

SINGULAR THOUGHT: A TWO-PRONGED APPROACH

By
Mirela Fus

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Supervisor: Professor Howard Robinson

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ABSTRACT

Singular or *de re* thought puts one into a position to think about the object not via descriptions or *de dicto*, but rather in a relational, referential way and under a certain mode of presentation. Traditionally, it has been widely accepted that one can have singular thought by acquaintance, and that acquaintance encompasses perceptual acquiring, memorizing and communicating singular thoughts. In this thesis I defend a possibility of having a singular thought via extending acquaintance to intermediaries other than just written and spoken words. I argue that intermediaries such as photographs or video and audio recordings can, in certain cases, acquaint us with objects. I show that the dominant approaches to singular thought, namely Acquaintance Theories, cannot by themselves meet the requirements of extending singular thought since, as I shall explain, they are vulnerable to a certain paradox. On my account, singular thought includes two types of representations, namely *indexical-iconic representation* and (*remote*) *indexical-discursive representation*. Also, it is determined by two constraints: (i) *the acquaintance constraint*: singular thought includes a causal-historical relation to the object; and (ii) *the cognitive significance constraint*: we have a cognitive capacity to deliberately encode an *indexical-iconic representation* into an *indexical-discursive representation*, which enables us to have a singular thought.

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INTRODUCTION

We believe that at least some of our thoughts are about objects, and indeed not about any object whatsoever, but about, say, that particular object we perceive¹. Then we say that we stand in some kind of specific relation to that particular object². To quote Bach:

It seems undeniable that we have singular thoughts about things in the world. If we didn't, our view of the world would be entirely qualitative. We would never be related in thought to anything in particular. (Bach 2010, 39)

Singular or *de re* thought³ puts one into a position to think about the objects not via descriptions or *de dicto*⁴, but rather in a relational, referential way and under a certain mode of presentation⁵. To illustrate, when I perceive my small white kitten in the room, I believe that I am thinking of this particular kitten; to use the philosophical terminology, I am having a *singular thought* about my kitten. Another way of thinking about an object is purely conceptual via *description* or *de dicto*. For example, if I do not have any particular kitten on my mind and I think under the description 'the smallest white kitten in my room', I am not thinking about a particular kitten, but about any kitten which comes to satisfy the above mentioned description⁶.

¹ In my thesis I will take into consideration only concrete particulars, i.e. material objects, objects which exist in reality, and not abstract objects, fictional objects or numbers. It is worth noting that different accounts of *singular thought* for the latter group of objects have also been given (see Jeshion 2010).

² "Only a radical solipsist would deny or question their existence and relation to me" (Jeshion 2010, 1).

³ In literature, singular or *de re* thoughts are often referred to as referential or relational thoughts while descriptive or *de dicto* thoughts are also called conceptual or notional thoughts.

⁴ *De re* and *de dicto* distinctions as in *de re/de dicto* attitude reports is often considered both as a syntactic and semantic distinction. However, both distinctions *de re* and *de dicto* as well as syntactic and semantic between them have been disputed. And there are several positions of the problem of *de re/de dicto* distinction. Some philosophers (Sosa 1970, Schiffer 1978, Searle 1979) claimed that there is no such thing as *de re* or singular thought about material objects beside about oneself. Among those descriptivists there are reductionists (e.g. Schiffer 1978), and the eliminativists (e.g. Searle 1979). I will not discuss these positions in this thesis.

⁵ "I have a certain mode of presentation of them and perceive them only from a certain perspective. Nonetheless, in thinking of them, I do not conceptualize that perspective and use that conceptualization as my means of thinking about them. I simply think of them from that perspective" (Jeshion 2010, 1).

⁶ However, according to some philosophers, definite description can sometimes have both *de re* and *de dicto* use, or as Donnellan (1966) claimed in his classical paper *Reference and Definite Descriptions*: definite description can be used both attributively and referentially. For instance, there are cases in which I can also think *de re* about a particular kitten by thinking under the description 'the smallest white kitten in my room'. I will leave this sophisticated discussion aside since it is not essential to the main focus of my paper.

The preliminary task for advocates of singular thought⁷ is to distinguish between two questions: first, what sort of relation is the relation in question and second, which intermediaries are allowed in order for one to have a singular thought? The relation in question is often taken to be a causal connection plus (some) epistemic conditions which need to be met in order to have a singular thought⁸. As for the second question, the answer is given by determining how far we can extend our acquaintance with objects. For both questions, directness of perception plays the key role in the answer, according to which one can then be more or less acquainted with the object one perceives and have a singular thought about it.

Moreover, in semantics, direct reference via direct perception can be achieved through three “degrees” of acquaintance. Hence, among most Acquaintance Theorists, including prominently Bach (1982/84, 1987/94, 2010) there are three types of *de re* or *singular thoughts* about objects. The first and most basic type of *singular thought* is *perception-based de re* thought while the other two, namely *memory-based* and *communication-based de re* thoughts, are derived from the first one (see Evans 1982; Bach 1982/84, 1987/94, 2010; Recanati 1993/1997).

The connection between the thinker and the object is *causal-historical*, and we are thinking via “chain of representations originating with a perception of the object” (Bach 2010, 55). It is also important to stress that singular thinking is determined *relationally*, not *satisfactionally* (see Bach 1987/1994: ch. 1).

The following problem arises among Singularists, especially among defenders of

⁷ There are three dominant theories of singular thought, namely *Acquaintance theory* of singular thought (see Burge 1977, Donnellan 1979, Lewis 1979, Evans 1982, Boer and Lycan 1986, Bach 1987/1992, Salmon 1988, Brewer 1999, Recanati 1993, Soames 2003, Pryor 2007, Kaplan, 1989, Reimer, 2004, Russell, 1912), *Semantic instrumentalism* (see Harman 1977, Kaplan 1989, Borg 2004) and *Cognitivism* (see Jeshion 2002, 2009, 2010, Sainsbury, 2005).

⁸ Let me list some neo-Fregean and neo-Russellian accounts. Kaplan (1968) includes modes of presentation which are proper to perception; Burge’s (1977, 346) account involves “an appropriate non-conceptual, contextual relation to objects the belief is about”; Evans (1982) emphasizes subject’s ability to discriminate the object of thought from other objects; Recanati (1993/1997) asserts both modes of presentation and epistemically rewarding relations.

Acquaintance Theory: How far can the acquaintance to the object be extended? In his recent work, Bach asks himself:

... I'm stuck on questions like these. So, for example, does seeing a photograph or film of someone put one in a representational connection with them? Hearing someone's voice? Does reading someone's name do the trick, even outside the context of communication? For example, can you have singular thoughts about someone whose name you read on a luggage tag, in a phone book, or on a tombstone? I'm inclined to think not. (Bach 2010, 58)

Conversely, once we admit the possibility of remoteness acquaintance via communication, we have to bear in mind that communication is a process which involves not only spoken or written words, but, potentially, all sorts of physical tokens – i.e. intermediaries – which can be causal-historically included in the representational connection relation. How do we discern which of them are in some way relevant for singular thought, if any?

In a recent book *New Essays on Singular Thought* the editor Robin Jeshion (2010, 16) identifies the four main topics concerning singular reference and thought. Let me summarize and enlist them briefly: (i) *the structure and nature of singular thought*; (ii) *conditions on thinking singular thought*; (iii) *the nature and scope of acquaintance* for perceptual-demonstrative and communication-based reference and thought; (iv) *the relationship between singular thought and the semantics of fictional characters and mythical terms*.

In this thesis I defend a possibility of extending acquaintance in order to have a singular thought. In other words, I am particularly interested in the problems concerning Jeshion's third topic, namely I extend the notion of acquaintance to non-propositional media of reference⁹. Furthermore, I allow a possibility of having a singular thought via extending

⁹ My view, even though defends the possibility of having a singular thought via pictures and similar intermediaries, substantively differs from the standard views in theories of depiction. For this reason, I will briefly mention the standard views, but I will not discuss them here. To put it in a nutshell, an alternative or additional view about *singular thoughts* has been discussed by authors (e.g. Zeimbekis, Lopes, Walton, Goodman) who argue *for* or *against* the view according to which it is possible to claim the same for pictures and (in some cases) other intermediaries. Very briefly, theories of depiction considering remote acquaintance can be divided into two camps. One camp supports the possibility of a remote acquaintance either through *demonstrative identification* (Lopes 1994) or *transparency theory* for photographs (Walton 1984). Another camp

acquaintance to intermediaries other than just written and spoken words. I argue that intermediaries such as photographs or video and audio recordings can, in certain cases, acquaint us with objects. I show that the dominant approaches to singular thought, namely Acquaintance Theories, cannot by themselves meet the requirements of extending singular thought since, as I shall explain, they are vulnerable to a certain paradox. My approach to singular thought is two-pronged because it includes both external and internal elements, and it is broad in scope since it is not restricted to just certain intermediaries.

