

Meaning and Definition: Scepticism and Semantics in Twelfth-Century Arabic Philosophy

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Abstract: The theory of essential definitions is a fundamental anti-sceptic element of the Aristotelian-Avicennian epistemology. In this theory, when we distinguish the genus and the specific differentia of a given essence we thereby acquire a scientific understanding of it. The aim of this article is to analyse systematically the sceptical reasons, arguments and conclusions against real definitions of three major authorities of twelfth-century Arabic philosophy: Faḥr al-Dīn al-Rāzī, Šihāb al-Dīn al-Suhrawardī and Abū l-Barakāt al-Baḡdādī. I focus on showing how their refutation of our capacity to provide essential definitions of things is rooted in their semantic theory: we only know things under certain descriptions which are identical to the meanings of the words that we use to refer to them, yet these descriptions do not capture the essences of things in themselves. The best result one can achieve with Aristotelian-Avicennian scientific definitions is a “nominal definition”. With this, Rāzī, Suhrawardī and Abū l-Barakāt will put some serious epistemic limitations on our capacity to attain scientific knowledge of things, at least as Aristotle and Avicenna would have it.

Keywords: meaning, semantics, definition, essence

WHEN WE LOOK AT THE history of Arabic philosophy, we might suggest that medieval Arabic philosophy lacks any sceptical element. This suggestion would ground itself in the fact that when one looks at the so-called “classical” period of Arabic philosophy (roughly from the ninth to the eleventh century CE), one can observe that Neoplatonism and Peripateticism strongly dominate the mainstream philosophical schools of the period. As scepticism is entirely alien to both Neoplatonism and Peripateticism, the reasoning goes, there ought to be no wonder that it finds no place in classical Arabic philosophy. The so-called “post-classical” period, in its turn, is largely determined by the inheritance of Abū ‘Alī b. Sīnā (known in the West as Avicenna, d. 1037), whose epistemology Dag Hasse (2013) has recently characterized as “optimistic”. This characterization is in no way an exaggeration. In order to secure our knowledge, Avicenna emphasizes the complete reliability of our own capacity to abstract conceptual forms from sensible particulars and the assistance that we receive from the transcendent epistemic and ontological principle called the Active Intellect. In fact, in doing so, Avicenna overdoes his job of securing knowledge: according to different

interpretations, empirical abstraction and illumination from the Active Intellect are both presented as sufficient grounds for epistemic certainty. This two-fold grounding has led to recent, rival interpretations of Avicenna's epistemology in contemporary scholarship (Black, 2005; Gutas, 2012; Hasse, 2013; Black, 2014; Alpina, 2014). But regardless of whichever interpretation is correct, one would not expect to come across sceptical doubts on the limitations of our knowledge in this period, given Avicenna's optimistic epistemology and his influence on the later Arabic philosophical tradition.¹

Though Avicenna is an important determining factor for post-classical Arabic philosophy, this does not mean that his theories were uncritically accepted. Being a good Aristotelian, Avicenna crowns his epistemological optimism with the theory of essential definitions. In this theory, when we distinguish the genus and the specific differentia of a given essence we thereby acquire a scientific understanding of it, the most famous example being the definition of the essence of human as "rational animal". Despite this theory of essential definitions being highly anti-sceptical, it provoked much scepticism in the later tradition. Several studies (Falaturi, 1969; Ibrahim, 2013; Özturan, 2018) have already noted that the influential twelfth-century Arabic philosopher, Faḥr al-Dīn al-Rāzī (d. 1210), developed a critique of precisely this Aristotelian-Avicennian theory of acquisition of the conceptualization of things through their essential definitions. Other studies (e.g., Ziai, 1990) showed that another influential figure, Šihāb al-Dīn al-Suhrawardī (d. 1191), developed his own refutation of Avicennian essential definitions roughly at the same time as Rāzī. This simultaneity is no coincidence. As I will show in this article, Rāzī and Suhrawardī have a common source in their rebellion against the Aristotelian-Avicennian thesis whose central tenet is that we grasp the essences of extramental things by providing their scientific definitions in terms of genus and species. Rāzī's and Suhrawardī's predecessor on this issue is Abū l-Barakāt al-Baḡdādī (d. 1165) – a highly influential and independent thinker from the first half of the twelfth century, whose importance, however, has been largely neglected in the scholarship.

The aim of this article is to analyse systematically the sceptical reasons, arguments and conclusions against real definitions in Rāzī, Suhrawardī and Abū l-Barakāt. I will focus on showing how their refutation of our capacity to provide essential definitions of things is rooted in their semantic theory: we only know

¹ In this very rough summary, I omit the mystical tradition of Arabic philosophy. Of course, mystics famously deny the reliability of philosophical and scientific knowledge in favour of direct mystical experience. Remarkably, however, even mysticism insists that one can know the true realities of things. It just happens in a different way. In any case, a study of mystical scepticism lies beyond the scope of this article.

things under certain descriptions which are identical to the meanings of the words that we use to refer to them; yet these descriptions do not capture the essences of things in themselves. The best result one can achieve with Aristotelian-Avicennian scientific definitions is a “nominal definition” of the referentially opaque meaning of a notion – in analytical parlance, of an intension – and not of essences of things in themselves. With this, Rāzī, Suhrawardī and Abū l-Barakāt – quite against the supposition about the absence of scepticism in Arabic philosophy – will put some serious epistemic limitations on our capacity to attain scientific knowledge of things, at least as Aristotle and Avicenna would have it.

My presentation of twelfth-century scepticism against Peripatetic scientific definitions will proceed in the following way: first, I will present Rāzī’s criticism of definitions on the basis of Meno’s paradox and the paradox of analysis, as well as reassess his conclusion that the conceptualizations of things are never acquired and that all definitions are nominal. Second, I will present Suhrawardī’s refutation of essential definitions, how it is connected to Suhrawardī’s metaphysics, and what his conclusion, that all Peripatetic definitions are nominal, in fact means. Third, I will present their common source, Abū l-Barakāt’s move to limit the task of definitions. We will see that Abū l-Barakāt is led to conclude that all definitions are nominal due to his semantic theory of nominal reference. In conclusion, I will speculate a little on how Avicenna himself paved the way for Rāzī, Suhrawardī and Abū l-Barakāt’s critiques.

1. Rāzī: Meno’s Paradox and Nominal Definitions

As has been briefly noted already by Falaturi (1969), Rāzī develops his refutation of the Avicennian theory of definitions with an eye towards his Ash‘arite ethical doctrines. His main goal is to prove that no human knowledge is acquired through our own volition; rather, all knowledge happens automatically. As our acts depend on our motivations, which in their turn depend on our beliefs, we are thus not free even in our beliefs, let alone our actions (Rāzī, *Inquiries*, 9.102–106). By showing the incoherence of the intentional acquisition of definitions, Rāzī means to secure his Ash‘arite conviction in human determinism. So, why are we not free in our extent of knowledge of what things are?

In most of his works, Rāzī formulates his doctrine in the following way: no conceptualizations (*taṣawwurāt*) of things are acquired (*muktasab*); all of them are necessary/immediate (*ḍarūrī*) and evident (*badīhī*).² This opposition relies on

² Relevant discussion may be found in the *Summary*, *Logic* (101–118), *Substance of Beliefs* (81–85), *Inquiries* (9.102–106), *Summit of Reason* (103–116) and *Perfect Treatise* (19–20); cf. *Sign Posts* (13). Rāzī may adhere to the position of an influential Ash‘arite scholar, ‘Abd al-Malik al-Ġuwaynī (d. 1085); on this, see Eichner (2009, p. 182).

two epistemological doctrines. First, it plays on the distinction between conceptualization (*taṣawwur*) and assent (*taṣdīq*), a widely accepted distinction in Arabic logic (see, e.g., Black, 2008). Conceptualization traditionally means possessing or mentally entertaining a concept, such as “human”, along with its intensional content – that is, “rational animal”. The intensional content is included in the notion of human and therefore thinking “human” and thinking “rational animal” is just one and the same act of thought. Assent in its turn means assenting to the truth of a proposition like “human is rational animal”. Conceptualizations do not imply any predication.³ They are simply ideas, concepts in the mind. By contrast, the act of assent implies providing a proposition that we claim to either correspond or not correspond with reality.

The second epistemological doctrine of Rāzī’s thesis is the distinction between knowledge that is acquired through investigation (*‘ilm nazārī*) and immediate knowledge (*‘ilm ḍarūrī*). This distinction was elaborated in the classical period of Islamic philosophical theology, known under the name of *kalām* (see, e.g., Bāqillānī, *Introduction*, 26–27). A thorough study of the opposition between these two notions still remains a desideratum for scholarship, and lies beyond the scope of this article. Let me just focus on Rāzī. Given the ethical background of the freedom of belief, we ought to interpret the opposition as follows: acquired knowledge is the knowledge that is acquired through voluntary investigation. I do not know what the essence of humans is. I voluntarily decide to address it, I provide an analysis, and I end up with a notion of human as rational animal. By contrast, immediate knowledge means that I know what “human” is just because it has presented itself to me in a certain way. Rāzī distinguishes two sub-classes of this type of knowledge: sensibles and non-sensibles. Sensibles include such examples as colours, sounds, tastes, etc. Non-sensibles, which are described as “arising from the inborn nature (*fiṭra*) of soul” or “of the intellect”, include such psychological states as knowledge or power as well as our emotions and passions, such as pain or pleasure, and the primary intelligibles, such as existence, unity, necessity, etc. (*Substance of Beliefs*, 84.5–9; *Summit of Reasoning*, 1.118–119; *Rāzī, Summary, Logic*, 109). None of these requires investigation in order that one grasps the contents of that type of knowledge. They just present themselves to us, and we immediately know what, e.g., blackness or pain is. In order to avoid confusion down the road, it is important to note that the notion of immediate knowledge is not in any way connected to Kantian apriorism, even though

³ Unless we accept the conceptualization of propositions without assenting to them (cf. El Rouayheb, 2016). If this interpretation is correct, propositions are concepts in the mind. Hence, whatever applies to simple concepts applies equally to propositions (impossibility of spontaneous acquisition, nominal reference, etc.). I am grateful to the anonymous reviewer and Abdurrahman Mihirig for referring me to this issue.

‘*ilm darūrī*’ does literally mean “necessary knowledge”. After all, according to Rāzī, objects of sense-perception definitely belong to this kind of knowledge; they are not acquired by means of any deliberate investigation. However, according to Kant, objects of sense-perception are not known *a priori*.

Keeping in mind both the doctrine of conceptualization and acquired knowledge, the following picture emerges: Rāzī’s point is that we do not know what things are by intending to acquire that knowledge through analysis; rather, we immediately and without intent encounter them and automatically learn what they are. In other words, there is no *spontaneity* (this, in the Kantian sense; cf. McDowell, 1994, p. 5) in our concept-acquisition. The knowledge of things is *given* to us.⁴ Thus Rāzī at least denies that conceptualization is a case of acquired knowledge (I will address the problem of assent later); in which case, knowing what human is would instead be “immediate” and so fall under the second class of knowledge, most probably under the sub-class of sensibles (that is, insofar as we know other people; see *The Commentary on the Elements of Philosophy*, 1.73.19).

