

The end of philosophy?

A Wittgensteinian perspective on the challenge of naturalism

Martin Stokhof

ILLC/Department of Philosophy

Faculty of Humanities

University of Amsterdam

m.j.b.stokhof@uva.nl

Abstract

The paper addresses the challenges that naturalism poses for the humanities, and for philosophy in particular. After a general overview, it takes as its starting point recent discussions on Wittgenstein's meta-philosophy and argues that from Wittgenstein's work on certainty, aesthetic experience and religious belief a notion of 'non-discursive content' can be extracted that may provide a new take on the naturalistic challenge.

Keywords

Wittgenstein, naturalism

Motto

'The philosopher is not a citizen of any community of ideas, that is what makes him a philosopher.'

Wittgenstein, *Zettel* 455

1. Introduction¹

Naturalism has always constituted a challenge, for the humanities in general and for philosophy in particular. Today that challenge is more urgent than ever: new methodologies and technological developments make it possible to investigate the traditional objects of the humanities in completely new ways and promise to deliver results that will radically transform these disciplines.

Compared to other disciplines in the humanities philosophy appears to be particularly vulnerable because here the challenge goes right to the heart of the matter: what philosophy is about. Of course, the end of philosophy has been announced many times and we do well to remember Etienne Gilson's prophetic statement: 'Philosophy always buries its undertakers.' However, that philosophy has been able to withstand the challenges of naturalistic thought in the past is no guarantee that it will always be able to do so.

The paper starts with an overview of the challenges that naturalism poses. There are various forms of naturalism, with different assumptions and different ambitions.

¹ A Dutch version of this paper has appeared in the *Algemeen Nederlands Tijdschrift voor Wijsbegeerte*, in the spring of 2017, along with commentaries by Michel ter Hark, Benjamin de Meesel, Michiel Meijer, Hans Radder, Marc Slors, and Guido Vanheeswijck. The current version has greatly benefitted from their comments.

Various disciplines in the humanities differ among themselves as well, and the effects of the naturalistic challenge reflect these differences. For philosophy, the challenge takes on a special form, it poses a dilemma: either philosophy is incorporated in the sciences, or it takes the high road and declares its own end. In both cases, it loses its identity.

This dilemma is generated in part by the fact that, unlike with other disciplines in the humanities, it is not clear a priori whether there is something that philosophy is about. And that question is also central to the debate on Wittgenstein's meta-philosophy: how exactly should his remarks on philosophy and its relation to the sciences be interpreted? After a short discussion of the main elements in this debate an attempt is made to show that Wittgenstein's work² provides a number of suggestions as to how one might escape from the dilemma that naturalism presents. The central concept is that of 'non-discursive content' of statements. Using Wittgenstein's observations on certainty, aesthetic experience and religious belief, we trace the main features of this concept: non-propositional, but not purely expressive, subject-related, but intersubjective and shareable; and world-related, but also normative and action-guiding.

Non-discursive content, we will argue, is outside naturalism's reach, and resists incorporation in the realm of the sciences. It forms the substance of philosophical reflection, and thus escapes the 'end of philosophy' horn of the dilemma without standing in opposition to naturalism per se. And that makes it a starting point of an account of the various ways in which science and philosophy shape and change each other as equal partners.

2. Naturalism and the humanities

2.1. Naturalism: a global sketch

Naturalism, like so many philosophical views, comes in many guises. There is 'liberal' and 'conservative' naturalism, 'scientific', 'limited' and 'broad' naturalism, and so on. And then there are views that don't have 'naturalism' in their names but that in fact often represent variants of it: 'physicalism', 'materialism', 'monism', 'reductionism', and so on.³

The common core of all these views is this: 'No spooky stuff!' From the perspective of a supporter of naturalism anything that does not belong to the natural world is 'spooky': God, fate, cosmic consciousness, and other supernatural entities obviously qualify. But human consciousness, ethical values, moods and emotions, social entities such as communities, legal and political institutions according to some do as well. The motives for removing these terms from the vocabulary of science vary. One type of motive concentrates on explanation, the other on what is being explained.

The least radical variant of the first consideration is that spooky stuff is not needed for the explanation of a particular phenomenon. Perhaps an appeal to it has some explanatory power, but this is superfluous: for the explanation of a natural phenomenon one needs to appeal only to other natural phenomena. An invocation of

² Throughout the paper the focus is on the later work.

³ See De Caro and Macarthur (2004b) for an overview.

simplicity then suffices to exclude references to spooky stuff. A more radical variant shuns such reference on the grounds that it lacks explanatory power altogether.

Besides this epistemological approach there is also an ontological take on the matter: there *is* no spooky stuff. Clearly, that is the more radical variant of naturalism. Whereas the epistemological approach does not deny the existence of spooky stuff as such, the ontological view is clear: God does not exist. And neither does the other stuff.

The contrast between these two views sends a warning: the common core can be motivated in quite different ways and as such thus does not say that much: ‘No spooky stuff’ — ‘Ok, but why not?’ That makes a difference. This becomes even more clear is we look at the various ways in which the common core is further specified. What does one mean with ‘nature’ and ‘natural’?

A often-used specification of ‘natural’ is ‘material’: the natural world is the material world, populated with material entities that are located in space-time, that in principle are accessible via sensory perception, and that are subject to causal laws. This may seem merely a clarification of a common sense meaning of ‘natural’, but that is only apparent: it does come with ontological consequences. Anything belonging to the realm of the social, or anything that is normative, escapes sensory perception and is not subject to causal laws in an obvious sense. Hence the reality of a social institution, or that of a legal or an ethical norm becomes derivative, at best.⁴

At this point a second specification appears: methodological individualism. What can be perceived by the senses and is causally determined are individual entities (of a great variety of kinds, of course). From that perspective, it seems to make sense that social and normative entities can be studied only indirectly, via the individual entities that play a role in them. That is an epistemological consideration that as such does not have direct ontological consequences. But it only takes one further step to make the ontological claim that social and normative entities and their properties and relations really only consist in individual entities, properties and relations.

Naturalism then becomes the view that reality needs to be understood in terms of the material individual entities of which it consists. And when applied to entities, properties and relations that are not of that kind it boils down to reductionism. Once this step has been taken, further reduction seems to make sense: from macroscopic entities to microscopic, to atomic, and, ultimately, to subatomic ones. The driving forces behind that are, on the one hand, the idea that complex entities can be exhaustively described and understood in terms of their component parts, and, on the other hand, the conviction that only what plays an explanatory role has a legitimate claim to existence. Here we see that epistemological and ontological considerations are closely related and in practice often very hard to distinguish.

The most explicit formulations and discussions of various forms of naturalism are due to philosophers. But that should not lead us to conclude that naturalism is just an issue for philosophers. Implicit in the practice of the sciences one can find the very same assumptions at work, as principles that shape the form explanations take and that define the, often implicit, ontologies that these rely on.

⁴ The implies that the current problematic applies not just to the humanities, but also to some of the social sciences. In what follows we leave that out of consideration.

This is, of course, just a very rough sketch of some features of a very complex set of issues and ideas, but for our purposes it will do.

