



Friedrich Waismann’s Open Texture Argument and Definability of Empirical Concepts

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Abstract

The appearance in 1945 of the idea of the open texture of empirical concepts, which anticipated Friedrich Waismann’s thesis of a many-level-structure of language, led to a re-evaluation of “context”. It widens the sense of context that we are accustomed to mentioning as being Wittgenstein’s conception of meaning in his later philosophy. The new idea Waismann brought into the landscape is how to “clarify the context”, which is in a way a very non-Wittgensteinian question as well as an “explanation of context”, where open texture plays a key role. But despite the amount of literature about open texture, this idea of Waismann is still not properly understood. Open texture must be situated as an obstacle to exhaustiveness of definition for internal reasons not only because of unforeseen conditions that could always arise in the future, but also by virtue of an *a priori* aspect of the texture of concepts. Thus, the main goal of this paper is to propose an interpretation of open texture as an immanent property of a concept, that is, as something that is underlying its nature.

Keywords Open texture · Vagueness · Definition · Description · Empirical concept

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1 Introduction

In the history of analytic philosophy of the twentieth century, the figure of Friedrich Waismann and his contribution to the development of analytic philosophy have been given insufficient attention and ambiguous evaluations¹. On one hand, he is regarded as a member of the Vienna Circle, who played an important role in this intellectual community; at the same time, he is generally regarded as an expositor of Ludwig Wittgenstein's ideas concerning changing the vision of language. Thus, Waismann is often assumed to have been a supporting actor who does not merit a place in the hall of fame of analytic philosophy because he was constantly in the shadow of his colleagues, especially the more famous members of the Vienna Circle (Schlick, Bergmann, Carnap, Neurath) and Wittgenstein. This has ultimately influenced the assessment of his original views and led to a lack of philosophical attention to his work².

This perception of Waismann's role may, at first glance, seem quite justified. In 1928, Moritz Schlick initiated a project to write a book co-authored by Wittgenstein and Waismann. Initially, the idea of the book was to present and systematically expound some of the central ideas of Wittgenstein's *Tractatus Logico-Philosophicus*. However, this project failed, at least in its initial form. Wittgenstein's views had changed significantly, which in part affected the later breakup of his relationship with Waismann and the termination of their joint work in 1936. Waismann's own views, particularly on the reductionist position of the Vienna Circle, also changed significantly, especially after his move to Oxford in 1939. As a result, the book was published in English only in 1965, after Waismann's death, under his name alone and with the title *The Principles of Linguistic Philosophy*. However, Waismann's time at Oxford, where he developed his philosophical and linguistic conception of the many-level-structure of language, was very productive and successful (Baker, 2003, xxii; McGuinness 2011, 14). This original conception was expounded in his articles "The Many-Level-Structure of Language" (1946) and "Language Strata" (1953), though its preliminary outline can be found in "Verifiability" (1945, 119–150). In "Verifiability", among others, he presented for the first time the idea of the "open texture"³ of empirical terms, which would play an important role in his understanding of the nature of language and become an essential component of his antireductionist linguistic approach. Moreover, the notion of open texture would be the basis on which

¹ There are only a few collections of papers on Waismann's legacy, and few papers among them on the notion of open texture. However, at least two impressive collections are devoted mainly to this idea: one is in French, edited by Jean-Philippe Narboux and Antonia Soulez (2008), and the second in English, edited by Dejan Makovec and Stewart Shapiro (2019).

² As Michael Beaney famously said, "Friedrich Waismann is one such philosopher who has dropped from the radar of contemporary philosophy but who was extremely influential and well regarded in his lifetime" (2019, vi).

³ The English term "open texture" is an arbitrary translation of the original German "die Porosität der Begriffe". The English version ("open texture") was suggested to Waismann by William Kneale (Waismann, 1945, 121), and it is this version that has become widely accepted. The term, according to Waismann, for the fact that however tightly we think we define an expression, there always remains a set of (possibly remote) possibilities under which there would be no right answer to the question of whether it applies. This is its porosity, or open texture.

Waismann’s theory of the many-level-structure of language was grounded (Waismann, 1946, 223).