It is important to understand that conceptualization for Rāzī is not just some random mental entertainment of concepts. As Rāzī puts it in the *Summit of Reason* (1.103.8–9), conceptualization means “intellection of true realities” and is synonymous with (re)cognition (*maʿrifā*). In the parlance of intentionality, these formulations imply that conceptualization has an “aboutness” or directedness towards the extramental realities of things. It is conceptualization of things, *not* conceptualization of concepts. Acquisition of concepts is a spontaneous attempt to understand the essences of things in themselves. Acquiring concepts is connected with another notion, *taʿrīf*, an established notion in Arabic logic that can be translated as “making known”, “to grasp” or even “definition”. For the purposes of this article, I translate it as “making understood/understanding” because of the meaning that Avicenna ascribes to it in his *Easterners*. There, he explains that *taʿrīf* is an act when someone intends to conceptualize something only “if he is aware of it” (*Easterners, Logic*, 29.2–3). Elsewhere he uses the notion of *taʿrīf* interchangeably with “providing understanding for an essence” (*tafḥīm al-dāt*; 37.11). The best among the three translations for *taʿrīf* is therefore “understanding”. “Making known” is misleading because for Avicenna one is already aware of the object of knowledge (this aspect will play a crucial role in the discussion of Meno’s paradox). “Definition” is also wrong because, as we will see, other

⁴ In his 2013 paper, Ibrahim suggests that Rāzī’s goal is to replace “noumenal” with “phenomenal” knowledge. I am not sure whether I understand what Ibrahim means by this. If he means that Rāzī is a phenomenalist and argues that we cannot know things in themselves or if Ibrahim means replacing all conceptual knowledge with the sensible, I think it goes too far, although I agree that this question needs further discussion.

kinds of understanding also fall under *ta'rif*. Rather, *ta'rif* (if it is not deficient) means that one acquires a full understanding of the object of which one has already been aware. For instance, if one performs *ta'rif* of something through definition (*hadd*), one acquires a conceptualization of it (*Easterners, Logic*, 40.19). Rāzī, in contrast to Avicenna, denies such *ta'rif*. Rāzī's refutation of the acquisition of concepts and of *ta'rif* thus means that one cannot perform a deliberate inquiry into the essences of things and thereby arrive at a full understanding of them. Rather, in Rāzī's view, one directly and immediately knows things in themselves as they are given to our perception.

I shall return to formulating Rāzī's goal in refuting Avicenna's concept acquisition theory at the end of this section. For now, I would like to first turn to his arguments, since they help clarify Rāzī's objectives. Rāzī has two main arguments in favour of his position. His first argument is nothing else than Meno's paradox. This paradox targets the issue of intentional acquisition of concepts in general. His second argument is directed specifically against the Aristotelian-Avicennian theory of concept acquisition through formulating scientific definitions or descriptions.

Meno's paradox takes on the following formulation in Rāzī:

[T1] If one is not aware (*maš'ūran*) of the object of inquiry, inquiry is impossible. For, if one is entirely unaware of something, the soul undertakes no inquiry into it. If on the other hand one *is* aware of it, inquiry is again impossible, since it is absurd to make something available when it is already available (*al-hāsil*). *If someone says*: [the inquirer] is aware of [the object of inquiry] in some respect or other, *I respond*: the respect in which he is aware of it is distinct from the respect in which he is not aware of it. He cannot inquire into the first [respect], since it is [already] available. Nor can he inquire into the second [respect], since he is absolutely unaware of it. (*Substance of Beliefs*, 81.10–82.2)

Rāzī's version of Meno's paradox is a "start paradox" (cf. Plato, *Meno*, 80d6–10): how can we start inquiring into anything if we do not even know into what we are inquiring – that is, if we are completely unaware of the object of inquiry? How can I inquire into the essence of humans if I have no idea that such an object exists at all? In other words, if one is not even aware of a certain subject of inquiry, one cannot do anything about that subject: neither inquire into it, nor tell anything about it at all. On the contrary, if I am already aware of the subject of inquiry, why would I need to inquire into it anymore? I look at humans, I am aware of them, I designate this subject of my awareness as "humans" as opposed to "horses", and so do not need to learn anything more about them.

Rāzī is perfectly aware of the traditional Aristotelian solution to the paradox, which was accepted by Avicenna, among others (Marmura, 2009; henceforth called here "aspects solution"). It states that knowing one aspect of something is sufficient for a subsequent inquiry into another aspect of that thing. It is enough

that I know at least something about the subject “humans” (maybe even not that they are rational animals, but, for example, that these subjects are two-footed animals). With this knowledge, Avicenna reasons, I can fix the subject of inquiry and learn something more about it. Rāzī disagrees with Avicenna in this regard. He argues that we would still need to distinguish between the known and the unknown aspect of a thing. But once one makes the distinction, the paradox returns: one cannot inquire into the known as it is already known, nor can one inquire into the unknown because it is absolutely unknown.

In order to understand Rāzī’s objection, we need to turn to semantics. We should note that instead of knowledge-related notions, such as “known” and “unknown” that were traditionally used in Meno’s paradox and in the Aristotelian-Avicennian solution to it, Rāzī uses notions of awareness and availability. In my understanding, Rāzī’s argument immediately brings us into the realm of opaque descriptions – that is, intensions or meanings (Fregean *Sinn*). If I am aware of humans under the description “two-footed animal”, I do not need to inquire into it anymore. In fact, whatever I do to this meaning, it will not help me learn that real humans are better defined as “rational animals”. I was and will remain completely unaware of the notion of humans as rational animals. One cannot distinguish between the known and the unknown aspects of meanings and descriptions because they are formulated according to how we know them. Rāzī’s argument against the “aspects solution” fails if one takes his notion of awareness to be awareness of extramental referents (Fregean *Bedeutung*). For instance, I can be aware of the existence of the subject of inquiry “human”. I might refer to it with the notion “two-footed animal”. Yet I am aware of the subject of the inquiry not *through* it being described as “two-footed animal” but rather as such. We may recall that awareness had already figured in Avicenna’s definition of *ta’rif* (understanding). One is aware of the concrete referent of the name “human” by referring to it as, e.g., “two-footed animal”; one learns that it is “rational animal” and thereby acquires new conceptual understanding of the same referent. In Avicenna’s definition of *ta’rif* one is precisely aware of referents; whereas in Rāzī’s objection one is aware of referents only insofar as they are described with meanings. The core of the Aristotelian-Avicennian “aspects solution” consists in submitting an underlying subject of inquiry, which one can access through different meanings (provided they are sufficient for fixing the extension of the name in question) – both through the known aspect and through the unknown. If one is aware of the subject of reference as such, it is sufficient for inquiry. If, however, our awareness does not apply to the referents as such but only insofar as they are captured by meanings or senses of our notions, then Avicenna’s aspects solution does not work.

Rāzī's second argument against grasping extramental essences through the process of spontaneous conceptualization is directed explicitly against the Aristotelian-Avicennian theory of definitions and descriptions. He argues that the act of conceptualization of an object is limited to the following four ways (*Substance of Beliefs*, 82–83; *Summit of Reason*, 107–108; *Rāzī, Summary, Logic*, 101–103):

- (1) through itself;
- (2) through something intrinsic;
- (3) through something extrinsic;
- (4) through the combination of intrinsic and extrinsic.

Rāzī argues that none of these options are possible. The first option is false because nothing can be grasped through itself. As Özturan (2018) suggested in his comprehensive analysis of the argument, Rāzī argues for the falsehood of the first option on the basis of the Aristotelian-Avicennian axiom that definitions are provided through something better known. Namely, nothing can be better known than the thing itself. The second option directly addresses the Aristotelian-Avicennian theory of definitions. According to this theory, definitions are provided through discovering the genus and specific differentiae, since both genus and specific differentiae are intrinsic to the essence of the defined (Özturan, 2018). According to Özturan, Rāzī relies on a problematic mereological assumption, that the sum of a thing's parts equals the whole. He thereby reduces the second way to the first. Özturan rightly connects Rāzī's refutation of the second option with semantics. The argument only works if one remains in the opaque context of referring to things through meanings rather than operating with referents as such. If the description of x under the meaning M_1 is identical with that of M_2 – as the defined and the definition should be – then learning M_1 through M_2 makes no sense, or at least should be proclaimed as uninformative. For instance, I already refer to humans with the meaning “human”. It is therefore false to say that I learn something more about them through “rational animal”, if “rational animal” is stated to be identical with “human” on the level of meanings or definite descriptions. If, however, one operates on the referentially transparent level of referents as such – as Özturan suggests on behalf of a later author, Ṭāškūpīrīzāde (d. 1561) – then the identity of “human” and “rational animal” as the whole and its parts would be strictly extensional. In this case there would be no harm in it, as the intensions of “human” and “rational animal” would still be distinct. It would still be possible to understand the referent of “human” as “rational animal”. Given that Rāzī does not entertain this option, his argument functions on the intensional context of grasping things insofar as they are captured by meanings.

Likewise the argument against the third option operates on the level of meanings. Here Rāzī targets the Peripatetic theory of descriptions (*ὑπογραφή/rasm* as opposed to *ὀρισμός/hadd*; see Bonelli, 2001). According to Avicenna, as an alternative to definitions, one can also make entities understood through their non-essential properties. For instance, I could make “human” be understood through the notion “whoever is capable of laughing”. Even though “capacity to laugh” is not essential to humans, it is their necessary and specific concomitant and therefore is sufficient for making their reality understood (e.g., *Easterners, Logic*, 30.6; 30.7–8). Note that this kind of description is not merely a way of saying at least something about the subject. Instead, it attempts to capture the subject’s essence by way of its extrinsic attributes.

Rāzī argues against conceptualization through scientific descriptions by emphasizing that one needs to know that the required properties specifically belong to the object of understanding. For instance, being odd necessarily applies to both three and five, but I cannot specifically conceptualize either as “that which is odd”. Rāzī argues that I cannot know the specificity of the attribution of a certain property without *first* knowing the subject of attribution. Therefore, scientific understanding through descriptions becomes as circular or uninformative as that achieved through definitions. A later author, Naṣīr al-Dīn al-Ṭūsī (d. 1274), rightfully diagnoses the problem: if a property is extensionally identical (he calls it “equal”) to an essence, then we automatically grasp the essence when we grasp the property (*Summary of the Substance of Beliefs*, 8.18–9.2). In other words, we do not need to know that it specifically belongs to the essence; rather, it just so happens to be specific to the essence and as such allows us to arrive at the understanding of that essence. For if it were not specific to the essence, it could not bring us there. We have, however, seen that Rāzī does not want to allow this level of extensional identity into the game. His argument, that one must first know the subject of attribution before knowing that a certain property belongs to it, implies that properties directly follow from the meaning with which we refer to the subject. It follows from the meaning of “human” that they are capable of laughing (the capacity to laugh is grounded in rationality). Here, the extensional identity of capacity to laugh and humanity plays no role. Their co-extension is only implied through the intensional implication of one from the other; if *x* intensionally implies *y*, they are extensionally identical *a fortiori*. That is why scientific descriptions are not informative either: we must already know the meaning of “human” in order to know that “capacity to laugh” is implied by it.

Finally, Rāzī can quickly reject the fourth option because it simply amounts to the combination of the second and the third. He can thus now triumph against the Aristotelian-Avicennian theory of conceptualization. Neither definitions nor descriptions, the two ways to conceptualize things scientifically, are informative.

One can summarize both Rāzī's arguments under C. H. Langford's (1942) notion of "paradox of analysis". Rāzī argues that conceptualization cannot be informative. We do not extend our knowledge of the essences of things by providing their definitions or descriptions. Rāzī's argument – as the paradox of analysis – is based on problematizing how one meaning, such as "human", can be supplied with additional meaning, such as "rational animal". If the latter is already contained in the meaning of "human", then this is not a proper expansion of knowledge. As Rāzī puts it in the first argument, we cannot grasp anew that which we have already grasped. As he puts it in the second argument, we cannot grasp a notion through itself again. Conversely, if the new information is not contained in the meaning of a thing, then the predication of identity is just false (in the paradox of analysis we can only allude to intensional identity).

