beliefs, it is quite clear that non-human animals are incapable of reflecting on their mental states and forming beliefs about them. Thus, human beings not only form beliefs about the world around them; they form beliefs about their own beliefs. Nonhuman animals cannot do this. This ability to reflect on our own mental states marks a crucial difference between humans and other animals." (Kornblith, 2011: 99)

On TVB, believing is about what we do in our heads about evidence and how we do it. When forming a belief, one forms a doxastic attitude towards a proposition that is supported by one`s evidence. Let`s call this *a mental agency component*. As we can see, a fundamental characteristic of transcendentalist accounts is that "rationality" is about the second-order level. The mental agency component is grounded on a *reflective component* as TVB presupposes that second-order beliefs are fundamental filters for the forming of first order

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[24] It is not a precedent to argue against a normative claim about belief from a descriptive one. To give just one example, in *Belief is weak* John Hawthorne, Daniel Rothschild and Levi Spectre argue against the assumption of entitlement equality and, consequently, against the knowledge norm of belief because they do not „correspond to our basic concept of belief" (2016: 1395) or that there is a „radical mismatch" between such normative conditions and the literal meaning of belief (2016: 1397).

[25] Kornblith himself refers to transcendentalist accounts of knowledge in philosophy as „anti-naturalistic" and argues against them by raising the claim that knowledge is a natural kind (2011: 98). I take no stance in the debate about the nature of knowledge and remain silent on the question if knowledge is indeed a natural kind. My only focus in this paper will be anti-naturalism about belief-forming.

beliefs and that second-order beliefs improve first order beliefs[26]. Thus, TVB can be summarized as follows:

> **TVB:** Beliefs are a) reflective, b) conscious doxastic attitudes towards a proposition and c) the content of any belief is thus propositional.

In what follows, I examine some influential norms of belief and show that they incorporate TVB at their heart, starting with:

2.1. The Truth Norm of Belief

One can sustain that beliefs should be aiming at truth. There are at least two construals of the truth norm. They both fall under the TVB premise, but there are some differences that are worth mentioning. I will start with what I call the weak construal that constitutes maybe the first official construal of a belief norm that (to the best of my knowledge) started this whole debate about norms of belief in epistemology.

> **Truth Norm (Weak):** One must: believe that p iff one takes p to be true (Williams, 1973; Shah, 2003).

First, it is worth noting that on Weak interpretation, the Truth Norm does not require that one only forms true beliefs. It only requires that one only forms such beliefs that one „takes" to be true, i.e. that the contents of said beliefs appear to be true or seem to be true[27]. Thus, Weak Truth Norm requires that every time one forms a belief, one has already formed a second-order belief that the first-order belief is true. I think it is obvious that the Weak construal requires us to accept TVB as its premise as it suggests that the reflective component is present in belief-forming.

Second, on a different interpretation of Weak, taking p to be true involves taking p as a practical reason for action. Thus, I believe that p for epistemic reasons, but at the moment when I start to take p as true, my belief becomes a reason for action. Even if this interpretation can be twisted around a little bit so it does not *prima facie* require that when

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[26] One can argue that another reason to question TVB is that the reflective component takes it for granted that second-order processing improves first-order processing and that is not always the case (for an analysis of empirical data on metacognition see especially Kornblith 2012). It is an open *descriptive* question how second-order beliefs influence and change first-order beliefs. For starters, empirical evidence of ideological commitments influencing belief-forming as well as a large number of experiments devoted to studying cognitive penetration should be taken into account when accessing the pros and cons of second-order processing.

[27] Traditional internalists about evidence for example would consider that evidence consists of true propositions of one`s mental own mental life (Littlejohn and Dutant, 2021: 802). On such a normative account of beliefs, a true belief that p and a false belief that p would be equally justified because equally supported by evidence.

forming the belief that *p* one does it in accordance with the reflective component[28], it would still require that belief-forming involves a mental agency component. Therefore, as the mental agency component is based on the reflective component, it remains a mystery how one can shape belief-forming as involving one and not the other.

Maybe it should already be obvious that any stronger version of the Truth Norm would also fall under TVB, but the stronger construal also invites a different problem.

Strong: One must: believe that p iff p is true.

Note that Strong does not simply say that one should not believe what one has evidence to think it is false. It goes way over and above by claiming that one should not form *any* false beliefs *ever*. When presenting this construal of the Truth Norm, Mona Simion, Christoph Kelp and Harmen Ghijsen refer to it as NFB or ascribing negative status to any false belief and argue that there is tension between NFB and radical skeptical scenarios (Simion, Kelp and Ghijsen, 2016). If we want to allow for justified false beliefs in cases of philosophical hallucination, Strong would be a non-starter.