2 Open Texture and Exhaustive Definition

The idea of the open texture of empirical terms⁴ was conceived by Waismann as an argument against the phenomenalist position that material-object statements can be reduced to sense-datum statements (Bix, 1991, 56). Dissatisfaction with verification as a criterion for the establishment of the actual truth and meaning of statements and as a requirement that reduces the meaning of a statement to the method of its empirical verification led Waismann to the conclusions that.

- 1) the incompleteness of our verification is rooted in the incompleteness of the definition of the terms involved, and.
- 2) the incompleteness of the definition is rooted in the incompleteness of the empirical description (Waismann, 1945, 126).

The fact that we cannot give an exhaustive definition of “terms involved”, that is, cannot describe the situations in which they are used, is because the terms have an open texture. This should be clarified before we turn our attention to the notion of

⁴ Although Waismann’s interests were limited mainly to the analysis of empirical concepts (in “Verifiability” he says that “open texture is a very fundamental characteristic of most, though not of all, empirical concepts, and it is this texture which prevents us from verifying conclusively most of our empirical statements” [Waismann 1945, 123]), the epistemological significance of the open texture argument unexpectedly began to manifest itself in other types of discourse, for example, in analytic philosophy of law and cognitive psychology. Because of H. L. A. Hart (1961), the idea of open texture, which Hart expounded in legal language, was given a second life and became thoroughly established as a methodological principle for the analysis of legal concepts. It is important to note at this point that “Waismann was writing about language in general; Hart was writing about language in the context of law—in particular, in the context of applying and interpreting rules—and the problems to which his ideas responded derive from that context” (Bix, 1991, 66). Anyway, the notion of the open texture of legal language and its concepts has proved so fruitful that the notion has become an independent subject of study and has acquired a new interpretation in the different context—the context of law is a really good example (especially see Miller 1972; Bix, 1991; Lyons, 1999; Anderson, 2010; Schauer, 2013; Bunikowski, 2016). Hart’s idea of open texture, in turn, has some influence on the formation of a prototype theory in cognitive psychology. This influence is traced in the following aspects. First, the idea of open texture of legal concepts was provided by Hart in his *The Concept of Law* (1961) twelve years earlier than the idea of prototype was expressed by cognitive psychologist Eleanor Rosch in “Natural Categories” (1973). Second, it is not the chronological primacy that is important, but the observed similarities in the terminology used and in the shared methodological attitudes. Hart, considering the ambiguity of meaning, distinguished the core and penumbral meaning, or the core and penumbra of concept. The prototype theory employs such similar terms as the central meaning of category and its peripheral meaning. Both Hart and proponents of the prototype theory shared Wittgenstein’s view of nondiscreteness, blurring of the boundaries of concepts, and continuity and randomness in the definition of things and their naming, which leads to the inevitability of the problem of indeterminacy in both cases. And, third, the idea of Hart’s open texture, like a prototype theory, arose as a reaction to, among other things, the traditional Aristotelian way of organizing categories and defining concepts by necessary and sufficient conditions. Thus, one could propose that Waismann’s idea of open texture through Hart has influenced in some ways a prototype theory (for more details, see Charnock [2013, 130]; about the differences between Waismann’s open texture, Wittgenstein’s family resemblance, and Rosch’s prototype theory, see Way [1991, 209–216]).

open texture itself. These reasons are closely related in the sense that the completeness of the description due to the open texture of terms is conditional. Completeness is possible in one context, but there is always another context where the description is incomplete. Incompleteness is established by giving the context, where, due to the open texture, vagueness is again disclosed. However, how does the open texture of empirical terms relate to the incompleteness of the empirical description, on one hand, and how does all this relate to the verification of empirical statements, on the other? In criticizing some English philosophers in their attempt to develop precise and strictly verifiable descriptions, Waismann points out that any term and, moreover, any concept expressed by a term has an open texture. We cannot conclusively verify statements that contain empirical terms because we cannot define these terms exhaustively given their open texture. In this sense, the definition of a term—and by definition of a term, Waismann means the description of conditions for its use—will be incomplete and nonexhaustive. His approach to definition plays a key role here, and it is directly related to the open texture of terms.