If we may have doubts about connecting Rāzī's arguments with semantics, we can find decisive support for it in his solution to both arguments. Rāzī states that the only way to escape the aforementioned difficulties is to say that definition is "a detailed analysis (*tafṣīl*) of that which is signified by a name in an inclusive way" (*Summit of Reason*, 113.1–2; *Substance of Belief*, 84.2; Rāzī, *Summary, Logic*, 106.1–2; *Perfect Treatise*, 20.23). This is the statement that Ibrahim (2013) rightfully interpreted as the thesis that all Aristotelian-Avicennian definitions are merely nominal for Rāzī. Rāzī means to say that whatever we do in the process of defining, we do not amplify our knowledge about the essence of external objects. Rather we further explicate the meaning of a word which refers to an already known external object. Explication replaces amplification. I can vaguely know the meaning of the word "human" insofar that I refer to humans with that meaning; I then define "human" as "rational animal". By doing this, I do not broaden my knowledge about the essence of humans. I only explicate what I had meant earlier by my notion of "human". Rāzī solves Meno's paradox and the problems about the circularity of definitions and descriptions on the basis of nominal reference and different levels of explicitness. Having "inclusive signification" is enough for fixing the subject of inquiry, so that Meno can no longer say that one is not aware of it at all. The distinction between different levels of explicitness is sufficient to avoid circularity: one does not grasp "human" through itself when one explicates it as "rational animal". Again, both the problems and the solutions that Rāzī provides for us function solely on the level of meaning or intension. The problem was explaining how we can depart from one understood meaning of an object and arrive at another. The solution for Rāzī is that we do not. Instead, we have one and the same meaning but just on different levels of explicit understanding: "It amounts to the specification of a conceptualized reality by way of a detailed conceptualization" (*Summit of Reason*, 114.12).

Rāzī's interpretation of conceptualization as the act of nominal definition, and his understanding of nominal definition as the explication of certain postulated meanings, have their roots in Avicenna's theory of nominal definitions:

[T2] That which is called "definition" is either in respect to the name (*al-ism*) or in respect to the essence (*al-dāt*). That which is in respect to the name is a detailed (*mufaṣṣil*) account which signifies the meaning of a name according to its use, whereas that which is in respect to the essence is a detailed account which unfolds an essence in terms of its quiddity. Whenever somebody uses a notion (*lafẓ*), if he chooses an expression for the meaning which he intends, its defining is up to him, so that there is no quarrel with him at all, unless he deviates from what he intends in one of the ways which we will mention [later on]. As for when he composes meanings as he wants and then says about the sum: "that is what I intend when I use the notion", then this is the definition of this notion – if he does not make a mistake in the composition among those you will hear about [later on]. Yet [this definition] would not be of such a kind that if you attached some additional meaning (be it specific for what one has composed or not) to what you posited, you could claim that the composed plus the addition is the meaning of the notion which has been defined earlier, so that one could say that it is identical to it. (*Easterners, Logic*, 34.6–14)

Avicenna distinguishes in this passage between two types of definitions: nominal and real. When one provides the nominal definition, one defines whichever meaning one intended to define. It follows that there can be neither mistakes nor arguments about nominal definitions. If I define the intended meaning of humans as "two-footed animals", one cannot argue against me by saying that there are other two-footed animals, such as birds, and hence this definition fails to identify the essence of humans. No, I did not even intend to identify the essence of humans! I was just saying that the meaning of a certain word that I call "humans" is "two-footed animals". You may call "humans" the entities that are "rational animals", as it pleases you, but then our debate is merely verbal. From this, in its turn, follows that I cannot even debate with myself about the nominal definition of humans. If I mean "two-footed animals" by "humans", I cannot add another sense to it, like "rational" and have a different definition of "humans" as "two-footed rational animals". The reason is that this new definition will be a definition of another notion, call it "humans*", and not of "humans". In this way Avicenna rejects the idea of amplifying nominal definitions – a feature that is so central for understanding Rāzī's theory of conceptualization. Although the theory of meaning-explication is not yet developed in Avicenna (we will see in section 3 that Rāzī rather inherits it from Abū l-Barakāt), the notion of "detailed analysis/account" is already there: nominal definitions only provide a detailed analysis of meanings. Rāzī also faithfully follows the Avicennian thesis that there can be neither quarrels nor arguments about nominal definitions (*Summit of Reason*, 115–16; *Rāzī, Summary, Logic*, 111).

There is, however, one important difference between Rāzī and Avicenna. Avicenna also recognizes the possibility of real definitions in this passage. Instead of

explicating a meaning, we can make an essence understood, that is, conceptualize what it is, by providing its complete definition. Several lines later, Avicenna explains that the cases when one amplifies their knowledge by improving the definition, one does so “not intending the meaning of the name ... but in respect of the essence/object itself” (*Easterners, Logic*, 35.4–5). On the contrary, we have seen that Rāzī does not allow this possibility. All definitions are nominal. All our attempts to conceptualize anything through definitions or descriptions are bound to be explications of intended meanings with which we refer to things and fail to grasp the essences of things themselves. The difference between Avicenna and Rāzī is rooted in different semantic approaches, which I suggested earlier in the analysis of Meno’s paradox. Avicenna’s amplification of knowledge through conceptualization is directed towards real essences as the extramental referents of names, regardless of which meanings we use to refer to them. Rāzī’s understanding of conceptualization is, however, directed towards the meanings themselves, with which we refer to extramental entities. This is why Rāzī faces the paradox of analysis and ends up by concluding that all acts of conceptualization are limited to explicating referentially opaque intensions.

Rāzī’s conclusion seems to go very far in the direction of scepticism. He states that all our scientific definitions, all intentional acts of conceptualization of things around us, do not reach the essences of things in themselves. Should we, however, conclude that Rāzī believes that we cannot know the world as such at all? I do not think so. One should remember that Rāzī’s aim is a very specific one. He wants to argue against the possibility of voluntarily acquired conceptualization of things. This kind of knowing the world does not reach the essence of the worldly things, according to Rāzī’s analysis. There are, however, different types of knowledge that remain intact from Rāzī’s criticism of definitions. First and most important is that which we saw him calling “immediate knowledge”. In his *Substance of Beliefs*, Rāzī provides a whole series of sceptical arguments against the reliability of direct perception, such as hallucinations, inability to distinguish between dreams and reality, or the perception of continuums instead of distinct elements (87–90). His sceptical doubts are not confined to sensible experience, but include all types of immediate knowledge; he professes doubt even on axioms such as the principle of non-contradiction (94–98). While this chapter of the *Substance of Beliefs* constitutes an important source for the history of scepticism in Arabic philosophy that requires a separate study, since we are now focusing on a different aspect of Rāzīan scepticism, it suffices to say that at the end of the chapter, Rāzī very briefly waves away all these doubts, saying that the reliability of immediate knowledge is self-evident (120).⁵

⁵ Rāzī may have arrived at some more sceptical position later in his life; alternatively he only wanted to limit our knowledge in respect of divine things precisely because it must be fully grounded in the given conceptions of sensibles (Shihadeh, 2006, pp. 181–203).

The reliability of direct understanding of things in themselves thus remains beyond any criticism. We might not be free in determining what we grasp this way: we see what is presented to us. This forms the way to ethical conclusions, as I mentioned earlier, since this makes us unfree in our beliefs about the world. But at least this is a way to get to things in themselves. One should be very careful here. On the one hand, immediate knowledge or direct grasp should not be confused with other kinds of conceptualization, such as Aristotelian-Avicennian definitions. The former is the *given* information that we perceive without being actively involved in the process in anyway. The second is a *spontaneous* act of conceptualizing about this information. Rāzī argues that direct grasp brings us to things in themselves, whereas such kinds of conceptualization as Aristotelian-Avicennian scientific definitions only reach up the meanings of words with which we refer to things. On the other hand, the result of direct grasp is also that we possess a certain idea or concept about what things are in their essential reality. We are just subjectively not involved in providing that idea: we possess concepts without spontaneous conceptualization.⁶

Rāzī is thus very far from being a complete sceptic. As was already rightfully concluded by Ibrahim (2013), Rāzī is sceptical only about our capacity to understand the essences of things through their scientific definitions. But he is not sceptical about the pre-scientific direct grasp of either sensible or non-sensible items.⁷ Moreover, Rāzī also has a tool to bridge the gap between “immediate knowledge” and the explicated meaning of words. I started explaining his theory by drawing the distinction between conceptualization and assent. All the criticism that we have seen against Aristotelian-Avicennian scientific definitions and descriptions was on the side of conceptualization. However, both in the *Rāzī, Summary, Logic* (111.8–11) and in the *Summit of Reason* (115.11–12), Rāzī allows that one can and should argue about whether certain meanings, explicated in a certain way, apply to concrete extramental things. This would be our way of accounting for things “in respect of reality” (*bi-ḥasab al-ḥaqīqa*). Rāzī explains in both passages that such an account would be a case of claiming ($z\text{-}^{\text{c}}\text{-}m/d\text{-}w\text{-}y$) – that is, assenting – and not of conceptualizing. Unfortunately, Rāzī does not explain how this part of his theory fits into the whole picture. Very speculatively, one could suggest the following: I can explicate the meaning of “human₁” as “two-footed animal”. I also have a direct grasp of humans as such. Then I can

⁶ A further question concerns the epistemic way of possessing these concepts. Rāzī believes that direct knowledge is a mere relation to the object known (see the forthcoming PhD thesis of Davlat Dadikhudoh, at the LMU Munich; I made some preliminary remarks on this issue in Benevich, 2019).

⁷ However, I cannot agree with Ibrahim’s (2013, p. 399) principle of the *Indefinability of Sensibles*, as becomes clear from the following reconstruction. Rāzī’s point just is the primacy of sensible knowledge. Possessing sensible knowledge in the first place, we can further attempt to provide complete accounts of sensible particulars in terms of assents, that is, make claims about their nature; see, for example, *Summit of Reason* (1.117.8–9).

assent to the proposition in which the subject is the object of my direct grasp and the predicate is “human₁”. In the *Rāzī, Summary, Logic* (111.9–10), Rāzī describes this procedure as follows: “One indicates a concrete existent and claims that its reality is composed out of this and that”. This proposition will be false, as “human₁” does not capture the essence of humans in themselves. Then I can propose another meaning, “human₂”, that is explicated as “rational animal”, and repeat the procedure. This proposition will be right.⁸ Although one cannot grasp the essences of things through the process of deliberate conceptualization, one can do so by way of immediate grasp and consequently assent to different propositions in an attempt to account for the content of the immediate grasp. We know the external object of inquiry through direct perception. Therefore, we do not just know it insofar as it is captured by a certain meaning but rather as such. Hence we can line up different propositions about that object and check which of them is correct. We do not thus amplify our knowledge – unlike Avicenna’s view – but we account for the contents of the given that we fully grasp anyway. Understanding consists for Rāzī of three epistemic moments: ascribing a meaning to a word and explicating it through definition (spontaneous conceptualization); perceiving an object directly (given conceptualization); and identifying the former with the second (assent). Conversely, Avicenna identifies the referent of the word with the object of direct perception from the very beginning; for him, both conceptualization and assent target that object. If this speculative reconstruction is correct, it shows that Rāzī does not regard the task of Aristotelian-Avicennian scientific definitions as being completely in vain. By explicating meanings with which we refer to external objects, we can try to provide a better account for whatever we immediately grasp in terms of the nature of these objects. This makes scientific definitions still useful, despite Rāzī’s scepticism towards the conceptualization of real essences through them. We will see now that a similar conclusion applies to Rāzī’s younger contemporary, Suhrawardī.

2. Suhrawardī: Sortal Constituents and Nominal Definitions

Suhrawardī’s attitude towards Aristotelian-Avicennian definitions finds its most detailed expression in his *Paths and Havens* and *Philosophy of Illumination*. He arrives at the same conclusion as Rāzī: the proper task of defining is to provide nominal definitions (*Paths and Havens, Logic*, 90.3–4).⁹ Suhrawardī’s agenda,

⁸ The complete dependence of the verification of such a proposition on whatever is given in the direct grasp makes the whole corpus of our beliefs not dependent on us. This is precisely Rāzī’s aim in terms of his ethical determinist project (cf. *Inquiries*, 9.102–104).

⁹ This has already been noted by Ziai (1990, p. 110). However, I do not see any persuasive reasons for Ziai’s connection of this Suhrawardīan thesis with the Platonic theory of anamnesis.

however, is very different from that of Rāzī. He does not address the problem of spontaneity of conceptualization anywhere. Instead Suhrawardī is more concerned about the metaphysical unity of extramental things as well as about the proper objects of intentional verbal reference.