Consequently, if we hold Strong then belief-forming should not only answer to the reflective component and the mental-agency component, it should be done in a way such that all beliefs are justified and all beliefs are knowledge. Thus, such a construal of the Truth Norm would not be much different from:

2.2. The Knowledge Norm of Belief

The knowledge norm of belief is primarily forwarded by knowledge-firsters in epistemology, but not all knowledge norms are alike. For example, in her *Resistance to Evidence*, Mona Simion explicitly breaks with the traditional construal of the knowledge norm and allows for justified false beliefs in a knowledge-first framework (Simion, 2024). At the same time, the norm of belief that she proposes is definitely *a* knowledge norm and it can be argued that it does not require that one accepts TVB[29]. When I address *the* knowledge norm of belief, I exclude Simion`s proper functionalism from my criticism. As it would become clear in 4., I

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[28] For example, an account like this can avoid stating that beliefs are always formed consciously.
[29] Simion`s normative account stems from the etiological theory of functions and identifies the epistemic function of our belief-forming system as producing good beliefs (aka knowledge) and the proper functioning of the system is determining the norm of belief (2024: 99-101). To be precise, on Simion`s account beliefs are described as moves in inquiry and, because the function of inquiry is to deliver knowledge, belief-forming *in* inquiry inherits this function and the associated norm (Ibid.: 101-102). I suspect that primal beliefs are not formed as part of the inquiry practice and are formed *outside* of any such practice.

think that the right way to go about shaping a normative account of primal beliefs is pretty close to Simion`s functionalism.

The knowledge norm was first introduced by Timothy Williamson as somewhat equivocal to the norm of assertion he upholds (Williamson, 2000: 208; 256-257)[30].

> **Knowledge Norm:** One must: believe that p iff one knows that p (formulation proposed in Simion, Kelp and Ghijsen, 2016; norm sustained by Williamson, 2000; Littlejohn, 2013, 2017; Smithies, 2011; Gibbons, 2013).

As part of the knowledge-first program, evidence and belief are defined in terms of knowledge. Evidence is presumed to be factive and to obey the E=K principle (following Williamson, 2000).

It is very important to see way supporters of the knowledge norm fall prey to TVB. Factivist accounts and especially versions of factivism that endorse the knowledge norm are all supporting an externalist theory of justification. Being *factive,* the conditions for a belief being a good belief (or justified belief) are objective as opposed to subjectivism about justification[31]. One can wonder if that would not take us further away from the reflective component and bring to the table a new way to talk about normativity of belief. As an externalist, I firmly believe that objectivism gave us a new and a better way to think about justification. The problem is that when it comes to belief-forming, the knowledge norm is not *that different* from other proposals.

> What Williamson and Littlejohn`s objectivism is giving us is the following:

> „If (OC) is correct, it is possible for pairs of thinkers to process things in just the same way, draw the very same conclusions using the same reasoning after things appear precisely the same to them, and still form beliefs that differ in justificatory status. This suggests that a kind of rational perfection might fall short of ensuring that our beliefs are justified." (Littlejohn, 2017: 144)

The difference between objectivism and subjectivism seems to be that objectivism *adds* an objective, external condition and states that rational perfection is good, but it is not enough[32]. Thus, in a certain sense objectivism is simply more demanding by excluding cases of bad

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[30] As already mentioned, that also raises the problem about Entitlement Equality (see Hawthorne, Rothschild & Spectre, 2016) that I will not be considering here.

[31] See Littlejohn, 2017: 143-146 for an outline of the opposition between subjectivism and objectivism about justification.

[32] Other forms of externalism about justification may still be quite different in this regard.

luck and nasty environment from the knowledge department (even if the believer does nothing wrong[33]). Littlejohn even proposes a transcendental argument to support his objectivism (2017: 146-147). Norms of belief are objective in the sense that when forming a belief one *has a duty* to consider one`s evidence or what one knows (invites the reflective component of TVB) but also that the right norm of belief requires identifying standards that should guide belief „even when not seen perfectly by an agent" (Ibid.). Even if my failure to recognize the evidence cannot be ascribed to a mistake on my part, but stems from bad epistemic environment, my second-order assessment fails the norm.