The structure of the thesis is as follows. First, I give a short historical background and a general overview on descriptive and singular thought. I emphasize that singular thought about material objects is deeply rooted into our perception no matter whether we talk about immediate perceptual acquiring, memorizing or communicating singular thoughts. Second, I stress that proper names and, in certain cases, even indexicals and definitive descriptions have played a significant role in communication of singular thoughts. However, extending acquaintance to intermediaries other than just written and spoken words has been problematic for many advocates of singular thought. At the same time, we have a very strong intuition that we can have singular thought about persons or objects we perceive via other intermediaries such as photographs or video recordings. I show that a dominant approach to singular thought, namely Acquaintance Theories cannot alone meet the requirements of extending singular thought since, as I shall explain, they are vulnerable to a certain paradox. Third, I propose that singular thought is determined by two constraints. The first is the acquaintance constraint: we *gain indexical-iconic representation* from perception. This sort of representation includes a causal-historical relation to the object. The second is the cognitive significance constraint: our cognitive capacity and control to encode *indexical-iconic representation* into *indexical-*

argues that pictures cannot acquaint us with particulars. Rather, as some of them will argue, they can acquaint us with certain *kinds of properties*. For example, Zeimbekis (2009, 11) claims that “the contents of picture-perceptions do not themselves provide the kind of numerical and contextual information required for singular thought.”

discursive representation (a physical system of symbols) which is suitable for having a singular thought. Further, I explain the two constraints in more detail. I narrow down the epistemic constraint of Acquaintance theory to a causal-historical relation and speculate that causal-historical link does not have sharp object-points, and while it is necessary for having *de re* thoughts, it cannot itself determine what is the object one has a singular thought about. Moreover, I argue that what is always accessible to us in perception are *indexical-iconic representations* which do contain causal-historical relation to the object, yet to have a singular thought, I claim that we also need to be deliberate enough as a cognitive agents in order to acquire a singular thought.

CHAPTER 1: GENERAL VS. SINGULAR THOUGHT – *PRO ET CONTRA*

1.1. Russell and Frege

Russell and Frege are considered to be the pioneers of the notion of singular thought¹⁰. However, as noted by Jeshion, the sole demarcation between singular and descriptive thought does not tell us “what it is for a thinker to grasp a general or singular proposition nor the conditions under which a thinker can grasp such propositions” (Jeshion 2010, 3) since it is about the structure of thought contents only.

Russell’s (1912) distinction between *knowledge by acquaintance* and *knowledge by description* has been used in semantics to demarcate *de re* from *de dicto* thoughts. However, according to him we could only have acquaintance (or singular thought) “with sense-data and (probably) with ourselves” (Russell 1912, 109). Present-day Singularists, even those who defend the Acquaintance Theory of singular thought often reject Russell’s ‘strict conception of acquaintance’. Following this line of thought there is a difference in content between singular and descriptive thoughts. The content of the former is a singular proposition (having properties and individuals for constituents), while the latter takes a general proposition as its content (consisting of concepts or properties). Both kinds of Russellian propositions are structured and have truth conditions.

On the other hand Frege’s sense/reference distinction, used both for expressions as well as for sentences, characterizes his descriptivist semantics. He applied the sense/reference distinction to singular terms, not only to proper names, but to definite descriptions, demonstratives and indexicals as well. According to Frege, the referent is the object the singular term is about whereas the sense which is taken to be its ‘mode of presentation’ is given in terms of conceptual condition. For example, the proper name “Lewis Carroll” refers to a person, namely to Charles Lutwidge Dodgson and the sense of it can be given using a

¹⁰ Frege (1984/1892, 1984/1918); Russell (1905, 1911, 1946).

definite description “the author of the *Alice's Adventures in Wonderland*”. This singular term is also interesting since it reflects the other important notion Frege introduced, and it presents his argument from cognitive significance. Singular terms which co-refer, as “Lewis Carroll” and “Charles Lutwidge Dodgson” do, both contain the same referent¹¹. As Jeshion puts it:

Yet, intuitively, a fully competent, rational agent might accept one while denying (or just not accepting) the other, and thus the propositions semantically expressed by the sentences cannot just contain, as the value of the proper names, their referents. To account for the differing cognitive significance of the co-referring singular terms, Frege postulated that they contribute senses, not referents, to the propositions expressed by the sentences in which they occur. Such propositions, composed of senses that are purely qualitative, are what we grasp and think in understanding sentences, and thus all our thought has as its content general, not singular, propositions. (2010, 4)

Thus, for the Fregeans, introducing senses and thinking under different modes of presentation when it comes to (co-referring) singular terms, should save the rational agent from being inconsistent, even though the referent of the singular terms she uses is one and the same object or person.

In the next two sections I will very briefly summarize the main advantages and disadvantages of descriptive and singular thought.

1.2. Descriptive thought

In addition, Jeshion (2010) mentions two advantages of the accounts that recognize only descriptive thoughts. I will give a brief description of both of them. I will call the first advantage the *straightforwardness of a descriptive thought* and the second one the *non-sensitivity to remoteness of relation to the object*. The advantage of the former consists in that that a thinker only has to grasp a general proposition “that has a conceptual condition that object satisfies” (Jeshion 2010, 4) in order to have a descriptive thought. Moreover, thinkers are able to “employ them compositionally in thought” (*ibid.*). For example, one can think of

¹¹ Frege’s well-known example of the co-referring terms Hesperus/Phosphorus which both refer to planet Venus.

the greatest philosopher by combining the concepts *greatest* and *philosopher* together with the definite concept *the*. The latter advantage tells us that “requirements for descriptive thought remain constant across various different ways in which a thinker may be related to the object of thought” (Jeshion 2010, 5). To illustrate, my relation to an object I perceive when I stand in a close perceptual relation to it, for example to the kitten, is not as remote as when I stand in relation to some other spatially distant object, for example Daniel Dennett. However, according to Descriptivists, my thought content and the constraints on thinking of them are the same in both cases. Similarly, in the case of temporal remoteness one’s thought does not change no matter whether one thinks about Obama or Roosevelt. The reference-determination for descriptive thoughts seems to be unproblematic as well, since “the mechanisms of reference-determination for descriptive thought are constant despite variations in thinker’s relation to the object of thought” (Jeshion 2010, 5). At the same time, the major dilemma of Descriptivist’s accounts is their non-plausibility. Jeshion argues that,

... our conceptualizations of objects are often not what determine which objects we think about. Our thought about object is more direct; it draws upon and uses our various complex relations to the world in securing and determining the reference of the objects we think about (*ibid.*).

1.3. Singular thought

Jeshion (see 2010, 5-13) emphasizes three philosophical “avenues” that influenced the surviving of singular thought and a widening of its scope¹². First, there have been significant developments on the semantics of singular terms. The new developments occurred during the last three decades of the twentieth century, and Fregean semantics (of proper names, natural kind terms, definite descriptions, demonstratives, and indexicals) has been heavily criticized and a new theory of direct reference has been established. In particular, several philosophers

¹² She also mentions the achievements from the other areas that have stimulated research on singular thought such as: “grappling with the problem of the contingent *a priori*; debate over conceptual and non-conceptual content of perceptual experience; the rise of dynamic semantics and especially discourse representation theory; the influence of externalism about belief content for natural, social, and artifactual kinds; exploration of the relationship between *de se* and *de re* thought; contemporary research on vision science and auditory perception; analysis of knowledge who; semantic analysis of propositional attitude reports” (Jeshion 2010, 6).

argued for direct reference in semantics, e.g. Kripke (1980) on the semantics of proper names with his famous ‘semantic argument’; Donnellan (1972, 1979) on the semantics of definite descriptions by showing that they can be used both referentially and attributively; Kaplan (1979, 1989a, 1989b) and Perry (2000, 2001) on the semantics of demonstratives and indexicals establishing that what is expressed by them is determined in a context of use¹³.

