

Claudio Ferreira-Costa

How Do Proper Names Really Work?

Philosophical Analysis

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Claudio Ferreira-Costa

How Do Proper Names Really Work?

A Metadescriptive Version of the Cluster Theory

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Probleme kann man nicht mit derselben Denkweise lösen, durch die sie entstanden sind. [Problems cannot be solved by the same way of thinking through which they arose.]

Albert Einstein

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Foreword

My goal in this book is not to suggest new philosophical hunches about how proper names could work referentially, or even to take a strong stand on the multifarious present discussion. My goal is rather to develop what seems to me, in its foundations, to be an unexpectedly complex, comprehensive, and definitive kind of two-tiered cluster theory of reference for proper names, with wide-ranging consequences for other terms.

My methodological assumptions are also diverse; they constitute a much more pragmatically than formally oriented “philosophizing by examples” (Stroll). This philosophizing by examples was to a large extent inspired by Wittgenstein’s later comprehensive, anti-scientistic, natural-language “therapeutic” philosophy grounded on the idea of a “surveyable representation” (*übersichtliche Darstellung*) of the way language works—a critical procedure that much of the present metaphysics of language does its best to forget. Along with it comes the multi-faceted technique of using any available resource to approach philosophical problems (Searle). Another influence was the criticism against the fragmentation of present academic philosophy arising from scientism and premature specialization (Haack). Instead, according to her, we should proceed by means of successive approximations, trying to reintegrate philosophical views on the basis of a principle of *consilience*, i. e., the idea that reality, being unified, fosters inter-theoretical agreement. I believe that to a reasonable extent, this can also be the best strategy for the philosophical investigation of reference, which leads me to incorporate in my project ideas foreign to the sub-field. For instance, Donald Williams’ radically empiricist trope theory is here taken as a grounding ontological assumption. For such reasons, all that this book really demands from the reader is not as much proficiency as readiness for a new start.

To make the undertaking *prima facie* justifiable, some orienting historical remarks are in order. Concerning the investigation of the mechanisms of reference for proper names, there have been two distinct periods in the philosophy of linguistic analysis. The first is that of the *old orthodoxy*. It was already inaugurated by Frege in the 19th century with the suggestion of a descriptivist view of proper names. In the 20th century, the main actors were Wittgenstein, Russell, A. J. Ayer, J. L. Austin, and P. F. Strawson, along with logical positivist philosophers like Rudolph Carnap, Carl Hempel and, following similar lines, W. V. O. Quine. The old orthodoxy was continued by philosophers like Michael Dummett and Gareth Evans, still in England, and Paul Grice and John Searle in the USA (which also had some later influence in Germany through works by Ernst Tugendhat and Jürgen Habermas). They mainly assumed that the mechanisms of reference were internal, im-

PLICITLY cognitive, and in one way or another, accessible through descriptions. Moreover, these thinkers tended to be anti-metaphysical.

The second period can be called the *new orthodoxy*. This period was initiated by Saul Kripke and Keith Donnellan in the early seventies with their causal-historical views of proper names. A group of very original philosophers joined them: Hilary Putnam, David Kaplan, David Lewis, John Perry, Tyler Burge, and Nathan Salmon... followed by Scott Soames and many others. Regarding mechanisms of reference, they were typically externalists, causalists, and to a greater or lesser extent, anti-cognitivist and anti-descriptivist. Moreover, much of their work had some metaphysical commitment, for instance, to essences and *de re* necessities. Gradually, they increased their influence on the philosophy of language to its limiting extreme. Nonetheless, the much greater influence of the new orthodoxy does not mean it has no serious drawbacks. Both approaches are to a considerable measure as stimulating as controversial, which has generated a deeply rooted stalemate.

From a methodological viewpoint, the analytic philosophy of language also had two main approaches, to some extent respectively parallel to the old and new orthodoxies. The first was motivated by developments in symbolic logic (J. O. Urmson called it “ideal language philosophy”), such as predicate logic and later modal logic. The philosophical use of Fregean logic was championed by Frege, Bertrand Russell, and the Wittgenstein of the *Tractatus*. Ideal language philosophy was also central for logical positivism, particularly that of Rudolf Carnap, later greatly influencing American philosophy (W. V. O. Quine, Donald Davidson, Saul Kripke, David Kaplan, and many others). With greater emphasis on original semantic applications of modal logic, Saul Kripke and the new orthodoxy promoted a renewed “ideal language” philosophical approach that today is favored among most specialists. Hence, a peculiarity of the new orthodoxy is that it is often formally inspired.

The second methodological approach was centrally motivated by a careful examination of communication praxis in normal language (Urmson called it “ordinary language philosophy”, although this label can be limiting). It was influenced by Moore’s common-sense approach and by reflection on the pragmatics of our natural language. It gained an exponential place in Wittgenstein’s later “therapeutic” philosophy, flourishing in the works of J. L. Austin, Gilbert Ryle, and P. F. Strawson, the so-called Oxford school, which had its final but minor influence in the USA through the works of Paul Grice and John Searle, both having learned philosophy at Oxford, though with a methodologically wider approach. It is not too difficult to understand that this last approach is today eclipsed by the dominant new orthodoxy, which being formalistically conceived, leaves scant room for a wider, pragmatically inspired natural language philosophy. (In semiotics, the pragmatic typi-

cally involves a semantic, which involves a syntactic, but not the opposite, which makes feasible the greatest scope of the pragmatics. We can see this, for instance, in the breadth of Habermas' universal pragmatics.)

The present book is to a large extent a return to the old orthodoxy combined with a pragmatic approach in the wider sense. It must be so, since its methodology is a pragmatically driven investigation of natural language, and since the theory developed here is essentially internalist, cognitivist, and neodescriptivist, challenging most of the externalist views of reference. However, it is also heavily supplemented by the answers it needs to give to the important challenges posed by causal-historical referentialism, and by new, imported methodological devices such as the appeal to possible worlds, to say the least. In other words: it is true that the motivation and the necessary theoretical underpinnings for the much more elaborate cluster-descriptivist theory of proper names developed here draws on the old orthodoxy. But the new orthodoxy has provided not only new methodological devices, but also indispensable dialectical challenges without which no progress could be made. In fact, the here presented theory was developed in the form of a critical dialogue with the writings of some main philosophers of the new orthodoxy, so that without their inquisitive and imaginative work it would never have had enough fuel to lift off the ground.

Aware of this, my great expectation concerning the theory developed here is that it will allow us to overcome the fifty years of stalemate between the old internalist cluster-descriptivism and the new causal-referential externalist views of proper names. In my judgment, this can be achieved by a new approach that could be called *metadescriptive*: a two-tiered form of cluster-descriptivism, which contains metadescriptive rules able to evaluatively order the basic cluster of descriptions belonging to any given proper name regarding its application in any possible world.

There are many persons to whom I am deeply indebted, not merely for discussing the topics with me, but also for motivation and support. These include first John Searle, for his legendary lectures at UCLA-Berkeley, which I had the good fortune to attend in 1999; his work was a major influence on this book. I am also grateful to Manuel Garcia-Carpintero, who in 2007 encouraged me to undertake the hard work of developing my own views on the reference of proper names; to Richard Swinburne, for his insights regarding the merits of the old orthodoxy; to Marco Antonio Ruffino, for his sympathetic skepticism; to Wolfgang Spohn, for exchanging views with me at the University of Konstanz in 2010; to João Branquinho, who invited me to explain my ideas at the University of Lisbon in 2011; and to Guido Imaguire for our conversations at the Federal University of Rio de Janeiro in 2013. I am also very grateful for the discussions and the chance to share my thoughts on the topic with Anna-Sofia Maurin and her talented, attentive students

at the University of Gothenburg in 2016/1, along with François Recanati for welcoming me to the IJN in 2016/2, where I attended his excellent course on pragmatic aspects of language and meaning. I would like to give very special thanks to Peter Stemmer, who accepted me for postdoctoral work as a researcher at the University of Konstanz in 2021, and Francesco Orilia for discussions at the University of Macerata at the beginning of 2022. Very special thanks are also due to my friend Dr. James Stuart Brice for numerous suggestions on how to best formulate my ideas in idiomatic English.

Praia Bonita, 2023

Introduction

To help the reader, who I assume to be a non-specialist, I begin by offering short summaries of the main ideas of each chapter.

Chapters I and II are preparatory, critically and constructively examining the most central ideas of the old and new orthodoxies on proper names, some of which seem to be almost forgotten. Chapters III, IV, and V are dedicated to the exposition and defense of my own theory. Chapter VI is concerned with what this theory might change if applied to other singular and general terms.

Chapter I is dedicated to an exposition and evaluation of the merits and limits of traditional descriptivist views of proper names, which were mainly developed by Frege, Russell, Wittgenstein, P. F. Strawson, and John Searle. According to these views, proper names are essentially abbreviations of definite descriptions or clusters of definite descriptions; a proper name refers to its bearer if it sufficiently satisfies the cluster.

It is important to consider the history of descriptivism in order to counter its simplified, distorted, and caricatured interpretations by the new orthodoxy.¹ Saul Kripke (1980, Lectures I and II) and his closest followers (e.g., Devitt and Sterelny 1999) have assumed the existence of two types of descriptivist theories: classical and modern. According to the classical theory, defended by Frege and Russell, a proper name is the abbreviation of a single definite description. For instance, 'Bismarck' is the abbreviation of a definite description like 'the first chancellor of the German empire'. Since many definite descriptions can be associated with a proper name, and since there is no obvious criterion to choose the relevant ones, the old theory was replaced by modern theories, defended mainly by Wittgenstein, P. F. Strawson, and John Searle. According to these modern theories, called cluster-descriptivism, a proper name abbreviates a set of definite descriptions, which are either all the descriptions that can be associated with a proper name, or, at least, the weightiest ones.

The interpretative thesis that I defend in the first chapter is that the distinction between classical and modern descriptivism is highly deceptive, a typical case of a distinction without a difference. All the mentioned philosophers, even if not explicitly, as in the cases of Frege and Russell, were cluster-descriptivists.

¹ The tactic of arguing against a distorted and oversimplified version of an opponent's view is almost as old as philosophy itself. Aristotle used it in his criticism of Plato's doctrine of ideas. I am not suggesting that this must be done consciously. It even has the positive side of making possible the fuller development of an argumentative vein. However, any critical reader should be aware of it.

The main difference was aspectual. Beginning with Frege, descriptivist philosophers have approached the same problem from different perspectives and with different interests and assumptions, and their views can be shown to be profitably complementary. It is easy to understand, for instance, that Searle's theory has been developed in much more detail than Frege's occasional remarks, since the former's theory was the last to appear. Searle's theory, in its turn, replaces Strawson's more restricted idea of *reference-borrowing* with a wider idea of *parasitic* reference. In the present book, proposals of the descriptivist philosophers will be gradually developed and integrated into a single more complex theory, which is why it is advantageous to explain and discuss them in the first chapter.

Particularly important in the first chapter is its *Addendum*. There, I suggest that weightier descriptions associated with proper names could be seen as patterns derived from their identification rules—an idea inspired by Michael Dummett's Wittgensteinian interpretation of Frege (1973) and also by Ernst Tugendhat's classical analysis of the singular predicative statement. According to Tugendhat, the proper name must have an *identification rule* (*Identifikationsregel*) (1976: 485, 495), which can be satisfied by criteria belonging to its bearer when the proper name is not empty. My proposal is that the cluster of descriptions suggested by cluster theorists should be intrinsically associated with the linguistic expression of the proper name's identification rule, a modest insight that turns out to present analytically surprising difficulties and consequently will be developed only in the third chapter.