2.2 The challenged humanities

The common core of naturalism, 'No spooky stuff', is something that does not present a problem for the large majority of disciplines in the humanities. God has left the stage of the historical sciences a long time ago, and the Tower of Babel plays no role in linguistics. However, things are decidedly different when it comes to reductionist forms of naturalism: these do present a challenge. How big that challenge is, and what form it takes, depends on a number of factors. As we saw, naturalism comes in different guises, and the humanities do not form a homogeneous group of disciplines, so it should come as no surprise that there is no such thing as *the* challenge of naturalism for *the* humanities. And if we add the diversity of technological possibilities and their impact to the equation what we get is a highly-varied landscape.

Yet there are more homogeneous regions in that landscape: some naturalistic challenges are primarily methodological, others epistemological, and yet other ontological. We briefly discuss them and give a few examples of each.

The first type of challenge is methodological: a discipline can be confronted by another discipline that investigates the same object, asking the same questions, but that does so using a different method. The result is methodological pluralism, and that raises the non-trivial question of comparability of results obtained by different methods. An example. In linguistics, a language is often characterised in terms of 'well-formedness': a language is a set of well-formed expressions, i.e., expressions that are generated by a system of rules from a set of basic expressions. Thus used, well-formedness is an absolute property which the linguist accesses via the intuitions of competent language users, usually linguistically trained ones. This classical methodology is increasingly flanked by experimental and data-oriented methods. But there, well-formedness becomes a different concept as it is no longer an absolute one: in an experimental setting judgments of actual language users may differ, and spontaneously produced utterances are definitely not always well-formed. How the diverse results of these different methodologies are to be combined into a coherent theory is not obvious.

A second, further reaching type of challenge is epistemological: here the same object is investigated in a different epistemic practice: different questions are being asked, and the results of the investigation are held to different standards. In some cases, the result is a stable division of scientific labour, but there is also the possibility of direct competition. The challenge here is to maintain the claim to objectivity of the results that are obtained in the original epistemic practice. The historical sciences provide instances. For example, where in traditional political history a hermeneutical interpretation of specific events, acts, and actors, is the main focus, economic history uses an explanatory model that is more causal-nomological. These two approaches now co-exist, but a discussion about relative priority, and hence about objectivity, is implied by the difference between these two types of explanation.

The third and most profound challenge is ontological: here the object of inquiry is changed in this sense that phenomena are construed in an ontologically different way.

The immediate consequence is ontological pluralism, and the challenge is to justify that pluralism. From a reductionistic naturalistic perspective, however, such a justification cannot be given, which means that reductionism is the only option. An example of this type of challenge is neuro-aesthetics. Where the traditional art disciplines construct their object of investigation broadly and study it in the relation to historical, cultural, socio-economic circumstances and other relevant parameters, neuro-aesthetics concentrates on a specific aspect and studies that with a specific methodology. What aesthetic experience *is*, is thus constructed in a different way, which means that this shift, and hence this challenge, is not just methodological and epistemological, but also ontological.

When the vision of naturalism is connected with the success of the natural sciences and the methods that are used there, the challenge of naturalism first takes the form of a methodological one: the use of quantitative, experimental and computational methods that have proven their worth in these disciplines. But methodological challenges turn into epistemological ones, and in some cases into ontological challenges.

Of course, however things develop in concrete cases depends on a number of factors: the specific nature of the humanities discipline; developments in the relevant disciplines in the natural sciences; technological developments, such as fMRI, that makes 'in vivo' brain research possible, or techniques for recombinant DNA research, or deep learning and other big data technologies.

Not all disciplines in the humanities are therefore in the same position with regard to the natural sciences. But it seems that there is a pattern: when a methodological challenge turns into an epistemological one, and then takes on an ontological form, the relation between disciplines may change as well: there can co-operation between equals, a discipline can become a sub-discipline of another, but a complete take-over is also possible.

Finally, what is interesting to note is that in certain situations the question whether a naturalistic challenge is a justified one may in fact not be all that relevant. In such situations, the fact that it is perceived as such, by other researchers, by policy makers, and by the general public, is what counts: the challenges that the humanities faces are not just an intellectual, but also a social reality.

2.3 Philosophy challenged

Among the humanities philosophy is special in this sense that it is confronted with an additional challenge: Is there something that philosophy is about? In all other humanities disciplines, whatever questions there may be regarding methods and goals, one thing is usually not debated: what they are about. Of course, how that object is best construed is another matter, and one that may be subject of heated debate. But that the historical sciences are concerned with the past, that linguistics deals with language, and so on, is not a matter that is up for discussion. In philosophy, however, things are more complicated.

If one not just subscribes to naturalism as a general idea, but really takes it seriously, incorporation of philosophy into a scientific discipline seems the inevitable outcome. For example, a truly naturalised epistemology would become part of cognitive psychology, which in its turn is increasingly dominated by cognitive neuroscience.

Ontology would become theoretical physics, and therewith connected with experimental physics. Philosophy of language would be part of theoretical linguistics, which in its turn is connected with a range of empirical disciplines (such as experimental cognitive psychology, computational linguistics, 'deep learning' and data science). Naturalism in philosophy, it would appear, does not change the discipline, it brings it to an end.

But what then is the distinct identity of philosophy? Here we can distinguish three types of answers. The first one claims a domain of its own: philosophy is about phenomena that do not belong to the domain of science but that are particular to philosophy. The second answer states that although philosophy, like the sciences, is concerned with the domain of natural phenomena, it distinguishes itself from the sciences by the use of a special method, such as the phenomenological method. And the third response is that philosophy is concerned with critical reflection on and conceptual analysis of the issues that concern a specific discipline, or science as such.

The first answer is that of denial: it stands in clear opposition to the common core of naturalistic thought because a domain that is distinct of that of natural phenomena can, from the perspective of naturalism anyway, only exist of 'spooky stuff'. It is not a very common answer nowadays, rather it is a position that one may end up inadvertently. It is useful to note that the claim to a domain of its own also occurs elsewhere, e.g., in mathematics. According to many, mathematics is not concerned with the natural world, certainly not if the latter is construed along the lines of materialism.⁵ Philosophy could claim to be in a similar position. However, where mathematics is seen as a bona fide undertaking and one that is necessary for the natural sciences, this is not how philosophy is viewed.

The second answer and the third one are both consistent with the core ontological assumption of naturalism, viz., that the world is a natural world. Where they differ is in their epistemological and methodological positions.

The view that philosophy deals with the same phenomena that are the subject of the sciences but distinguishes itself from the latter by the use of a specifically philosophical method has a long ancestry. The main problem here is the epistemological status of the results that are obtained by means of this special method. Given that the method is applied to study the same domain, the results it yields should be comparable with those that the methods of the sciences produce, and that means that the same standards to evaluate those results are in place. But if that is the case, then it is no longer obvious that this form of philosophy is really different from a naturalised philosophy: it becomes part of the scientific enterprise. One could of course deny that the results of the philosophical method are comparable with those that are gained by means of the methods of the sciences, but the only way in which that would make sense, it seems, is if the phenomena with which philosophy occupies itself are different. Which would mean that this second answer in fact falls back on the first one. In other words, this position is inherently unstable.