When we talk of Suhrawardī's theory of universals, the first notion that comes to mind is *ʿtibārāt ʿaqliyya* (conceptual considerations). Whether all universal notions are such conceptual considerations for Suhrawardī and what it means for his metaphysics when something is a conceptual consideration still remains a desideratum for scholarship (cf. Benevich, 2017; Kaukua, 2020). There is, however, no doubt that (1) Suhrawardī believes that all genera and differentiae – that is, all sortal constituents of essential definitions – are “conceptual considerations” and (2) that it means for Suhrawardī in this case that we cannot regard the extramental essences of things as mereological compounds, whose parts those sortal constituents are. Suhrawardī argues at length in *Paths and Havens* (365–368) that one should not regard genera and differentiae as real parts (*ağzāʿ*) of extramental essences. His conclusion, based on his favourite example of the relation between being a colour and blackness is that “In reality, being a colour is a merely conceptual consideration (*wasf ʿtibārī*), and [hence all] genera and differentiae are likewise” (*Paths and Havens*, 368.11–12). Otherwise one would need to count being a colour and the corresponding differentia (contacting the sight) as two distinct things (*šayʿān*), two existents (*mawğūdān*), and two features (*hayʿatān*) that inhere in one and the same blackness. According to Suhrawardī, sortal constituents do not have a concrete form (*šūra ʿayniyya*) in the extramental reality (*Paths and Havens*, 368.3–7).

These metaphysical observations about the nature of the constituents of definitions stand in close connection with Suhrawardī's criticism of definitions. Naturally, if genera and differentiae are not extramental parts of extramental essences, one cannot claim that definitions, which consist of them, directly correspond and capture the constitution of extramental essences. The Avicennian theory of definitions and essences presupposes that genera and differentiae are parts of essences in a certain sense (Benevich, 2018, pp. 144–149). If Suhrawardī denies this, he must also deny the theory of real essential definitions. So, he concludes his proof that genera and differentiae are not real parts of essences by alluding to his criticism of definitions: it is not that we grasp the reality of blackness through its genus, being a colour, and some unknown differentia. Rather both are accidental features – that is, extrinsic properties – of blackness as such (even though they are grounded in the essence of blackness). Therefore one cannot learn what blackness is on the basis of these two properties. Instead – Suhrawardī suggests – we learn blackness “as it is” (*kamā huwa*). “Sensibles qua sensibles are conceptualized naturally (*fiṭrī*)”. Hence one learns what

blackness is through direct observation: “the object of direct observation (*al-muṣāhadāt*) are principles to which natural [reasoning] should go back; one does not [need to] understand (*taʿrīf*) them” (*Paths and Havens*, 368.18–369.7).

This conclusion from the metaphysical section of *Paths and Havens* bears on two elements of the criticism of real definitions, to which Suhrawardī constantly alludes in his logical discussions of the topic. The first element is Suhrawardī’s insistence that all the usual candidates for being genera and differentiae in fact appear to be extrinsic and posterior to the natures of observable things. The relation between blackness, its genus, being a colour, and its differentia, contracting the sight is one usual example (*Paths and Havens, Logic*, 88.8–11; *Philosophy of Illumination*, 51.17). Another example is the definition of human as rational animal. Suhrawardī argues that being rational indicates a certain disposition. Dispositions, however, are secondary properties “that follow upon realities” (*tawābiʿ li-l-ḥaqāʾiq*). Therefore rationality cannot be a part of the human essence. Instead Suhrawardī argues that it is the simple human soul that is identical to human essence itself. The soul, however, “can be only known through concomitants and accidents” (*Paths and Havens, Logic*, 98–100; *Philosophy of Illumination*, 10.1–5).

This brings us to the second fundamental element of Suhrawardī’s criticism of the Aristotelian-Avicennian theory of grasping essences through their essential definitions. These are his two arguments against this kind of grasp and his proposed alternative account. Among the two, the second argument is better known and easier to understand. Suhrawardī argues that one cannot ever gain certainty that one has taken into account all essential features of the defined: “If it remains possible that some other essential feature has not yet been perceived, one cannot be certain of understanding a reality”. In other words, there can be no guarantee for the completeness of definition (*Philosophy of Illumination*, 10.17–11.4). This is rather straightforward. However, the first argument that Suhrawardī presents in the *Philosophy of Illumination* is more convoluted. It has the following structure:

1. The unknown may only be grasped through the known.
2. The known through which one grasps the unknown must involve both the general (genus) and specific (differentia) altogether.
3. Yet the specific differentia is known through:
 - 3a. belonging to something else; but then it is not specific anymore.
 - 3b. belonging to the defined; but then if neither is directly perceived by the senses, the differentia is equally unknown as the defined.
 - 3c. through something else; but then the issue about that which makes the differentia known is raised again: is it common (3a) or specific (3b)?

4. Therefore “The only recourse is features that are sensible, or evident in another way, and that taken together are proper to the thing (*yaḥiṣṣu al-ṣay’ ġumlatuhā bi-l-iġtimā’*)” (*Philosophy of Illumination*, 10.10–16).

Within this argument Suhrawardī brings his reader step by step to the conclusion that the only way to grasp something is to observe it directly with our senses (in the case of sensibles). His argument focuses on proving that we cannot learn essences through their specific differentiae. How will we know these specific differentiae themselves? If we learn them by finding them in other subjects, then they are not specific anymore. Nor can we learn of them as being specific, unless we accept that we have already observed both the defined itself and its specific differentia with our senses (which is the targeted conclusion). Nor can we suppose that differentiae are grasped through giving a further definition, since then we ought to ask about the way in which we grasp these differentiae of differentiae and so on *ad infinitum*. Therefore, the only option remaining, Suhrawardī argues, is that we must have already observed that the specific attributes, which the Peripatetics call differentiae, belong to their subjects. If, however, this is the case, then we do not need the process of making the defined understood through the differentiae and genera anymore: we have already seen the defined with our own eyes and thus know it sufficiently. This is the explicit conclusion Suhrawardī reaches later in the book:

[T3] The truth is that blackness is just one simple thing. It can be understood intellectually, with no part of it remaining unknown. It cannot be understood by someone who has not observed what it is like (*yuṣāhiduhu kamā huwa*), but anyone who has observed it does not need to come to understand it (*ta’rif*). It has a form in the mind, just as it has a form in sensation. There is no coming to understanding such things. (*Philosophy of Illumination*, 52.5–7, tr. Walbridge & Ziai mod.)

Suhrawardī denies in this passage that there is any need for Avicenna’s doctrine of *ta’rif* to account for the act of knowing and understanding. One does not need to make “blackness” understood through conceptualization if one has already observed it with the senses. If one has not observed it, however, there is no way for them to make it understood anyway. This conclusion as well as the second argument from specification cannot but remind us of Rāzī’s theory of the opposition between direct knowledge and spontaneous conceptualization. Rāzī argued in his paradox of circularity that either one does not know that P belongs to x specifically, and thus one cannot come to understand x through P; or one knows it, but then one has already understood x in the first place. Suhrawardī’s line of argument follows the same pattern. Moreover, we have also seen that Rāzī’s main conclusion was that direct perception is the only way to reach the essences of things in themselves.¹⁰ Suhrawardī concludes the same in T3: in order to know things, we need to observe them as they are.¹¹

If, however, definitions are not necessary for knowing things, why have them at all? Here, Suhrawardī's position is again reminiscent of Rāzī's:

[T4] Some use the term "definition" for the formula that signifies a thing's quiddity. That formula indicates essential [constituents] and the features that are intrinsic to the thing's true reality, whereas a formula that allows the true reality to be known by means of external accidents is called a "description". Yet, consider the example of the body. Some affirm that the body has parts, but others are in doubt, while still others deny it. (You will learn later what these "parts" are.) For most people, these parts do not belong to their understanding of the thing named. Instead, the name signifies only the totality of the concomitants of its conceptualization. Or consider water and air. When it is affirmed that these have parts that cannot be sensed, some people will deny it. So those parts are not included in their understanding of water and air. Even if the body is a part of every corporeal nature, and is as we have said, people will only conceptualize those parts apparent to them. It is those aspects that are meant by the name, both for the one who coined the name and for them [sc. the people who deny invisible parts]. (*Philosophy of Illumination*, 9.11–20, tr. Walbridge & Ziai mod.)

At first glance, it may seem that Suhrawardī argues in this passage for the idea that all definitions in fact are descriptions. First, he seems to introduce the Peripatetic notions of definitions and descriptions, as we saw them in the previous section of this article. Where definitions provide conceptualizations of the essences of things through their essential constituents, descriptions provide their conceptualization on the basis of extrinsic attributes. Having drawn this distinction, Suhrawardī then seems to argue that when one defines body some may think that one alludes to its constituent parts. However, according to Suhrawardī, the usual candidates for being the parts of the essence of body are in fact its extrinsic attributes. The same applies to the definitions of water and air. Right after this passage, Suhrawardī also alludes to the example of human that we saw above: "rationality" does not capture the essence of the human soul but rather its extrinsic concomitant (*Philosophy of Illumination*, 10.1–5). One may naturally suppose that as all these attributes are merely extrinsic, then definitions must simply be replaced with descriptions. One would conceptually grasp the essences of things through their extrinsic attributes alone.

There is some basis for this interpretation. We have seen that Suhrawardī's metaphysical background for his criticism of definitions is the statement that entities such as blackness or humans are in fact simple and are not mereological

¹⁰ Rāzī's position is specifically reminiscent of Suhrawardī's in *Summit of Reason* (1.119) and *The Commentary on the Elements of Philosophy* (1.67–68); see also Ibrahim (2013, pp. 399–400). According to both authors, our direct naive grasp of, for example, heat is the primary and ultimate source of knowledge about heat.

¹¹ This, in fact, is a part of Suhrawardī's major epistemological theory of knowledge as immediate presence. However, I cannot explore this in detail in the present article (for more on this theory, see Kaukua, 2013). Its source might be Abū l-Barakāt's (d. 1164/65) epistemology; on this, see Benevich (2020).

compounds. Therefore, one cannot provide their definitions, since those would need to contain the sortal constituents of the defined. Why not just say that the essences of all these simple objects are fully understood through descriptions? Suhrawardī moves us in this direction in *Paths and Havens*: “That’s why the Master Abū ‘Alī [sc. Avicenna] claimed in the treatises which he ascribed to the Easterners (which are only partially and incompletely available) that simples can be described but not defined” (88.12–13; cf. *Easterners, Logic*, 36.18–20). This statement could be interpreted as Suhrawardī’s charitable reading of Avicenna. Although Avicenna did not reach the understanding that most of his usual candidates for defining are in fact simple, Avicenna has the theoretical framework to conclude that if something is simple, then one arrives at a full understanding of it through descriptions – Suhrawardī’s own position, on this interpretation. However, right in the next sentence Suhrawardī reveals his critical stance to Avicenna even on this reading: “Even though he ascribed it to the Easterners, it still is the same as the doctrines of the Peripatetics” (89.1). This statement may be interpreted very differently, but I suggest that Suhrawardī thereby means that the theory of scientific descriptions is not much closer to the truth than the Aristotelian-Avicennian theory of essential definitions.