To summarize, the knowledge norm makes one more prone to failure, because it adds an objective component to the norm of belief. Although it is an externalist norm, it requires that one endorses TVB.

2.3. Rationality Norm

Unlike the truth norm or the knowledge norm, rationality norms are maybe best depicted as a family of norms. However, I think that each supporter of a rationality norm can agree that something like the following normative condition should hold:

> **Rationality of Belief:** One must: believe that p iff it is epistemically rational to believe that p (Hughes, 2019).

The difference between accounts of the rationality norm would probably stem from debates about what should be considered as „rational". Two examples of such disagreements are if it can be rational to sustain a belief solely on the basis of practical reasons (Comesaña, 2015; Rinard, 2019) and if it can be rational for any agent ever to be epistemically acratic (Horowitz, 2013; Christensen, 2024).

In both debates, appeals to the reflective component and the mental agency component of TVB are quite common and are usually part of the description of one`s rationality[34]. For example, Sophie Horowitz`s non-acratic constraint is supported by the

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[33] In radical sceptical scenarios for examples believers would be „excused" and will not be „blameworthy" but they will still fall short of justification, i.e. their beliefs are still *bad* and they *should not have formed them*.

[34] It has been brought to my attention that one can conceive of a very minimalist concept of rationality that does not involve neither a mental agency component nor a reflective component. I have been asked if I think that a Rationality Norm construed in accordance with such concept will be applicable to primal beliefs. Maybe that is possible. It remains to see if such a minimalist understanding would be able to deliver a viable epistemic norm of belief. An anonymous reviewer has also suggested that Gerd Gigerenzer`s concept of ecological rationality (see Gigerenzer 2000: 57 for definition) is compatible with primal beliefs. That is true as Gigerenzer`s concept is also an environmentalist one. However, it is not an *epistemic* concept of rationality and it does not go hand in hand with any epistemic norm of belief.

concept of higher-order evidence or the evidence about what one`s evidence support[35] (Horowitz, 2013: 718-719). Comesaña`s criticism against pragmatism is entirely based on the following assumption: even if one can (unbeknownst to them) believe for practical reasons, it is never rational (or maybe not even possible) to believe for what one *takes* to be a practical reason (Comesaña, 2015: 190-191). Thus, the real question in the debate should be: If there is a second-order belief about one`s evidence, is it possible to believe for practical reasons?

Debates surrounding the rationality norm provide the clearest indication that contemporary epistemology only cares about the normativity of beliefs as presented by TVB. In the remaining pages I aim to show that TVB is false and that we should reconsider what normative constraints we should impose on beliefs. What I propose is a naturalist account of belief. I argue that if empirical data can show that beliefs are not what epistemologists suppose they are, i.e. if TVB is descriptively false, then we should not presume that it is normatively right. If during the stage of belief-forming all beliefs are non-propositional, then none of the TVB inspired norms is able to account for the normativity of belief. I also aim to show that a naturalist account does not have to remain merely descriptive and can propose a viable normative constraint on beliefs that is more inclusive than the abovementioned manifestations of TVB.

3. Why Primal Beliefs are Non-propositional

In accordance with the content naturalism condition of the desiderata, in this part of the paper I examine the empirical data about belief-forming that is provided by neuropsychology and cognitive neuroscience. Surprisingly enough, the process of believing and the nature of belief have been explicitly examined by very few research teams. Notably however, beliefs have been the central focus of Rüdiger Seitz, Hans-Ferdinant Angel and Raymond Paloutzian`s research for the last two decades. I suggest that empirical data provided by their teams is in conflict with TVB. The scope of this paper does not permit for an extensive analysis of the empirical results, but I will try to provide a naturalistic theory of primal beliefs and the process of belief-forming that is founded on the data provided by three of Seitz and Angel`s studies (2016, 2020, 2023).

3.1. Primal Beliefs

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[35] Horwitz`s criticisms of level-splitting accounts that proclaim in support of the rationality of akrasia in certain cases is all about the second-order beliefs that detective some should have about his epistemic state and his first-order belief (Ibid.: 725-726).

Let`s start by introducing a definition of what I am going to call 'primal beliefs' that is mostly influenced by Sachs & Hirsch, 2008; Seitz & Angel, 2020 and Seitz et al., 2023. I borrow the notion of primal belief from Seitz & Angel, 2020 where primal or proto-beliefs are not explicitly defined. It is only pointed out that they are not conceptual or language-bound and correspond to expressions like "to belief that" and "to belief someone" (Seitz & Angel, 2020: 2,4). If a more precise and philosophically informed definition[36] is to be given, it should sound like this:

> **Primal Beliefs**: Multilayer relational states of a cognitive system S that do not presuppose conscious awareness, nor they include propositional content and are by-products of perceptive and affective processing.