Chapter II is a critical exposition of the more recent causal-historical view first suggested by Saul Kripke and Keith Donnellan in the early seventies. This view was and remains decisive for developing the so-called new orthodoxy, which has largely replaced the old orthodoxy since then. The chapter begins with a general presentation of the causal-historical criticism of descriptivist theories, followed by descriptivist answers. I am not the first to show that the objections against descriptivism advanced by Kripke, Keith Donnellan, and others, although having their good points, are far from decisive (e.g., Searle 1983, Chapter 9; Ahmed 2007, Chapter 2).

The main theme of the second chapter, however, is the place of the causal-historical chain in the attempt to explain the proper name's reference. According to Kripke, a proper name refers because it is used at the end of a causal-historical chain that typically begins with a baptismal ceremony of the referred object (referent) performed by some speaker to an audience. My goal is to show that, although obvious that there must be external (physical) causal or causal-historical chains that usually begin by associating a baptizer with the speech act of naming, any attempt to identify the links of these causal chains will at some point inevitably resort to *intentions* committing us to open or hidden forms of cognitive aware-

ness of the referent. These cognitive awarenesses can easily be translated into the form of descriptions, which commits causal-referentialism to some sort of covert descriptivism. In other words, the causal-historical view is unavoidably trapped in a *petitio principii*: Although its goal is to overcome descriptivism, it must presuppose it in some way to gain any explanatory power. Even if descriptivism without causalism is empty, which I admit, causalism without descriptivism would be entirely blind; since reference at some point entails awareness of it, some form of descriptivism must be assumed.

Beyond this, one needs to realize that it is not only the causal-historical chain initiated by baptism that can give rise to the speech act of naming, which in a good measure relativizes Kripke's original idea. Any causal-historical chain initiated by occurrences related to the existence of the name's bearer can give rise to relevant descriptions. And these descriptions can have referential import, some of them in this respect even more important than baptism, which Kripke restrictively sees as if it were the only relevant origin of a causal-historical chain. For instance, the causal-historical chain initiated by the assassination of Archduke Franz Ferdinand by Gravelo Princip, which produced the corresponding definite description, seems to have a considerable referential import when we utter the proper name 'Gravelo Princip'. It is not from the beginning assured that the causal chain initiated by the baptism of Gravelo is more important for the referential function of this name than the causal chain initiated by his assassination of the Archduke. This is viewed as the event that triggered the First World War, which is why we still remember an otherwise obscure Serbian nationalist.

Only in Chapters III, IV, and V do I develop my own more refined form of neo-descriptivist cluster theory. This theory can be seen as a *metadescriptive* one, since it is a two-tiered theory oriented by metadescriptive rules that are able to select and evaluate the weightiest descriptions belonging to the cluster of descriptions attached to a proper name, in order to evaluate its referential success.

Chapter III is the central one and is not easy to summarize. The methodological *Leitfaden* to find the weightiest descriptions is taken from J. L. Austin, who advised us to consult lexicons as a pre-philosophical work. Since proper names are seldom found in lexicons, I began by checking what encyclopedia entries had to say about famous proper names. What I found was that if we do this, we can clearly identify two complex kinds of descriptions that almost always appear prominently and because of this can be justly called the *fundamental ones*: (i) *localizing descriptions*, telling the time, place, and career of the proper name's bearer, and (ii) *characterizing descriptions*, telling the decisive reasons why we use that proper name to refer to its bearer.

A key part of my view is the assumption that at least for *privileged users* of proper names—those who know how to apply them in the most complete way—

these two kinds of descriptions belonging to the cluster are the irreplaceably weightiest. Having found these two most fundamental kinds of descriptions, the next task was to find a meta-rule requiring the combinations and measures of satisfaction of such descriptions that allow the application of proper names. My arguments show that what this meta-rule—the metadescriptive rule—most often demands regarding proper names is that *at least a disjunction of localizing and characterizing descriptions must be sufficiently satisfied by the referent in the absence of any equally weighted competitor*. Moreover, we have implicit knowledge of the metadescriptive rule and its variations. The application of the metadescriptive rule to the cluster of descriptions we associate with a particular proper name forms what we can rightly call its *identification rule*, a rule whose existence was already speculatively suggested by Ernst Tugendhat (1983: 285–286). This allows us, for instance, to confidently refer to Sir Isaac Newton insofar as we know that he was (i) a man who lived in England from 1642 to 1727, who (ii) as a great physicist discovered classical mechanics, the law of universal gravitation, and the infinitesimal calculus, satisfying these conditions as a whole more than any other person.

The above-summarized usual mechanism is restricted to *privileged users* (specialists, baptizers, familiars...). It excludes the too often second-hand referential use of proper names by non-privileged users, that is, by the many people who are able to associate with a proper name only some less relevant description or even some wrong but rightly classified description. The possession of these descriptions already enables a person to insert the proper name in public discourse by means of a *parasitical* form of reference.

Furthermore, the fundamental difference between the *rigidity* of proper names and the *accidentality* of definite descriptions pointed out by Kripke can now be explained from a neo-descriptivist perspective. Defining a *possible world* as “a total way the world is or might have been”,² we can say the following. A proper name is rigid because it can identify its bearer in all possible worlds where this referent can be said to exist, which is accomplished by applying variable sets of descriptions belonging to its fundamental cluster of descriptions in sufficient degrees and without competitors, as prescribed by the meta-rule. An isolated definite description, however, is accidental because it can be said to change its reference in different possible worlds insofar as its application does not need to coincide with the applications of the in each world differently selected descriptions belonging to the cluster of the associated proper name. This is the reason why those rare defi-

2 See Kripke 1980: 15–20. In agreement with Kripke, I understand the concept of a possible world modestly, as any conceivable way our world is or might have been.

nite descriptions that do not belong to any cluster of descriptions distinctive for a proper name can be said to be rigid: they cannot but apply in any possible world where their bearer exists. Example: ‘the Rafflesia discovered by Dr. Joseph Arnold on May 20, 1818’. It would be contradictory to attempt to conceive a possible world where this same event occurred and its description does not apply.

Chapter IV addresses the main classical objections against descriptivism, appealing to the theoretical developments already presented in the previous chapter. In this chapter, I give detailed answers to the classical counterexamples offered by Kripke (like those of the Gödel-Smith case and the semi-fictional prophet Jonah) and from Donnellan (like those of Thales, Tom’s friendly guest, etc.). The answers are in my judgment very conclusive, and I regard their success as a decisive measure of the proposed theory’s superiority.

An important point in answering Donnellan’s counterexample of Thales was to show that causal-historical chains leave behind what we can call *causal records*, which are cognitively retained, publicly recognized events that can on their side be converted into descriptions, some of them even belonging to fundamental descriptions. Thus, the fact that Aristotle quoted Thales’ affirmation that water is the principle of everything is a causal trace fixed in his writings and later publicly retained, a trace that belongs to the causal record and that reappears in the cluster’s definite description ‘the philosopher *quoted by Aristotle* as having said that the principle of everything is water’. This finding plays a decisive role in refuting Donnellan’s simplified claim that Thales would still be Thales even if he did not satisfy the definite description of having said that all things are water because he was the causal origin of our spelling of his name. No: we refer to Thales mostly because (simplifying things) he is the bearer of the definite description ‘the philosopher *quoted by Aristotle* as having said that the principle of everything is water. This remains true, even if the content of Aristotle’s quotation was mistaken.

Chapter V deals with sentences that state identities between proper names. Here the metadescriptive theory is applied in favor of a neofregean solution for what could be called Frege’s “identity in difference” puzzle regarding the informativeness of identity statements of the kind “ $a = b$ ” (where ‘ a ’ and ‘ b ’ are proper names), which is meant to enhance his view. This is made partly against Kripke’s interpretation of such identity statements as *necessary*, since for Frege empirical statements of the kind “ $a = b$ ” would be *a posteriori* and contingent. The result is a combination with which we can derive a necessary *a priori* statement of referential identity from the more explicit contingent *a posteriori* statement of the difference between the senses. Kripke’s necessary *a posteriori* results here from the confusion of the necessity of identity ($a[b] = [a]b$) with the contingency of the difference ($aa \neq bb$).

Chapter VI is an unsystematic collection of provisional sketches. Its goal is to show some of the many relevant consequences of the proposed metadescriptive theory of proper names for other main terms of our language, like indexicals and general terms, with the main result of showing that the apparently convincing externalist thought experiments of Hilary Putnam and others are defeasible. A conclusive application of the suggested neodescriptivist approach to all kinds of terms, along with its implications, would require an entirely new book.

Finally, I wish to sketch some vague metaphilosophical views guiding the present investigation that deserve to be stressed in order to prevent misunderstanding. A question that could be posed concerns the fifty years conflict between descriptivism/internalism and referentialism/externalism. A common impression, mine at least, is that we remain stalemated because nothing sufficiently plausible and philosophically groundbreaking as a theory of reference has arisen to overcome the old conflict (cf. Stalmaszczyk 2022).

I can give a few examples that reinforce this impression. (i) Although it has a point, which I believe I have to some extent rescued in this book (Chapter V), two-dimensionalism, based on contentious logico-semantic principles, has diversified itself into an inextricable variety of competing views, which seems to typify it as a regressive research program (cf. Schroeter 2021). (ii) Alternative theories like predicativism (e.g., Burge 1973; Fara 2015) are deviants. We can for sure distinguish “that Mary” (pointing to a teenager over there) from “this Mary” (pointing to an older woman here), by uttering the sentence “That Mary is not this Mary”. In this case, we are using proper nouns predicatively, and this can be of interest to linguistics. But when we use the name ‘Aristotle’ in a course of Greek philosophy, assuming it is distinct from the name ‘Aristotle’ said on a yacht belonging to the Aristotle Onassis family, we are not using the name in a predicative sense; we are intending to refer to an individual. Moreover, in the most proper sense of the term ‘proper name’ that we are investigating in this book, which can be formally expressed by an individual constant referring to a particular, we are considering the function of a singular term in contradistinction to the function of general terms. This is not only logically, but also epistemically and ontologically of greater interest. (iii) Referentialism (e.g., Putnam 1975; Kaplan 1989; Salmon 1998; Soames 2002), defending the intuitively implausible idea that meaning belongs to the realm of reference, remained for many unable to explain empty terms and modes of presentation convincingly. (iv) The metaphor of mental files (repositories of information) (Perry 1980; Recanati 2012; 2016) associated with proper names is a way of explaining differences in cognitive values, replacing Frege’s concept of modes of presentation (*Sinne*) without disposing of externalism. So, the files for ‘Cicero’ and ‘Tully’ in the statement “Cicero = Tully”, though having the same informational content—say, *Roman orator*—can only be *numerically* distinct and even so able to

explain why these names have different cognitive values (Recanati 2022: 540–541). Nevertheless, a cognitive value still seems to demand more than a numerical distinction (two tokens of ‘Tully’ are also numerically distinct, nevertheless maintaining the same expected cognitive value).³ Moreover, files must be understood as cognitions containing non-conceptual information, which sounds inconsistent insofar as concepts do not need to be linguistically constructed (Chapter IV, § 5). It is clear to me that the views developed in the present book can enable us to solve the problems differently addressed by the above-considered alternatives with greater clarity, economy and explanatory power, simply by extricating us from the methodological and conceptual conflicts that produced the stalemate between the old and the new orthodoxy.