A similar observation can be made with regard to the third answer, which claims that philosophy is primarily concerned with critical reflection on and analysis of the conceptual apparatus and basic principles that the sciences use in their investigations of

⁵ Cf., Maddy (1997, 2005) for more on this issue.

natural phenomena. But we should note that such reflection and analysis are integral components of the scientific process, next to empirical and theoretical investigations. That makes philosophy part of that process, and that means that the distinction between philosophy and science is strictly speaking merely a matter of division of intellectual labour. Some construct this division hierarchically,⁶ but that is not implied by this view: what we are dealing with is a division of the epistemological tasks that together make up the scientific process. This view on philosophy and its relation to science is dominant in the Anglo-Saxon world, but also has adherents elsewhere. However, it does raise an obvious question: if the actual difference between philosophy and science is the result of this division of labour, what then is the own nature of philosophy? Or, to put it differently, what motivates exactly this way of dividing the tasks? Is it that philosophers are particularly well-equipped to take on the tasks of critical reflection and conceptual analysis? And what would it be that makes them so? The difference, if it exists in the first place, would seem to be a contingent outcome of particular socio-cultural processes, it is difficult to imagine that there is a more principled reason for this. Whatever the facts of the matter may be here, what remains is that philosophers must be able to share their results with the other scientists. And that indicates that any claim to a separate identity for philosophy is not justified. So, this position, too, seems to suffer from an inherent instability.

Time to take stock. The challenge that naturalism poses for philosophy is to come up with an epistemology and an ontology for a philosophy that meets two requirements: first of all, it is not 'naturalised' in a way that makes it *de facto* part of a scientific discipline; and second, it does not claim a domain of its own, or a unique method that implies incomparability of results. Such a philosophy shares the common core of naturalism and does not involve itself with 'spooky stuff'. It accepts that natural phenomena are sufficiently independent from specific epistemologies and methodologies. And it keeps science at a distance and does not commit itself to a form of scientism. It is only when we can construct philosophy in this manner that we can give a proper account of the exchanges that occur between science and philosophy, and of the ways in which both relate to how we relate to the world in everyday life.

It is not at all obvious that such a philosophy exists. And those that commit themselves to one of the three answers that we discussed above, will reject the very idea of such a philosophy, either because it is not radical enough (first answer), or because it is deemed unrealistic (second and third answers). Nevertheless, in what follows we will try to sketch some features of such a philosophy, using elements from Wittgenstein's later work as our starting point. For that we start with some observations on Wittgenstein's conception of philosophy and on his attitude towards naturalism.

3. Wittgenstein: backgrounds

3.1 Wittgenstein's meta-philosophy

⁶ Such a hierarchical construction of the relation between philosophy and science informs the view on conceptual analysis that Peter Hacker endorses in, e.g., Bennett and Hacker (2003), Hacker (2004b).

Wittgenstein's meta-philosophy has been the subject of intensive debate over the last decade or so. In the discussion two main positions can be distinguished (with each, of course, a number of variants). The first holds that for Wittgenstein philosophy has only a therapeutic function: the goal of philosophical analysis is to show that philosophical problems are pseudo-problems, and that is its sole purpose. This position is defended mainly by those who are collectively called 'new Wittgensteinians'.⁷ The second main position is the one defended by more orthodox interpreters who hold that, besides a therapeutic function, there is also another task for philosophy according to Wittgenstein, viz., that of conceptual analysis as a prolegomenon to the empirical investigations that are carried out in science.⁸ Note that these positions differ in terms of their goals, and not so much in the tools that they employ: conceptual analysis can be used with a therapeutic aim in mind. Also note that the goal of conceptual analysis as a prolegomenon to science can be combined with some form of therapeutic analysis as a tool. What differentiates them is what they take philosophy to be about: exposing the nonsensical nature of philosophical problems, or providing conceptual clarification that is of use for empirical investigation.

From a purely exegetical point of view there are arguments in favour and against both positions. That Wittgenstein saw a therapeutic role for philosophy is clear. In the *Tractatus* philosophy is characterised as 'the logical clarification of thoughts' (4.112), and the problems of philosophy are said to spring from a lack of understanding of the logic or out language (preface). The so-called 'methodological sections' of *Philosophical Investigations*, viz., 81–131, are also quite clear in this respect. Philosophy 'leaves everything as it is' (122), philosophical theses do not allow for any discussion (128), and philosophical problems should 'disappear completely' (133).

But conceptual analysis definitely also is one of the means that Wittgenstein uses in many places throughout his work. He investigates relations between concepts, describes the roles that they play and the ways in which we learn to employ them. What is remarkable, and this is something that gives Wittgenstein's conceptual analysis a twist of its own, is that he explores and extends the limits of the actual. What he calls 'natural history' investigates what our concepts are actually like and how they function, but in philosophy we can also 'invent natural history for our purposes' (*PI*, second part, xii).

Both interpretations of Wittgenstein's meta-philosophy account for what definitely is one important aspect of his vision on the nature of philosophy. The problem with both is the exclusivity that they claim for therapy and conceptual analysis, respectively, as the goals of philosophy. Would we take this exclusivity seriously then the therapeutic reading in fact claims that the end of philosophy is the goal of philosophy.⁹

⁷ Well-known representatives of the 'new Wittgenstein' movement are Cora Diamond, James Conant, Rupert Read. Cf., Crary and Read (2001) for an overview. Authors who are not new Wittgensteinians per se, but who defend a similar 'therapy only' reading are, e.g., Eugen Fischer (Fischer 2004) and Gordon Baker (Baker 2004). For a later and more nuanced vision on the debate, cf., Conant (2007).

⁸ Best known representative of this position in the debate with the new Wittgensteinians is Peter Hacker. Cf., Hacker 2004b and the references given in footnote 5.

⁹ That the end of philosophy is not a stable position because, as time goes by, new philosophers will fall prey to new pseudo-problems, is not at odds with the end of philosophy being its goal.

From an exegetical point of view this seems not very plausible as it leaves unexplained why Wittgenstein kept engaged with philosophy to the very end.¹⁰ And from a systematic perspective it is a position that does not engage with the discussion on the status of philosophy and the challenge of naturalism: where philosophy ceases to exist, this question lose their meaning.

The other position, which views philosophical conceptual analysis as a prolegomenon to empirical investigation, does take a stand in that debate. In fact it is a specific instance of the third answer that we discussed earlier. Philosophy does not have a domain of its own and also does not employ a method that is specifically philosophical, since conceptual analysis and critical reflection are part of the scientific process as such. The question what is the own nature of philosophy is not in fact answered here, that own nature is simply postulated.

What is interesting to note is that both positions seem to share an (implicitly) scientific view: it is science, and science only, that delivers reliable knowledge. That is connected with a shared assumption regarding the nature of the content of statements and judgments: all content of language and thought is propositional, and only propositional content can be asserted, tested for truth, play a role in reasoning and proof, and so on. In other words, all content is discursive.¹¹ It is precisely this assumption that leaves no room for other stances regarding the naturalistic challenge to philosophy than the three we have discussed above. And we have seen that each of them raises some serious issues.