A definition is usually understood as a special logical form of the clarification of terms or concepts. What is the task of a definition? Take, for example, the following sentence: “No vehicles in the park”⁵. What does “vehicles” mean here? One could answer by providing the definition that a vehicle is a machine that transports people and cargo and includes at least cars, buses, and trucks. Is this definition complete? In a standard situation, this definition will be sufficient to make us understand that the use of cars in the park is prohibited, and therefore we do not use them. The problems arise when we are faced with borderline cases, when we cannot say whether, for example, electronic wheelchairs, Segways, hoverboards, or gyroscooters fall under this definition. We cannot, according to Waismann, foresee and describe all of the situations in which the term vehicle should be used, and as a result, our definition relative to our purposes will be incomplete and nonexhaustive. However, suppose that we could describe all situations completely without missing anything; then we could make an exhaustive list of all the circumstances in which this term should be used, without any doubts, but

[I]n fact, we can never eliminate the possibility of some unforeseen factor emerging, we can never be quite sure that we have included in our definition everything that should be included, and thus the process of defining and refining an idea will go on without ever reaching a final stage. (Waismann, 1945, 125)

A definition, under this approach, is relativized according to the context that specifies the grounds for its verification. The explanation of the context is a simple substitution for what is considered equivalent to an obscure concept or term. If we substitute “vehicles” with “cars” (cars understood here in a simple sense) in the sentence “No vehicles in the park”, then we obtain a completely meaningful sentence “No cars in

⁵ This famous example of open texture was put forward by H. L. A. Hart and later elaborated upon in many different ways by many different scholars (see Bix 1991 Bix, 2019; Bell, 1998; Schlag, 1999; Schauer, 2008 Schauer, 2019; Slocum, 2019). For the most recent discussion about the no-vehicles-in-the-park rule, see Struchiner et al., (2020).

the park”. The most important requirement here is that the sentential context should not change its meaning. In this case, a definition is considered a way to substitute one expression for another; a definition is understood as a terminological convention that determines the usage of terms and concepts expressed by these terms. How can the correctness of such a definition be evaluated? If we assume that the definition is a terminological convention, the definition would be correct if the truth-value of the sentence does not change under possible substitution. Now suppose that we substitute a machine or animal that transports people and cargo within a definition of vehicle by a Quidditch flying broomstick, a magic carpet, seven-league boots, the little humpbacked horse, etc.⁶ Will the proposed definition be correct in the given context? My inclination is to say yes. It should be borne in mind that definitions are not checked for compliance with reality but explain the sense in which a concept and term expressing it are used in the relevant context. Definitions are not intended to establish truth based on facts, but to clarify the concepts and terms used; definitions as a special logical form can be only correct or incorrect. Correctness or incorrectness, thus, depends on the context in which definitions are used, and only the context determines whether they are correct or not. That is why Waismann says that for any definition we provide, we can always find a context in which that definition will be incomplete:

We can never exclude altogether the possibility of some unforeseen situation arising in which we shall have to modify our definition. Try as we may, no concept is limited in such a way that there is no room for any doubt. ... We tend to *overlook* the fact that there are always other directions in which the concept has not been defined. And if we did, we could easily imagine conditions which would necessitate new limitations. In short, it is not possible to define a concept like gold with absolute precision, i.e. in such a way that every nook and cranny is blocked against entry or doubt. (Waismann, 1945, 122–123)