Second, in the philosophy of perception the relationship between content of perceptual experience and content of thought has been discussed¹⁴. There are two Russellian-inspired positions. The first one suggests that the content of perceptual experience is singular and object-involving. On this account, one experiences the very object in the world one perceives:

The content of my perceptual experience of the grapes actually contains the grapes I see, together with their properties of being purple and ripe, and can be captured as a Russellian singular proposition. (Jeshion 2010, 10)

The second position, on the contrary, takes the content of perceptual experience to be a general proposition, one whose contents are existentially quantified¹⁵.

However, Jeshion points out that the second position has often been criticized by Singularists for two reasons, in short, its failure “to account for the phenomenology of perceptual experience” and since “such an account of content does not allow that perceptual content itself provides one with knowledge of what one is thinking about” (Jeshion 2010, 10).

Finally, the third influence comes from the interface of philosophy of mind and epistemology, from the discussion about the mind’s acquaintance with real world objects.

¹³ It is prudent to mention in addition to the aforementioned philosophers, two other prominent philosophers: Putnam (1975) and Marcus (1995).

¹⁴ “The content of perceptual experience aims to capture what perceptual experience is like: how we experience the world when we are in a state of perceiving or apparently perceiving the world. How is this related to the content of those thoughts we think on the basis of occurrent perceptual experiences? One facet of this complex topic concerns the representation of objects in perceptual experience. There is much agreement that we typically perceptually experience properties as being properties of objects. We do not simply perceptually experience purple ripeness as at a certain location in the visual field. We perceptually experience the grapes themselves as purple and ripe. Or at least we are disposed to attribute perceptually experienced properties to perceptually experienced objects.” (Jeshion 2010, 9-10)

¹⁵ See McGinn (1982), Davies (1997), and Tye (2000) for generalist accounts of content.

These additional questions come to mind: is there any object in the real world that we can be directly acquainted with, what that object is, and what is the scope of acquaintance?

Russell's answer was positive, yet Jeshion explains that:

[w]hile he championed the existence of an acquaintance relation, he held that we are not acquainted with ordinary objects like grapes and roses because for him standards on acquaintance were exacting, requiring unmediated and complete awareness of objects of acquaintance, immune to errors of identification, and perceptual experience never reaches that standard. (Jeshion 2010, 11)

To this argument, the arguments from illusion and hallucination can be added, that is when one's perceptual experience that one has of objects, phenomenally speaking, is identical to one's normal perceptual experiences¹⁶. Thus, Russell needed a common object for both cases and, since no external object can satisfy that condition, he appealed for a mental object that he thought would do the job. For that reason he introduced the sense-data which have the characteristics of being "mind-dependent, private, possibly non-physical mental images, and they possess all and only the properties that are phenomenally presented to us in perceptual experience" (Jeshion 2010, 11-12). As a result, our thought about the external objects is general¹⁷.

However, despite popularity of sense-data theory¹⁸ in the first half of the twentieth century, in the second half of the twentieth century numerous problems arose. For example, one criticism claims that it is hard to identify the properties presented in perceptual experience. To illustrate, Chisholm (1942) argued that when having a perceptual experience as of a speckled hen, one is not able to say how many spots it has. While this may be true, Austin (1962) contended that it is implausible to say that this sense-datum possess indeterminate number of spots. These criticisms opened the door to direct reference,

¹⁶ For classical presentations of the arguments from illusion and hallucination, see Price (1932), Russell (1946), Broad (1965), and Moore (1993).

¹⁷ "I think about the grapes by thinking, roughly: there is an object that is a grape-bunch, purple and ripe that is the cause of this sense datum, where 'this' makes demonstrative, acquaintance-based, reference to the sense datum I presently have in seeing the grapes." (Jeshion 2010, 12)

¹⁸ Apart from Russell (1946), the sense-data theory was defended by Price (1932), Broad (1965), Moore (1993).

especially with help of recent developments from vision sciences which “affirm that visually attending to objects affords mental reference directly to objects” (Jeshion 2010, 13)¹⁹.

In the end, I would like to briefly enumerate several of sets problems concerning singular thought as identified by Jeshion (see 2010, 13-16). The first, the fundamental set of problems deals with *what singular thought is*. Under this set there are included three problems: (i) If singular thought is necessarily object-dependent, theory of singular thought needs to deal with how to explain tokening of empty names and, perhaps, cases of hallucinating. (ii) How and if a singular proposition can be grasped? (iii) What is that happens in cognition when one thinks referentially and how she can maintain this kind of intentional relation²⁰? The second set of problems deals with the acquaintance, especially its nature and scope. The third one is about fictional characters and mythical objects.

¹⁹ Scholl and Pylyshyn (1999), Scholl (2002), Scholl, Pylyshyn, and Feldman (2002), Pylyshyn (2003, 2007).

²⁰ Those advocating and developing such an approach include: Evans (1982), Bach (1987), Recanati (1993), Millikan (2000), Perry (2001), Lawlor (2001), Jeshion (2002), Taylor (2003), Sainsbury (2005).

CHAPTER 2: THE PARADOX OF EXTENDING ACQUAINTANCE

In this chapter I want to look closer at extending acquaintance from the perspective of Acquaintance Theorists. In particular, I will take into consideration Bach's (1982/84; 1987/94) attempt of extending the acquaintance relation via representational connection relation even to the most remote examples (where causal-historical chain exists). However, in his (Bach 2010, 57) later work he questioned this possibility, e.g. extending acquaintance relation to examples such as photography, film, hearing someone's voice, reading someone's name: on a luggage tag, in a phone book, or on a tombstone. In my opinion, he stumbled upon the sorites paradox.

2.1. Bach's extending acquaintance: the representational connection relation

First, let me briefly describe how Bach characterizes *de re* representations and relations. He defends the view according to which one can have a singular thought about an object under *de re* modes of presentation. The connection between the thinker and the object is *causal-historical*, and one is thinking via "chain of representations originating with a perception of the object" (Bach 2010, 55). It is also important to stress that, for Bach, singular thinking is determined *relationally*, not *satisfactionally* (see Bach 1987/1994: ch. 1). Equally important, there is no need for *de re* thought "to represent its being in that relation to the object but merely has to be in that relation" (Bach 2010, 55). The latter claim opens the possibility to extend the relation of acquaintance. This would allow the thinker to have a singular thought of the object to which the relation of acquaintance is thus extended. As Bach states: "whatever it is, let's call this extension of the acquaintance relation the *representational connection* relation" (Bach 2010, 57).

While this may be true, what comes to mind are additional questions. First, how far can this relation be extended in order to be representationally connected to an object at the

end of the causal-historical chain of representation? Second, what is (if any) the constraint on representational connection with regard to remoteness? Bach admits that his answer has long been that there is *no* constraint because:

Perceiving an individual is the most immediate way of being in that position, but, as I've suggested, having perceived and now having a memory image of that individual will do, or even hearing about or reading about that individual from someone else who has perceived that individual or who at least has heard or read about that individual from someone who has heard or read about that individual ... from someone who has perceived that individual. (Bach 2010, 57-8)

In other words, Bach argues that the most basic way of acquiring singular thought is immediate or direct perceiving an object or an individual, e.g. seeing the smallest white kitten in my room, which puts one in a position to have a perception-based *de re* thought. After that, the person can recall to her mind the mental token of this object or individual, e.g. she recalls her memory of the smallest white kitten in her room, which she has once perceived and thus had have perception-based *de re* thought of. On this basis, she has a memory-based *de re* thought, and this kind of *de re* thought is derived from her perception-based *de re* thought.

The third way of having *de re* thought is via communication. This takes place when she, who had already had both perception-based and memory-based *de re* thoughts about that particular kitten, transmits *de re* thought to another person in conversation or in a written form by using physical token corresponding to her mental token. Furthermore, Bach allows not only for tokens of *proper names* or some other *singular term* used 'as a name' that can function as *de re* modes of presentation but, in some cases, even *pronouns*, *definite descriptions* and *hybrid names*²¹ used by a person can via their physical tokens “actually display his *de re* way of thinking of the object and thereby enable the hearer to think of it in the same way” (Bach 1987/1994, 32). According to Bach, the listener or the reader is then in a position to have a communication-based *de re* thought about that particular object.

²¹ Apart from using proper names sometimes even “indexicals, demonstratives, or descriptions (...) are used, full understanding requires thinking of the referent only in the same kind of way” (Bach 1987/1994, 24-5).