Suhrawardī several times quite explicitly rejects that one can fully understand things through descriptions. First, in *Philosophy of Illumination* (52.2–3) he applies the aforementioned specification problem to grasping blackness through its concomitants: “Furthermore, if conception is assumed to take place by means of concomitants, the concomitants will also have specific properties, and the same difficulty will apply to them too”. In other words, I cannot know whether contracting the sight which is now regarded as an extrinsic concomitant rather than a specific differentia, specifically belongs to blackness. As we have seen, the only way to escape it is direct observation of blackness. But then one does not need to conceptualize blackness as “the entity which contracts sight” anymore, as one already knows it as such. Likewise, in *Paths and Havens* Suhrawardī says:

[T5] If everything through which one understands the objects of sense-perception and observation are [in fact] more obscure than them, one does not [need] to provide a definition or description for them. Whiteness is more evident in itself than its being widening the sight. (*Paths and Havens, Logic*, 97.11–12)

Given that Suhrawardī explicitly states that definitions and descriptions are equally unnecessary, since direct observation provides more evident information, or even impossible because of the completeness and specification problems, one might need a different interpretation of T4.¹² For this we need to turn again to semantics. One may notice that Suhrawardī alludes in T4 to the signification of names. For him, it is not only important that the alleged parts of the definition of

body are merely its extrinsic attributes. Rather, these parts also form an extrinsic description of an underlying subject with which (description) we refer to that subject. Here, we have returned to the distinction between (1) taking objects under a certain description, i.e., insofar as they are captured by certain meanings, and (2) the referents of words as such. When one defines black as “the colour which contracts sight”, according to Suhrawardī, one does not define the essence of blackness itself. Instead, one defines the intended meaning, in other words, blackness taken under a certain description. As Suhrawardī says in T4, “people only conceptualize those parts apparent to them”. This means that our attempts to define things are bound to be limited by how we intend them and by the meanings of words through which we approach them. The intended meanings are proper objects of definitions and not the essences of things in themselves. This line of thought is repeated in *Paths and Havens*:

[T6] When people refer to a certain animal as a “horse”, they neither intend nor coin something that is obscure to them. Rather they capture that which they observe in terms of the form of a horse and its properties. This is what they mean (*mafhūm*) and nothing else. Whatever is beyond it is not included in the referent of the name. (*Paths and Haven, Logic*, 96.10–13)

Here Suhrawardī explains his position on semantics. The referents of words are not things in themselves. Rather they are things insofar as they are referred to with meanings whose content depends on the point of view of the observer. For analytical readers, one may better get to the sense of this theory if one compares it to H. Putnam’s (1973) famous statement that “meanings ain’t in the heads”. For Putnam, it does not matter how one refers to the object called “Venus”: as “Morning Star” or “Evening Star”. The referent of the name will be the object itself, and the meaning of “Morning Star” and “Evening Star” will be Venus itself (as meaning must fix the reference, according to Putnam). This is precisely what Suhrawardī would deny. The referents of names are something *only* insofar as it is described respectively as “Morning Star” and “Evening Star”. This is why when we define things we can be satisfied with either meaning. We can give definitions of something *qua* being “Morning Star” or “Evening Star” but we cannot give an essential definition of the real extramental subject that underlies both of them. The “meaning” here is equivalent to the extent to which we understand the underlying subject. As Suhrawardī states in T6, we cannot refer to something that

¹² One might note that descriptions may still be in better standing than definitions. Although they are not the means to make something fully understood, one still might use them in order to account for things in themselves in accordance with that which one has primarily observed directly (like we had it in Rāzī’s account of assent). At least the problem of simplicity does not befall them. This might be the reason why Suhrawardī does not criticize descriptions as harshly as definitions in *Paths and Havens, Logic* (101.3–5).

we do not know. With this he radically differs from Putnam. In Putnam's theory, we could be completely wrong about what Venus actually is, but we still refer to the object itself with the name "Venus". Conversely, to repeat the analytical parlance of my analysis of Rāzī's theory of nominal definitions, the proper objects of reference and therefore scientific definitions are objects *as opaquely referred to with intensions* for Suhrawardī, and not referentially transparent essences of things in themselves.

Limiting definitions to objects under certain descriptions fits quite nicely into Suhrawardī's metaphysics of genera and differentiae. As I mentioned at the beginning of this section, Suhrawardī argues that genera and differentiae, such as being a colour and contracting the sight, are not real parts of extramental compounds. Rather they are predicates that are said of further more basic and primary concepts (the latter being like blackness or humanity, that is, species). This stands in agreement with his semantics of definition. If definitions (genera and differentiae) are only given of objects qua meanings, and meanings already are our ways of conceptualizing things, then genera and differentiae can only be predicated of further concepts and cannot be posited as their real parts.

If this interpretation is correct, this is how one ought to understand Suhrawardī's thesis that "the statement which unfolds the meaning of something is precisely what the most noble among the people of inquiry inclined to [with the notion of definition]" (*Paths and Haven, Logic*, 90.3–4), which I referred to at the beginning of this section. As it was correctly diagnosed by Ziai, Suhrawardī thereby states that Aristotelian-Avicennian epistemology can at best give us only nominal definitions. Thus, Suhrawardī reproduces the Avicennian doctrine in T2 (90.4–91.8) that it is impossible to amplify nominal definitions. This is quite in line with Suhrawardī's position in T4 and T6 that definitions are only descriptions of objects. Given that any new definition will have additional meanings, it cannot be intensionally identical to the previous one. Rather, the new definition will be a nominal definition of a different description/appearance of the thing.

Next to the impossibility of amplification, there is another important point of contact between Avicenna's theory of nominal definitions and Suhrawardī's. In T4, Suhrawardī does not divorce definitions and meanings from real things. In fact, he establishes a connection between them. He says that the objects of definition (*definienda*) are bundles of quasi-extrinsic attributes, i.e., concomitants and accidents of the underlying subjects. We have seen how this idea might mislead someone to conclude that Suhrawardī believes that we can fully conceptualize the essences of things in themselves through their extrinsic descriptions. On the basis of semantics, we might conclude now that Suhrawardī believes in the conceptualization of things insofar as certain extrinsic descriptions apply to them. When one conceptualizes (*s-w-r*) or understands (*‘-r-f*), one still targets things although only

under certain descriptions. This idea, which was not so explicit in Rāzī, might however still go back to their original common source: the Avicennian theory of nominal definitions. In the *Easterners*, Avicenna explains that one can easily have the nominal definition of humans as two-footed animals (I take my own example) “because there is an animal with that attribute, and there is a certain way of considering (*i'tibār*) it in accordance with that attribute, and nothing prohibits its consideration in accordance with that attribute to have a name for it” (34.17–19). This is a very important clarification. It does not follow that one cannot argue about nominal definitions simply because they are completely random. It is not that I would randomly take the notion of two-footed animal and call it “human” because I want to do so. Rather, nominal definitions are given of meanings that are still ways of thinking about real things. Humans do have the attribute of being two-footed. It might not capture their essence, but it still belongs to them. Therefore when I give a nominal definition of humans as two-footed animals I refer to them with a meaning which stands for the way that I consider humans. Suhrawardī's idea that the proper objects of nominal definitions are in a way extrinsic attributes of things might be a development of this idea. “Colour that contracts sights” is the nominal definition of blackness. But it is not a definition of a completely random idea of how to conceive of blackness. Rather it is the definition of the way that blackness appears to me – as Suhrawardī was insistent in T4 and T6. This kind of epistemically limited appearance is still different from the transparent appearance that Suhrawardī was talking about in terms of direct observation. After all, it gets us only to some attributes, not to all of them (the notions of *z-h-r* and *š-h-d*, however, are equally used for both). The difference between two kinds of appearance consists in the presence of the intentional act of conceptualization. As Suhrawardī says in T4 and T6, we nominally define something when we intend that thing with a name. We define certain intended aspects of things. On the contrary, direct observation is not intended; it grasps all the attributes of the object (*Philosophy of Illumination*, 11.5–6).

If this reconstruction of some of Suhrawardī's rather obscure remarks is correct, we can finally draw some conclusions about Suhrawardī's scepticism. Similarly to Rāzī, Suhrawardī is very sceptical about the utility of the Aristotelian-Avicennian theory of scientific definitions. For Suhrawardī, the objects of such definitions are the intended meanings of words; they are not the essence of things in themselves. The project of conceptualization (in the Aristotelian-Avicennian sense) is thus bound to fail because of the issues of completeness and specification. Instead, we can only conceptualize things under certain descriptions. However, again similar to Rāzī, Suhrawardī has his own non-sceptical way of getting in contact with things in themselves. This is their direct, non-conceptualizing, pre-scientific (in the Aristotelian sense of “science”) observation through sense-perception

(or other ways if the object is not sensible, like, e.g., our self-awareness). Suhrawardī is thus in no way a global sceptic.¹³ He is only a sceptic about Aristotelian-Avicennian science; in this respect, he shares Rāzī's criticisms of that science. Suhrawardī also, like Rāzī, tries to connect the objects of nominal definitions to things in themselves by referring to the objects of nominal definitions as the extrinsic attributes of the latter. This might be the reason why Suhrawardī, despite his overall scepticism, still says in *Paths and Havens* that the usefulness of such nominal definitions is obvious (*Paths and Havens, Logic*, 91.15). Nominal definitions are not completely random; they target things under certain descriptions or target certain ways of considering things. Although Suhrawardī has different reasons for the usefulness thesis than those which I suggested for Rāzī, both thinkers still grant that despite its problems the Aristotelian-Avicennian theory of definitions should not therefore be completely abandoned.

3. Abū l-Barakāt: Meaning and Essence

Both Rāzī's and Suhrawardī's criticism of definition make use of the Peripatetic concession that giving real definitions is extremely difficult, even if one grants that it is possible at all. Suhrawardī says that "Their Master (*ṣāhib*) admits its difficulty" (*Philosophy of Illumination*, 11.5–6). In *Paths and Havens*, however, Suhrawardī remarks that if one limits definitions to being of meanings alone, then one avoids these difficulties (*Paths and Havens, Logic* 98.1–4). Likewise, in Rāzī, we find the following passage:

[T7] [The difficulty of composing a definition] is owing to the difficulty of grasping the proximate genus and the proximate differentia, as has been established. Once the Sheikh [sc. Avicenna] established this, the author of the *Reconsidered* [sc. Abū l-Barakāt] disagreed, saying: in fact this is very easy, since definitions are definitions of names, and names are names of items grasped by the intellect. When any item is grasped in the intellect, surely one will have a perfect grasp of the part that makes it what it is and is shared with other things, and also of the part that makes it what it is and is distinctive of it. From this point of view, definition is easy. *Fair judgment*: if the goal of [the definition] is to provide a detailed analysis of the referent of a name, then it is as the author of the *Reconsidered* says. But if its goal is to grasp existent quiddities, then this is very difficult. (Rāzī, *Summary, Logic*, 118.2–10)

Rāzī starts by stating a rather straightforward idea that composing definitions is not an easy task because it is difficult to discover the proximate genus and differentia – that is, to approach the essence of the thing itself. He ascribes this idea to Avicenna, in contrast to Suhrawardī who probably ascribes it to Aristotle (because of the *ṣāhib*-title). I suggest, however, that neither of them has any

¹³ Suhrawardī explicitly rejects global scepticism in *Paths and Havens* (212).

concrete Aristotelian or Avicennian passage in mind when they write this. My hypothesis is based on what Rāzī says in the rest of T7. He mentions, for instance, that Abū l-Barakāt al-Baġdādī, a scholar who predates him by a generation, disagreed with Avicenna on the basis of his theory that definitions are only definitions of the meanings of names and not of real things. Rāzī in his “fair judgement” agrees with Abū l-Barakāt that there is no real difficulty in defining meanings; however, real definitions are not easy to grasp. As we can infer from the analysis in section 1 of this article, Rāzī in fact thinks that Abū l-Barakāt’s position is the correct one.

So, both in Rāzī and Suhrawardī we have an account of the difficulty of real definitions and the easiness of nominal definitions, the latter being explicitly ascribed to Abū l-Barakāt by Rāzī. This gives us the initial basis for my main historical hypothesis in this article, that both Rāzī and Suhrawardī in fact draw on Abū l-Barakāt in their analysis of definitions and the conclusion that all Aristotelian-Avicennian definitions are in fact of meanings (or: of things under certain descriptions) and not of real essences.