⁶ These fictional things are not borderline cases of a vehicle in the usual sense. And, of course, the vehicle example in this sense is not the sort of extreme and barely imaginable cases Waismann (and, from the same period, Wittgenstein and J. L. Austin) was speaking about: cats that suddenly become nine feet tall, or disappear and then reappear a man. But in the unusual sense it can be considered in this way. It must be clarified that an unusual sense is meant here. The vehicle example as Hart and his commentators use it (a vehicle in the usual sense) is about the way in which some term has a clear core meaning (cars and trucks) and an unclear or vague one with respect to currently known fringe examples, such as roller skates, toy trucks, motorized wheelchairs, etc. While this case is interesting on its own, I will not argue the points here. I just want to clarify whether a definition of vehicle would be correct if we substitute the definiens by fictional terms (Quidditch flying broomstick, magic carpet, etc., which can be used as a vehicle in the unusual sense). And I tend to think that it will be, if and only if a sentential context would not change its meaning: A vehicle in a fictional discourse would still mean a tool for transporting people and cargo. I do not feel that such an extension of vehicle distorts Waismann’s original idea. We can and do often say, when a sentence has been used in our presence, that the question of its truth or falsity does not arise on this occasion because we can understand it. One such situation is this when fairy tales are told to us. We know that a Quidditch flying broomstick or a magic carpet do not exist “but storyteller is for our entertainment making the peculiar use of words which we can call speaking *as if* they do” (Hart, 1951, 204). My interpretation could be treated as another way to show the importance of context dependence even for definition of fictional terms for which the same problems arise (e.g., incompleteness and nonexhaustiveness). A similar idea can be found in Searle (1975).

In other words, we cannot define a concept in an exhaustive way because of its open texture. For Waismann, open texture is a very important feature of empirical concepts, and it is this open texture that prevents us from conclusively verifying empirical statements. Thus, the impossibility of conclusive verification of empirical statements is related to the open texture of the concepts used in these statements. The concepts that are used in the statement “No vehicles in the park” do not have an exhaustive definition and complete description because we cannot foresee all possible conditions in which they should be used. There is always the possibility that we have not taken into account a particular condition or circumstance related to their use; we cannot foresee all possible circumstances in which the statement will be true or false, and therefore, “there will always remain a margin of uncertainty” (Waismann, 1945, 123). The open texture of the concepts used in a statement implies the possibility of unforeseen and potentially important conditions that may affect the truth or falsity of this statement. It is in this sense that the open texture of concepts prevents a conclusive verification of the statements that contain them. Brian Bix claimed that “though discussions of verification are often the context for Waismann’s analysis of ‘open texture’, the concept is not concerned primarily with problems in that area” (1991, 57). This view cannot be accepted because the impossibility of conclusive verification is, for Waismann, directly related to the open texture of the corresponding concepts.

3 Open Texture, Closed Texture, and Vagueness

Open texture understood in this manner should be differentiated from closed texture⁷. The latter relates, for Waismann, to how *a priori* knowledge is shaped in logic and mathematics:

Open texture, absent in logical and mathematical concepts, is a very important feature of most of our empirical concepts. That the structure of empirical knowledge is so different from that of *a priori* knowledge may have something to do with the difference of open and closed texture. (Waismann, 1946, 225)

This approach provides a completely different understanding of what is considered *a priori* or *a posteriori*. The question of how statements are established to be true within a particular discourse, that is, whether statements are analytic or synthetic, is translated into the question of whether the texture of the terms used for expression in such discourse is open or closed⁸. In modern philosophy, this question is a key one

⁷ Peter Ingram has provided an explanation on how open and closed concepts should be distinguished: “A concept is open if its conditions of application are emendable and corrigible, if I cannot list exhaustively all the conditions of application because unforeseeable or novel conditions are always forthcoming or envisageable. With an open concept new applications are possible where I shall have to make a decision whether to extend the concept to cover the new case, or (arbitrarily) to exclude the new case from coverage. A concept is closed only when both the necessary and sufficient conditions for its application can be stated” (1985, 48).

⁸ Thus, synthetic statements, for Waismann, are always open because of the open texture of language, whereas analytic statements are closed. But Kyle Wallace suggested that by contrast there are empirical

because it reduces the problem of understanding what it means for a statement to be true or false to the problem of whether the terms have an open or closed texture. As an example, Waismann refers to Goldbach's conjecture that states that every even integer greater than 2 can be expressed as the sum of two primes. It is undecidable, according to Waismann, because we cannot go through all the integers in order to try it out (Waismann, 1945, 126). The idea of an open texture is not applicable, for example, to natural numbers, since the series of these numbers is infinite. However, our inability to define the limits of these mathematical concepts⁹ does not prove the open texture of such concepts but only the incompleteness of verification. Open texture indicates that the intension of any empirical concept remains uncertain. By contrast, the intension of mathematical concepts is fully defined; for example, the concept of a natural number is defined by an inductive definition through the construction of a natural series. However, we cannot verify this statement because we cannot complete a verification of every number in the natural series. This leads Waismann to the conclusion that even though mathematical concepts are closed, verification of statements including such concepts will be incomplete. However, open texture makes it possible to continue empirical study: we can adjust the definitions of open-textured concepts if new circumstances appear.