Consequently, communication-based *de re* thought is always derived from perception-based *de re* thought.

Conversely, once we admit the possibility of remote acquaintance via communication, we have to bear in mind that communication is a process which involves not only spoken or written words, but, potentially, all sorts of physical tokens – i.e. intermediaries – which can be causal-historically included in the representational connection relation. How do we discern which of them are in some way relevant for singular thought, if any? In his recent work, Bach asks himself:

... does seeing a photograph or film of someone put one in a representational connection with them? Hearing someone's voice? Does reading someone's name do the trick, even outside the context of communication? For example, can you have singular thoughts about someone whose name you read on a luggage tag, in a phone book, or on a tombstone? I'm inclined to think not. (Bach 2010, 58)

We can blur this picture even further by pointing out that Bach does not cover some other hopefully possible ways of *de re* perception and communication. Because, perhaps, the transmitter's, call her T, attempt of communication by producing other kinds of physical tokens (such as photography, film, map, microscopic or telescopes image, etc.), which do not have a propositional content strictly speaking, can produce the same effect. And this alone could invoke a sorites paradox. One might argue that if the latter is possible, then everything, potentially, could function as physical token made by the transmitter T originating from her mental token gained in perception of an object O and could produce a mental token in the receiver's R mind. And, somehow, *de re* thought would be transmitted.

For example, do we not say that deaf people can also communicate *de re* successfully? They are just using another kind of physical token to express *de re* thought about an object. But if we acknowledge that they communicate *de re* as well as we do, then we might have a problem where to stop, which is the threat of sorites. Nonetheless, I would like to explore the possibility of such extending acquaintance.

To further illustrate, here is an example of possible extended acquaintance to intermediaries other than propositional ones, i.e. a painting serving as a physical token. Lee is showing Emily a painting of his daughter Zelda (a physical token made out of Lee's mental token) that he, Lee, made of her. However, Emily has never met Lee's daughter Zelda, i.e. he does not have a perception-based *de re* thought of her. Could Emily have *de re* thought of Zelda just through this painting without Lee ever saying or writing down her name, i.e. 'Zelda'? For how can proper names capture the transmitter's intentions and real object better than paintings or other kinds of signs, i.e. physical tokens, do? How can mental tokens of proper names once transformed into some physical token fare better? On the other hand, if the picture can fulfill the task, then, perhaps, Emily, as long as there is some causal chain through which physical tokens can be perceived, can have perception-based *de re* thought of Lee's daughter via communication. The question, again, is whether the physical token resulting from Lee's mental token in the causal chain of communication can produce in Emily's mind a mental token which would be responsible for her having a communication-based *de re* thought about Lee's daughter Zelda. We should strive to see if the singular proposition as a content of a singular thought can be transmitted via such physical tokens and whether the singular propositional structure of mental token is lost once we use other kinds of physical tokens (other than the ones Bach allows) in an attempt to transmit a singular thought.

I believe that Bach has failed at determining the constraints on physical tokens which the transmitter T can use in order to transmit singular thought to the receiver R.

2.2. A possible sorites paradox for Bach's theory of singular thought

I start this section by describing the possible sorites threatening the further extending acquaintance in order to widen the scope of singular thought. I want to suggest that Bach's proposal of representatively connected communication-based *de re* thought, if not further

restricted and explained, might land him into a sorites paradox. This would make things even worse than he is cognizant of in his approach. However, my attempt is to propose a kind of Bach-inspired account of communication-based *de re* thought that can be saved from the threatening sorites paradox, by putting two constraints on singular thought and by introducing two kinds of representations, namely the *indexical-iconic representations* and the *indexical-discursive representations*. I will argue that *indexical-iconic representations* are products of our perception of physical tokens and, more important, that they are the basis for encoding *indexical-discursive representations* which are characteristic for singular thought.

Let me remind the reader of some general constraints Bach puts on his communication-based *de re* thought:

On this [Bach's] conception of singular thought, there must be a representational connection, however remote and many linked, between thought and object. A *de re* representation of a material object must be a percept or derive from a percept, either one's own or someone else's. If it derives from a percept of one's own, it is a memory image. If it derives from someone else's, it is the product of a perhaps many-linked chain of communication. But you can have *de re* thoughts about objects you've merely heard of or read of, provided that you're at the end of a chain of communication and representation, originating in perception, back to the object. In short, to be in a position to have thoughts about an object, you must be representationally connected to the object, however indirectly and remotely. (Bach 2010, 55-6)

This leads to question we should worry about. How does singular propositional content come to exist? It seems, at least to Bach, unproblematic for one to gain the singular propositional content in direct perception (in the case of perception-based *de re* thought). But how can we establish it when the object at the end of the communication chain is given indirectly via perception of more proximal representations?

Therefore, following Bach's argument about *de re* thought, and extending acquaintance to other physical tokens then names will lead into the sorites paradox by opening two parallel problems:

1. *The more traditional philosophical one: how much of directness of perception is required for de re thought in Object-Perceiver causal-historical relation?*

2. *The more communication-focused problem: how direct can causal-historical relation between the transmitter T, and the receiver R, of the relevant singular thought about an object O actually be?*

Keeping this in mind, here is a description of the basic situation of Bach's transmitting *de re* thought:

A) *O-P relation*: There is an object O which the perceiver P is perceiving and she is having perception-based *de re* thought about that particular object and is thinking of it by some *mode of presentation* which functions as mental *indexical*. This kind of relation brings into existence perception-based *de re* thoughts.

B) *T-R relation*: After having perceived and remembered an object O the transmitter T refers to it by some name (a physical token) which is expression of *de re* thought (a mental token) about it to receiver R and puts R in the position of thinking of it under a new *de re* mode of presentation. This kind of relation brings into existence communication-based *de re* thoughts.

2.3. The possible sorites paradox of Bach's extended communication-based *de re* thought

I will start with 2. *the more communication-focused problem: how direct can causal-historical relation between the transmitter T, and the receiver R, of the relevant singular thought about an object O actually be?*

I would like to examine a type of the example with a more indirect relation between the transmitter T and receiver R of the relevant singular thought. To complicate the story slightly, consider an example with more intermediaries between the object O and the final receiver R. Let us suppose the causal chain at the end of which is Mary. John (i.e. the receiver

R) is watching *live news* on TV and the speaker Jane (i.e. the transmitter T) is speaking about Mary (i.e. object O) of whom she once had a perception-based *de re* thought by using physical token, her name 'Mary'. Suppose that transmitting of *de re* thoughts is possible via remote communication. How exactly could this happen and which intermediaries might be included in such communication? How does it differ from another possible example where Jane is talking about Mary in the mere presence of John, and not being recorded in the TV studio²²?

Let us take the matters one step further. Had Jane, instead of using a proper name for Mary, made a statue of her without telling John anything, could he then have *de re* thought about Mary via this statue? If John could also have *de re* thought about the statue (which Jane would make as a physical token of *de re* thought about Mary), instead of Mary, why could not he have *de re* thought about physical token of a proper name, and not about Mary? One might say that both the statue and the word (voice, not proper name) are causally connected both to Jane and Mary. Why should he not then grasp *de re* thought about Mary through the statue in the same way as he could through the word?

²² In both cases, when the speaker Jane is transmitting *de re* thought, she is also included in *de re* communication, not only by producing a physical token from her mental token, but in a way that she herself could also be perceived by John. Then, Jane as an 'object' is necessary and relevant but is not directly productive for some other person having *de re* thought about Mary, being '*de re* transmitted'. Jane (her voice) is like a medium for transmitting *de re* thought. Furthermore, John does not have unmediated access to Jane's voice. Someone has recorded her and then all sorts of media have been used to potentially transmit many kinds of *de re* thoughts through the causal-historical chain in communication. Simply put, Jane's voice when naming Mary is the physical token of the proper name she derived from her mental token of memory-based and perception-based *de re* thought of Mary she had and has, thus, enabled John to have *de re* thought about Mary. This part just seems to be unproblematic. The part which is problematic though lies within seemingly unproblematic one and it consists in explaining what the intermediaries are and how are they connected to causal-historical chain.