The identification of content with discursive content is also problematic for other reasons. For example, if we investigate the kinds of meanings that expressions in natural languages have, we note that the focus on discursive content, that is also characteristic for many philosophical and linguistic approaches to meaning, fails to do justice to the diversity of ways in which expressions have meaning.

It is fairly common, still, to analyse the meaning of expressions in broadly referential terms, and to relegate anything that does not fit to the realm of ‘mere expression’.¹² But if we look closer we notice things that are not captured by such an approach. Discursive and non-discursive are not two disjoint domains. There are hybrid expressions, with a meaning that has elements from both. And there are ‘travelling’ expressions, that depending on context take their meaning now from this, and then from that domain. This means that ‘mere expression’ is not a proper characterisation of the non-discursive domain.

Some examples of hybrid and travelling expressions are the following: so-called ‘predicates of personal taste’, which include aesthetic adjectives;¹³ exclamations, invectives, ...; prayer and other forms of ritual language; so-called ‘Moore-propositions’;

¹⁰ For a critique along these lines of the exclusively therapeutic interpretation of the *Tractatus*, cf., Proops (2001); an analysis that focusses on the late work can be found in Bax (2011, chapter 2); cf., also Kuusela (2008) for a reading that tries to find a balance between the new Wittgensteinian and the orthodox approaches.

¹¹ For more on this aspect of the debate around the new Wittgenstein, cf., Stokhof (2011).

¹² ‘Referential’ is used here in a broad way so as to encompass both internalistic and externalistic perspectives.

¹³ Cf., Crespo (2015) for extensive analysis, partly from a Wittgensteinian perspective.

... As will be illustrated later on, these expressions all defy a strict characterisation in terms of either discursive or expressive. That is too static a view. Many meanings, and hence many concepts, are hybrid, flexible, dynamic: they depend on context, are open to change, and they may involve elements from both domains. That has consequences for a whole range of concepts and the use that we make of them. And that serves as an indication that the relationship between science, philosophy, and the everyday, should be constructed in terms of interdependence, flexibility, and change, not in terms of static oppositions.

3.2 Wittgenstein and naturalism

Although Wittgenstein certainly did not shy away from using a vocabulary that seems to include reference to spooky stuff, it is not correct to regard him as a non-naturalist. For example, as we will see later on, for Wittgenstein the meaning of religious terms should not be constructed referentially, and has nothing to do with reference to non-natural entities.

What is characteristic for Wittgenstein's variant of naturalism is his non-reductionism. This is explicit in the following passages from *Zettel* (608–609):

No supposition seems to me more natural than that there is no process in the brain correlated with associating or with thinking; so that it would be impossible to read off thought-processes from brain-processes. I mean this: if I talk or write there is, I assume, a system of impulses going out from my brain and correlated with my spoken or written thoughts. But why should the system continue further in the direction of the centre? Why should this order not proceed, so to speak, out of chaos?

[...]

It is thus perfectly possible that certain psychological phenomena cannot be investigated physiologically, because physiologically nothing corresponds to them.

This can be read as a clear rejection of type-type identity between mental and physiological processes: there need not correspond a single type of physiological process to a particular type of mental process. And without such an identity a meaningful reduction of the mental to the physiological is not possible. Of course, that does not entail a denial of the fact that the physiological carries the mental, but it does mean that physiological processes do not have a meaning-inducing bearing on the mental.¹⁴

Wittgenstein's analyses of the mental are not reductionistic, on the contrary, he emphasises the situated-ness in social practices that is characteristic for the content of mental concepts. In doing so, Wittgenstein also rejects methodological individualism, that holds that social phenomena can only be explained in terms of individuals and their

¹⁴ According to some Wittgenstein can be read here as a predecessor of basic tenets of connectionism; cf., Stern (1991); for discussion, cf., Proudfoot (1997).

properties and relations, and that is a main element of reductionism. This externalistic and social point of view is a defining characteristic of Wittgenstein's views on a wide range of issues.¹⁵

This suggests that for Wittgenstein philosophy is not just therapy, but also not only conceptual analysis. Philosophy investigates phenomena in a particular way, and does so to create a particular kind of results. Further support for that comes from passages such as the following one, from *Philosophical Investigations* (144):

I wanted to put that picture before him, and his *acceptance* of the picture consists in his now being inclined to regard a given case differently: that is, to compare it with *this* rather than *that* set of pictures. I have changed his *way of looking at things*.

Philosophy does something. What it does is not formulating a theory, as a competitor of the sciences. It is also not providing the correct conceptual framework that the sciences then use to produce knowledge. What philosophy does, liberates, – and that is what the therapeutic interpretation gets right–, and informs. It provides insight in ways for us to engage with the world and ourselves. Not just the actual way in which we do that, – which is connected with science, as the orthodox interpretation accurately observes–, but in all the many possible ways that nature, in a broad sense, allows. Tracing that is what philosophy is about.

4. Non-discursive content in Wittgenstein

4.1. Features of non-discursive content

Wittgenstein's relation to naturalism also plays a role in his analysis of what we call 'non-discursive content'. The following three features may serve to give a first positive characterisation of this concept.

First of all, non-discursive content is *content*, i.e., we are dealing with utterances that are more than just pure expressions of an emotion or a sensation (like a cry of pain, or the giggle that is provoked by being tickled). These utterances contain expressions that may also have discursive content, or that mix discursive and non-discursive content.

Second, non-discursive content is subject-related, i.e., its specification requires reference to a subject. Nevertheless, it is *shareable*, i.e., it is content to which other subjects have access as well.¹⁶

Third, non-discursive content is related to external reality, but in a specific way. It is *action-guiding*, i.e., it has a normative dimension that is relevant for the way we act in the world, for how we react to what it singles out in the world.

¹⁵ Cf., e.g., Williams (2000, 2010) for an extensive overview of the role of the social in Wittgenstein's work. Some examples that indicate that methodological individualism is problematic in other disciplines, such as economics and biology, as well, cf., Stokhof and Van Lambalgen (2016). For an analysis of Wittgenstein's analysis of rule-following from this perspective, cf., McGinn (2010).

¹⁶ So the subject-relatedness is not to the idiosyncrasies of a particular subject, but to individual manifestations in subjects of a shared form of life.

Using these three characteristics as our starting point we will explore the concept of non-discursive content further by looking in more detail at three examples that Wittgenstein has treated in his later work: certainty; aesthetic experience; and religious belief.¹⁷ We sketch the main features of Wittgenstein's analyses of each of these three phenomena and then investigate how his views relate to the three characteristic features we just identified.¹⁸

4.2 Certainty

Wittgenstein's analysis of knowledge and certainty in *Über Gewißheit/On Certainty*¹⁹ starts with a critical account of Moore's attempt to refute radical scepticism, in which such statements as 'I know that this is a hand' play a special role. It is statements such as these, Moore argues, that can be used to show that, contrary to the claim of the radical sceptic, we do in fact know things about the external world, and that hence there is such a thing as an external world.