However, if open texture cannot be eliminated, how can we adjust the definitions of open-textured concepts? We can try to do this, according to Waismann, by assuming that "open texture is something like the possibility of vagueness":

Vagueness should be distinguished from *open texture*. ... Open texture, then, is something like *possibility of vagueness*. Vagueness can be remedied by giving more accurate rules, open texture cannot. An alternative way of stating this would be to say that definitions of open terms are *always* corrigible or emendable. (Waismann, 1945, 123)

This idea from Waismann has become widespread, not simply because it has brought some precision to the relationship between the concepts of open texture and vagueness but because this explanation has actually become the basis of the whole conception of open texture. No attempt to consider the idea of open texture in any context today is complete without taking this thesis into account¹⁰. Moreover, Waismann's

concepts which are closed: (1) referentially null expressions (since no experience could alter the concept); (2) metrical expressions (since they refer to no objects or entities that are themselves manifestly measurable); (3) general attribute terms (since they too refer to no objects that in turn exhibit attributes); and (4) certain types of first order relational terms (since they are not objects that can have properties or which can stand in concrete relations to other things) (1972, 41). A similar idea can be found in Shapiro & Roberts (2019).

⁹ Waismann argues that mathematical concepts, being not empirical, have a closed texture. Perhaps the natural numbers are closed in Waismann's sense, but should we think that this holds of all mathematical concepts? Do, for example, infinite decimals have a closed texture? Waismann does not answer this question directly and precisely. He speaks mainly on the natural numbers, as a convincing case of closed texture, and leaves open these questions.

¹⁰ There is a huge literature on the vagueness problem and how it may be eliminated or resolved (as most representative, see Waldron 1994; Williamson, 1996; Endicott, 2000; Shapiro, 2006 Shapiro, 2013; Keil and Poscher eds. 2016). This is the first reason that I do not consider vagueness in detail; the second is that

distinction between vagueness and open texture has led to the study of how both of these concepts are related to semantically similar concepts such as indeterminacy, ambiguity, uncertainty, and others.

Indeed, the question of how open texture is connected with vagueness is important to Waismann but not crucial. Perhaps he needed to employ the notion of vagueness to offer a better understanding of open texture. Here is why. A primary aim of science is to avoid ambiguities when facts are described. It is assumed that if we at least use the technical language of science, terms are assigned a certain meaning. The problem arises when these terms are used in different contexts. This is where the thing appears that Waismann calls open texture¹¹. It is often the case that terms with meanings that seem unambiguous begin to acquire new meanings. The question thus arises—what are these new meanings about? The obvious answer focuses on eliminating the vagueness of the terms. However, a vagueness is something that can be remedied by making a term more precise by means of definition, whereas its open texture cannot. No precise definition or ways of using the term can remove the possibility of vagueness because it may arise again from a further use of the term. Contexts change, and the ways in which terms are used also change. This is an inevitable feature of the development of all knowledge. However, this is an infinite process if it involves determining the meaning of terms that express empirical concepts. Because of their essence, empirical concepts are not protected from vagueness. Thus it is the case that “open texture is something like the possibility of vagueness”. How does this idea work?

The relationship between an open texture and vagueness becomes clear if open texture is treated as an immanent feature of the concept, as something that is embedded in it *a priori* and that can cause vagueness in turn. We know *a priori* that the concept cannot be conclusively defined. This is a key point in Waismann’s approach to a definition: no matter how we define a concept, we cannot eliminate its open texture. We can always find an object about which we are uncertain whether it belongs to the extension of a concept. Therefore, we adjust a definition of the concept by adding additional properties. However, this does not mean that we obtain a complete definition. The concept is still characterized by an open texture as something *a priori* that is embedded in the concept itself. This immanent feature can generate vagueness, but vagueness, unlike open texture, might in principle be remedied; therefore, open texture is, as Waismann pointed out, a possibility of vagueness. Vagueness seems to reveal this potential *a priori*. Even if we remedy vagueness in one case, it can potentially occur again in another case because the open texture of concepts or terms remains. Having remedied one possibility of vagueness, another may arise, and it is in this regard that open texture is the potential for (or possibility of) vagueness.