Another related problem to answer might also arise. Physical tokens are something that one perceives and one can have *de re* thoughts about them, too. One is not always aware nor does he remember every single thing in that causal chain. This causal chain is out there in the real world and one perceives some of the items and links within it. And as long as one is connected to it and is able to perceive the required items, one might be in a position to have a *de re* thought. What is problematic here is that this might work for more direct perception of an object, but how could this work for the most indirect examples you could imagine? There can be many sources of perception involved between an object O and the final receiver R. One might argue that, if we acknowledge all perception-based *de re* thoughts the receiving person might have at his end of that causal chain we would have too many perception-based *de re* thoughts.

This seems very odd and confusing. Before making further distinctions and bringing some order into this confusion I would like to show that it is not only when in communication the transmitter T wants to transmit *de re* thought to the receiver R via physical token (T-R relation) that this confusion happens, but also each time the perceiver P perceives something, when just the perceiver P and an object O (O-P relation) are included.

2.4. The possible sorites paradox of Bach's perception-based *de re* thought

Let us see how the above mentioned *communication-focused problem* reflects on *1. the more traditional philosophical one: how much of directness of perception is required for de re thought in O-P causal-historical relation?*

The real question is how many intermediaries are allowed, how “close” or “far” one needs to be to the object one is supposed to perceive in order actually to perceive it? This is a problem for other proponents of *de re* thought as well, even for those who believe only in the perception-based *de re* thought. This is because one always perceives the object through some media (at least via air). Some other object (in a very wide sense of the term) is always involved as a medium for perceiving the object one perceives. So, even when we try to reduce the intermediaries in order to have more direct perception, we can see that there will always be some intermediary included in one's perception. The very same reason why communication-based *de re* thought seems to be problematic applies to the perception-based *de re* thoughts, at least when defined in Bach's terms. Hence, the main problem for Bach's account as it stands, is that one can never come to the ‘pure’ object itself – in order to perceive it without some intermediary²³. If the causal relation is crucial for fixing the

²³ Notice that this is not the same point which Bach raises when argues that there is no “contrast between mediated and unmediated thinking” because even “*de re* thought about a current object of perception, which is direct as can be, is still mediated. In general, to think of an object in a *de re* way is to think of it via some means, but it is still to represent the object. (...) This leaves open the possibility that in some cases one's connection to an object of *de re* thought is remote” (Bach 2010, 55).

reference of *de re* thought, then whenever there is a causal relation (to the object at the end of the causal-historical chain), there is a *de re* thought of this object. Consequently, we can potentially always have numerous representations of different sorts of objects which are intermediaries between us and the object at the end of the causal-historical chain, and as I have tried to show in 2.3. and 2.4. this is the case both for communication-based *de re* thoughts as well as for perception-based.

Therefore, on Bach's account, there is no relevant difference between communication-based *de re* thought and perception-based *de re* thought if it turns out that both kinds of *de re* thoughts are subject to the same paradox.

2.5. Conclusions concerning the possible sorites paradox

To reiterate, the true problems for Bach's theory might not be just communication-based *de re* thoughts, but perception-based *de re* thoughts as well. In his account, every perception-based is in a way communication-based and *vice versa*. In a physical world the perceivers do not have unmediated access to objects. If causality is the way thoughts are transmitted, then every perception-based *de re* of some physical object O_1 involves numerous other (potential) perception-based *de re* of object O_n , which functions as an intermediary included in causal-historical chain, where at the end of the causal chain is that object O_1 . The really hard question for Bach's account is not how far can we extend acquaintance but how close can we get to the acquaintance with the object at the beginning of the causal chain?

Therefore, as I have stated earlier, our quest has yielded both pros and cons for Bach's theory. There are both optimistic and pessimistic conjectures and conclusions. The optimistic conjecture is: If the relation *O-P* (case of perception-based *de re* thought) is as indirect as the relation *T-R* (case of communication-based *de re* thought) is, and if *T* could have perception-based *de re* thought about the *O*, then *R* could also have communication-based *de re* thought

about the *O* via physical token which is causally connected to the *O* at the end of the causal chain. The pessimistic conjecture is: If the relation *O-P* (case of perception-based *de re* thought) is as indirect as the relation between *T-R* (case of communication-based *de re* thought) is, and if *T* could not have perception-based *de re* thought about the *O*, then *R* could also not have communication-based *de re* thought about the *O* via physical token which is causally connected to the *O* at the end of the causal chain.

If every acquaintance is more or less an extended acquaintance, then instead of trying to determine which intermediaries are allowed in order for one to have a singular thought, Bach should once again worry primarily about what sort of relation is the relation he offered.

It seems that one might then accept two very different, but at the same time both very odd, conclusions. The optimistic conclusion is: We might have as many and as various *de re* thoughts as there are causal connections to an object. The pessimistic conclusion is: Perhaps, the only thing one might have in connection with an alleged object of thought are not *de re* thoughts of that object, but only causal relations to it without any *de re* thoughts. Neither of the two is very appealing.

Finally, it is questionable whether Bach can keep holding both the optimistic and pessimistic conjecture (and perhaps get out of them his version of the optimistic conclusion).

CHAPTER 3: A SOLUTION TO THE PARADOX – A TWO-PRONGED APPROACH TO SINGULAR THOUGHT

So far we have seen that Bach (see 1982/84; 1987/94) tried to extend the acquaintance relation via representational connection relation even to the most remote examples (where the causal-historical chain exists), but in his (Bach 2010, 57) later work he questioned this possibility²⁴. I have tried to demonstrate in the previous chapter that this might lead to a sorites paradox. In this chapter I give my reaction to the potential threat of the paradox. In this chapter, I will argue that many concepts and relations I have mentioned above deserve better treatment and further enhancement. Furthermore, I wish to distinguish clearly between two main cases of extended acquaintance and to argue that the situation is not so pessimistic, that there is a way out, both for the cases of perception and memory (that appear in the Bach's formulation), and at least for some cases of communication-based *de re* thoughts.

3.1. Seemingly two types of cases of physical tokens

Consider first the physical tokens we perceive. One might say that there is a significant difference between cases of hearing or reading words that refer to a certain object on one hand, and seeing photography or film of this particular object on the other. In both cases physical tokens (made out of the mental tokens) that are causally connected to the object are used. However, we have an intuition that physical tokens of acoustic or visual patterns of items heard or read resemble the object at the end of the causal-historical chain rudimentarily (or not at all) whereas photography or film resemble it more (or to a greater degree). The cases of photography or film might seem especially confusing since we can find a similarity between properties of the object-as-presented in the photography or on the film on one side, and the actual object the photography or film really depicts on the other. But let us not be

²⁴ Including when he gives the following examples of extended acquaintance and of one's relation to photography, film, hearing someone's voice, reading someone's name: on a luggage tag, in a phone book, or on a tombstone.

fooled, since in both cases, at least according to Bach, what is important is a causal-historical relation to the object at the end of the communication chain, not the appearance of the physical token itself, at least not in a sense that it should resemble to the object at the end of the causal-historical chain.

While this may be true, physical tokens of spoken or written words can be perceived as well, and thus one might say that the receivers might also have immediate perceptual *de re* thoughts about these physical tokens itself. I believe that considerable confusion stems from not taking into consideration this possibility. Yet with this in mind, demarcation is crucial when it comes to perceiving other kinds of physical tokens, e.g. photographs or film, since we might also have immediate perceptual *de re* thoughts about these physical tokens themselves on one hand, when on the other we have a strong intuition that they can connect us with the object at the end of the communicational or causal-historical chain, at least when they stand in the causal relation to the object. For example, the perceiver can perceive a visual or acoustic physical token such as the word ‘Mary’ written or spoken respectively, or perceive the photo or video recording of Mary. In the case of the physical token, which should stand for a (mental) proper name according to Bach, the perceiver can have a communication-based *de re* thought about Mary, while in the case of photo or video recording Bach is inclined to think that he cannot.

Do we really want to come to this paradoxical ending? We might agree that that causal link plays the crucial role, and not the object resemblance of the physical token. But we should try to see if there is anything else that matters apart from the pure causal-historical connection to the object at the end of the communication chain.

3.2. The acquaintance constraint and the cognitive significance constraint

One way to go is to emend Bach's view and to add different criteria to the causal-historical link in order to have a singular thought. A causal connection to the object is necessary, but there must be additional criteria to answer the problem of a singular thought. Let me propose that singular thought is determined by two constraints: (i) the *(external) acquaintance constraint*: singular thought includes a causal-historical relation to the object; and (ii) the *(internal) cognitive significance constraint*: the thinker has a cognitive capacity to deliberately encode an *indexical-iconic representation* into an *indexical-discursive representation*, which enables him to have a singular thought. This approach to singular thought is two-pronged because it includes both external and internal elements, yet it is broad in scope since it is not restricted to just certain intermediaries. To illustrate further, I argue that the information that the causal-historical link carries and our cognitive ability to properly²⁵ unpack this information are two components that matter in order to have a singular thought.