Whether Wittgenstein gives a fair representation of Moore's argumentative strategy is not what concerns us here.²⁰ What is interesting is the alternative analysis he gives of these statements. These are not, Wittgenstein argues, bona fide claims to knowledge, but rather they are concerned with what is constitutive for our ability to play the knowledge language game in the first place. These are the conditions of possibility of our epistemic practices, and as such they are not part of those practices.²¹

Before we can talk about knowledge, –and along with that, about doubt, evidence, justification and falsification, proof and refutation, truth and falsity–, we first need to accept certain contents. These Wittgenstein calls 'certainties'. Their common characteristic is that they do not admit doubt, and can not be proven either. Certainties do however come from various sources, and hence form a varied, heterogeneous collection, as the following examples, all taken from Wittgenstein's text, illustrate.

Certainties include fundamental features of human cognition, such as object-permanence and proprioception; fundamental aspects of the natural environment, such as gravity, the movement of celestial bodies, and the changing of the seasons; basic conceptual structures and contents, such as the existence of the earth and the direction

¹⁷ This is not to say that these are the only examples. As Michel ter Hark pointed out to me, Wittgenstein's work in the philosophy of psychology provides another rich source of relevant material, e.g., his analyses of aspect-perception and of 'imponderable evidence'. Taking that material on board, including an exploration of connections with the material is discussed here (such as those between imponderable evidence and aesthetic experience), has to be left for another occasion.

¹⁸ There is a wealth of literature on each of these three phenomena, that we can not do justice to in the context of this paper. However, since the analyses that we present do not claim to be new, that may not be necessary. For a general view that is akin in spirit to the one presented in what follows, cf., Cioffi (1998).

¹⁹ Wittgenstein (1969), in what follows 'OC'.

²⁰ Arguably, he does not, but then again, giving fair representations of other people's views was neither one of Wittgenstein's concerns, nor one of his strongest points.

²¹ At this point we follow the broad outlines of the so-called 'transcendental interpretation'; cf., the various contributions to part II of Moyal-Sharrock and Brenner (eds) (2007). Cf., also Moyal-Sharrock (2015).

of time; elementary contents we acquire through socialisation and education, such as the shape of the earth, the boiling temperature of water, and basic arithmetic; and individual properties, such as our name, where we live, whether we had breakfast, and that such-and-such is our good friend.

What these examples show is that certainties do not derive from one specific domain, either physical or mental, but rather spring from a wide range of sources. They also illustrate that what certainties we have may change over time, on a personal as well as a cultural time-scale. Whether something counts as a certainty, it appears, is not determined by content, but by *function*. Together certainties form a conceptual framework, –Wittgenstein also uses the term ‘world picture’–, within which our epistemic practices exist and run their course.

In Wittgenstein’s analysis of knowledge and certainty relevant factors occur at three distinct levels:

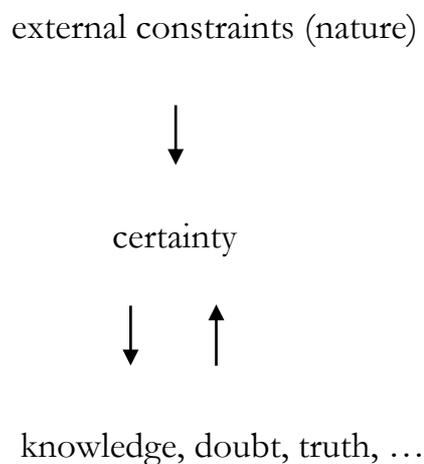


Figure 1. Three levels

There is nature, which comprises both our natural environment as well as our own biological and basic psychological make-up. There is certainties, i.e., the contents that function as certainties and that form our conceptual framework. And then there are the epistemic practices constituted by certainties, within which we talk about knowledge, ways of acquiring it, procedures for doubt and justification, conditions of truth, entailment, and so on.

Nature limits what may function as a certainty: some conceptual framework are simply not adequate, whereas others prove their worth (OC 474). But nature does not force a unique framework on us, as is shown by the fact that our world picture changes over time, and by the fact that different communities with different frameworks can co-exist.

Between the levels of certainty and epistemic practices exchanges occur, in both directions. In the process of socialisation and education we acquire a world picture, we learn to accept certain things as certain, without bothering ourselves with proof and justification, simply because we are not yet sufficiently acquainted with the relevant epistemic practices. Once we acquire the necessary epistemic skills possibilities of

interaction open up. What functions as a certainty may, for various reasons, become subject of discussion, and thereby it might be drift from the level of certainty into that of knowledge and doubt, and become subject to the procedures of an epistemic practice. And reversely, what once was an exciting new discovery may become so established that it fades into the background and becomes part of our world picture, a certainty that is no longer tied and tested, but simply accepted.

The functional distinction between certainty and what belongs to the domain of knowledge is thus subject to change. What is important to realise is that such a process of change takes time and does not necessarily proceed at the same pace among the members of a community. Not everybody starts to doubt the same things at the same time, and neither does everybody accept something as a certainty at the same time. That means that there are always things that are 'in transition', temporally and with regard to the community as a whole. There is, so to speak, a 'purgatory' of statements that some doubt, that for other function as a certainty, and that yet others regard as proven (or refuted).

This implies that the contents of such statements, which we can indeed call 'travelling expressions', neither belong unequivocally to the discursive domain, nor to that of the non-discursive. From the point of view of empirical investigation travelling expressions are problematic because the rules and procedures of the relevant epistemic practices do not apply to them without qualification. For a philosophy that aims only to be therapy they are problematic as well, since travelling expressions can not be qualified as either nonsensical or meaningful. Likewise, orthodox conceptual analysis assumes a clear and stable distinction between conceptual questions and empirical ones that these travelling expressions defy. However, they do exist.

4.3 Aesthetic experience

A second domain of non-discursive content that Wittgenstein analysed is that of aesthetic experience. Our main source here is the compilation of notes taken by his students during three lectures on the topic that Wittgenstein gave in the summer of 1938, which have been published under the title *Lectures on Aesthetics*.²²

The terms 'aesthetic' is used by Wittgenstein in a rather traditional sense: his main concern is not art, but a specific type of normative judgement. Aesthetic experience is not defined by engagement with a special type of object ('objects of art') or special properties of objects ('beauty'), but is related to judging objects and events in a particular way. It is an appreciation of them according to rules that are embedded in a culture/tradition/community and that characterise 'ways of living'.

This is reflected in the fact that the examples that Wittgenstein discusses come from the sphere of the artisanal rather than from that of the artistic. His heroes are the architect who design a doorway; a tailor who cuts the fabric for the lapels of a jacket; a piano player who practises playing a sonata.

What unites these diverse practices is that they are all concerned with activities that are based on rules that define ways of appreciating what someone does or makes, or

²² Published in Wittgenstein (1978), in what follows 'LA'.

of the way in which someone does something or makes something. Analogously, being able to act guided by those rules constitutes an expertise, an acquired body of practical knowledge, which is expressed primarily in application, in action.

This defines the nature of aesthetic experience and its expression in judgments. An aesthetic judgment has nothing to do with the expression of a feeling, a sensation, or an emotion, as Wittgenstein illustrates in the following passage (LA, i.17):

Suppose there is a person who admires and enjoys what is admitted to be good [in music, MS] but can't remember the simplest tunes, doesn't know when the bass comes in, etc. We say he hasn't seen what's in it. We use the phrase 'A man is musical' not so as to call a man musical if he says "Ah!" when a piece of music is played, any more than we call a dog musical if it wags its tail when music is played.