providing an assessment of vagueness is not my main goal here. However, because the notion of vagueness can shed some light on open texture, I briefly consider it. In addition, the third reason is that vagueness was not a primary interest of Waismann’s. Thus, I focus here solely on the idea of open texture treated as the possibility of vagueness.

¹¹ I am going to argue that the extreme examples used by Waismann in describing open texture and the mere changing of context are closely connected, although one can think otherwise (for example, that open texture could be extended to changes of context).

Open texture thus is an infinite possibility of vagueness; it is an *a priori* condition of boundless variability.

However, how do we remedy such vagueness? We can remedy only a vagueness of terms but not the possibility of vagueness, because the possibility of vagueness is not a type of vagueness, just as the possibility of error is not a type of error. As we already know, the open-textured concept “vehicle” is vague in the sense that whatever new qualifying properties we add, we will not be able to complete its definition in Waismann’s sense¹². At a certain stage, we can remedy vagueness by giving more precise rules for using this concept; for example, we can define vehicle as a mechanical device for transporting people and/or cargo that (1) produces noise and (2) pollutes the air (Bix, 1991, 54). But we cannot exclude the possibility that in the future vehicles can appear that do not comply with these rules but still belong to this concept and cause new vagueness. The context of use is crucial here; when a new circumstance appears, we are inclined to adjust our definition. Jeremy Waldron came to a similar conclusion, claiming that “we cannot know that a word is vague, unless we know something about its use” (1994, 511). Again, vagueness is remedied not by the context or the fact that a new context appears (the appearance of a new context is just a signal that we need to start adjusting the previous definition) but by correcting a previously formulated definition. But no matter how we remedy a vagueness, the possibility of vagueness always remains, because the open texture infinitely provides the vagueness. This is probably what Waismann meant when he said that “definitions of open terms are *always* corrigible or emendable” (1945, 123).

There are arguments in the literature that claim that Waismann’s idea of open texture was not so original. In particular, David Bunikowski suggests:

Waismann was wrong to think that he was the first to discuss “open texture”. Due to his poor knowledge of the history of philosophy, he believed that he was the first to discover this phenomenon. However, similar ideas occur in the writings of Aquinas, Leibniz, and Meinong, among others. (Bunikowski, 2016, 159)

I am not inclined to think that Waismann actually believed this, or that he cared much whether he was the first to discuss open texture. What does “similar ideas” mean in this quotation? Which ideas exactly? Waismann really did not mention these scholars in discussing an open texture, but we can hardly conclude from this point that he has “poor knowledge of the history of philosophy”. Perhaps Waismann, like Wittgenstein, also “was constitutionally incapable of walking along other men’s furrows” (Hacker, 2011, 97). I think that the absence of references to Aquinas, Leibniz, and Meinong is not a confirmation of Waismann’s poor historical knowledge. To claim otherwise, it is necessary for the author of this short remark to give more convincing arguments than he did. Bunikowski’s considerations, however, have made a valuable contribution to the debate on open texture.

¹² Of course, we can complete the definition by settling necessary and sufficient conditions for being a vehicle. If circumstances change we may decide to change the definition and therewith the concept. But in Waismann’s sense such a definition will be always incomplete due to the open texture of terms involved.