Some clarifications are in order. Starting from the last part of the definition, in a 2016 study, Seitz, Paloutzian and Angel showed that perception and tacit emotional valuation are the basis for any primal belief (Seitz, Paloutzian and Angel, 2016):

> "Accordingly, belief formation can be regarded *without referring to the notions of truth, knowledge and rationality* (emphasis added)" (see Angel and Seitz, 2016).

Later, their results also point out that action or prediction based on primal belief predates awareness (e.g. Seitz, Angel and Paloutzian, 2023: fig.2). Primal beliefs are formed during perceptual exposure to concrete objects and they can be described as "probabilistic perceptual representations" of say the objects shape or heaviness or location (Seitz & Angel, 2020: 2).

If Seitz, Angel and Paloutzian`s assessment of primal beliefs is about right, such beliefs are non-propositional representational states whose acquisition does not require any conscious awareness. In other words, empirical data about belief-forming and primal beliefs brings bad news about TVB. To remind the reader, according to TVB beliefs are a) reflective, b) conscious doxastic attitudes towards a proposition and c) the content of any belief is thus propositional. One thing should be clear by now, not *all* beliefs are like that. It remains to be seen if *any* beliefs *are* like that.

3.2.Belief-forming

Going beyond the restrictions of TVB and formulating an empirically-informed and descriptively-accurate normative account of belief-forming which would be able to

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[36] Empirical data can be interpreted in a variety of ways. When it comes to matters of the mind, precision of analysis and interpretation is just as much (maybe even more) a task for philosophy as it is for hard science.

accommodate primal beliefs is an important philosophical task. First, if (following Seitz and Angel`s distinction) empirical beliefs that are generally found out to be by-products of perceptive and affective processing, i.e. to be primal beliefs, then existing accounts of belief-forming and acquisition are unable to account for empirical beliefs *that*. Even if one is to disagree with my more radical claim that all revised beliefs are grounded on primal beliefs, one is bound to agree that many of our beliefs are empirical beliefs that and that we need an account which can be applied to such beliefs.

It is an open question how to proceed and what kind of definition should we give to belief-forming in this more inclusive sense that parts ways with TVB. I propose one that allows for a naturalistic approach to belief and answers the conditions stated in the desiderata. Moreover, my proposal is motivated by the role of perception and the environmental component, which – if Seitz and Angel are right[37] – are extremely important for accurate belief-forming:

> **Belief Forming:** A unifying concept signifying all bodily acts and environmental relations involved in the forming of primal beliefs.

Thus, I consider belief-forming as an interaction between a cognitive system[38] and its environment. In this interaction, a non-propositional representation of one`s external environment has been acquired. This representation can be more or less accurate. The belief-forming function of the cognitive system has evolved in a pre-linguistic fashion and acquired representations can be stored in memory for retrieval which is compatible with the claim that primal beliefs may be non-occurrent[39] (see Seitz, Angel and Paloutzian, 2023).

Belief-forming is shown to be guided by perceptive and subjective valuations of environmental input (Seitz & Angel, 2020: 2). Non-propositional representations of one`s environment in primal beliefs can be influenced by our tacit evaluation. If Tony the human and Tony the hedgehog see a poisonous snake, the object of perception for both creatures would be the same external object. However, they may form very different non-propositional

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[37] In one of their papers they sustain that "belief formation seems to reflect to the individual subject the meaning of his/her past and future interactions with the environment" and that the function of belief is to aid problem-solving and manoeuvring in one`s environment (Seitz and Angel, 2020: 2, 5). As it is going to become apparent in 4., the environmental component will be crucial for the positive suggestion I have to offer as my normative account would involve a proper function condition, as well as an environmental condition.

[38] Another interesting challenge would be to pinpoint how far down the evolutionary tree can this interaction be stated to go. Would it be that every organism capable of perceptive processing can form beliefs? I admit that this is an interesting question that I have to turn to someday. However, for now I can just say that it seems obvious that primates, crows, dogs, cats, octopuses and a variety of other life forms have primal beliefs.

[39] See 1.2. and compare to my assumptions about belief maintenance.

primal beliefs. Tony the human may have a belief with environmental content as of a snake being present, but also – his representation is influenced by the subjective valuation of what he perceives as DANGEROUS[40]. Tony the hedgehog may have a belief with the exact same environmental content[41], but his representation will not be influenced by the same subjective valuation (i.e. a hedgehog has no evolutionary reasons to fear a poisonous snake).