I would like try to analyse this a bit further. I propose to distinguish between two types of cases of extended acquaintance representations taking also into consideration problematic examples of extended acquaintance Bach has introduced in the quote in the chapter 2. In particular, I will briefly explain what I mean by *indexical-iconic representations* and *indexical-discursive representations*²⁶.

²⁵ What "properly" means is to be defined by what it takes to encode an *indexical-iconic representation* into an *indexical-discursive representation* in order to have a singular thought. Due to the space considerations I do not cover this here.

²⁶ The motivation for this distinction I owe to Fodor's (2007) distinction between *iconic* and *discursive* representations. I add to both the element of indexicality that is motivated by Peirce's (1967) distinction between indexes, icons and symbols. However, my view differs from their's in several points, especially the ones that are relevant for transmitting singular thoughts. I cannot fully develop this distinction here, but I will indicate differences in what follows, accordingly.

3.3. The indexical-iconic representation and the indexical-discursive representation

In my view, the *indexical-iconic representation* is constructed in our mind each time the thinker perceives something, either in the case of O-M relation, namely in direct perception of an object (Bach's perception-based *de re* thought), or M1-M2 relation, namely through perceiving the physical token which was made in communication (Bach's communication-based *de re* thought). In other words, the thinker's immediate sense perceptions namely sight, hearing, smelling, tasting, touching or their combination always produce indexical-iconic representations. Thus, most indexical-iconic representations depend on one's senses. What is available to the senses is the immediate perceptual information, gained in O-M relation or M1-M2 relation, which brings along a causal-informational link²⁷. The thinker (or the receiver or the perceiver, in this case) has to dismantle this informational package he received from his immediate perception. He can unpack this causal-informational link in the way that will be beneficial in order for him to have a singular thought about an object. Consequently, there are always families of intermediaries²⁸ that are present in perception and that are responsible for producing the *indexical-iconic representations*. If there is a certain analogy between O-M relation and M1-M2 relation, then what Bach's communication chain presents in M1-M2 relation can be seen as a label for just a part of causal-informational link between O and M2.

In my view, the indexical-iconic representations are non-propositional representations and have a non-conceptual content. They are produced in perception by those intermediaries included in the causal-informational link, which connect the thinker to the object at the end of

²⁷ What Bach calls causal-historical link I would rather call *causal-informational link* to emphasise the informational package it carries.

²⁸ As I have pointed in chapter 2, the intermediaries might be more or less remote, e.g. air, glasses, photography, film, map, microscopic or telescopes image, etc. However, I want to stress that although there are intermediaries present between our senses and the object on the end of the causal-informational chain, the perceivers are not always, and do not have to be, aware of all the intermediaries present.

the causal-informational link²⁹. Thus the hard question is whether the propositional content³⁰ contained in the mental token of one thinker, i.e. the transmitter, can be transmitted to another, i.e. the receiver, via physical tokens. Is the propositional structure of a mental token lost once we use a different kind of physical token (i.e. other than one produced in language) in an attempt to transmit a singular thought? Can it be preserved only in the case of physical tokens such as spoken or written words? I doubt that. This further opens the problem of how to transmit the propositional content via any kind of physical token from one person (who already has already gained the propositional content and has it as a certain mental token) to another who should gain it via communication. I believe that each time the thinker perceives some physical token and has an indexical-iconic representation, he is in a position to derive a propositional content out of this token, i.e. to decode an indexical-discursive representation.

I want to argue that, apart from the acquaintance constraint, what makes it possible to have a singular thought (either immediately or transmitted to us in communication) is the possibility of encoding indexical-discursive representation, i.e. the cognitive significance constraint. Fodor (2007) characterizes discursive representations as conceptual (as opposed to iconic representations), but I would like to distinguish between fully conceptualized, i.e. discursive representations and non-fully conceptualized, i.e. indexical-discursive representations³¹. For this reason, indexical-discursive representations are, in my view, not

²⁹ Another related issue is the following. What determines that certain thing is at the end of the causal-informational chain? I am inclined to think that, in fact, causal chains are often not linear and are not with ‘the sharp ending’. They do not lead solely from the object-point A to the object-point B, but they often go further to the object-point C, D, etc., and (sometimes) also come back to the previous points. They might, but not necessary, go linearly backwards. We use the model of ‘causal links’ with sharp endings in order to help us schematize the connections, and we deliberately ‘break’ the causal-historical chain at a certain point in order to say that this is the object one is having singular thought about.

³⁰ Here the assumption is that a propositional content is characteristic of singular thoughts. I argue in favor of this notion by introducing the indexical-discursive representations.

³¹ Bach's conceptualized representations are also not like Fodor's (2007) – they are the narrow-psychological properties. And adding to them an indexical element makes them not fully conceptualized. Those are characteristics of “mental” *proper names* – they are not fully conceptualized. Bach assumes, contrary to Burge (1977), that conceptual “content is a narrow-psychological property” and “*de re* beliefs have truth-conditions which are not determined solely by their narrow-psychological properties (...) since they are indexical...” (Bach 1982/84, 128) *De re* thoughts have also non-conceptual element which is distinctive of *de re* beliefs. Bach uses

fully conceptualized since they are, apart from being symbols, partly indexical in the Peircean sense. Indexical-discursive representations can be encoded from the indexical-iconic representations the thinker has when he perceives (both in case of O-M1 relation, as well as M1-M2 relation). Once the indexical-discursive representation has been encoded, this then opens a mental file³². Plainly speaking, the thinker perceives something and, thus, he has an indexical-iconic representation. After that he can use his cognitive capacity to decode the information into indexical-discursive representation that has propositional content³³. Once he does that, he is in a position to have a singular thought.

3.4. Why not cut out the middle man?

Why introduce the indexical-iconic representation when we already have the indexical-discursive one? I posit the indexical-iconic representation as a middle step, one that ties together the object singular thought is about and the indexical-discursive representation which, in fact, is a singular thought. To elaborate, the indexical-iconic representation is not a singular thought, yet it might lead to one. I agree with Acquaintance Theorists that one has to be in a certain relation, but I also posit this middle step, the ontological entity between the object singular thought is about and the singular thought itself.

This entity, namely the indexical-iconic representation is not a singular thought (yet), although it opens the possibility that the transmitter can use other intermediaries other than just words in order to communicate her singular thought about the object she has, if any. However, her communication might not be always successful, for what she does is not to transmit a singular thought in the strict sense of the word transmitting, but to enable the

the notion of thought/belief interchangeably. My notion of the latter differs but, for the purpose of this paper, let us suppose we are talking about thought.

³² Recanati (2013) writes extensively on mental files.

³³ I believe that decoding can be extended to symbol systems other than one of the natural language. The thinker can do so via other semantic systems she has the cognitive capacity to encode.

receiver to encode one. Communication of a singular thought is a complex process. Some of the crucial ingredients which it includes are the object singular thought is about, the transmitter and the receiver on one hand, and on the other it involves the perception of sense-data, mental and physical token, indexical-iconic and indexical-discursive representation. Finally, it includes the causal connection that goes from the object to the receiver. I will expand my view on this in what follows.

It is worth noting that, according to my account, transmitting a singular thought means something else. Let me clarify the matter: In my view, singular thought is not transmitted in the way Bach and other Singularist argue for³⁴. Moreover, even when the external condition is satisfied and there is a causal connection from the object to the receiver, the failure of transmitting still might be at work if the internal condition is not satisfied, namely if the receiver is not cognitively capable to accept and decode an indexical-iconic representation into an indexical-discursive representation.

3.5. The nature of an indexical-iconic representation

Thus, an indexical-iconic representation is both external and internal in its nature. It is a step from external to internal. Singular thought about an object is always generated anew depending on, among the other things, the cognizer's abilities. However, although the singular proposition via indexical-discursive representation is created afresh, a difference between singular and descriptive thought still remains. For, in the case of the inception of a singular thought, there exists the causal-informational path and other elements that lead to its inception. In short, there is a certain sense-data that is responsible for an indexical-iconic

³⁴ For this reason, I believe that the kind of transmitting they offer is an illusion since it somehow presupposes that the whole proposition is transmitted, whereas I will argue that the singular proposition is created anew.

representation, and in that sense we might say that, transitively, the object singular thought is about becomes closer to us³⁵.