What is more interesting is the fact that, as Frederick Schauer comments, “At about the same time that Waismann was writing about open texture, J. L. Austin captured the identical idea even more vividly” (2013, 198; the same idea was developed by Bunikowski [2016, 152]). Indeed, in his “Other Minds” (1961), Austin’s considerations of how to answer the question “How do you know it’s a goldfinch?” are very similar to Waismann’s idea of open texture. How do we define or describe a goldfinch by means of natural language when we are asked to do so? Of course, it is possible to determine or to expose with some degree of precision the distinctive features of the situation that allow us to describe a thing as satisfying the description that we have given. However, will our description be complete? For Austin, when dealing with questions such as “How do you know it’s a goldfinch?” or “Do you know it’s a *real* goldfinch?”, we will always be uncertain whether given classificatory features are sufficient. Suppose that “we have made sure it’s a goldfinch, and a real goldfinch, and then in the future it does something outrageous (explodes, quotes Mrs. Woolf, or whatnot), we don’t say we were wrong to say it was a goldfinch, *we don’t know what to say*” (1961, 56). Like Waismann, Austin came to this conclusion “in view of the fewness and crudeness of the classificatory words in any language compared with the infinite number of features which are recognized, or which could be picked out and recognized” (1961, 53). This idea from Austin is compatible with Waismann’s thesis about the essential incompleteness of an empirical description. The incompleteness of a description affects the incompleteness of a definition in the sense that the definition is incomplete if and only if it is impossible to describe the situations in which the term is to be used. This incompleteness of the description, according to Austin, affects our confidence in our knowledge, albeit not in the fact that the appearance of new, previously unforeseen circumstances can disclose a mistake in this knowledge, but rather in the fact that “what the future *can* always do, is to make us *revise our ideas* about goldfinches or real goldfinches or anything else” (1961, 57). This means that we are again faced with what can be called an open texture of language.

4 Open Texture and Linguistic Antireductionism

Waismann’s concept of open texture, thus, is directly related to the criticism of reductionism. Indeed, no matter how theoretical statements are reduced to describing empirical facts, and no matter what logic is used, the terms that describe empirical facts have an open texture. Therefore, the problem is what is to be considered a description of the initial facts; this problem cannot be solved in principle¹³. Here Waismann radically raises the question not of the possibility of distinct sense data but of the possibility of their adequate description. If the problem is not what is considered an initial sense impression, which was typical of classical English empiricism, such as the work by Berkeley, but rather how to describe this impression, then reduc-

¹³ This idea was developed also by Quine (1961, 42–46; 1992, 2–6). Reductionism of this type is seriously concerned with what observation sentences are, that is, those statements that describe an immediate experience. An important difference, however, is that Quine starts from an indeterminacy of what is considered the initial impression, whereas Waismann sees the main problem in terms that are used in a description.

tionism in this sense can be reasonably questioned. This doubt is rooted in the open texture of terms and concepts. Indeed, if Berkeley believed that, starting from sense impressions, which alone can be a source of knowledge, we can explain the objectivity of the world, the new reductionism, based on the technique of analysis, according to which “philosophy consists only in the study of symbolism” (Waismann, 1946, 221), seeks to reduce a description of the world of objects to a description of sense experiences. As Waismann says,

A modern adherent of Berkeley would say that statements about material objects are “*reducible*” to statements about sense experience; in other words, statements about material things can—without loss of meaning—be *translated* into statements which are only about sense contents. (Waismann, 1946, 221)

Reductionism is thus moved from the analysis of cognitive abilities to the analysis of language capabilities. Empiricism in this sense begins to differ very much from the classical English empiricism. With the common premise that the basis of knowledge must, in one way or another, be sense impressions, the problem itself is formulated in the framework of how these sense impressions are expressed in language and what place they occupy in language. This type of problem was formulated by Schlick (1979, 156), the founder of the Vienna Circle. For the Vienna Circle, reductionism of this kind became a programme based on a new type of logical calculus and some of Wittgenstein’s ideas. Actually, the main idea of this programme was that all theoretical knowledge can be reduced to statements about sense impressions and that such a reduction is provided by the new (symbolic) logic. In this sense, the new logic created by Frege, developed by Russell, and in some respects modified by “early” Wittgenstein, becomes for reductionism, considered by Waismann, the force that gives unity to statements about sense impressions. Sense impressions transformed by the new logic create theoretical knowledge and ensure its unity. The new logic, in a sense, takes on a divine meaning, defining the unity of the description of the world. This unity of description becomes important if the sole sources of knowledge are individual sense impressions.