Being musical is being able to do something, not having certain emotions in certain circumstances. And being musical is something one is only partly 'by nature'. Education and training, within an existing culture in which music and musical practices is connected with a range of other practices, are essential as well.

The nature of aesthetic appreciation is further illustrated by a subsidiary concept that Wittgenstein introduces in his analysis of aesthetic experience and aesthetic judgment: 'directed discontent'. This term is used to indicate a particular internal relation between experience and object/event (LA, ii.19, LA, iii.3):

There is a 'Why?' to aesthetic discomfort not a 'cause' to it. The expression of discomfort takes the form of a criticism and not 'My mind is not at rest' or something. It might take the form of looking at a picture and saying: "What's wrong with it?"

Suppose someone said: "The tempo of that song will be all right when I can hear distinctly such and such." I have pointed to a phenomenon which, if it is the case, will make me satisfied.

Directed discontent is not merely an emotional reaction, it is directed, it is focussed on improvement, and thus action-guiding. As such it is normative and rule-based, and can be recognised and shared by other experts. They need not necessarily have the same directed discontent, but they understand why an expert reacts the way he does and why he proposes the improvements he does.²³

Aesthetic judgments such as directed discontent reflect the meaning that an object or event has. This meaning is not objective in the sense that it can be located in or reduced to particular physical features that it has or to causal processes in which the object or event is involved. The meaning exists in a practice and thanks to a practice, and is action-guiding within that practice. And it is because practices are socially

²³ Cf., Rietveld (2008) for further discussion from a cognitive science perspective.

constituted that aesthetic judgments, though not objective, are intersubjective: aesthetic experience can be shared, and aesthetic judgments have a communicative function.

The dual roots of aesthetic experience is crucial here. Its intersubjectivity depends on ‘nature’, –our shared human nature–, and on ‘nurture’, –the existence of, and our participation in, shared practices.

That also determines the relation between a scientific approach of phenomena and an aesthetic one. Both are possible, of course, and both are necessary, but they concern themselves with distinct aspects of the phenomena, and they do so in their own ways. Science focusses on objective, causal and nomological generalisations. Aesthetics in Wittgenstein’s sense is concerned with the meaning phenomena have for us, who are creatures that are determined both naturally as well as socially and culturally.

Thus Wittgenstein suggests a distinction that is also of prime importance for a different take on philosophy and its relation to empirical science. The latter investigates what something is, as objectively as possible; the former is about what something is-for-us., i.e., about its meaning.

This distinction will reappear in the third example of non-discursive content: religious belief.

4.4 Religious belief

Wittgenstein’s relation with religion was complex. ‘I am not a religious man, but I cannot help seeing every problem from a religious point of view,’ he once told his student Drury.²⁴ It seems that Wittgenstein did not reject religion, certainly not in way in which contemporary philosophical atheists do. But he did have quite specific ideas about what a true religious belief is, and about what a true religious attitude entails.

As in the case of aesthetics, we have to make do mainly with ‘second hand’ material. What we know of Wittgenstein’s ideas comes from reports of conversations with students and friends; there are remarks that are spread throughout a great many manuscripts that have been collected in *Culture and Value*;²⁵ and there are notes made by his students of three lectures that Wittgenstein gave on the subject of religious belief in 1938 that were published as *Lectures on Religious Belief*.²⁶

As in the case of aesthetic experience the relation between scientific explanation and the meaning that phenomena have for us in our daily lives is a central theme in Wittgenstein’s considerations about religious phenomena. As he states in LRB i:

Not only is it not reasonable, but it doesn’t pretend to be.
What seems to me ludicrous about O’Hara is his making it appear to be reasonable.

²⁴ Cf., Malcolm 1994.

²⁵ Wittgenstein 1998.

²⁶ Published in Wittgenstein (1978), in what follows ‘LRB’. There is quite an extensive literature on Wittgenstein, religion and theology. Cf., Arrington and Addis (2001) for an overview of the main interpretations.

Why shouldn't one form of life culminate in an utterance of belief in a Last Judgement? But I couldn't either say "Yes" or "No" to the statement that there will be such a thing. Nor "Perhaps," nor "I'm not sure."

It is a statement which may not allow of any such answer.

Father O'Hara was someone who tried to make Christian doctrine acceptable by pointing out rational and historically accurate elements therein. For Wittgenstein, such an approach is completely off the mark. True religious belief is not a matter of seeking and weighing evidence, as if it were a scientific hypothesis. Religious belief is something people can come to embrace, but it is far removed from our epistemic practices with their procedures for testing and investigating. Religious belief is outside the realm of the discursive, outside the domain of science.

For Wittgenstein, this is a characteristic feature of true religious belief, all other forms of belief that pretend to be religious but that are treated as if they were in the realm of the discursive, he dismisses as superstition. Much of what people believe who would call themselves religious is thus implicitly disqualified.

In Wittgenstein's vision a true religious belief is one that has nothing to do with a belief in the existence of a certain (type of) entity, or in the occurrence (past or future) of certain events. The central characteristic of a true religious belief is the attitude that it results in. That attitude is one that pervades everything in one's life, so it is not related to any specific question, or fact, or phenomenon. As such it is quite unlike what goes into taking a stance in a factual, scientific matter. There evidence, doubt, proof and refutation play a role, but all that is irrelevant in the case of true religious belief.

In the second lecture Wittgenstein talks about how he would react to someone who professes a belief in the miracle of a bleeding statue (of a saint, or the Virgin, or Christ). Under normal circumstances, he says, he would consider this a case of superstition, and he would confront the believer with empirical investigation, alternative scientific explanation, and the exposure of deceit: Wittgenstein as 'myth buster'.

What is interesting, however, is that Wittgenstein also indicates that in certain circumstances such an approach would be completely inappropriate (LRB ii):

I could imagine that someone showed an extremely passionate belief in such a phenomenon, and I couldn't approach his belief at all by saying: "This could just as well have been brought about by so and so" because he could think this blasphemy on my side. Or he might say: "It is possible that these priests cheat, but nevertheless in a different sense a miraculous phenomenon takes place there."

I have a statue which bleeds on such and such a day in the year. I have red ink, etc. "You are a cheat, but nevertheless the Deity uses you. Red ink in a sense, but not red ink in a sense."

'Red ink in a sense, but not red ink in a sense.' In other words: yes, there is deceit and manipulation, and there is a perfectly reasonable explanation for the phenomenon. But the meaning that it has belongs to a different realm altogether: that is not a matter of evidence or explanation, but of the role that it plays in our life.

What we see here is that, like in the case of aesthetics, in his analysis of religious belief too, Wittgenstein distinguishes between two ways in which we can approach a phenomenon. On the one hand a religious belief pertains to things that we can investigate empirically, on the other it has meaning that is unrelated to that: the ‘what-it-is’ and the ‘what-it-is-for-us’ are two dimension of the phenomenon that come to the fore in two different ways of dealing with it.

But if evidence, – an apparition, the literal meaning of a text, or the declarations made by an anointed person–, does not play a role and only leads to superstition, then how does a true religious belief come about?