By claiming that, we must bear in mind that my view is closer to Russell's sense-data theory than to those whom claim that the relation to the object is more immediate and direct. Even though there is no direct relation to the object properly speaking, still one's thought is not merely descriptive. What fixes this problem is the acquaintance constraint I am committed to. It manages so for at least two reasons. First, this external constraint pulls my theory out of the possible methodological solipsism one might arrive at if she only follows the internal constraint³⁶. Second, it secures that singular thought is about the particular object that exists outside and the thinker thinks about. As a result, the indexical-iconic representations reconcile the internal and external condition for having a singular thought.

3.6. Indexical-iconic without indexical-discursive representation

From what I have written so far, it is also important to see if one sometimes have an indexical-iconic representation without having a correspondent indexical-discursive one. As already stated, this is mainly determined by the thinker along with her ability to decode the right discursive system³⁷. I claim that the communication-based singular thought is possible when both of the thinkers, namely the transmitter and the receiver, are able to successfully encode the right indexical-discursive representation, each on their own. What is then

³⁵ Again, we have to bear in mind that the object alone cannot come into one's mind, one can only grasp a certain aspect of it via its sense-data. Precisely because of that, I am inclined to think that this is the only way one can have an object in her mind.

³⁶ As already noticed by Descartes, our representations might not resemble the object they represent.

³⁷ I am aware that I owe an account of how these (indexical) discursive systems are generated and what does it mean that two thinkers share the same (indexical) discursive system.

I also stipulate here that these systems can be learned and recognized by a cognizer. Of course, it might happen that one does not, in the end, recognize or encode a certain physical token into a indexical-discursive representation whereas the other one does. Depending on the cognizers and the physical tokens, some of them are more suitable and they are in a position to encode them easier. However, I do not discuss the problem of encoding here.

transmitted, if anything, is the physical token³⁸ which is eventually responsible for the indexical-iconic representation. We can say that while the thinkers are to a certain degree powerless in having the indexical-iconic representations, they are in charge of encoding the indexical-discursive one, i.e. of having a singular thought. In other words, there is no real transmitting in the Bach's sense when it comes to communication-based singular thoughts.

In brief, in order for one to have a singular thought, apart from the causal-informational connection to the object one has singular thought about, the thinker must acquire two indexical representations: (i) indexical-iconic representation and (ii) indexical-discursive representation. As I argued above, the indexical-iconic representation is necessary, but not a sufficient representation one has to have in order to have a singular thought. In other words, the indexical-iconic representation which does not lead to the indexical-discursive representation is not enough for one to have a singular thought. Indexical-iconic representation can lead to indexical-discursive representation when the thinker's cognitive capacity is fulfilled. It is fulfilled when the thinker is capable of decoding the indexical-iconic representation into an indexical-discursive representation³⁹.

Next, I want to look at how my proposed account including these two kinds of representations reflects on the standard view which distinguishes three standard kinds of singular thought, i.e. the perception-based, the memory-based, and the communication-based singular thoughts, with special emphasis on the third kind, namely the communication-based singular thought.

³⁸ It is transmitted along with the causal connection to the object singular thought is about.

³⁹ The indexical-discursive representations might include different propositional systems. Due to the space considerations I do not cover this here.

3.7. The inception of a communication-based singular thought

In my view, in the case of communication-based singular thought the transmitting of a singular thought is not the ordinary Bachian since singular thought is not transmitted, but generated anew. The transmitter's intention is relevant since it motivates her to produce a physical token out of her mental token that the receiver then perceives. Moreover, I believe that, on one hand, singular thought is always perception-based since it is derived from perception, yet on the other it is not a form of a perception-based singular thought in the Bachian sense. More precisely, there is an object the transmitter perceives and its sense-data produces an indexical-iconic representation in her mind which she as a cognitive capable thinker encodes into indexical-discursive one and memorizes it. After that the transmitter, who has acquired singular thought about that particular object, intentionally uses a physical token out of her mental token of that particular object. However, this physical token is another sense-data the receiver has to deal with. Similarly, the receiver perceives the sense-data of a physical token which produces an indexical-iconic representation in the receiver's mind which she, again, as a cognitive capable thinker encodes into indexical-discursive one. Apart from this, there has to be a causal-informational connection originating from the object via the transmitter to the final thinker.

Further question regarding sense-data comes to mind. How is it possible that both the transmitter and the receiver have a singular thought if the sense-data the receiver perceives might be completely different from the sense-data the transmitter had about that particular object? My very tentative solution is that the singular thought about a particular object rests on the notion of a certain indexical-discursive system singular thought is based on. I am inclined to think that a certain system can be encoded out of sense-data. Take, for example, the natural language system. Language is a generated system connected with certain sense-data. One can learn to recognize and transform this sense-data into spoken or written words. I believe that the cognitive capable thinkers can also learn certain already generated discursive

systems which refer to certain classes of objects or entities (general thoughts or propositions) to which then, in certain circumstances suitable for a singular thought, the element of indexicality is added (singular thoughts or propositions).

3.8. Conclusions concerning a two pronged approach

What is the novelty of this approach to singular thought? I offer two important roles. The first is *a restrictive role*: I believe that introducing the indexical-iconic representation is a necessary element which can resolve the dilemma whether any physical token whatsoever can be taken as a means of transmitting a singular thought. And my answer is that not any physical token will do for in order to have a singular thought one has to have the right indexical-discursive representation originating from the indexical-iconic one. The second *a explanatory role*: this account enables the possibility of having a singular thought in cases of remote acquaintance which, despite our strong intuitions, other Singularists, in particular, less restrictive Acquaintance Theorists, unsuccessfully strive to explain⁴⁰. In my opinion, they are struggling with the dilemma of how we can argue for the transmission of a singular thought via physical token of words (either spoken or written of which one perceives the sense-data) and not of the other physical tokens.

To conclude, we should not lose sight of the fact that the two pronged approach to singular thought opens a possibility of a remote acquaintance under new terms of grasping what the acquaintance to the remote object is. Acquaintance is an external condition, given both in terms of a causal connection and the Russellian sense-data theory⁴¹. However, in order for a thinker to have a singular thought about an object the internal condition in terms of indexical-iconic and indexical-discursive representation is needed. While the former condition

⁴⁰ For example, the ones who would like to allow the possibility of having a singular thought via photographs, audio and video recordings, etc.

⁴¹ Even though my account relies on sense-data theory, I think that it does not exclude or it is at least compatible with the fact that a singular thought is about the object.

externally fixes the *singularity* and the reference to the particular object singular thought is supposed to be about, the latter internally gives the *thought-likeness* to the singular thought.

CONCLUSION

Singularists find it utterly implausible that none of our thoughts are about a particular object and that all what we perceive is given to us in an entirely qualitative manner. Therein lies their strong motivation to define and defend a singular or *de re* thought. Some Singularists have argued that this is possible only in the case of our more or less immediate perception or due to cognitive significance for a thinker (this would be the Acquaintance Theorists and Cognitivists), while the other group put less or none restriction needed in order for one to have a singular thought (Semantic Instrumentalists).

Bach is a prominent defender of Acquaintance Theory of singular thought. To put it in a nutshell, for Bach singular thinking is determined *relationally*, not *satisfactionally*. Singular thought is about an object under *de re* modes of presentation while the connection between the thinker and the object is *causal-historical*. He distinguishes between three types of *de re* thought, namely perception-based, memory-based and communication-based *de re* thought. In his recent work, Bach admits that, in communication, extending acquaintance relation to photography, film, hearing someone's voice, reading someone's name: on a luggage tag, in a phone book, or on a tombstone seems to be problematic and he is inclined to think that it is impossible.

In this thesis, I have tried to show that Bach's extended acquaintance might lead him to a possible sorites paradox. This would challenge not only the existence of communication-based *de re* thought, but perception-based *de re* thought as well, since perception of an object is always indirect in the sense of intermediaries being included in causal-historical link. In response, I offer my tentative solution to the problem. I am hopeful my solution does not depend on (in)directness of perception, but rather takes into consideration two constraints which together fix the reference of singular thought. Singular thought is, thus, determined by two constraints: (i) the (*external*) *acquaintance constraint*: singular thought includes a causal-

historical relation to the object; and (ii) the (*internal*) *cognitive significance constraint*: the thinker has a cognitive capacity to deliberately encode an *indexical-iconic representation* into an *indexical-discursive representation*, which enables him to have a singular thought.