Abū l-Barakāt devotes about fifty pages to issues of semantics and definitions in the section “On Understanding and Conceptualization of Meanings by Way of Definitions and Descriptions” in his book, the *Reconsidered*. This is due to his style of writing, according to which he leads the reader step by step to the conclusion. His conclusion is found in the last chapter which is directly devoted to our issue: the difficulty and easiness of providing definitions. Abū l-Barakāt starts the chapter by reporting arguments for the difficulty of defining.¹⁴ Among them are taking a remote genus instead of proximate (such as defining man as “rational body”); not being able to discern mere extensional identity and real essential implication (such as thinking that one does not need to mention both “sensation” and “voluntary motion” in the definition of animal, because they are extensionally identical anyway); and the completeness of definition: how can I be sure that I have gathered all specific differentiae that belong to a specific essence? All the above shows why definitions are very difficult or even impossible to achieve (*Reconsidered*, 112.15–113.10). As was correctly traced by Rāzī, Abū l-Barakāt disagrees:

[T8] The difficulty of [whoever provides the definition] about real existence in terms of what is primary and what is secondary does not apply to everything defined or to everyone defining; nor

¹⁴ Cf. Avicenna, *Definitions*, 2–3 (identified by Khaled El-Rouayheb in his edition of Ḥūnaġr’s *Unveiling*, 60). Furthermore, there are several problematic passages in Avicenna’s *Marginal Notes* (§62, 345, 718–719; I am grateful to the anonymous reviewer for these references). Their interpretation requires further study, but it should be preliminarily noted that Avicenna does not question our capacity to know the essences of things there. Rather he just insists that we first directly grasp (*c-r-f/d-r-k*) their extrinsic properties and then make inferences about the natures of things on the basis of those properties.

does it apply at all times; nor does it apply more than it applies to syllogisms and [demonstrative] sciences ... Likewise if defining is difficult in some cases and at some times, nevertheless this is not a difficulty in reality, since verbal definition [only] relates whatever results from the thing in the mind. It is that for which one posits a name and for which mental and semantic (*ma'nawī*) unity is established. (*Reconsidered*, 1.116.8–14)

Abū l-Barakāt starts with statistical reasoning. The difficulties about definitions (here he talks about distinguishing essential from extrinsic) do not apply predominantly. He also uses an *ad hominem* argument: why say that definitions are difficult and not say that syllogisms and demonstration are as well? Apparently he thinks that Peripatetics would not be willing to subscribe to the latter thesis. However, if one is not convinced by these rather wacky arguments, Abū l-Barakāt then proposes his real solution. Definitions are in fact not even intended to capture the real essences of things in themselves. Instead, definitions are “verbal”. They target the mental content which a certain name signifies. This is how Abū l-Barakāt finishes his argument. This is also how he starts it: “Definitions are definitions in respect of names. Names are names of whatever has definitions in respect of definitions” (*Reconsidered*, 1.113.13).

The main contention of Abū l-Barakāt is that all definitions are nominal: “Know that definitions only are in respect of names and names only are in respect of definitions; or better say, names only are in respect of meanings and meanings are the meanings of [names]” (*Reconsidered*, 1.110.1–2). So, with Abū l-Barakāt, we encounter once more the theory that definitions are of meanings and words that signify them, and not of the essences of things in themselves. Again, one should not understand this theory as stating that one defines some randomly posited meanings of names. Consider, for instance, the following passage:

[T9] One and the same thing has multiple names in respect of multiple definitions and multiple definitions in respect of multiple names. All these are in respect of multiple attributes and descriptions. For instance, “human” [may be named] insofar as he is a body, a human, a writer, a doctor, a knower. He has a definition in respect of each of [these] names. Nevertheless, even though a definition would be in respect of names, it only is a definition insofar as it belongs to the existent object of naming, so that the result is an existing reality. It is in relation to it that it is a definition. (*Reconsidered*, 1.111.12–17)

Abū l-Barakāt repeats in this passage his main claim that all definitions are nominal. Names signify meanings that belong to some concrete really existent object. Meanings are identified as attributes and descriptions of concrete objects in this passage. For instance, a human can be described as an animal, a human, or a writer. All these are meanings of names with which we refer to certain attributes of a concrete thing. The meanings that are intended in definitions hence are not completely detached from reality. Rather, we still intend to conceive of real

things. It is only that we always end up with conceiving things *under certain descriptions* – a position that we have also seen in Suhrawardī.

How does this theory help overcome the proposed difficulties for definitions? This is Abū l-Barakāt's response:

[T10] We say: if [differentiae] are unknown, then they are unknown either as distinguishing differentiae [in the mind] or as the [extramental] attributes that belong (*mawǧūda*) to the subject of attribution. If [they are unknown] as the attributes that belong to the subject of attribution, *then one cannot know them*. You have learned that whoever performs understanding (*ʿarif*) designates (*yusammā*) whatever he has understood insofar as he understood it and he defines that which he has designated insofar as he designated it. Definition is a definition in terms of name (*bi-ḥasab al-ism*); and the name and the definition are in terms of understanding (*al-maʿrifā*). If someone designates whatever he understood he explains (*yufassiru*) the name with a definition, which is a detailed analysis of understanding (*tafṣīl al-maʿrifā*). Whatever is unknown does not enter the definition in respect of which someone gave a name and a definition. If something is unknown it does not disturb the knowledge of the known insofar as it is knowledge. For instance, when we understand from something – such as snow – that it is a white body, yet we do not know whether it is cotton or snow, our ignorance about its being snow or cotton does not damage our understanding of its being a body and of its whiteness. So, if we designate it by a name that refers to whatever we understood and then we define it in respect of this name, so we have just performed the explanation of a name and a demonstration of the cognition insofar as we understood it. Whatever we did not know remains unknown to us until we learn it differently. (*Reconsidered*, 1.114.5–13)

This is a central passage in understanding Abū l-Barakāt's theory of definitions. He is trying to solve the problem of how we can be sure that we made clear all differentiae that were needed to capture the essence of the subject. His response consists in distinguishing two ways of looking at these differentiae and accordingly two possible tasks of definitions. One way would be regarding differentiae as really existent attributes of real entities. The task of such definitions would be establishing the essences of these entities. Abū l-Barakāt concedes that in this case the difficulty holds. The short sentence that I italicized goes as far as stating that one cannot know things in this way at all. This is probably the most sceptical statement that one can find in the discussion of real definitions in the three authors I discuss in this article. However, Abū l-Barakāt immediately moves away from this side of the picture. What interests him more is showing that the reliability of definitions is not in any way harmed by the fact that our knowledge of things in themselves is limited. The reason is that we do not attempt to attain the essences of those things at all. Here, the theory of nominal definitions is helpful. The constant refrain of Abū l-Barakāt's theory is repeated: definitions are of meanings designated by names, and meanings relate to things insofar as we understand them. His example is grasping a certain white object, cotton or snow. If I only know that it is something white – for instance, by looking at it from a distance – then I will also define it as “white body” and not as “white cold body”, for instance, if it is snow. Someone may argue that by this I express my lack of

knowledge; Abū l-Barakāt, however, would state that the definition does not target the essence of the object itself and hence neither does it miss the unknown aspects of its essence. Definition only targets the way I consider the object as it appears to me. Therefore every definition is complete and correct. The analytic reader may again remember the contrast to Putnam's theory of meanings: meanings are the objects themselves. Abū l-Barakāt's theory is the diametric opposite. For him meanings are our ways of considering things; definitions are given to meanings that are either mental or – more broadly speaking – dependent on how we intend things.

Semantics thus prepares the way for Abū l-Barakāt's theory of definition. If one goes back to the very beginning of the section on understanding and definitions, one can see the roots of Abū l-Barakāt's approach to definitions:

[T11] As a human being in the origins of his inquiry is not aware of the distinction between the conceptions of his mind and real existents in whatever he perceives, he therefore will equally signify them with names and refer to them with words in the same way. As a result, he will name an image of Zayd "Zayd" and the conceptual form (*al-ṣūra*) of human "human". In reality, the naming of all significations belongs to the conceptions of his mind primarily and [only] through them does he [refer] to existents. Consequently, if he sees a horse from a distance and the reality of its form has not been properly established and represented (*yataṣṭalu*) in his mind, he will instead be confused about it and will think that it is a donkey; yet he still designates it in respect to that which he has conceptualized in his mind, though not with a name that would be posited for its true reality as such. (*Reconsidered*, 1.60.9–17)

Abū l-Barakāt's central conclusion in this passage is that names primarily signify intensions, or opaque concepts, and only through them, secondarily, the existent things in themselves. In order to prove his point, Abū l-Barakāt places us in a referentially opaque context: in terms of the transparency of our knowledge, we cannot immediately distinguish between cases where we conceive of a real thing as opposed to just an image of it. This limitation of our knowledge, however, should not have any impact on the application of nominal reference: whether it is a real human or only an image of it, I equally signify them as "human". Abū l-Barakāt concludes that names must signify the common element present in both cases, which is, namely, the way in which things appear to me. The next example serves his point. I might not really know what I am seeing. In reality it is a horse, but I see it as a donkey (it may appear smaller to me because of the distance). So, I refer to it as "donkey". To what do I refer in this case? Putnam would say that I still refer to the horse itself, regardless of my false way of seeing it. On the contrary, Abū l-Barakāt claims that I refer to the horse *under the description of* "donkey" – that is, in respect of my false way of seeing it.

Abū l-Barakāt confirms his semantics when he speaks about the identification of things. In the chapter dedicated to the traditional Peripatetic question "what is

it?”, Abū l-Barakāt opts for descriptive or qualitative identification. He starts by stating that every individual which we intend with a reference (*naqṣuduhū bi-l-iṣāra*) is known to us in respect of a collection (*maǧmūʿ*) of attributes that we ascribe to it. It may change its place and move through time, but we still perceive it as the same individual due to the commonness of predicates (*Reconsidered*, 1.77.18–78.3). It may just suffice that it appears to have the same corporeal form. Abū l-Barakāt brings forth the example of when we identify a human corpse as still being the same individual (1.78.3–16). Although this is rather an example of a failure of identification, Abū l-Barakāt argues that we are justified in doing so, given that we identify individual objects insofar as we understand them:

[T12] We say “he” about [a human] insofar as we understand (*ʿarafnāhu*) him, whereas he says “I” about himself insofar as he understands [himself], and the extent to which we understand him is different from that to which he understands himself, and that through which we understood him remains [i.e., the corpse], so we say in this respect that it is him. That through which he understood himself does not remain. Nevertheless we are right (*nataḥaqqaqu*) in saying that it is one and the same “him” due to [the commonness] of two perceptions (*idrākayn*). For instance, someone may show us a dinar and we store its [conceptual] form after its accurate observation and complete understanding. Then, if one runs it itself by us again, we say: this is the same as that. We say “the same” about two resembling things in which we cannot recognize any difference. For instance, if another dinar is minted on a coin in the same way and its magnitude and weight is the same, and its every attribute and mode that we observe in it [is the same], then we say that it is the same [dinar] although in reality it is not the same. (*Reconsidered*, 1.78.17–24)

Abū l-Barakāt starts by explaining the specific case of why we refer to the corpse of the human being as the same person. His reason is that the bundle of qualities, the amount to which we recognized the person, remains the same between when he was alive and now after he has died. We identify the object of our perception as the same object because its bundle of qualities has not changed. He means that we identify, e.g., Socrates on the basis of his body and physical appearance, and even though he is already dead, the body remains the same. Our identification, furthermore, proceeds regardless of Socrates’ own perception of himself, i.e., the fact that he identifies himself as having qualities beyond the body, i.e., his soul.

In the second section, Abū l-Barakāt extrapolates his analysis to the general problem of the identity of indiscernibles. If two entities appear the same, we may conclude that they are the same. It is important to note that Abū l-Barakāt entertains here the epistemological variant of Leibniz’s law. It is irrelevant whether the dinar that one shows to me at t_1 actually is the same as that at t_2 . More importantly, I see all the qualities to be the same and hence conclude they are numerically identical. This conclusion is based on Abū l-Barakāt’s semantics and epistemology: it suffices that we identify things insofar as they have same

descriptions; whether they actually are the same or not, regardless of how we identify them, lies beyond our epistemic scope.