For Wittgenstein, it are first and foremost events in our personal lives that determine this. As he states in a remark in *Culture and Value* that dates from 1950:

Life can educate you to “believing in God”. And experiences too are what do this but not visions, or other sense experiences, which show us the “existence of this being”, but e.g. sufferings of various sorts. And they do not show us God as a sense experience does an object, nor do they give rise to conjectures about him. Experiences, thoughts –, life can force this concept on us.

So perhaps it is similar to the concept ‘object’.

The kind of experience that can lead to the adoption of a religious attitude is not comparable to experience of something empirical. And that is another indication that true religious belief is not subject to the principles and procedures of our epistemic practices that are connected with our experience of empirical reality.

In the same way that the term ‘object’ does not refer but is indicative of a particular way of classification, – it is a formal concept, not a material one –, the term ‘God’ does not refer to an entity but serves as an indication of a particular form of evaluation, of an attitude. And that attitude is not connected with specific practices, or specific dogmas (LRB i):

But he has what you might call an unshakeable belief. It will show, not by reasoning or by appeal to ordinary grounds for belief, but rather by regulating for all in his life.

5 The motley of non-discursive content

A lot more can and should be said about these topics, but this brief sketch hopefully has made clear that in the domain of certainty, that of aesthetic experience, and that of religious belief, there is content that has the three features that we have used to characterise non-discursive content: not merely expressive, but also not completely referential-descriptive; subject-related but intersubjective and shareable; connected to the world, but also action-guiding, i.e., normative.

Of course, there are also lots of differences between these three domains. Non-discursive content is not always the same, it is rather a motley of phenomena. For example, homogeneity differs per domain: compare the diversity of sources of certainty

with the much more homogeneous structure of aesthetic practice. Also, the amount of variation along the socio-cultural dimension differs: that distinguishes, for example, religious belief from aesthetic experience. And the amount of subject-relatedness is yet another variable: here certainty and religious belief differ substantially.

However, behind the commonalities and the differences we can identify two factors that are essential for the establishment of all non-discursive content. It is related to, and constrained by, the world; and it is through-and-through human, being the result of socialisation and education in shared practices. It is in the space created by these two forces that we can locate various kinds of non-discursive content.

This also illustrates that the distinction between the discursive and the non-discursive is not an ontological one, but springs from a difference in what we want of a phenomenon, of the stance that we take towards it. Many phenomena can be approached in different ways, and the results are not necessarily in competition. To think that they must be, is the basic mistake of scientism, and of its mirror image.

So it is important not to view the discursive and the non-discursive as two disjoint domains, as two ontological spheres that are strictly separated and do not influence each other in any way. The characteristic features of non-discursive content in fact show that such a separation is not tenable. And that conclusion is reinforced if we look at language.

The non-discursive is not the ineffable, it does not exclude the use of language. On the contrary, language has an important role to play here. Again, that is not always the same: here too, what we can see is a motley of cases, not one homogeneous domain. Certainties, for example, go largely unexpressed, and language comes in mainly when they become 'transitional'. Aesthetic experiences, on the other hand, need language in training and application, and in some cases, they are about language as such. And religious beliefs are often connected with narratives and with ritual use of a particular set of expressions. So, linguistic expression occurs and what is important to note is that the same expressions can be used for both discursive and non-discursive content.²⁷

Not all expressions have this possibility of course: in the context of a scientific investigation we sometimes define new expressions with the aim of using them in a 100% discursive manner. Mathematics is perhaps the best example, but the practice of setting up a vocabulary of 'theoretical terms' occurs in many other disciplines as well. For us it is the expressions that are not in this way strictly tied to the discursive domain that are the most interesting. Many everyday expressions are like that, and they can be used in a variety of both discursive as well as non-discursive contexts. An illustrative example is formed by our everyday psychological vocabulary, which we use to talk about ourselves, in terms of which we characterise and explain ourselves and our actions, but that we also use in contexts in which we investigate human psychology in a scientific way.²⁸

²⁷ For detailed investigation of a certain class of aesthetic expressions, cf., Crespo and Veltman (to appear); for expressions in a religious context, cf., Kusch (2011).

²⁸ For example, expressions that are used to indicate emotions and moods: their content is not exhausted by the objective physiological and behavioural characteristic that we can connect with them. Another example is given by Wittgenstein in LRB, iii, when he remarks about the statement 'We might see one another after death' that he understands it despite the fact that he himself does not believe in an afterlife.

It is important to note that this is not a matter of ambiguity, i.e., of expressions having multiple, but strictly distinct, meanings. The border between the discursive and the non-discursive is an open one, and this is crucial for it is what makes travelling expressions possible. This also means that there can be influences between the discursive and the non-discursive that can go in either direction. Results of scientific investigation can inform the everyday meaning of expressions that we also use in a non-discursive setting. And conversely, the non-discursive meaning that expressions have may play a role in the way in which we use them in a discursive setting. In some cases, 'what something is' is in part determined by 'what something is-for-us', and, conversely, what 'something-is-for-us' may change due to what we find out about 'what something is'.

At this point the question may arise whether this view of philosophy as being concerned also with non-discursive content is not in fact an instance of the first answer to the question about the nature of philosophy, viz., that the identity of philosophy resides in its having a domain of its own. That this is not the case is in fact implied by the observations just made. The key point to note is that whether content is discursive or non-discursive is not a matter of the phenomena as such, but rather reflects the attitude that we adopt towards them. It is a matter of what we want from the phenomena, not what they are in themselves. 'Discursive' and 'non-discursive' are indication of two distinct ways in which we relate to one and the same world. The results of both are accessible to both, and what attitude we adopt is up to us. What, when and why is determined by practical concerns that relate to the results that adopting a given attitude delivers.

6 Conclusion

There is more that can and should be said, but at this point some tentative conclusions can be drawn. That there is indeed such a thing as non-discursive content with the characteristic features that we have introduced; that non-discursive content is a widespread phenomenon, that is not linked to one domain, but that is heterogeneous; and, finally, that we can survey non-discursive content via the analysis of hybrid and travelling expressions; and, as the work of Wittgenstein illustrates, that non-discursive content creates the possibility of a substantial philosophy that is neither a prolegomenon to science nor its competitor.

Philosophy can be more than just therapy. But that does not put philosophy on the same plane as science. It is not a kind of science without empirical import, but is also not an activity that has as its sole purpose to clear the conceptual way for science. The dilemma that philosophy is either therapy-only and thus projects its own demise, or conceptual analysis as prolegomenon to science and as such not really distinct from it, can be avoided. And that makes this philosophy also an alternative for a scientific view.

This is not to say that philosophers need to restrict themselves to analysis of non-discursive content. Philosophy and science are related in a variety of ways. 'Naturalised' forms of philosophy often lead to fruitful interactions in which the distinction between disciplines becomes increasingly vague. Philosophy that focusses on non-discursive content relates to science in a different way, and also interacts with other fields, such as

the arts and politics. In all cases, disciplinary differences are of less importance than a shared concern in particular questions, and their possible answers.

A final remark concerns the challenge that philosophy shares with other humanities: that of objectivity. The challenges that the humanities face are not just an intellectual but also a social reality. Objectivity plays a key role because that is an important condition for public, and hence also for political support for science in general. And as objectivity becomes more and more associated with practical applicability, it is of increasing importance to give a proper answer to the question as to the objectivity of the humanities.