Final advisement: We live in a world dominated by science. Because of this, it makes sense to think that much of the philosophy of language today—due to the ways philosophy is academically practiced, whose incentives and evaluation often simulate those of science—too easily leads to *scientism*, and from scientism to what Susan Haack calls *precocious specialization*. What she means is that a number of merely hypothetical philosophical ideas are treated as if they were well-grounded scientific principles upon which edifices of discussion should be built. The result is what she calls a *fragmentation* of philosophy: Since the questionable foundations of these edifices must be dogmatically accepted by their practitioners, the result is a forced separation among these artificially trusted buildings, creating a segmented philosophical practice. In this atmosphere, broad syntheses (rightly rejecting these foundations) are consequently treated as if their possibilities should right at the start be excluded from discussion. As a result, theorists can be fated to end up discussing, as she writes, how many philosophers could dance on the head of a pin (2016; 2017). If you take another look at the different approaches to proper names indicated in the last paragraph, you will get a sense of what she means.

Haack grounds the antidote for the foregoing state of affairs on accepting a principle of *consilience*: the idea that since reality is unified, different sources can converge on strong conclusions (Wilson 1998). A good example, among many others, is Darwin’s theory of evolution, which was later reinforced by Mendelian and molecular genetics. In philosophy, a similar convergence could only be obtained through sufficiently comprehensive and eventually progressive investigation.

³ As I think I have shown, the statement “Cicero = Tully” is semantically very different from “Phosphorus = Hesperus”, and ignoring this difference can lead to misunderstandings (Chapter V, §§ 2 and 4).

Much earlier, Wittgenstein (1984b, § 122) sought in a similar vein to justify his rejection of logical positivism. As he dictated in his *Blue Book* (1933–1934):

Philosophers constantly see the method of science before their eyes and are irresistibly tempted to ask and answer questions in the way science does. This tendency is the real source of metaphysics and leads the philosopher into complete darkness. (Wittgenstein 1975: 18)⁴

Instead of answering questions in the way science does, according to Wittgenstein, we should instead look for “surveyable representations” (*übersichtliche Darstellungen*) of the pragmatic rules of our natural language, even if at the cost of vagueness and lack of details. As he wrote:

A main source of our failure to understand is that we do not have an overview of the use of our words.—Our grammar is lacking in surveyability. A *surveyable representation* produces just that understanding which consists in “seeing connections”. Hence the importance of finding and inventing intermediate links. (Wittgenstein 1984b, § 122)

Although developed in a definite and systematic way, the broad theoretical approach proposed and developed in the present book has similar goals.⁵

It might even be true that fragmented philosophy can be motivating for researchers working in related scientific fields. Nonetheless, it can represent a bad import for philosophers interested in achieving reasonable forms of theoretical comprehensiveness in the pursuit of truth. After all, this has been an appropriate goal throughout the whole history of philosophy.

⁴ I do not want to overemphasize the objection of scientism, since philosophy can be useful even when philosophers go astray, as I think was the case with the different forms of referentialism. Moreover, I also believe that the general direction of philosophy should be that of science insofar as we understand science in a sufficiently broad way as *objective consensualizable knowledge* (Ziman 1968), which I find compatible with Wittgenstein’s idea of surveyable representation.

⁵ For access to metaphilosophical criticism of the practice of present analytic philosophy, see Mulligan, Simons, and Smith (2006), Susan Haack (2016; 2017), Tugendhat (1992), and Costa (2018), not to mention Frankfurt (2005). See Soames (2003 II, Epilogue) for a defense.

I The true history of descriptivism

In this chapter, I begin the investigation of how proper names refer. There are two general kinds of theorists of proper names, who might be roughly called *descriptivists* and *referentialists* (Orilia 2010). The descriptivists are internalists with regard to meaning or semantic content. They emphasize the internal intermediary cognitive link⁶ existing between the name and its bearer, regarding it as semantically fundamental and generally expressible by means of definite descriptions. Referentialists are usually externalists with regard to meaning and emphasize the naming of an external referent (the object, the bearer). Either they deny that names have semantic content, or they identify semantic content with the referent (the object, the bearer).⁷ Consequently, they reject the idea that resorting to an intermediate descriptively rescuable semantic-cognitive link might be unavoidable and explanatorily fundamental.

My goal in this and the next chapter will be to provide theoretical and critical support for Chapters III, IV, and V, in which I will present my own more complex metadescriptive explanation of the referential mechanisms of proper names, followed by its application to counterexamples and particular cases. Hence, in the present chapter, I will introduce and critically discuss the classic versions of descriptivism and, in the next, the main ideas of Kripkean causal-historical referentialism. Before beginning, however, I want to introduce critically the referentialist theory of proper names suggested by John Stuart Mill in the 19th century, since it was in the origin of the contemporary analytic discussion.

1 John Stuart Mill: Names as labels

An important distinction made by Mill was between the denotation and connotation of a term: denotation is the reference of the term, while connotation (signification) is the descriptive element, implying an attribute. Among the referential expressions, the definite description (called by him an ‘individual name’) has both a denotation and a connotation. It denotes through its connotation, namely, by expressing attributes that, when possessed solely by its object of reference, allow

⁶ Notice that I will use the word ‘cognitive’ as including what some would call the pre-cognitive, that is, whatever is cognitive but tacit, implicit, or unconscious, as in Sigmund Freud’s analysis of thoughts belonging to the primary process (1987, 1992).

⁷ John Stuart Mill and Saul Kripke, denying that proper names have meaning, belong to the first group, while pure referentialists like Nathan Salmon and Scott Soames belong to the second.

us to identify its object referentially, distinguishing it from a multiplicity of other objects. A description such as ‘the author of *Heart of Darkness*’ connotes an attribute belonging to a unique individual, namely Joseph Conrad’s attribute of having written that story. The same is *not* true regarding proper names. In his own words:

Proper names are not connotative: they denote the individuals who are called by them, but they do not indicate or imply any attributes as belonging to those individuals. When we name a child by the name Paul or a dog by the name Caesar, these names are simple marks used to enable such individuals to be made subjects of discourse. (...) Proper names are attached to the objects themselves and are not dependent on the continuance of any attribute of the object. (Mill 2002: 20)⁸

In other words: a proper name has no connotation, no signification. Even if it has a meaning, this meaning has no influence on its referential use. According to Mill, the city of Dartmouth was so-called because it was located at the mouth of the river Dart, but if an earthquake changed this river’s course and shifted it away from the town, the name of the town would not necessarily be changed. That is, a proper name refers independently of any linguistic meaning it may have. It refers directly as if it were a label glued to a bottle. Since for Mill, the meaning of a term does not lie in what it denotes, but rather in what it connotes, it follows that “proper names strictly speaking have no signification” (Mill 2002: 21).

I pause here only to note that this standard interpretation might not tell the whole story. Mill also made statements that seem to complement what I have just set out, though conflicting with the standard interpretation. As he wrote some paragraphs later:

We put a mark, not indeed upon the object itself, but so to speak, upon the *idea* of the object. A proper name is but an unmeaning mark which we connect in our minds with the *idea of the object*, in order that whenever the mark meets our eyes or occurs to our thoughts, we may think of that individual object. (...) By enabling [the reader] to identify the individuals, we may connect them with *information* previously possessed by him. By saying “This is York” we may tell him that it contains the Minster. But this is not by anything implied in this name. (Mill 2002: 22; emphasis added)

This passage makes it clear that with the word ‘meaning’, Mill understood in our first quoted passage only linguistically expressed meaning. This meaning must be distinguished from the *idea* of the object, which in the English empiricist tradition of Locke and others should be understood as the content of meaning (informative content) in a wider sense. In fact, a proper name (even ‘Sitting Bull’) lacks any ref-

⁸ This passage provides us with the elements of Mill’s standard interpretation.

erentially relevant linguistically expressed meaning, which is not the case regarding definite descriptions or, as also happens, regarding general terms ('general names' for Mill) like 'man', 'dog' and 'disease'. For him, these last terms connote their attributes, in addition to denoting the sets of all men, all dogs, and all sick organisms. However, what Mill calls 'the idea of the object' in the quoted passage does seem to be simply a psychologist's way of speaking about an often-shared informative content, that is, about *senses*, ways of presentation that only differ from Fregean senses regarding their contrasting ontological interpretations.⁹

If my understanding of this point is correct, then Mill's conception of what proper names mean must be compatible with the suggestion that proper names are marks evoking in our mind senses, here understood as psychological modes of presentation of the object (their ideas). Using his own example, the proper name 'York' can be attached to an idea that can be expressed by the description 'the city containing the Minster', while this association is not indispensable for the reference. Surprisingly, the consequence would be no principled contradiction between his views and the forms of descriptivism about proper names advocated by later philosophers from Frege to John Searle. Although I consider this the most generous and even reliable way to interpret Mill's intentions, it is not how it is traditionally interpreted, and I will ignore it in the rest of this book for merely expositive reasons.

The theory of direct reference allegedly proposed by Mill was easily refuted by the earlier analytic philosophers. In the way the theory is understood in our first quotation, it is unable to satisfactorily resolve the paradoxes of reference answered by Russell through his famous theory of descriptions (1905; 1916). The first was the riddle of the non-existent reference. How could we make sense of a sentence like "Santa Claus lives at the North Pole" if the name 'Santa Claus' has neither a connotation nor a denotation? To this, Mill could reply that Santa Claus refers to an imaginary person. But consider the case of a true negative existential like "Santa Claus does not exist". If all that belongs to the name is its reference, such a sentence seems contradictory, for to apply the name one should already admit that its referent exists. Now, let us consider identity utterances containing co-referential names. Think about the difference between the sentence (a) "Mount Everest is Mount Everest" and the sentence (b) "Mount Everest is Chomolungma". The first is tautological, saying nothing, while the second is informative, telling us that 'Chomolungma' was the name native people called the same

⁹ Regarding senses, Frege was a kind of Platonist, while Mill was an English empiricist and a kind of psychologist (meaning-ideas should be located within psychological minds and qualitatively repeatable).

mountain. But for Mill, since names have no connotation, co-referential names should not have different meanings; sentence (b) should be just as trivial as (a), though this is not the case. Finally, there is the problem of the lack of inter-substitutivity in opaque contexts. Consider a sentence such as “Mary believes that Cicero, but not Tullius, was a great Roman orator”. If the proper nouns ‘Cicero’ and ‘Tullius’ are only labels for the same person, it seems that Mary must be able to believe in totally inconsistent things, such as that Cicero is not Cicero. For reasons such as these, and under the challenging influence of Russell’s insightful theory of descriptions, the alleged Millian theory of the direct reference of proper names soon fell into a well-deserved oblivion. It is important to remember these old objections because even in the present, skilled externalist-referentialist proponents of the new orthodoxy have struggled with them without finding convincing answers.¹⁰

2 Descriptivism (I): Frege and Russell

Millian referentialism was soon replaced by what we can call the descriptivist theory of proper names. The descriptivist theory dominated the 20th century until the 1970s, when it was gradually eclipsed by a new and improved version of Millianism, first proposed by Saul Kripke and Keith Donnellan, which inaugurated the new orthodoxy.

The fundamental idea of descriptivism is that a *proper name refers indirectly: it refers as a shorthand for bunches or clusters of descriptions applicable to the properties of its bearer*. This means that contrary to Mill a proper name connotes, it has meaning. And it has meaning because its semantic role is that of abbreviating a cluster of meaningful definite descriptions, being, therefore, in its semantic structure, more complex and not simpler than a definite description.