Waismann looked at these things much more broadly. He was not just interested in the possibility of description and of logical interrelation between facts. Starting from impressions, he explicitly said that the logic of sense data and the logic of objective facts are completely different, not to mention the logic that tries to combine both. Which logic we use differs significantly depending on the mode of description we choose and what we are trying to describe. The main thing is to be able to describe. This skill depends on understanding the so-called many-level-structure of language. Waismann’s remarkable expression reads as follows:

The logic of aphorisms seems to be peculiar: you may say one thing at one time and the opposite thing at another time without being guilty of contradicting yourself. ... Now all this suggests to look upon a system of logic as a characteristic which sets its stamp upon a particular stratum. (Waismann, 1946, 224)

Thus, the logic and ways of describing impressions are rooted in an investigation of various cases of language uses.

This becomes especially clear when we ask about the completeness of a description. What description is complete? In the sense of mathematical logic, this is a perfectly justified question. It comes down to the existence of a model¹⁴. If there is a model, that is, there is an interpretation such that all statements are true, then this question can be answered correctly. The case is different if one turns to descriptions, where it is simply impossible to determine the truth-value of statements. There are far more discourses of this type, and they are not reducible to a description of impressions in the sense of reductionism, because it is often quite impossible to give an unambiguous answer about the facts experienced. Waismann refers to the dream as an example (Waismann, 1946, 224). The description of a dream always contains an element of some uncertainty. Even more certainty disappears if one asks whether a description of a dream has a model. Such a description has a completely different meaning¹⁵ than that assumed by the reduction to sense impressions: “Every description stretches, as it were, into a horizon of open possibilities” (Waismann, 1946, 224). Thus, Waismann’s key point is that our ideas about reality depend to a large extent on the system of description that we accept.

The main consequence of Waismann’s position is that a verification, in the sense that reductionism understands it, does not purport to establish a correspondence between a description and what is described. Description is an extremely complex procedure, and it is also extremely difficult to determine what is being described. Eventually, if we are taking into account the reductionist position, everything comes down to the so-called “I-statements”, that is, to that which describes individual experiences. However, to what extent can they be verified? Given the open texture of the language, “verification weaves a complicated net, a ramified pattern of lines” (Waismann, 1946, 226). This image of knowledge is obviously different from what is usually clearly defined. The truth varies with respect to description systems. The open texture thesis thus becomes the ontological basis of Waismann’s linguistic antireductionism.

¹⁴ Here “model” is used in a technical sense, in the sense of mathematical logic, that is, what is set axiomatically.

¹⁵ Notably, this refers to the logic of fictional discourse. A remarkable pragmatic analysis of the phenomenon of fiction can be found in Searle (1975). And this may make it seem that Waismann’s open texture as related to presupposed context that could be different is similar to what Searle discussed in “Literal Meaning” (1978), namely a metaphorical or ironical utterance meaning. Indeed, Searle perfectly moves the study of metaphor into the pragmatic area of fiction, leaving studying a metaphor in the traditional position, recognizing the purely linguistic duality of meaning. However, Searle’s theory has some limitations that derive from the fundamental belief in the homogeneity of literal meaning that is embedded in it. It rather demonstrates the desire to avoid ambiguity, rather than reflecting the absolute nature of the literal-metaphorical classification (see Katz 1981). But Waismann’s theory is not about the literal-metaphorical distinction, although he does refer to imaginable cases. He was doing this mainly to show that the incompleteness of description causes the incompleteness of definition and the role of context.

5 Conclusions

None of the above is to say that Waismann underestimated the impossibility of a conclusive definition of concepts. On the contrary, he argued that our language should be organized in such a way that we can respond adequately to changes in linguistic practices (see Quinton 1977, xiii). We do not need to develop all sorts of ways to define concepts such as vehicle because the ways that we already have are quite sufficient to establish that the car is a vehicle. If circumstances arise that force us to change the concept of vehicle, we can do so by adding new properties to its intension. It is new, unforeseen circumstances that compel us to revise our concepts because we cannot take them all into account in the formation of concepts. In this sense, the open texture treated as something that is underlying the *a priori* nature of the concepts themselves makes it possible to define concepts more precisely, by adjusting the definition, if the appropriate circumstances arise.

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