The “insofar as we understand it” in T12 is the clause that connects all three discussions: meaning and reference, identification, and definitions. This is Abū l-Barakāt’s way of replacing the essence of things in themselves with their descriptions under which they appear to us. This idea is rooted in his analysis of essentiality. Abū l-Barakāt devotes several chapters to the notion of essentiality in the section on understanding and definitions. There he argues against the Avicennian definition of essentiality (*dātiyya*) in terms of an elimination test: “P is essential for x iff if P is eliminated (*r-f*^c) x is eliminated as well” (*Reconsidered*, 1.70–71; cf. Benevich, 2018, pp. 368–376). Abū l-Barakāt understands the Avicennian elimination test in terms of ontological dependence: if x is ontologically dependent on P then P is essential for x. He objects from two perspectives. First, Abū l-Barakāt is concerned about the status of essentiality for the essences of individuals. For instance, one might argue that “humanity” is essential for Zayd, given that Zayd is ontologically dependent on the presence of humanity in him. However – Abū l-Barakāt argues – if Zayd is dependent on his specific properties as well (such as his height), then should we also conclude that they are essential for him (71.14–17)? The second problem is raised later, together with a nice summary of Abū l-Barakāt’s own position, right in the middle of his discussion of definitions:

[T13] [Avicenna] said about [the essential] that it is that whose elimination eliminates that which it describes (*mawṣūf*). I add: insofar as it is described with it. He adds: insofar as it is existent. He applies essentiality to existence. We apply essentiality to designation and meaning. The reason is that existence only depends on necessitating causes of the existent and nothing else. (*Reconsidered*, 1.115.19–22)

Abū l-Barakāt argues that essentiality cannot mean ontological dependence of x on P because effects likewise depend on causes, yet one would not say that they are essential for them. With this, he proposes a solution as well as clarifying how his understanding of essentiality is different from that of Avicenna. Avicenna wants to talk about the essential as belonging to real existent objects in themselves. That is why he was faced with the problem of essentiality for individuals. Abū l-Barakāt suggests completely removing essentiality from the level of existent quiddities and instead applying essentiality only to the level of our conceptualization and understanding them. P is not essential for x anymore. It is essential for x under a certain description. It is this understanding of essentiality that paves the way for Abū l-Barakāt’s theory of definitions as nominal or intensional. One may remember that Abū l-Barakāt suggested in T9 different descriptions under which one may give a definition to a human. Among intuitively essential

candidates such as human and animal, we saw writer and doctor. These are, however, accidents; how can one give the definition of human in terms of his accidents? Abū l-Barakāt's understanding of essentiality helps avoid this question. It is essential for a human to be a writer or a doctor not as such but rather only under the description of being a writer or being a doctor. As Abū l-Barakāt is satisfied with this kind of essentiality, he also allows descriptorial definitions.

So far it may seem that Abū l-Barakāt, if not a complete sceptic, is at least a relativist: his programme of scientific definitions is very modest. For him, we do not even attempt to attain real definitions of extramental essences. Instead, we focus completely on internal meanings and the way things appear to us. At the end of his discussion of identification, Abū l-Barakāt brings the reader to a very natural conclusion of his theory of essentiality: something is essential for a subject "if it is intrinsic to the reality of something as its part – that is, to the intended meaning" (*Reconsidered*, 1.79.19–20). Does this mean that Abū l-Barakāt suggests replacing "realities" of things with the intended meanings? This would make Abū l-Barakāt a relativist or even bring him into the direction of idealism. However, there are three elements in his theory that direct our reading of him in the opposite direction.

First, though Abū l-Barakāt may divorce essentiality from real existents and ontological dependence, he does not completely exclude that one may keep track of the latter aspect of reality as well. One simply should not think of it in terms of essentiality and definitions. Abū l-Barakāt still believes that one can ask for the core (*aṣl*) element of real individual existents. The response ought to be given in terms of substance (*ḡawhar*) and not in terms of essence (*dāt*) (*Reconsidered*, 1.80.23). Substancehood should apparently be established in terms of ontological priority and independence, but this question lies beyond the scope of this article. What is important for us now is that Abū l-Barakāt interprets all traditional Aristotelian-Avicennian real essential definitions as nominal and intensional definitions, whereas his own "real definitions" are about ontological dependence and substancehood.

The second essentialist element in Abū l-Barakāt's theory concerns the distinction between conceptualization (*taṣawwur*) and understanding (*ma'rifa*). We have seen in the first section that Rāzī takes these notions as synonymous. Both signify the intentional act of understanding the given information in terms of our own concepts: I perceive an object and then interpret it as "human". We saw also that both Rāzī and Suhrawardī allow a different way of reaching the external world by way of direct non-intentional observation. Abū l-Barakāt precedes this distinction and puts it into the terms of the difference between conceptualization and understanding. For Abū l-Barakāt, *taṣawwur* just means learning the given information by heart, whereas *ma'rifa* always means recognition. The first time I see Zayd, I

form an idea of him. As I argued elsewhere, we have no subjective influence on this procedure according to Abū l-Barakāt (see Benevich, 2020). However, when I see Zayd again, I might recognize him as such or I might not (*Reconsidered*, 82–83). Everything that we have seen so far about Abū l-Barakāt's theory of definitions in fact applies only to this second epistemological stage. Aristotelian-Avicennian definitions and descriptions are *recognitions* of things in the external world. These fall short of the essences of things. We end up recognizing and defining Zayd only insofar as we recognized/understood him. However, the first stage of *taṣawwur* remains intact. It means “forming representations in the mind from the observations of concrete objects” (83.1–3). Here we deal with a result of a direct observation – as was the case in Rāzī and Suhrawardī – which connects us with essences of things in themselves.¹⁵

The last but not least essentialist aspect of Abū l-Barakāt's epistemology probably arises against his will. Here we must turn back to his theory of intensional definitions. If definitions are of meanings, how are they construed? Quite in line with his theory of meaning, Abū l-Barakāt interprets definitions as the “analysis” (*taḥlīl*) and “detailed account” (*tafṣīl*) of that which is understood primarily (*Reconsidered*, 1.106.20; 107.11; cf. Rāzī's definition of definition as the “detailed analysis of the name's referent”). One of Abū l-Barakāt's examples is that I understand something as grey and then by way of analysis I recognize that the object of my thought is in fact a combination of white and black (1.106.12). So far so good, since we remain on the level of intensions or things considered under certain descriptions. His other example, however, is how we arrive at a better understanding of a human starting from the general grasp of it as a body. Abū l-Barakāt says that we first learn that “this thing” is a body, then that it is a body having soul and so on (1.108.19–23). Although this is given as an example of analysis, it does not strike me as such. Rather we posit here a concrete entity “this thing”, a referent that is independent of meanings by which we refer to it, and start learning new information about it.

This problem brings us to the major issue of explication vs. amplification of knowledge. We have seen that Rāzī prepared his attitude towards definitions on the basis of the paradox of analysis. That helped him show that definitions are explications of meanings and as such do not amplify our knowledge of the

¹⁵ Abū l-Barakāt also distinguishes between the “acquired” (*iktisābī*) and “primary” (*awwalī*) understanding. He equates the former with definitions and the latter with direct observation (*Reconsidered*, 1.92.16–17). One could hence argue that the primary understanding is another candidate for being the counterpart of Rāzī's and Suhrawardī's direct observation. The problem is, however, that Abū l-Barakāt talks about *ma'rifa* and not about *taṣawwur* for both types of understanding. As we have seen that *ma'rifa* for him always operates on the level of meanings, its result cannot be grasping things in themselves, as it was in Rāzī and Suhrawardī.

essences of things. Again, at first glance, Abū l-Barakāt goes in the same direction with his theory of definitions as analyses of meanings. However, if we look at his solution to Meno's paradox, things become more confusing.

The fact that Abū l-Barakāt addresses Meno's paradox within his discussion of definitions and understanding is another clear sign for combining his theory with that of Rāzī (the usual place to discuss Meno's paradox would be in the "demonstration" section of logic.) However, Abū l-Barakāt's solution to Meno's paradox is diametrically opposed to that of Rāzī – at least at first glance. We have seen Rāzī arguing against the Peripatetic "aspects solution" to Meno's paradox. On the contrary, this is precisely what Abū l-Barakāt suggests: in order to be able to inquire into something we must have already grasped it in some respect (*min ḡiha*) (*Reconsidered*, 1.88.13). One might interpret this as another case of explication: we know the subject of inquiry under a certain description with a certain name that refers to it and we explicate the meaning through which we referred to the subject of inquiry. This is at least what Rāzī made out of Abū l-Barakāt's theory, as we saw in the first section. If, however, we look at Abū l-Barakāt's own analysis, it becomes clear that he wants to explain the amplification of knowledge and not mere explication. Here, again, he addresses his example of knowing "human", starting with some very general apperception of it as a body. However, we do not explicate "body" as "human", we do amplify our knowledge about a certain object! No wonder that Abū l-Barakāt again smuggles in "an individual" of whom we first only conceive that it is a body, and then learn that it is a human (*Reconsidered*, 1.89.9–12).

Both cases within the major issue of the explication and amplification of knowledge show that Abū l-Barakāt has an essentialist element in his theory. He might be a sceptic or even a relativist about Aristotelian-Avicennian definitions but he still wants us somehow to learn new information about the essences of things in themselves when we perform scientific analysis. One might argue that the amplification of knowledge is not a problem for Abū l-Barakāt in general. As we saw in Rāzī, one might still provide assents about the objects of direct perception, in the sense of "this is a body", "this is a body having a soul", etc. However, one cannot say that this is our way of acquiring the definitions of humans, as Abū Barakāt does in these passages. The reason is Abū l-Barakāt's own position that definitions are of meanings and are provided by way of explication. "This", however, is not an intension, that is, a way of considering the extramental object; it is our way of referring to the object itself. On a critical reading, Abū l-Barakāt simply cannot keep his theory consistent. On a charitable reading, he tries to accommodate both elements: we start from learning new information about concrete things in themselves, but we end up with intensional definitions of things under descriptions alone. It remains a question for further study how Abū l-

Barakāt manages to slide from objects themselves to the way they appear to us within his discussion of cognitive grasp and definition. For our purposes here, it suffices to say that he attempts to combine both sceptical-relativist and anti-sceptical elements in his theory.

4. Conclusion

In this article I have presented the way in which scepticism against the Aristotelian-Avicennian theory of real essential definitions emerged from the semantics of twelfth-century Arabic philosophy. Historically speaking, it was probably Abū l-Barakāt al-Baġdādī who prepared the way for Rāzī's and Suhrawardī's attempts to diminish the task of Peripatetic scientific definitions. He introduced the idea that definitions are not derived from the essences of things. They are of things under certain descriptions, that is, the way they vaguely appear to us. All three authors call definitions "nominal" because they only relate to the meanings of names with which we refer to objects (intensions) and not to the objects themselves. This epistemological theory is rooted in semantics. We saw a theory of meaning both in Rāzī and in Suhrawardī, but most explicitly in Abū l-Barakāt, according to which naming and understanding stop at referentially opaque intensions with which we refer to objects and do not extend to the essences of objects themselves. It is due to this semantic background that Rāzī, Suhrawardī and Abū l-Barakāt (for the most part) think that definitions are mere explications of intensions of terms and do not amplify our knowledge about the essences of referents. I conceive of humans as rational animals, I explicate my notion of "human" this way and I define it this way. If I conceived of humans as two-footed animals, I would define them that way. Without the involvement of any further supportive psychological or epistemological theories, it remains a happy coincidence that I conceive of humans correctly in the first place. This picture shows how Abū l-Barakāt's semantic theory of meaning and reference prepared the way for the sceptical doubts of Rāzī and Suhrawardī.

Besides the scepticism directed towards Aristotelian-Avicennian science, we have also seen the anti-sceptical side of epistemology in all three authors. In each case it bears the same character. There is a way for us, humans, to perceive objects directly in themselves. Elsewhere I suggested that Abū l-Barakāt introduced a "unified direct realism" into Arabic epistemology and Rāzī and Suhrawardī might have followed him in this respect (Benevich, 2020). The observations that were made in this article support this hypothesis. Whether it is Rāzīan non-intentional "immediate" knowledge, or Suhrawardī's direct observation of things "with all their specific attributes", or Abū l-Barakāt's theory of concept formation (*taṣawwūr*) – I suggest that in all three cases we deal with the

same anti-sceptical attempt to establish a direct and certain relation between knowers and things. This direct relation, observation of particulars in themselves (for sensible objects), replaces the Aristotelian-Avicennian theory of universal knowledge through definitions and demonstrations as more certain and more infallible to sceptical doubts. To put my hypothesis in short: knowledge is now of particulars and not of universals.