According to a current interpretation disseminated by Kripke, there are two forms of descriptivism: the classical and the modern.¹¹ The more primitive one, advocated by Frege and Russell, was a theory according to which a proper name’s meaning is a shorthand for the meaning of a *single* definite description associated with it. The second, more sophisticated one, advocated by philosophers such as Ludwig Wittgenstein, P. F. Strawson, and John Searle, attached the meaning of a proper name, not to the meaning of a single description, but to the meaning of

¹⁰ For access to the tortuous and inconclusive discussion, see Matthew Davidson (Ed.) 2007, chapters 3 and 4.

¹¹ Kripke 1980, Lessons I and II. Devitt and Sterelny 1999: 45. See also Lycan 2006: 256–257, and S. P. Schwartz 1977: 18–19. Although this kind of interpretation was popularized by Kripke, he seems to have taken it from John Searle (1967: 488; 1969: 170).

a whole group of descriptions. This new theory can be called the *cluster theory* of proper names since it identifies the whole meaningful content of a proper name with a cluster, a bundle, or an aggregate of descriptions.

My goal in this chapter (among others) is to demonstrate that this dichotomous interpretation of the development of descriptivism is false, serving only to make criticism easier. I will show that in fact a more complex cluster theory of proper names was already alluded to in the writings of Frege and Russell, even though they were not sufficiently and thoughtfully thematized. What has really happened since then has been a progressive explicitation and addition of aspectual details around a common insight.

Frege on sharing descriptions

To advance my view, I want to start by considering the Fregean formulation. In the little he wrote about the reference of proper names, Frege interpreted their changing senses as expressible by different descriptions or conjunctions of definite descriptions that different speakers associate with them. This view appears in a well-known note from his article “On Meaning and Reference” (*Über Sinn und Bedeutung*), which can be considered (*pace* Dummett) the *locus classicus* of the descriptivist theory of proper names in analytic philosophy:

In the case of genuinely proper names such as ‘Aristotle’, opinions as to the senses may differ. It might, for instance, be taken to be the following: The pupil of Plato and the tutor of Alexander the Great. Anyone who does this will attach another sense to the sentence “Aristotle was born in Stagira” than will a man who takes as the sense of the name ‘the teacher of Alexander the Great who was born in Stagira’. To the extent that the *nominatum* remains the same, these fluctuations in the sense are tolerable. But they should be avoided in the system of a demonstrative science and should not appear in a perfect language. (Frege 1892: 28)

What Frege’s examples explicitly show are cases in which the speaker does not associate a single definite description with a proper name: a first speaker has in mind the conjunction of the definite descriptions (i) ‘the most famous student of Plato’ and (ii) ‘the tutor of Alexander the Great’. A second speaker has in mind the descriptions (ii) ‘the teacher of Alexander the Great’, understood as (iii) ‘a person born in Stagira’. This already counters the single-description interpretation.

For Frege, the partial meanings carried by the definite descriptions, the “senses” (*Sinne*) or “modes of presentation” (*Arten des Gegebenseins*) associated with the proper name, are expressed by variable definite descriptions, under the condition that speakers can preserve the same reference. But how could the reference be preserved? The most immediate answer we could give is that there

must be a single *repository-cluster* of descriptions that contains as elements the possible conjunction of all definite descriptions we accept as referring to the same bearer; in the above-exemplified case, the historical person called Aristotle. In other words, in this quote Frege's next step to warrant the preservation of the reference, though not explicitly elaborated, would be to assume not only that the speaker may have more than one description in mind, but also that having different speakers' different descriptions in mind, there must be a larger repository-cluster of descriptions conventionally carried by a proper name in the natural language, a reservoir that can possibly be known by the speakers.

Frege's view is obviously not that a speaker should always have only one or two definite descriptions in mind. If two speakers agree that the sentence "Aristotle was born in Stagira" refers to the same person, it might be because even though they have in mind two different sets of definite descriptions, they also agree on the application of some common description, such as 'a Greek philosopher'. They may be apt to agree regarding the application of the definite description 'the great philosopher born in Stagira', possibly having still other descriptions in common, like 'the author of the *Metaphysics*' or 'the husband of Pythias'. Some form of cluster theory is an inevitable consequence of this reasoning since different speakers should be able to agree that the *nominatum* remains the same.

This point appears more explicitly in "The Thought" (*Der Gedanke*), a paper published twenty-five years later. There Frege explicitly shows how fluctuations in the sense of a proper name can be so great as to prevent communication: if different language users associate totally different descriptions or conjunctions of descriptions with a proper name, they will lack any way to unify the meaning, and it will be impossible for them to know if they are talking about the same reference since definite descriptions are the identifying criteria for the reference.

To show this, he imagines that Leo Peter went to the residence of Dr. Gustav Lauben and heard him say "I was wounded", and this is all he knows about Gustav Lauben. Leo Peter tries to comment on what happened to Herbert Garner, who in turn knows of a Dr. Gustav Lauben who was born on September 13, 1875, in N.N., without knowing where Dr. Lauben resides, nor anything else about him. It turns out that Leo Peter and Herbert Garner cannot know if they are talking about the same person. In Frege's formulation, they

do not speak the same language, since, although they do in fact refer to the same man with this name, they do not know that they do so. Therefore, Herbert Garner does not associate the same thought with the sentence "Dr. Gustav Lauben has been injured", which Leo Peter wants to express with it. (Frege 1918: 65)

From the quotations above, it is easy to conclude that Frege, who sees definite descriptions as carriers of senses, would be led to agree with a cluster theorist's suggestion that the proper name *Gustav Lauben* must be associated with definite descriptions common to both Herbert Garner and Leo Peter; to achieve communication about the same bearer. But this also means that any other person with other definite descriptions of *Gustav Lauben* in mind should share some description with Herbert Garner and Leo Peter; to also be able to communicate about the same bearer with them, which would once again lead to the assumption of a cluster of descriptions.

In conclusion, if speakers S1 and S2 have respectively the different definite descriptions D1 and D2, but along with them the common description D3 making them share the referent, and if speakers S2 and S3 have respectively the different descriptions D2 and D5, but possibly need a common description D4, which is not the same as the others, shared by them in order to share the referent, then S1 will need to have D3 and D4 in order to also share the same referent with S2 and S3. Since we can continue this process, the result will be the resource of a whole set of descriptions {D1, D2, D3, D4... Dn} that should at least to some reasonable extent be shared by competent speakers. Here we again find different conjunctions of descriptions known by each competent speaker, and a full repository of descriptions, a full cluster that they could in principle know, all of them being expressions of Fregean senses belonging to the proper name.

This, of course, leaves open the possibility that when applying a proper name, some speakers could have in mind a large share of the repository-cluster, which could even be close to its entire repository-cluster of meaningful content, for instance, if the speaker were a pupil of Aristotle or maybe even the proper Aristotle in his last years. Though none of these conclusions were explicitly stated by Frege, they are an obvious result of a cautious reading of his writings. If Frege did not follow this path, he was at least paving the way; and the only reason he did not develop a cluster theory is that he did not envision a natural language theory of proper names.

A curious point is that Michael Dummett, Frege's most original and influential interpreter, contested the idea that Frege proposed a descriptivist theory of proper names.¹² Dummett's claim was that Frege used descriptions because they were easy ways to clarify the meanings of some examples, but that this had nothing to do with Russell's idea that a proper name is short for a complex description,

¹² The American authors influenced by Kripke associate Frege with descriptivism, while English authors, influenced by Dummett often reject this association (see Dummett 1981: 97–98; 110–111; 186f.). But Frege's text is incontestable.

nor with the referential conception of meaning inherent in Russell's theory of descriptions... Moreover, wrote Dummett, there is no indication that Frege would agree with the idea that the meaning of a proper name can always be expressed through descriptions. According to him, the important thing for Frege is that a proper name is associated with a *criterion* enabling us to recognize a given object as its referent. Dummett illustrated his point by considering the multiple possible ways to identify the river Thames (1982: 97–98; 101–111). Often, he wrote, this is done indirectly, using collateral information, as in the case of a person who realizes that it is the same river that passes under the Radcot Bridge or through the citadel of Henley... And one can know that it passes through Oxford without knowing that it is the same river that runs through London, still identifying the river correctly. There is, he concluded, no sufficient condition that everyone needs to know for the identification of the river Thames.

However, none of the reasons put forward by Dummett justifies his protest. First, it is perfectly possible to adopt descriptivism without a commitment to the referential conception of meaning implied in Russellian logical atomism, which seems to me the culprit of the Dummettian reaction. Ignoring Russell's atomism, we see that the collateral information given by Dummett is made up of definite descriptions, like 'the river that passes under Radcot Bridge, through Henley, and through Oxford', although the weightiest definite description is 'the river that flows through London'. The last description, one can guess, is more central to the criterial rule with which we conventionally identify the river Thames, while the first ones are almost irrelevant. In the neo-descriptivist theory of proper names that I will propose, descriptions should be understood as *linguistic expressions of conventions* or *conventionally grounded rules*, calling conventionally grounded rules *any combination of conventionally established rules* by means of which an unlimited range of new meanings is able to be added to the language.¹³ And considering the referential character of these descriptions, what they really express are what may be called semantic-criterial rules, whose main function is to bind a proper name to its bearer in one way or another in a public language. This understanding, however, should be complementary to Dummett's own idea that the important thing for the meaning of a proper name is that it is associated with an *identity criterion* for the identification of its bearer, allowing it to be rec-

¹³ Descriptivists do not need to argue that everything can be expressed through descriptions: from a phenomenal viewpoint, tactile, visual, auditory sensations, associated emotions... cannot in themselves be adequately conveyed through spoken or written words. The only form to convey these things linguistically is metaphorical, through artistic representations like poetry. Frege called them *colorations* (*Färbungen*) and *illuminations* (*Beleuchtungen*), giving them a special semantic place (1892: 31).

ognized again as being the same bearer (Dummett 1981: 73). I will come back to this point in the addendum of this chapter.

My conclusion is that a philosopher like Frege was very far from thinking of a single description as the complete sense of a proper name as used by any speaker. Moreover, concerning the whole sense of a proper name—given by the repository-cluster—he was also an unspoken cluster theorist. Dummett could not see these things because he had a narrow view of what a descriptivist theory of proper names should be, based upon a simplified but quite common understanding of Russell's own description theory. This will become obvious in the following section when I compare his example of the River Thames with Russell's example of Bismarck.

Russell's mass of information

Let us now move on to Russell's conception. He saw the proper names of ordinary language as *abbreviated, truncated, or disguised* definite descriptions, suggesting that they could be analyzed using the same formal method with which he analyzed definite descriptions. As he was primarily concerned with logical analysis, he was not very much interested in the ways we really apply proper names in the practice of natural language. However, it was clear to him that a proper name does not abbreviate a single description, as many insisted on interpreting his ideas, and as he himself, for mere convenience of exposition, often did in his more technical texts. His awareness of the real complexity of proper names in natural language is better shown in a book with fewer formal concerns, his *Problems of Philosophy*. In this introductory but nonetheless philosophically deep book, he demonstrates a much more complex understanding of the pragmatics of reference. Here is a passage:

Common words, even proper names, are usually descriptions. That is to say, the *thought in the mind* of a person using a proper name correctly can generally only be expressed explicitly if we replace the proper name with a description. Moreover, the description required to express a thought *will vary for different people, or for the same person at different times.* (Russell 2013: 39; emphasis added)¹⁴

What this passage suggests is that language contains a vast repository of information about the object referred to by a proper name, which can be expressed in the

¹⁴ The book was first published in 1911. This passage, like the next to be quoted, appears in an identical form in Russell's article from 1918.

form of descriptions. When we think or spell a proper name, we usually have in mind one or more of these descriptions, so that a hearer only needs to know that our descriptions apply to the same reference evoked by them in his mind (Russell 2013: 40).