Depicted like that, belief-forming can go a long way in explaining interesting philosophical phenomena's as cognitive penetration or Tamar Gendler`s aliefs. Unfortunately, it will not be possible to examine these matters here, but I still think it important that an account of primal beliefs can re-open other philosophical debates by suggesting a new solution to the problems they raise.

Finally, and on a more speculative note, primal beliefs can be examined as natural kinds. There are grounds to assume that there are basic units produced in the process of belief-forming. It has been insinuated that their formation can be observed and they are referred to as "babs". (Angel & Seitz, 2016: 5). The emergence of new basic units is accompanied by a change in behaviour. Belief formation, in this sense, is not 'guided' by anything apart from our relation and affective reactions to the external environment. Note that such reactions may be misguided, thus it would be a stretch to claim that primal beliefs are related (in any relevant way) to truth.

Seitz and Angel`s studies also involve a third type of beliefs which they call "conceptual beliefs" or "belief in". They are supposedly much more influenced by our social environment and cultural evolution and are described as abstract beliefs which contents are "narratives" (2020: 2). That may be closer to what Mathew Chrisman and Neil Levy are looking for in their social accounts of believing. Traditionally however, epistemology has always been concerned with beliefs *that*[42]. For the time being, I will continue to focus on this more traditional problematic.

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[40] By this I don`t mean that Tony the human needs to apply the concept DANGEROUS to any environmental content nor that his representation needs to have any conceptual, non-sensory content.
[41] That assumption is highly problematic because of the differences between hedgehog and human perception, but for the sake of the argument, let`s grant that it is possible under certain conditions.
[42] There are various ways to account for the difference between beliefs *that* and beliefs in, but an example may serve best. Martha`s belief *in* God can also be referred to as "identity belief" or "identity-defining belief" and is sometimes examined in virtue of features defining social cognition and group belonging (e.g. Williams 2022). The traditional target of philosophical analysis however remains Martha`s belief *that* God exists. The last one can correspond or fail to correspond to an actual state of affairs and in virtue of that its propositional content may turn out to be true or false.

What remains to be seen is if we are to reject TVB and all norms that adopt it as their premise, what positive normative account of belief forming can be proposed? In the last part of this paper, I will attempt to provide some guidelines of how such an should look. The proposed account is by no means complete and it is facing numerous challenges, but I hope that it lays the foundations for an interesting new direction into normative theories of belief.

4. Functional Environmentalism

If primal beliefs are pre-dating language, often tacit and non-propositional and are products of type-1 information processing, it can be questioned if we can even have epistemic norms about them. At any rate, none of the ones involving the reflective component and the mental agency component of TVB would work for primal beliefs. In this last part of my paper I want to suggest that a normative approach to primal beliefs can be justified.

I would like to go back to proper functionalism for a moment. An evolutionary explanation would allow us to see that belief-forming is a function of a cognitive system that has been acquired to serve a certain goal. Thus, I agree that primal beliefs should *aim* at *something*. On the other hand, if Angel and Seitz (2016) are correct, the aim of belief-forming should be assessed without referring to notions as truth, knowledge and rationality (see 3.1.). Being non-propositional, beliefs could not possibly be aiming at truth. At the end of the day, truth is (depending on your preferred view) either a property of propositions or sentences. Representational content, especially non-conceptual one, is not true or false. It is simply more or less accurate[43].

Could it be that beliefs aim at knowledge? While I agree with a lot of what Mona Simion has to say in her *Resistance to Evidence*, I think that it would be too ambitious to say that the function of a belief-forming system is to produce knowledge and that it is questionable if primal beliefs amount to knowledge in any non-minimal sense[44]. That is not to say that knowledge is not valuable or that epistemology should not raise normative claims involving the concept of knowledge. However, norms of belief and especially primal belief should simply involve a different notion[45].

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[43] I would like to thank Mitch Green for our long discussion on accuracy conditions that has inspired the last part of this paper.

[44] It remains possible that they can if knowledge is understood in some specific sense, e.g. as non-propositional, tacit and not requiring truth, but simply an accurate representation of one`s environment. As I am not sure if any existing normative account would sign under this picture of knowledge, for now I will presume that the belief-forming function has not been acquired to produce knowledge in any familiar sense.