More studies need to be done on the roots and developments of the anti-sceptical side in this two-fold picture, but I would like to conclude with an observation about the origins of its sceptical side. The reason is that it might have been Avicenna himself who provided Abū l-Barakāt with all the arrows needed in order to shoot down his own theory of definitions. As I recently argued, Avicenna binds the definition of the essential with conceptual analysis: P is essential for x iff one cannot fully conceive of x without P (Benevich, 2018; see also Strobino, 2016). So animality is essential for humans because the concept of human would not be full without the concept of animality (Benevich, 2018, pp. 368–376). This is already a step in the direction of Abū l-Barakāt, who wants essentiality to operate on the level of mere meanings alone. Moreover, in his discussion of definition in *Easterners, Logic* (39.8; 45.1–2), Avicenna explicitly identifies the defined quiddity as the meaning (*mafḥūm*). Of course, he also wants to maintain that this is a real definition of a real quiddity that we are seeking through conceptualization. Even though its qualitative content is grasped through a given meaning, it still is the real quiddity itself. However, it remains uncertain how Avicenna safeguards us from cases where, due to having a confused understanding of the real subject of definition, we mis-ascribe something as being its essential constituent (cf. Benevich, 2018, pp. 421–426, for possible solutions). So, Abū l-Barakāt simply needs to bring this intensionalist approach to essences to its logical conclusion, and cast doubts on how far Avicennian definitions really reach out to the essences of things. Rāzī and Suhrawardī follow him in this respect.

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References

- Abū l-Barakāt. *Reconsidered* = al-Bağdādī, Abū l-Barakat. *Mu'tabar*. Ed. 'A. al-'Alawī al-Hadramī. 3 vols. Hyderabad: Da'irat al-ma'ārif al-'uthmāniyya, 1955.
- ALPINA, T. (2014) "Intellectual Knowledge, Active Intellect, and Intellectual Memory in Avicenna's *Kitāb al-Nafs* and its Aristotelian Background (with an English Annotated Translation of Chapter V, 5)." *Documenti e studi sulla tradizione filosofica medievale* 25: 131–183.
- Avicenna. *Easterners, Logic* = Avicenna. *Manṭiq al-Maṣriqīyīn*. Ed. M. Al-Ḥaṭīb und 'A. al-Qatlā. Cairo: al-Maktaba al-Salaṭiyya, 1910.
- Avicenna. *Definitions* = Avicenna. *al-Ḥudūd*. Ed. A. Goichon. Cairo: Publications de l'Institut Français d'Archeologie Orientale du Caire, 1963.
- Avicenna. *Marginal Notes* = Avicenna, *al-Ta'liqāt*. Ed. S. Ḥ. Mūsaviyyān. Tehran: Iranian Institute of Philosophy, 2013.
- Bāqillānī, *Introduction* = Abū Bakr b. al-Ṭayyib al-Bāqillānī. *al-Tamhīd al-awā'il wa-l-talḥīṣ al-dalā'il*. Ed. 'I. A. Ḥabudar. Beirut: Mu'assasat al-kutub al-ṭakāfiyya, 1987.
- BENEVICH, F. (2017) "The Essence-Existence Distinction: Four Elements of the Post-Avicennian Metaphysical Dispute (11-13th Centuries)." *Oriens* 45: 203–258.
- BENEVICH, F. (2018) *Essentialität und Notwendigkeit: Avicenna und die Aristotelische Tradition*. Leiden: Brill.
- BENEVICH, F. (2019) "God's Knowledge of Particulars: Avicenna, *Kalām*, and the Post-Avicennian Synthesis." *Recherches de Théologie et Philosophie médiévales* 86 (1): 1–47.
- BENEVICH, F. (2020) "Perceiving Things in Themselves: Abū l-Barakāt al-Bağdādī's Critique of Representationalism." *Arabic Sciences and Philosophy* 30: 41–76.
- BLACK, D. (2005) "Psychology: Soul and Intellect." In P. Adamson and R. Taylor (eds), *Cambridge Companion to Arabic Philosophy*, pp. 308–326. Cambridge: Cambridge University Press.
- BLACK, D. (2008) "Al-Fārābī on Meno's Paradox." In P. Adamson (ed.), *In the Age of Al-Fārābī*, pp. 15–34. London: Warburg Institute.
- BLACK, D. (2014) "How Do we Acquire Concepts? Avicenna on Abstraction and Emanation." In J. Jause (ed.), *Debates in Medieval Philosophy*, pp. 126–144. New York, NY: Routledge.
- BONELLI, M. (2001) *Alessandro di Afrodisia e la Metafisica come scienza dimostrativa*. Napoli: Bibliopolis.
- EICHNER, H.. *The Post-Avicennian Philosophical Tradition and Islamic Orthodoxy*. Unpublished Habilitationsschrift, 2009.
- EL-ROUAYHEB, K. (2016) "Does a Proposition Have Three Parts or Four? A Debate in Later Arabic Logic." *Oriens* 44: 301–331.
- FALATURI, A. (1969) "Fakhr al-Din al-Rāzī's Critical Logic." In M. Minuvi (ed.), *Yād-nāmah-yi Irānī-yi Minorsky*, pp. 51–79. Tehran: Intisharāt-i dānishgah-i Tihirān.
- GUTAS, D. (2012) "The Empiricism of Avicenna." *Oriens* 40: 391–346.
- HASSE, D. (2013) "Avicenna's Epistemological Optimism." In P. Adamson (ed.), *Interpreting Avicenna: Critical Essays*, pp. 109–119. Cambridge: Cambridge University Press.

- Ḥūnāgī. *Unveiling* = al-Ḥūnāgī, Afḍal al-Dīn. *Kaṣf al-asrār ‘an ḡawāmiḍ al-afkār*. Ed. Kh. El-Rouayheb. Tehran: Iranian Institute of Philosophy and Institute of Islamic Studies, Free University of Berlin, 2010.
- IBRAHIM, B. (2013) “Faḥr al-Dīn al-Rāzī, Ibn al-Hayṭam and Aristotelian Science: Essentialism Versus Phenomenalism in Post-Classical Islamic Thought.” *Oriens* 41: 379–431.
- KAUKUA, J. (2013) “Suhrawardī’s Knoweldge as Presence in Context.” In S. Akar, J. Hämeen-Antilla and I. Nokso-Koivisto (eds), *Travelling Through Time: Essays in Honour of Kaj Öhrnberg*. *Studia Orientalia*, Vol. 114, pp. 309–324. Helisinki: Finnish Oriental Society.
- KAUKUA, J. (2020) “*‘Ttibārī* Concepts in Suhrawardī: The Case of Substance.” *Oriens* 48: 40–66.
- LANGFORD, C. H. (1942) “The Notion of Analysis in Moore’s Philosophy.” In P. A. Shlipp (ed.), *The Philosophy of G.E. Moore*, pp. 319–342. Evanston, IL: Northwestern University.
- MARMURA, M. (2009) “Avicenna on Meno’s Paradox: On ‘Apprehending’ Unknown Things through Known Things.” *Mediaeval Studies* 71: 47–62.
- MCDOWELL, J. (1994) *Mind and World*. Cambridge, MA: Harvard University Press.
- ÖZTURAN, M. (2018) “An Introduction to the Critique of the Theory of Definition in Arabic Logic: Is Complete Definition Circular?” *Nazariyat* 4(3): 85–117.
- PLATO, Burnet, J. (1903) *Meno*. Platonis opera. 3 Oxford: Clarendon Press.
- PUTNAM, H. (1973) “Meaning and Reference.” *Journal of Philosophy* 70: 699–711.
- Rāzī. *The Commentary of the Elements of Philosophy* = al-Rāzī, Faḥr al-Dīn. *Šarḥ ‘Uyūn al-ḥikma*. Ed. Aḥmad al-Ḥ. al-Saqqā. 3 vols. Cairo: Maktabat al-anglū al-miṣriyya, 1969.
- Rāzī. *Inquiries* = al-Rāzī, Faḥr al-Dīn. *al-Maṭālib al-‘āliyya min al-‘ilm al-ilāhī*. Ed. Aḥmad al-Ḥ. al-Saqqā. 9 vols. Beirut: Dār al-kitāb al-‘arabī, 1987.
- Rāzī. *Substance of Beliefs* = al-Rāzī, Faḥr al-Dīn. *Muḥaṣṣal afkār al-mutaqaddimīn wa-l-muta‘aḥḥirīn min al-‘ulamā’ wa-l-ḥukamā’ wa-l-mutakallimīn*. Ed. Ḥusayn Atay. Cairo: al-Maktaba al-azhariyya li-l-turāt 1991
- Rāzī. *Perfect Treatise* = al-Rāzī, Faḥr al-Dīn. *al-Risāla al-kamāliyya fī l-ḥaqā’iq al-ilāhiyya*. Ed. ‘A. Muḥīn al-Dīn. Beirut: Dār al-kitāb al-‘ilmiyya, 2002.
- Rāzī. *Summary, Logic* = al-Rāzī, Faḥr al-Dīn. *Manṭiq al-Mulaḥḥas*. Ed. A. Qarāmalkī and A. Aṣḡarīnizād. Tehran: Dānišgāh-e Imām Ṣādiq, 2003.
- Rāzī. *Sign Posts* = al-Rāzī, Faḥr al-Dīn. *Mā‘ālim*. Ed. as *As‘ila Naḡm al-Dīn al-Kātībī ‘an al-Mā‘ālim li-Faḥr al-Dīn al-Rāzī mā‘a ta‘ālīq ‘Izz al-Dawla b. Kammūna* by S. Schmidtke and R. Pourjavadi. Tehran: Iranian Institute of Philosophy & Institute of Islamic Studies, Free University of Berlin 2007.
- Rāzī. *Summit of Reason* = al-Rāzī, Faḥr al-Dīn. *Nihāyat al-‘uqūl fī dirāyat al-uṣūl*. Ed. Sa‘īd ‘A. Fūda. 4 vols. Beirut: Dār al-ḡakā’ir, 2015.
- SHIHADDEH, A. (2006) *The Teleological Ethics of Fakhr al-Dīn al-Rāzī*. Leiden: Brill.
- STROBINO, R. (2016) “Per se, Inseparability, Containment and Implication. Bridging the Gap between Avicenna’s Theory of Demonstration and Logic of the Predicables.” *Oriens* 44: 181–266.
- Suhrawardī. *Paths and Havens* = al-Suhrawardī, Šihāb al-Dīn. *al-Mašārīf wa-l-muṭārahāt*.” In H. Corbin (ed.), *Opera Metaphysica et Mystica*, Vol. 1, pp. 194–505. Istanbul: Maarif Matbaası, 1952.
- Suhrawardī. *Philosophy of Illumination* = al-Suhrawardī, Šihāb al-Dīn. *Ḥikmat al-iṣrāq*. Ed. and tr. J. Walbridge and H. Ziai. Provo: Brigham Young University Press, 1999.

- Suhrawardī. *Paths and Havens, Logic* = al-Suhrawardī, Šihāb al-Dīn. *al-Mašārī wa-l-mutārāḥāt, Manḩiq*. Ed. M. Muḩammadī and A. ‘Alīpūr. Tehran: ḩaq yāvarān, 2006
- Ṭūsī. *Summary of the Substance of Beliefs* = al-Ṭūsī, Našīr al-Dīn. *Talḩīs al-Muḩaššal*. Ed. ‘A. al-Nūrānī. Tehran: Institute of Islamic Studies McGill, 1980.
- ZIAI, H. (1990) *Knowledge and Illumination*. Atlanta, GA: Scholars Press.