One of the tasks of the humanities is to explain that objectivity as such is not an absolute feature, one that is somehow rooted in reality. Note that this is a different claim than the one that maintains that also in the natural sciences all kinds of psychological, social and cultural assumptions play a role in the construction of objects of investigation, in the application of methods, or in the interpretation of results. That is all true, – at least to some extent–, but it is not what is at stake here.

What is important is that apart from the objectivity that exists ‘without us’,²⁹ there is also an objectivity that we human constitute together. There is objectivity that appears through discovery, via observation and experiment, that forms the basis for causal, nomological explanation, and that is connected with control and application. But there is also objectivity that can be accessed through recognition of shared practices, that is the basis of properly justified interpretation, and that is connected with the meaning things have for us.

This second objectivity is the one that sprouts from our recognition in ourselves and in others of a shared nature and a shared culture. It is the objectivity that determines how we act, from the natural ways in which we react to our environment to the complex social and cultural institutions that we base upon that. It is the objectivity that enables us to learn what meanings objects, customs, and actions have for people in a different age, or in different social, cultural, and economic circumstances. And it is also the objectivity that is connected with the meaning we give to ourselves, to our lives.

Bibliography

- Ammereller, E. and E. Fischer (red.) (2004) *Wittgenstein at Work: Method in the Philosophical Investigations*. London: Routledge
- Arrington, R.L. and M. Addis (red.) *Wittgenstein and Philosophy of Religion*. London: Routledge, London
- Baker, G.P. (2004) *Wittgenstein's Method. Neglected Aspects*. Oxford: Blackwell
- Bax, C. (2011) *Subjectivity after Wittgenstein. The Post-Cartesian Subject and the 'Death of Man'*. London: Continuum
- Bennett, M. and P. M. Hacker (2003) *Philosophical Foundations of Neuroscience*. Oxford: Blackwell

²⁹ The scare quotes acknowledge the fact that, of course, science as such is a human undertaking, a fact that is reflected in various ways in how science is done and in what it does. As said, that is true, but a different matter.

- De Caro, M and D. Macarthur (red.) (2004a) *Naturalism in Question*. Cambridge, Mass.: Harvard University Press
- De Caro, M. and D. MacArthur (2004b) Introduction: The Nature of Naturalism, in De Caro and Macarthur (red.), pp. 1–17
- De Caro, M and D. Macarthur (red.) (2010) *Naturalism and Normativity*. New York: Columbia University Press
- Cioffi, F. (1998) *Wittgenstein on Freud and Frazer*. Cambridge: Cambridge University Press
- Conant, J. (2007) Mild-Mono Wittgensteinianism, in A. Crary, (red), *Wittgenstein and the Moral Life: Essays in Honor of Cora Diamond*. Cambridge, Mass.: MIT Press
- Crary A. and R. Read (red.) (2001) *The New Wittgenstein*. London: Routledge
- Crespo, M.I. (2015) *Affecting Meaning: Subjectivity and Evaluativity in Gradable Adjectives*. PhD thesis, ILLC/Faculty of Humanities, University of Amsterdam
- Crespo, M.I and F. Veltman (to appear) Tasting and Testing
- Dupré, J. (2004) The Miracle of Monism, in De Caro and Macarthur (red.), pp 36–58
- Fischer, E. (2004) A Cognitive Self-Therapy. *Philosophical Investigations* Sections 138-97, in Ammereller and Fischer (red.), pp 86–126
- Hacker, P.M. (2004a) Turning the Examination Around: The Recantation of a Metaphysician, in Ammereller and E. Fischer (red.), pp. 3–21
- Hacker, P.M. (2004b) The Conceptual Framework for the Investigation of Emotions. *International Review of Psychiatry*, 16(3), pp. 199–208
- Kusch, M. (2011) Disagreement and Picture in Wittgenstein’s Lectures on Religious Belief, in R. Heinrich et al. (red.), *Image and Imaging in Philosophy, Science and the Arts*, 59-72 Frankfurt a/M: Ontos
- Kuusela, O. (2008) *The Struggle Against Dogmatism: Wittgenstein and the Concept of Philosophy*. Cambridge, Mass.: Harvard University Press
- Macarthur, D.. (2010) Taking the Human Sciences Seriously, in De Caro and Macarthur (red.), pp. 123-141
- Maddy, P. (1997) *Naturalism in Mathematics*. Oxford: Oxford University Press
- Maddy, P. (2005) Three forms of naturalism, in S. Shapiro (red) *Oxford Handbook of Philosophy of Mathematics and Logic*. Oxford: Oxford University Press, pp. 437-459
- Malcolm, N. (1994) *Wittgenstein: A Religious Point of View?* Ithaca, NY: Cornell University Press
- McGinn, M. (2010), Wittgenstein and Naturalism, in De Caro and Macarthur (red.), pp. 322-351
- Moyal-Sharrock, D. and W. H. Brenner (red.) (2007) *Readings of Wittgenstein’s On Certainty*. New York: Palgrave
- Moyal-Sharrock, D. (2015) Wittgenstein on Forms of Life, Patterns of Life, and Ways of Living. *Nordic Wittgenstein Review* 4, pp. 21–42
- Proops, I. (2001) The New Wittgenstein: A Critique. *European Journal of Philosophy* 9(3), pp. 375-404
- Proudfoot, D. (1997) On Wittgenstein on Cognitive Science. *Philosophy* 72
- Rietveld, E. (2008) Situated Normativity: The Normative Aspect of Embodied Cognition in Action. *Mind* 117, pp. 973-1001
- Stern, D.G. (1991) Models of Memory: Wittgenstein and Cognitive Science. *Philosophical Psychology* 4(2), pp. 213-229

- Stokhof, M. (2011) The Quest for Purity. Another Look at the New Wittgenstein, *Croatian Journal of Philosophy* XI(33), pp. 275-294,
- Stokhof, M. and M. van Lambalgen (2016). What Cost Naturalism?, in: K Balogh and W. Petersen (red.) *Bridging Formal and Conceptual Semantics. Selected papers of BRIDGE-14*. Düsseldorf: Düsseldorf University Press, pp. 89-117
- Williams, M. (2000) Wittgenstein and Davidson on the Sociality of Language. *Journal for the Theory of Social Behaviour*, 30(3), pp. 299–318
- Williams, M. (2010) Normative Naturalism. *International Journal of Philosophical Studies*, 18(3), pp. 355–75
- Wittgenstein, L. (1961) *Tractatus Logico-Philosophicus*. London: Routledge
- Wittgenstein, L. (1969) *Über Gewißheit/ On Certainty*. Oxford: Blackwell
- Wittgenstein, L. (1978) *Lectures and Conversations on Aesthetics, Psychology and Religious Belief*. Oxford: Blackwell
- Wittgenstein, L. (1998) *Culture and Value*. Oxford: Blackwell, Oxford,. 2e herziene ed.
- Wittgenstein, L. (2009) *Philosophische Untersuchungen/ Philosophical Investigations*. Oxford: Blackwell. 4de herziene ed.