[45] Maybe it is the case that belief revisions aim at knowledge. That remains to be explored.

Nevertheless, I think that Simion is right that every function comes with an associated norm:

> "[T]hese [associated norms] prescribe the right way to proceed in order to reliably enough fulfil the function in question under normal conditions. Because its function contributes to the explanation of its very existence, the trait in question ought to perform in a way that is associated with likely enough function fulfilment." (Simion, 2024: 101)

Studies have shown that the hard-wiring and proper function of a cognitive systems is a crucial factor determining if the system is going to do better or worse in belief-forming. For example, delusion or social malfunction manifested in the holding of inaccurate beliefs can be traced to a breakdown in neural processes that correspond to and are constitutive for belief-forming (see Pechey & Halligan, 2011). Thus, I agree that a belief system`s proper function should play a key role in a normative account.

What do I mean by saying that a cognitive system can do "better or worse"? As already stated, primal beliefs are non-propositional and a probability criterion will not be applicable to this case. Therefore, I propose that we impose accuracy conditions. A cognitive system functions well in forming primal beliefs when acquired non-propositional representations are accurate enough, i.e. when the system can reliably form predictions for effective action. Which actions are effective? Those that promote the adaptiveness of the system to its environment. Belief-forming is about being informed about one`s environment or "being tuned" to it[46]. In other words, the function of primal beliefs is to be tuned to signals from the surrounding environment.

I think that the right normative approach to belief-forming (i.e. to primal belief) would combine the proper function component with an environmental component. That would probably also require a lot to be said about the metaphysics and epistemology of perception. This is a future project that needs a lot of work, but for now I propose that the following norm of belief that I contend is applicable to primal beliefs:

Accuracy Norm: Beliefs are aiming at accurate representation of one`s environment.

Accurate representation requires proper function as necessary condition for fulfilment. However, proper function is not enough. Even if one`s cognitive system functions perfectly,

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[46] Another reason to think so that perceptual systems were selected for delivering information that would allow life-forms to improve interactions with their environment (see Godfrey-Smith (2017) for extensive speculation). As by-products of perceptive and affective processing, primal beliefs were not selected for some higher-order rational aim as assumed by TVB, but for a much simpler goal – surviving and adapting to one`s environment.

in cases where one interacts with a bad epistemic environment[47], this interaction may produce inaccurate beliefs. Therefore, I think that the right way to go is to adopt Functional Environmentalism.

Radical sceptical scenarios and arguments from hallucination would present an especially interesting problem for my approach. Representations of simulated environments are – in an important sense – inaccurate. Being positioned in such an environment would render the system incapable of reliably making predictions for effective action.

However, we do not need radical scepticism to enter the scene in order to examine another interesting and much more trivial challenge. It can be argued that cases of gaslighting are such that the belief-forming system is functioning properly and it is even possible that the primal beliefs are initially accurate, but an environmental factor (in this case – the Gaslighter) brings about a second-order belief that leads to a revision and dropping of the primal belief. Cases like this can show that environmental conditions can distorted even perfectly tuned cognitive systems that tend to reliably produce accurate beliefs. They can also show that – on occasion – second-order beliefs can do more harm than good.

Finally, everything I said by now applies to belief-forming and primal beliefs. But one can object that this is not what we should care about in epistemology. The challenge can continue by assuming that even if I am right about epistemologists not providing norms about primal beliefs, they should not be expected to do so. Epistemic normativity may be said to apply to updated, revised beliefs and to concern rational belief-revisions (where "rational" is not understood in a minimal sense – see footnote 32). If that is the case, there may be a tension between an accurate primal belief and a seemingly rational revision that distorts its initial accuracy as suggested by the Gaslighter example. Also, it remains a valid point that the descriptive account of beliefs provided by TVB is not compatible with mounting empirical data about beliefs and belief-forming. To satisfy a modest content naturalism requirement[48], the transcendentalist should account for these discrepancies and should provide reasons why we should discard said empirical evidence.

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[47] The analysis of primal beliefs would have a lot to do with examining epistemic environments and defining the features of a bad vs good epistemic environment. I am extremely sympathetic to the Environmental epistemology project (Amico-Korby, Harell & Danks, 2024) and to attempts to account for beliefs in epistemically polluted environments (Levy, 2021, 2023). However, I should underline that while all these projects refer mainly to one`s social environment, I use "environment" in a wider sense.

[48] Which I think Nina Emery has successfully showed that most philosophers attempt to satisfy (Emery, 2023: 10-44).

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