Russell presents, as an example, the noun ‘Bismarck’. According to him, a first and peculiar form of access to Bismarck is the one that the latter has to himself in a judgment like “I am Bismarck”; in this case, Bismarck himself is a component of his judgment, without going through a description. Another way of access is that of persons who were personally introduced to him. In this case, what they considered was Bismarck’s body and mind, known through sets of data associated with him and usually able to be expressed by descriptions. But still another way to get to know Bismarck, Russell wrote, is through history. In this case, we associate with him personal descriptions, such as ‘the first chancellor of the German empire is a cunning diplomat’ (which is a composite description, formed by the conjunction of a definite and an indefinite description). In the end, he concluded, what we usually have in mind is a vast set of historical information expressible in the form of descriptions and able to identify the person uniquely. As he wrote:

When we, who didn’t know Bismarck, make a judgment about him, the description in our minds will probably be *some more or less vague mass of historical knowledge*—far more, in most cases, than is required to identify him. But here, for the sake of illustration, let us assume that we think of him as ‘the first chancellor of the German empire’. (Russell 2013: 40; emphasis added)

What Russell suggests in these textual words is that when we use a proper name in the third person, what we have in mind is not just one description. It can be a complex “mass of information” which is composed of a great variety of descriptions. Such a composite of descriptions must have vague contours, which “will vary for different people or for the same person in different times” (Russell 2013: 39).¹⁵ This makes it unavoidable to infer that the descriptions in the mind of a user of a proper name must belong to an even larger repository of descriptions that express the non-personal totality of identifying information on the referred object. If those remarks by Russell do not explicitly present cluster theory, they surely invoke it. And no matter how we decide to interpret the notion of the full mass of information, the normal user will be able to know only a portion of

¹⁵ Anyway, the composite description assumed by a proper name’s user can easily be symbolized through Russell’s theory of descriptions: if the descriptive predicates are symbolized as the set $\{F_1, F_2, \dots, F_n\}$, then a composite definite description (formed by an indefinite number of definite descriptions) can be formulated as $(\exists x) ((F_1x \ \& \ F_2x \dots \ \& \ F_nx) \ \& \ (y) (F_1y \rightarrow y = x) \ \& \ (y) (F_2y \rightarrow y = x) \dots \ \& \ (y) (F_ny \rightarrow y = x))$.

it. The conclusion is that the interpretation of Russell's suggestions as to the defense that when we use proper names, we have in mind a single definite description is a rough simplification of what he actually thought.

What these close textual readings also demonstrate is that Russell is willing to analyze the proper noun 'Bismarck' in a way that does not differ substantially from the way Dummett analyzed the meaning of the proper noun 'Thames', or even from the way Frege should treat the name 'Gustav Lauben'. A central description, such as 'the first chancellor of the German Empire', is for Russell only one among the mass of descriptions that we can associate with Bismarck, in the same way that for Dummett the central description 'the river running through London' is just one of the many descriptions that we can associate with the proper noun 'Thames'.

If Dummett insists on claiming that Frege was not a descriptivist, then he should conclude the same about Russell. But since Russell has always been considered the ultimate champion of descriptivism, the conclusion can only be that Frege was also a descriptivist and, like Russell, an unspoken cluster theorist. And there is an important reason to think so: if there is an effective unity in the theoretical object of descriptivist theories, then its various versions need not be inconsistent alternatives to each other, but instead could be congruent approximations of the same complex phenomenon, each of them highlighting different aspects, even if diverging in methods and assumptions.

3 Descriptivism (II): Wittgenstein, Strawson, and Searle

After Frege and Russell, several other philosophers associated with the philosophy of natural language, mainly the later Wittgenstein, P. F. Strawson, and J. R. Searle, presented valuable suggestions for improving the theory of proper names as clusters or aggregates of descriptions, which were only fragmentarily developed by Frege and Russell. I want to briefly consider some interesting suggestions from each of them since they will be useful to us later.

Wittgenstein on proper names

In section 79 of his *Philosophical Investigations*, Wittgenstein added some commentary to Russell's conception. According to him, 'Moses' may be a proper name abbreviating a variety of definite descriptions, such as:

the man who led the Israelites through the desert,
 the man who lived in such and such a time and place and was called 'Moses',
 the man who as a child was found in the Nile by the pharaoh's daughter.

To this, he added that the name 'Moses' gains *different meanings* depending on the description we associate with him, thus recognizing that a name's cognitive meaning is expressed by the definite descriptions we associate with it (1984b, § 79); and this meaning is, like Mill's *idea* of the object, and Frege's sense as a mode of presentation, much more than a restrictive linguistic meaning.

The question that emerges is: to what extent do descriptions of the cluster of descriptions associated with a name need to be satisfied by its bearer? Wittgenstein evades a direct response. He limited himself to saying that we use proper names without having in mind a rigid meaning, so that even if some descriptions fail to apply, we can still use others for support. Natural language is inevitably vague. Moreover, with time, the body of relevant descriptions associated with the object referred to by a proper name can change. That is: characteristics that previously seemed irrelevant may become relevant and conventionally accepted, while others may weaken or be rejected, changing the conceptual meaning.¹⁶

Strawson on reference-borrowing

In Strawson's view, for each proper name, there is generally a set of presupposed descriptions with indefinite limits, a so-called *presuppositional set*. To be able to apply a proper name correctly, we must know a reasonable fraction of the set, which consists of those definite descriptions he called *genuinely identifying descriptions*, understood as those applying specifically to the name's bearer. Although we lack precise definitions of either the limits of the set or of what constitutes a reasonable and sufficient share of these descriptions, we could conclude that *the most frequently used descriptions are of greater significance* (Strawson 1963, Chapter 6, and 1974, Chapter 2).

An important idea first proposed by Strawson is that of *reference-borrowing*. It helps in using a proper name referentially, even without having a relevant or proper identifying definite description. Suppose that a description has an indexical

¹⁶ Leonard Linsky interpreted Wittgenstein as having here suggested the absence of conventional limits to fix descriptions (1977: 99), though there is no qualified textual evidence for this idea. Anyway, if Wittgenstein thought so, he would be wrong. It does not seem conceivable that a proper name can maintain a single and distinguishable reference if the limits of its application result from arbitrary decisions.

element, for instance, ‘the nice woman my brother said he met yesterday’. It seems that I can refer to her by using this description. For Strawson, what I have is in a sense an identifying description, though not in itself a genuinely identifying description. Despite this, I can identify the woman by a mechanism of reference-borrowing. Here is Strawson’s somewhat convoluted explanation:

It should be added, moreover, that the identifying description, though it must not include a reference to the speaker’s own reference to the particular in question, may include a reference to another reference to that particular. If a putatively identifying description is of this latter kind, then, indeed, the question, whether it is a genuinely identifying description, turns on the question, whether the reference it refers to is itself a genuinely identifying reference. So, one reference may *borrow its credentials*, as a genuinely identifying reference, from another, and that from another. But this regress is not infinite. (Strawson 1963: 185, footnote; emphasis added)

To exemplify: suppose that a student was unable to attend a class, and a fellow student tells him that Plotinus was ‘the philosopher discussed by the professor last week’, so that this is all the student knows about Plotinus. Thus, for instance, although the student has not attended the class and does not have any genuinely identifying description of the philosopher Plotinus, he has borrowed reference credentials offered by the testimony of a fellow student. The latter had attended the class, and in this way learned some reference credentials provided by the professor. He already knows more than before about Plotinus. And his professor certainly knows enough of the cluster of descriptions in order to safely identify the greatest Neoplatonic philosopher. Therefore, it seems that through a mechanism of reference-borrowing, a person can in a parasitic sense use a proper name to refer to some bearer sufficiently known by some proficient speakers of the linguistic community, even if this person knows almost nothing about the object of reference. The borrowing of a reference works here like the signature of a promissory note; it guarantees that something is due to the true reference maker. Although Strawson had in mind the borrowing that is found in indexical contexts, it is easy to give a broader (enhanced) application to the concept of reference-borrowing. Later in this book, we will make extensive use of this idea.

Searle’s mature cluster theory

The most recent of the descriptivist theorists, John Searle, developed the clearest and most elaborate formulation of cluster descriptivism.¹⁷ Searle notes that we

¹⁷ Searle’s formulation first appeared in a paper published in 1958. Later he presented the same

learn and teach the use of proper names only by ostension or by descriptions and that both methods connect a name to its object of reference only in virtue of specifying enough characteristics of the object to distinguish it from other objects. Hence, there is a close connection between the ability to use a proper name and the knowledge of those characteristics, which can only be expressed by means of descriptions, even if these descriptions are not analytically tied to the object. From this, Searle concludes that the use of a proper name by a speaker has conditions defined by the application of a sufficient but indefinite number of descriptions to a single object. Only this indefinite sub-set of descriptions is sufficiently tied to the object to allow reference, though no description is necessarily tied to the object, and no pre-established set or sub-set of descriptions requires the existence of the object. He exemplified this with the name 'Aristotle', which is associated with a class of definite descriptions that includes:

the tutor of Alexander the Great,
the author of the *Nicomachean Ethics*, the *Metaphysics*, and the *Organon*.
The founder of the Lyceum school in Athens.¹⁸

According to Searle, the descriptions belonging to the cluster can even include some indefinite descriptions, such as 'a Greek' or 'a philosopher'. For Searle, the proper name 'Aristotle' warrants its application insofar as a sufficient number of such descriptions apply, a number that may vary from speaker to speaker. And it is possible to assume that this number would, in a limiting case, be reducible to a single definite description. As he writes, this number can be "the logical sum or even the disjunction of the descriptions" (Searle 1958: 172).

For Searle, the question of the descriptive conditions for applying a proper name is also one of its meaning. Or, in Susan Haack's summarizing paraphrase: "*Proper names have the sense of some indeterminate sub-set of some open-ended set of co-referential descriptions*" (1978: 58).

For Searle, the fact that proper names do not connote specific meanings does not mean that they do not connote in any sense. Proper names connote by being shorthand expressions for clusters of descriptions logically connected with criterial properties of their bearers in a *loose* way. But far from being a shortcoming, this is what gives the proper name a *flexibility* of application much greater than that of an isolated definite description or an indexical. As Searle explained:

ideas in his contribution to the *Encyclopedia of Philosophy*, edited by Paul Edwards (1967), as well as briefly in his book *Speech Acts* (1969: 162–174).

¹⁸ Searle 1967, Vol. V: 490.