BIBLIOGRAPHY

- Austin, J. L. 1962. *Sense and Sensibilia*, Oxford: Oxford University Press.
- Bach, K. 1982/84. *De re* Belief and Methodological Solipsism. In *Thought and Object*, ed. A. Woodfield, 121-151. Oxford: Oxford University Press.
- Bach, K. 2010. Getting a Thing into a Thought. In *New Essays on Singular Thought*, ed. R. Jeshion, 39-63. Oxford: Oxford University Press.
- Bach, K. 1987/94. *Thought and Reference*. Oxford: Oxford University Press.
- Boer, S. and W. Lycan. 1986. *Knowing Who*. Cambridge, MA: MIT Press.
- Borg, E. 2004. *Minimal Semantics*. Oxford: Clarendon Press.
- Brewer, B. 1999. *Perception and Reason*. Oxford: Calderon Press.
- Burge, T. 1977. *De re* Belief. *Journal of Philosophy* 74: 338-62.
- Broad, C. D. 1965. The Theory of Sensa. In *Perceiving, Sensing, Knowing: A Book of Readings in the Philosophy of Perception*, ed. R. Swartz. Garden City, NY: Doubleday.
- Chisholm, R. 1942. The Problem of the Speckled Hen. *Mind* 51: 368-373.
- Davies, M. 1997. Externalism and Experience. In *The Nature of Consciousness*, eds. N. Block, O. Flanagan, and G. Guzeldere. Cambridge, MA: MIT Press.
- Donnellan, K. 1966. Reference and Definite Descriptions. *The Philosophical Review* 75 (3): 281-304.
- Donnellan, K. 1972. Proper Names and Identifying Descriptions. In *Semantics of Natural Language*, eds. D. Davidson and G. Harman. Dordrecht: Reidel.

- Donnellan, K. 1979. The Contingent A Priori and Rigid Designators. In *Contemporary Perspectives in the Philosophy of Language*, eds. P. French, T. Uehling, and H. Wettstein. Minneapolis: University of Minnesota Press.
- Evans, G. 1982. *The Varieties of Reference*. Oxford: Oxford University Press.
- Fodor, J. 2007. The revenge of the given. In *Contemporary Debates in Philosophy of Mind*, eds. B. P. McLaughlin and J. Cohen, 105-116. Oxford: Blackwell.
- Frege, G. 1984/1892. On Sense and Reference. In *Collected Papers on Mathematics, Logic and Philosophy* McGuinness, eds. and trans. Black, et al. Oxford: Blackwell.
- Frege, G. 1984/1918. The Thought. In *Collected Papers on Mathematics, Logic and Philosophy* McGuinness, eds. and trans. Black, et al. Oxford: Blackwell.
- Harman, G. 1977. How to Use Propositions. *American Philosophical Quarterly* 14: 173-176.
- Jeshion, R. 2002. Acquaintances *De Re* Belief. In *Meaning and Truth: Investigations in Philosophical Semantics*, eds. Joseph Keim Campbell, Michael O.'Rourke & David Shier. Seven Bridges Press.
- Jeshion, R. 2010. *New Essays on Singular Thought*. Oxford: Oxford University Press.
- Jeshion, R. 2010. Singular Thought: Acquaintance, Semantic Instrumentalism, and Cognitivism. In *New Essays on Singular Thought*, ed. R. Jeshion, 105-140. Oxford: Oxford University Press.
- Jeshion, R. 2009. The Significance of Names. *Mind and Language* 24 (4): 370-403.
- Kaplan, D. 1968. Quantifying In. *Synthese* 19: 178-214.
- Kaplan, D. 1989a. Demonstratives. In *Themes from Kaplan*, eds. J. Almog, H. Wettstein, and J. Perry. New York: Oxford University Press, 481-563.
- Kaplan, D. 1989b. Afterthoughts. In *Themes from Kaplan*, eds. J. Almog, H. Wettstein, and J. Perry. New York: Oxford University Press.

- Kaplan, D. (1979) Dthat. In *Contemporary Perspectives in the Philosophy of Language*, eds. P. French, T. Uehling, and H. Wettstein. Minneapolis: University of Minnesota Press.
- Kripke, S. 1980. *Naming and Necessity*. Oxford: Blackwell.
- Lawlor, K. 2001. *New Thoughts about Old Things: Cognitive Policies as the Ground of Singular Concepts*. New York: Garland Publishing.
- Lewis, D. 1979. Attitudes *De Dicto* and *De Se*. *Philosophical Review* 88: 513-543.
- Lopes, D. 1994. *Understading Pictures*. Oxford: Oxford University Press.
- Marcus, R. 1995. *Modalities: Philosophical Essays*. Oxford: Oxford University Press.
- McGinn, C. 1982. *The Character of Mind*. Oxford: Oxford University Press.
- Millikan, R. 2000. *On Clear and Confused Ideas: An Essay about Substance Concepts*. Cambridge: Cambridge University Press.
- Moore, G. E. 1993. Sense Data. In *Selected Writings*, ed. T. Baldwin. London: Routledge.
- Peirce, C.S. 1967 Exact Logic. Collected papers, vol. 3 Third printing Cambridge Mass.: The Belknap Press of Harvard University Press.
- Price, H. 1932. *Perception*. London: Methuen.
- Perry, J. 2000. *The Problem of the Essential Indexical and Other Essays*. Stanford: CSLI Publications.
- Perry, J. 2001. *Reference and Reflexivity*. Stanford: CSLI Publications.
- Pryor, J. 2007. *An Epistemic Theory of Acquaintance*. Unpublished manuscript.
- Putnam, H. 1975. *Philosophical Papers II: Mind, Language and Reality*. Cambridge: Cambridge University Press.
- Pylyshyn, Z. 2007. *Things and Places: How the Mind Connects with the World*. Cambridge, MA: MIT Press.
- Pylyshyn, Z. 2003. *Seeing and Visualizing*. Cambridge, MA: MIT Press.

- Recanati, F. 1993/1997. *Direct reference: From Language to Thought*. Oxford: Blackwell.
- Recanati, F. 2013. *Mental Files*. Oxford: Oxford University Press.
- Reimer, M. 2004. Descriptive Names. In *Descriptions and Beyond*, eds. M. Reimer and A. Bezuidenhout. Oxford: Oxford University Press.
- Russell, B. 1912. Reset 1946. *The Problems of Philosophy*. Oxford: Oxford University Press.
- Sainsbury, M. 2005. *Referents without Referents*. Oxford: Calderon Press.
- Salmon, N. 1988. How to Measure the Standard Metre. *Proceedings of the Aristotelian Society* 88: 193-217.
- Schiffer, S. 1978. The Basis of Reference. *Erkenntnis* 13:171-206.
- Searle, J. 1979. Referential and Attributive. In *Expression and Meaning*, 137-161. Cambridge: Cambridge University Press.
- Scholl, B. 2002. *Objects and Attention*. Cambridge, MA: MIT Press.
- Scholl, B. and Z. Pylyshyn. 1999. Tracking Multiple Items Through Occlusion: Clues to Visual Objecthood. *Cognitive Psychology* 80: 159-77.
- Scholl, B., Pylyshyn, Z., and J. Feldman. 2002. What is a Visual Objects? Evidence from Target Merging in Multiple Object Tracking. Reprinted in *Objects and Attention*, ed. B. Scholl. Cambridge, MA: MIT Press.
- Soames, S. 2003. *Philosophical Analysis in the Twentieth Century*, vol. 2. Princeton: Princeton University Press.
- Sosa, E. 1970. Propositional Attitudes *De dicto* and *De re*. *Journal of Philosophy* 67: 883-896.
- Taylor, K. 2003. *Reference and the Rational Mind*. Chicago: Chicago University Press.
- Tye, M. 2000. *Consciousness, Color, and Content*. Cambridge, MA: MIT Press.

Walton, K. 1984. Transparent pictures: On the Nature of Photographic Realism. *Critical Inquiry* 11: 246-276.

Zeimbekis, J. 2009. Pictures and Singular Thought. *Journal of Aesthetics and Art Criticism* 68: 11-21.