If the criteria for proper names were in all cases quite rigid and specific then a proper name would be nothing more than a shorthand of these criteria, a proper name would function exactly like an elaborate definite description. But the uniqueness and immense pragmatic convenience of proper names in our language lie precisely in the fact that they enable us to refer publicly to objects without being forced to raise issues and come to an agreement on what descriptive characteristics exactly constitute the identity of the objects. They function not as descriptions, but as pegs on which to hang descriptions. (Searle 1958: 171)

This version of descriptivism enables us to explain a variety of cases. It is possible, for example, that an object satisfies only a few or even only one of the descriptions belonging to the bundle of descriptions usually associated with its name. What cannot happen is that a proper name will apply when none of the relevant descriptions is satisfied. As Searle aptly concluded, Aristotle cannot be the name of a waiter at a restaurant in Berkeley or the name of a prime number. And in his most striking example:

If a classical scholar claimed to discover that Aristotle wrote none of the works attributed to him, never had anything to do with the works of Plato or Alexander, never went near Athens, and was not even a philosopher but was in fact an obscure Venetian fishmonger of the late Renaissance, then the discovery would become a bad joke. (Searle 1967: 490)

In possession of this theory of proper names, Searle is able to explain conclusively the case of statements of non-existence regarding proper names. For instance, “Cerberus does not exist” is true, because the descriptions associated with the proper name Cerberus (‘the hound of Hades’, ‘the three-headed dog that guards the gates of the underworld’, ‘the offspring of the monsters Echidna and Typhon’) do not apply in the real world; but Cerberus still has a meaning, which is given by descriptions like these. Searle also has a way to explain analytical and non-analytical identities. We say “Everest is a mountain” when a minimum, though indeterminate, number of descriptions sufficiently apply to the object. We affirm an analytical identity, such as “Everest is Everest” or even “Tully is Cicero”, because the same sets of descriptions of each occurrence of the two name-words apply to the same object (Searle 1967: 490). And we affirm non-analytical identities, such as “Mount Everest is Chomolungma” because in them different sets of descriptions apply to the same object. Of the last two proper names, he would claim that the different sets of descriptions that people can keep in mind cannot be disjointed. Even if they are not identical, they at least need to intersect in a way that enables us to know that we are talking about the same object (Searle 1967: 171). If we add that Mary does not know that Cicero is part of the proper name ‘Marcus Tullius Cicero’, she can well believe that Cicero, but not Tullius, was a great Roman orator, without knowing that this is logically impossible. This is because she does not as-

sociate the noun Tullius with the cluster of descriptions she associates with the noun ‘Cicero’. With his theory of proper names, Searle has given us tools able to solve Russell’s paradoxes of reference. Furthermore, there is no doubt that his explanations could be formulated in sufficient agreement with Frege’s own views.¹⁹

A last important point is that Searle has his own expanded understanding of reference-borrowing as a *parasitic* form of reference. As he points out, just by knowing only that the name ‘structuralism’ concerns “a kind of fashionable theory” (an indefinite description), and therefore including it in the appropriate class, he is already using the name to refer parasitically to what better-informed language users are able to refer to in a more complete, non-parasitic way. This would work in almost every case, with the exception of wildly mistaken views, say an imaginary case where someone thinks Socrates is a non-prime number divisible by 17 (Searle 1983: 249, 259).

Although Searle developed the most elaborate exposition of descriptivism that we have, there are both better and worse objections to it. A useful objection offered by William Lycan (2003), although already anticipated by Searle (1958: 170), is the following: even if the number of descriptions to be satisfied by the object is not defined, it should be more than half the bundle of descriptions, because a lesser number would allow two totally different objects, each satisfying half of the descriptions, to be identified by the same name. However, it seems quite possible that an object could be discovered that satisfies fewer than half of the descriptions, perhaps only one or two, and is nevertheless still referred to by the name.

It is not hard to answer this objection. Like all criteria of application, the criterion of partial satisfaction of a cluster of descriptions has *its own limits of application*. Thus, if one object satisfies half of the descriptions and another object satisfies the other half (assuming all the descriptions have the same weight), there is simply no way to know which object we should apply the proper name to, and it thereby loses its referential function. The remedy to this loss consists simply in the invention of new proper names.

Nonetheless, I can present a stronger objection focusing on the weight of the descriptions. It explores the point that Searle’s theory offers no criterion to evaluate weight. Suppose, for instance, that in a possible world not far from ours there is a pair of twins who for some odd reason are both called Osama Bin

¹⁹ I think that Searle misinterprets the Fregean example of Herbert Garner and Leo Peter as requiring that both should make the same descriptive contribution to the name. But this interpretation is contradicted by the remark on the innocuous variations of senses in Frege’s footnote on proper names in “On Sense and Reference”. Certainly, the two sub-sets only need to intersect to some degree. (Cf. Searle 1969: 168 and 170.)

Laden. One is a terrorist responsible for founding Al-Qaeda and planning the 9/11 attack on the Twin Towers, but does not satisfy most of the other descriptions that can be biographically associated with that name in our world. In contrast, the other twin satisfies half or even most of the descriptions biographically associated with the common name, such as having received a devout Sunni Muslim education, marrying Najwa Ghanem, studying business at King Abdulaziz University... But unlike our Osama Bin Laden, he lived and died peacefully in Jeddah and had nothing to do with attacks by Al-Qaeda or with any other terrorist group. We would surely prefer to identify our Osama Bin Laden as the first twin in that world, the one responsible for the 9/11 terrorist attacks since this event and the descriptions related to it and his later life and death in Pakistan have much more weight. A real weakness in Searle's theory is that it does not help us to explain our preference for identifying the first twin as our Osama Bin Laden. Moreover, assuming all descriptions have the same weight, if more than half of the bundle, say 3/5, is satisfied by the second twin, Searle's theory will lead us to conclude erroneously that with the name 'Osama Bin Laden' we must mean the second twin. But given that he was a devout Sunni Muslim who never committed acts of terror and died peacefully in Jeddah, this response would be strongly counterintuitive.

This objection already shows that Searle's theory needs improvements to keep its explanatory value. It is at least necessary to add the requirement that there should be no homonymous competitors possessing associated clusters of descriptions with the same weight as the cluster of descriptions accepted as making a proper name applicable to its bearer. As we will see later, the main problem with the descriptivist theories discussed in this chapter is not that they contain errors, but that they are either fragmentary or vague and insufficiently detailed theoretical sketches, which limits their explanatory power.

Finally, considering what all these descriptivist philosophers have said, we can provisionally suggest two kinds of sense (or meaning) of proper names within descriptivism: (A) the whole sense or descriptive content of a proper name, which can be expressed by at least *the whole cluster of weighted descriptions* (i. e., the repository-cluster, the mass of information, the presuppositional set); (B) the actual sense of a proper name, which is what "*is in the mind*" of the speaker when he uses the word (Russell), even if only tacitly. The last sense of the proper name must be that of a subset of the whole presuppositional set or cluster, even if it is only some generally known definite description. Frege's theory thematizes sense (B), which can change from speaker to speaker, and can change for any particular speaker from time to time. This can also be said of Wittgenstein and Searle. Strawson, in contrast, places his emphasis on sense (A) as the presuppositional set.

Considering Frege's first example, it is clear that considering (B) we can find two senses of the name 'Aristotle': (i) 'the pupil of Plato and tutor of Alexander the

Great' and also (ii) 'the teacher of Alexander the Great who was born in Stagira', both belonging to the whole sense (A) of the proper name 'Aristotle'. This is confirmed by the fact that one can easily conceive of a person who has in mind both definite descriptions and also many others scattered throughout the language, as would an Aristotle expert. This surely warrants our sense (A) as that of a cluster.

We can end here on a positive note. What this brief historical excursion demonstrates is that contrary to what some philosophers think, there is a strong complementarity and unity in views held by the defenders of traditional descriptivism, simply because they are all essentially cluster-descriptivists. It is not a question of several competing theories, but of a single research project, which was insufficiently developed by various authors committed to a wide range of different philosophical perspectives and interests. This speaks in favor of its heuristic potential.

4 Addendum: Identification rules and descriptions

It is worthwhile to add an informative note suggesting a plausible relationship between descriptivism and identification rules. According to Wittgenstein: "criteria give our words their common meaning" (1958: 57).²⁰ His views, along with those of philosophers like Strawson, seem to have deeply influenced Michael Dummett's interpretation of Frege's concept of *sense* (*Sinn*), since according to him:

...for Frege, the *sense* of a word or expression always consists in a *rule* which, taken together with the *rules constitutive of the senses of the other words*, determines the condition for the truth of a sentence in which the word occurs. (Dummett 1981: 194; emphasis added)

Thus, in Dummett's interpretation of Frege, the sense or meaning of a proper name, as much as the sense of a predicate and a relation, can be analyzed in terms of *criteria rules*. This is made clear in a most telling passage of his book on Frege's philosophy of language:

To know the sense of a proper name is to have a *criterion* for recognizing, for any given object, whether or not it is the bearer (referent) of the name; to know the sense of a predicate is to have a *criterion* for deciding, for any object, whether or not the predicate applies to that object; and to know the sense of a relational expression is to have a *criterion* for deciding, given any two objects taken in a particular order, whether or not the relation it stands for holds between the first object and the second. (Dummett 1981: 229; emphasis added)

²⁰ See also Wittgenstein 1984a, §§ 61–62. For a discussion, see Baker 1974 and Hacker 1975, Chapter 11.

Criteria are, of course, conditions for the application of rules. Restricting ourselves here to the case of the sense of proper names, we can follow Ernst Tugendhat's clearer presentation of a similar view (1983: 235–236). According to him, the meaning (sense) of any singular term, including proper names, must be given by its *identification rule* (*Identifikationsregel*), which I would understand as an *often only tacitly applied semantic-cognitive criterial rule*, which is a rule meant to be satisfied by external criterial conditions that the rule is internally able to require.

Here we need to note that the word 'criterion' is ambiguous, denoting internally what the criterial rule requires and, externally, what we believe has satisfied this requirement. Wittgenstein also insightfully distinguished between *primary criteria* and *secondary criteria* or *symptoms* (1958: 24–25; 2001: 28). Primary criteria are seen as *warranting* the application of a term, while secondary criteria or symptoms make this application *only probably warranted*. From this perspective, a semantic-cognitive criterial rule giving the sense of a name can be regarded as having the following general form:

Ce [Ci => A],

where 'Ce' symbolizes for us a given external criterion, 'Ci' symbolizes the corresponding internal criteria expected to be satisfied, '=' symbolizes the warrant, and 'A' symbolizes our awareness that the criteria are satisfied. For instance, if a chair can be definitionally described as "a non-vehicular artifact with a backrest made for only one person to sit on at a time", the internal criterial condition Ci is expressed by means of that description. The external criterion Ce is what we find in the world that satisfies (corresponds to) the internal criterial condition Ci, warranting our awareness A that the criterial meaning-rule "Ce [Ci => A]" for the identification of chairs is satisfied (or applied). The given primary criterion Ce *warrants* for us that the rule is satisfied, while the secondary criteria or symptoms are non-necessary properties like the fact that most chairs have four legs. After all, three-leg, no-leg, and even thousand-leg chairs, are also conceivable: symptoms make the satisfaction of the rule only *probable* for us.²¹

Back to Tugendhat, it is instructive to note that he thought an analysis like Dummett's could be applied to all singular predicative statements. In my understanding of his writings (1983: 235–236; 1976: 259, 484–485, 487–488), a singular

²¹ There are a considerable variety of interpretations of Wittgenstein's distinction between criteria and symptoms. The one I use here seems to be the most reasonable (see Costa 2018: 144–146 and Costa 1990).

predicative statement should have, in the place of its senses or cognitive meanings, what we could call three criterial rules:

- (i) the *identification rule* (*Identifikationsregel*) of the singular term,
- (ii) the *application rule* (*Verwendungsregel*) of the general term, which I prefer to call its *ascription rule* and,
- (iii) resulting from a combination of (i) with (ii), there should be some kind of *verifiability rule* (*Verifikationsregel*) (1976: 484–488), which would be able, if applicable, to make the statement true by means of what he calls *correspondence*, which I understand as the satisfaction of its *verifying criteria* (1983: 236).

Tugendhat noted the rule that should be applied first must be the identification rule of the singular term (in our case the proper name), which then allows the application to its result of the ascription rule of the general term (the predicative expression), both together constituting a kind of verifiability rule.

To make it clear why this should be so, we can take as an example Yuri Gagarin, the first person to orbit the Earth. He looked out from the small window of his space capsule and said: “The Earth is blue”. He first applied the identification rule for the proper name ‘Earth’, whose criteria were satisfied by the object of reference: the sphere he saw in the space outside. Only afterward did he decide that this singular object of reference satisfied the criteria for the application of the predicative term ‘...is blue’. The combination of both applications amounts to the application of a kind of verifiability rule for the sentence “The Earth is blue”, which at least in this case can be clearly seen as demanding a correspondence in terms of a structural isomorphism between internal criteria of two associated criterial rules and their fulfilling external criterial referents.

It could be objected here that the appeal to verificationism and consequently to a verifiability principle was demolished by the logical positivists and their heirs... With this claim I would disagree vehemently. In my view, nothing is as far from the truth as the unqualified belief that the logical positivists and others disproved the verifiability principle, and this is possibly the greatest *blunder* of contemporary analytic philosophy. What they really refuted was just a straw man, namely, their own inflexible formalist versions of the principle. After all, they did not originate the insight contained in the statement that the cognitive meaning of a sentence is its method of verification. The first philosopher to clearly equate cognitive meaning with verification was Wittgenstein in his 1929 expositions to the members of the Vienna Circle (See Glock: 1996), and sometimes it is advisable to check what the true originator of an idea said before naively giving credit to others who have tried to improve on it. There and in later writings, he

suggested that the only way to analyze the (cognitive) meaning of a declarative sentence—without drawing again on meanings—would be to consider the links that this sentence might have with the world, interpreting its meaning as the same thing as diversely ramified criterial methods or rules that can be employed in its verification. To make this point clear, I quote a text from Wittgenstein revealing a nuanced and contextually variable view, which cannot be forced into a single logical formulation, as A. J. Ayer (1952) and others have tried to do:

Attending to the way the meaning of a sentence is explained makes clear the connection between meaning and verification. Reading that Cambridge won the boat race, which verifies “Cambridge won”, is obviously not the meaning, but it is connected with it. “Cambridge won” is not a disjunction, “I saw the race, or I read the result, or...” It is more complicated. Yet, if we ruled out any one of the means of verifying the statement, we would alter its meaning. It would upset our grammar if we excluded as a verification something that always accompanied winning. And if we did away with all means of verifying it, we would destroy the meaning. It is clear that not every sort of verification is actually used to verify “Cambridge won”, nor would just any verification give the meaning. The different verifications of the boat race being won have different places in the grammar of “boat race being won”. (Wittgenstein 2001: 29)²²

This shows that Wittgenstein’s identification of verifiability with the (cognitive) meanings of declarative sentences permits the most varied forms and degrees of complexity. The methods of verification are usually multiple, though systematically based on grounding rules. There is no common formulation able to unify them, and the verifications of different sentences are also interdependent, though hierarchically and not in the equivocal holistic way proposed by W. V. O. Quine.²³ The only way to analyze these forms of verification would be through careful pragmatic investigation of different cases or groups of cases, something that would not be helpful to construct the anti-metaphysical machine gun anticipated by the Vienna Circle. Wittgenstein’s original insight was almost commonsensical and, as far as I know, until now neither adequately developed nor successfully refuted. When speaking of verification in this book, I will always have in mind Wittgenstein’s understanding.

Returning to our main concern, we can conclude that it is plausible to think that the above-sketched view of criterial identification rules for proper names

²² For an extensive comparative analysis, showing how misleading and ultimately harmful were the positivist attempts to develop Wittgenstein’s insight in a formal way, together with the later fatally misplaced criticisms by them and their followers, see Costa 2018, Chapter 5.

²³ The application of a chosen verifiability rule is in no way hopelessly entangled with the application of many other verifiability procedures, as Quine suggested (1951), since it only *presupposes* their application (Costa 2018: 327–332).

could be rescued for the cluster theory of proper names, to make it more adequate. This could be done, inasmuch as definite descriptions can be understood as linguistic *expressions* of criterial rules aiming at the identification of objects of reference, while a cluster of descriptions that could be seen as abridged by a proper name could also be seen as having to do with some complex identification rule aiming to identify its bearer.

Here, I am intentionally writing in a condensed, overly vague way. However, much of the third chapter of this book will be dedicated to developing a sufficiently precise and, as I hope to show, clear and convincing version of the general forms of identification rules for proper names able to be conceived from a neodescriptivist viewpoint.

II Inconsistencies of Kripke's *quasi*-referentialism

In 1970, Saul Kripke held lectures at Princeton that were recorded and subsequently published as *Naming and Necessity*. This extraordinarily original text contains an enormously influential assault on descriptivist theories. It also contains (among other things) the outline of an innovative causal-referential conception of proper names, in its principles influenced by J. S. Mill's direct reference view but also extending it to include terms applicable to natural species. Since then, the old descriptivist orthodoxy in vogue from Frege to John Searle has gradually been eclipsed by referentialist theories of reference, which for many specialists became the inherited wisdom (Raatikainen 2020; Martí 2022).

While recognizing that these new ideas have definitively transformed the landscape of the discussion, making it more complex, intricate, and disorienting, I am convinced that they are not in and by themselves sustainable. Besides introducing the new orthodoxy, the main purpose of this chapter is to reveal their most serious shortcomings.

As a matter of strategy, I will limit myself to a critical examination of Kripke's ideas, since over time they have established themselves as a kind of standard explanatory paradigm for the reference of proper names within the new orthodoxy (Newen 2008: 105). Kripke's view is what might be called *quasi*-referentialism since it does not endorse the idea of reference as meaning or semantic content; but it would be easy to generalize my results to more radical forms of referentialism. My main goal in this chapter will be to show that a dialectical change to a broader internalist neodescriptivist paradigm is not only possible but desirable.

1 Three unconvincing arguments against descriptivism

I begin my presentation didactically, by exposing and showing the limitations of three very influential arguments against descriptivist theories of proper names, extracted from Kripke's text.²⁴ Although by no means exhaustive, they give us a good starting point. They have been called (i) the *modal argument* (objection of rigidity), (ii) the *semantic argument* (objection of ignorance and error), and (iii) the *epistemological objection* (objection of unwanted necessity). I will limit myself here to a very short critical examination of these arguments, leaving aside a more detailed

²⁴ See Salmon 2005: 23–31; Fitch 2004; and Burgess 2013: 19–24 and 53–55; Cf. also Ahmed 2007, Chapter II.

discussion of the most important counterexamples, since this will make use of the neodescriptivist theory to be explained in the next chapter.

Let us start with (i): the modal objection of rigidity (Kripke 1980: 53, 61–63, and 74–76). Before presenting this objection, I need to introduce Kripke's concept of the *rigid designator*, which he finds especially important for proper names. In accordance with Kripke, I choose to define a rigid designator as *a term that designates the same object in every possible world where this object exists and does not designate anything in any possible world where this object does not exist* (Kripke 1971: 173; 1980: 48). A rigid designator contrasts with a *non-rigid* or *accidental designator*, which lacks this property (Kripke 1980: 48; 1971: 145–146). In simpler terms, a rigid designator would designate the same object in any actual or counterfactual circumstance where this object exists. The important point of Kripke's distinction can be seen when we compare the behavior of proper names (which are the primary models of rigid designators), with the usual behavior of definite descriptions, which are typically *non-rigid* or *accidental* (also called '*flaccid*') designators.

The difference between rigid and accidental designators can be made evident by examples. Compare the proper name 'Columbus' with the definite description 'the first European navigator to set foot on Hispaniola'.²⁵ The name Columbus would still refer to the same person in a near possible world, even if it were not Columbus but rather Vasco da Gama who discovered the Island of Hispaniola in this world, and Columbus instead preferred to lead an uneventful life as a merchant in his Italian hometown of Genoa. The reference of the proper name Columbus, however, remains the same. According to Kripke, the reference of 'Columbus' does not change in different possible worlds, because Columbus is a proper name, and proper names are rigid designators. But in the above-considered possible world, the reference of the definite description 'the first European navigator to set foot on Hispaniola' changed from Columbus to Vasco da Gama, since this is an ordinary empirical definite description, and such descriptions are accidental. The definite description is also applicable in a possible world where Columbus did not even exist insofar as Vasco da Gama or some other European had discovered Hispaniola. On the other hand, if Columbus existed, the proper name 'Columbus' would still refer to Columbus in any counterfactual situation, even if an unexpected cosmic cataclysm had prevented any European from ever setting foot on Hispaniola, making impossible the application of the definite description.

Beyond these comparisons, Kripke proposed an intuitive test for the identification of a rigid designator (1980: 48), which can be explained as follows:

²⁵ Here, I am avoiding the often-noted inaccuracy of the description 'the first European to visit America' (Searle 1958: 68; Kripke 1980: 83–84).

Ask yourself whether it is true that:

Something *other* than x might have been x . Or: ask yourself whether x might have been other than (different from) the thing that is in fact x .

If the answers are negative, then x is a rigid designator.

In addition to this, Christopher Hughes (2004: 20) suggested his own incremented test:

Ask yourself whether it is true that:

x could have *existed* without being x .

If the answer is *negative*, then x is a rigid designator.

Applying Kripke's test to the above definite description, we could ask if the following statements are true: "Someone other than the first European to set foot on Hispaniola might have been the first European to set foot on Hispaniola". Or, more clearly: "The first European to have set foot on Hispaniola might have been other than the one who was in fact the first European to have set foot on Hispaniola". The answer is in the affirmative: it could have been another person. Finally, applying the incremental test we have: "The first European to have set foot on Hispaniola could have existed without being the first European to have set foot on Hispaniola", which can also be accepted as obviously true. Hence, the given definite description must be an accidental designator.

However, the proper name 'Columbus' does not behave like the description above. Are the following sentences true? "Someone other than Columbus might have been Columbus", or "Columbus might have been someone other than the person who was in fact Columbus". Certainly not, they must be false. Finally, "Columbus could have existed without being Columbus" is obviously also false. Hence, 'Columbus' is a rigid designator. It is worth considering this point because the theory of proper names to be developed in Chapter III furnishes a neodescriptivist demystifying way to explain rigidity that shows precisely *why* proper names pass the test while corresponding definite descriptions fail to pass.

There is an ongoing dispute over possible worlds where the bearer of a proper name does not exist. Would a rigid designator still refer in such cases? In the case where the bearer is a so-called abstract object like the number 2, it seems easier to conceive the bearer as existing in *any* possible world (for this reason it is also called an *obstinately* rigid designator). But this is not so convincing in cases of ordinary empirical names like 'Columbus'. In his original conception of the rigid designator, Kripke acknowledged this point:

When I use the notion of rigid designator, I do not imply that the object referred to necessarily exists. All I mean is that in any possible world where the object in question *does* exist, in any

situation in which the object *would* exist, we use the designator in question to designate that object. In a situation where the object does not exist, then we should say that the designator has no referent and that the object in question so designated does not exist. (Kripke 1971: 173)

This is surely the most reasonable view regarding our robust common sense, for it is a deeply ingrained conceptual rule of our language that *we can use a word to refer only when its object of reference exists, otherwise not*.²⁶ Consequently, in counterfactual situations where the object does not exist, we cannot use ordinary empirical proper names to refer to their bearers, at least in the proper sense of the word 'reference'. (In order to change the concept of reference without cheating it would be more desirable to invent a semantically neutral word, say, 'ecnerefer', a strategy that would eventually backfire by emptying arguments.)

As I see it, Kripke spoiled his useful tool by making it unnecessarily complicated. In his 2019 talk "Naming and Necessity Revisited", he emphasized that his most important book, *Naming and Necessity*, contains two notions of the rigid designator: (i) a *de facto* definition in the main text of the book, according to which: "a designator is rigid *iff* there is an object *a* that it designates with respect to every possible world in which *a* exists, and", he now adds, "never designates another object with respect to any world", intending "to be *neutral* about whether the term designates with respect to worlds where the object does *not* exist". On the other hand, there is (ii) a *de jure* rigidity, for which "the main thing is that a name designates an object *independently of other considerations*", having as a corollary that it "designates *that* object with respect to *every* world" (see also 1980: 21, n.).

From my standpoint, the only meaningful paraphrase of Kripke's *de jure* definition is sufficiently trivial: as a rigid designator, a proper name *is made* (has the job) to designate something in every possible world, even if it does, in fact, designate (refer) only in those possible worlds where its *designatum* exists.

Since these details will have absolutely no impact on our further arguments, I prefer to ignore doubtful questions about a sense in which a proper name could refer to an object in a possible world where this object does not exist. Henceforth, I will understand a rigid designator as what is called a *persistent* rigid designator, namely, a term that only refers in possible worlds where its object of reference actually does exist (Salmon 1982: 34).

Now we are in a position to understand (i): the modal argument caused by the rigidity of proper names in contrast to their supposed lack of rigidity in descriptivism. The point is that *if proper names are always rigid designators, while definite descriptions are typically not, proper names cannot be equated with definite descriptions or even with clusters of definite descriptions*. Definite descriptions are typical-

²⁶ This is the so-called *axiom of referring*. See Avrum Stroll 1996: 179.

ly accidental designators, designating contingent properties, and only possibly referring to the same object referred to by the proper name in counterfactual situations. Thus, proper names and definite descriptions must have inexorably different modal profiles! Implicit is the suggestion that the mechanism by which a proper name refers must in some unexplained way be intrinsically different from the mechanism by which a definite description usually refers. Both cannot refer in the same way since only proper names pick out their referents directly.

Indeed, it seems that for any definite description that we choose as associated with a proper name, it is always possible to imagine cases where the object exists, but the description applies to another object or simply does not apply to any object. As Kripke wrote against Searle's version of cluster theory:

It just is not, in any intuitive sense of necessity, a necessary truth that Aristotle had the properties commonly attributed to him (Kripke 1980: 74). (...) It would seem that it is a contingent fact that Aristotle ever did *any* of the things that we attribute to him today, *any* of these great achievements that we so much admire (Kripke 1980: 75).

In fact, we can imagine a near possible world where Aristotle existed but died in adolescence. In this world, he does not satisfy the definite descriptions of having been the founder of the Lyceum, the preceptor of Alexander, and the author of the great philosophical work for which his name is remembered. Even descriptions containing his place and date of birth are not guaranteed. We can perfectly well imagine, as Kripke did, a possible world where Aristotle lived five hundred years later but could still be recognized as our own Aristotle (Kripke 1980: 62).

However, the modal objection of rigidity applies only to descriptive theories that identify the meaning of a proper name with a single definite description or even with some precise set or sub-set of definite descriptions—a cluster supposedly shared by all-competent speakers of a language. For those who carefully read the previous chapter, it must have been clear that Frege's view implies that proper names might have different senses according to the descriptions or sub-sets of descriptions their users have in mind, which relativizes the modal objection. Russell also explicitly understood that the descriptions in our minds can vary from speaker to speaker, forming vague masses of historical knowledge, which strongly contrasts with the inflexibility demanded by the modal objection. Finally, a theory such as Searle's explicitly appeals to the relation between a changeable variety of descriptions a speaker can have when using a proper name and an open cluster of descriptions, which fosters flexibility. This last theory is in an explicit way immune to the modal objection, by emphasizing that *no specific description belonging to the cluster must necessarily be satisfied, although a sufficient yet unspecified number of descriptions must necessarily be satisfied*. Against such interpretations,

the modal objection of rigidity is powerless since the cluster theory does not require the application of any particular description or combination of descriptions in any possible world where the bearer of the proper name exists.

Furthermore, even if it is possible to imagine, as did Kripke, that Aristotle does not necessarily satisfy the vast majority of descriptions attributed to him, or any chosen description, it is crucial to see that *it is not possible to imagine that he does not satisfy any of the descriptions belonging to the cluster's name*. It is not possible to imagine that he is a prime number, or a waiter in a restaurant frequented by Searle, or that he was not a philosopher, but instead, a 20th-century Greek shipping magnate who seduced Maria Callas and married Jackie Kennedy. Nor could he, using Searle's example, have been an illiterate fishmonger who lived in Venice during the Renaissance. Such men certainly could have nothing to do with our Aristotle. Even an Aristotle in a near possible world who lived 500 years after the Aristotle of our world should have at least something relevantly "Aristotelian" about him—enough to be recognized as our Aristotle. For instance, he could have written the *Nicomachean Ethics*... In sum: under more careful and impartial consideration, the modal argument of rigidity is unable to warrant that proper names and ordinary definite descriptions are semantically incompatible.²⁷

Notwithstanding, the modal argument leaves a serious question lurking in our minds: how could a descriptivist theory warrant the intuitive rigidity of proper names? The answer is that in the present stage of descriptivism even Searle's cluster theory does not have the necessary resources to answer this question. This is, however, one of the problems that an adequate descriptivist theory must be able to solve.

Now we will consider (ii): the semantic argument (e.g., Kripke 1980: 79–85).²⁸ According to this argument, *whether a proper name refers to an object does not depend on its satisfaction of definite descriptions*. This argument is well exemplified by cases of ignorance and error. Concerning ignorance, Kripke shows that even when we associate a single *indefinite* description with a proper name, we are still able to refer with it. This is the case with the name 'Feynman'. Many people associate this name only with the indefinite description 'an American physicist'. Only a few would be able to answer by saying that he was the originator of quan-

27 This conclusion is not new. Karen Green, for instance, has long argued that Searle's requirement that the bearer of a proper name "must necessarily have the logical sum, inclusive disjunction", of properties commonly attributed to it (1958: 172) was *never really disconfirmed* by Kripke's objection (Green 1998).

28 I will leave aside, for now, the more important and difficult counterexamples of Gödel, Jonah, Thales, etc. They will be considered in Chapter IV since they will be better dealt with after the presentation of my own views.

tum electrodynamics, and still fewer would be able to explain in detail his main contributions to microphysics. Even so, people are often considered able to refer to Feynman by uttering only that indefinite description. An indefinite description, however, is incapable of warranting the singularity of reference. Therefore, descriptivism must be a faulty theory. As for the problem of errors, Kripke noted that in his time there were people who associated the description ‘the inventor of the atomic bomb’ with the name ‘Einstein’. Although the description is wrong, those people were referring to Einstein even though they had a wrong description in mind. Now, if so, then it seems that descriptions have little or nothing to do with the relevant way proper names refer to their bearers.

To this kind of objection, Searle would answer that what matters most is the content that the members of the linguistic community to which the speaker belongs consider relevant for the object’s designation (1983: 253).²⁹ Thus, for Searle, a person may utter the name ‘Einstein’, while having in mind a description such as ‘the individual my community calls Einstein’. This may suffice to neutralize the inadequacy of the content. However, the answer offered by Searle cannot be satisfactory. If it were, we could appeal to exactly the same stratagem to arbitrarily warrant the reference of any proper name whose reference we do not know.

A better proposal would be that a description like ‘Einstein was the inventor of the atomic bomb’, although erroneous, remains *convergent* in the sense that it already classifies him correctly as a human being and a scientist. Likewise, describing ‘Feynman’ as ‘an American physicist’ is convergent since the bearer is correctly classified as an American and a physicist. Based on these vague convergences, hearers are already able to recognize the speaker as having the intention to identify someone who satisfies the descriptions they also associate with these names. This is not only true for the hearer who really knows a lot of the cluster of descriptions typically associated with the names Einstein and Feynman, but also for the many hearers who know only generalities about these names and see that the given description falls under those generalities. They can all judge which person the speaker is referring to. Consider, for instance, the many hearers who know nothing about Einstein except that he was a great German physicist who originated relativity theory, or that Feynman was an American physicist who did research at Caltech. These vague uses of the proper name parasitically echo the *effective act of reference* that could only be made by the most competent users of the name; less competent speakers are free to borrow the right of reference from them insofar as

²⁹ Searle dedicated the last chapter of his 1983 book to a brilliant defense of his descriptivist cluster theory against the objections of Kripke and Donnellan. I am not the first to note the curious point that his defense was virtually never addressed by partisans of the new orthodoxy.

they assume their existence. If this answer does not seem sufficiently satisfactory to you, a more complete formulation will be given in the next chapter.

Finally, we will consider (iii): the epistemic objection of unwarranted necessity (e.g., Kripke 1980: 86–87). It is different from the semantic argument. The semantic argument is that the name's referent need not necessarily satisfy the intended description. The epistemic argument, on its side, says that *even if the referent satisfies the associated description, we do not know it a priori, although from the descriptivist perspective, we should* (Ahmed 2007: 37). If the name Aristotle replaced the description 'the author of the *Metaphysics*', such a description should be known *a priori* in the analytical sense of conveying information known solely by reflection on the concepts involved, and without resorting to sensory experience (see Salmon 1982: 27). However, we can be wrong about this accomplishment attributed to Aristotle. Even if the name Aristotle replaced a cluster of descriptions, at least some of them should be known *a priori* about him, although this is also in no way guaranteed. After all, one can be totally misled concerning what one regards as the reference of a proper name.

Nonetheless, even the epistemic objection hardly refutes a cluster theory of descriptions such as Searle's, which does not require an *a priori* or necessary satisfaction of any individual description or of any particular group of descriptions belonging to the cluster to allow the application of the proper name to its bearer. The only necessity that must be supported by a cluster theory is that *at least a previously unspecified minimal number of weightier definite descriptions belonging to the cluster must be satisfied by the named object, in cases where this object exists*. Hence, there is no requirement for a specific description or conjunction of descriptions to be analytically *a priori* satisfied by the proper name's bearer. If we think this way, then Searle's cluster-descriptivism can still be seen as allowing—though not explaining—the treatment of the proper name as a kind of rigid designator. A surprising result of the more refined form of cluster theory to be presented in the next chapter is that it also explains rigidity.

As already noted, it is difficult to find any decisive objection to a formulation of the descriptivist theory of proper names such as that developed by Searle. The reason is that it was presented in a non-simplifying and sufficiently vague way. But, as will become clear later, this advantage is also its greatest weakness, because, due to its own vagueness, this theory lacks the resources to provide sufficiently decisive and complete answers to a variety of counterexamples and objections.

There are other challenging and revealing objections to descriptivism, particularly in the form of examples. But before dealing with them we need to develop a more complex descriptive theoretical apparatus, one which enables us to answer objections in depth. Hence, I ask you to wait until Chapter IV to read what I regard

as the most convincing and, in fact, the only answers. Anyway, the few considerations offered above already enable us to conclude that Kripke's objections to descriptivism are not as decisive as his most loyal supporters would like us to believe.³⁰

2 Kripke on individuation

Kripke's critique of descriptivism is attractive mainly because it is complemented by a challenging conception of the mechanisms of reference that vaguely recalls J. S. Mill's view of proper names as labels. Before explaining it, I will consider more carefully the phenomenon of the rigidity of proper names compared with the accidentality of definite descriptions.

A proper name like Columbus applies to the same referent in any possible world where Columbus exists, unlike the description 'the first European to set foot on Hispaniola'. But how can we explain this curious difference? For those sympathetic to the solution attributed to Mill, the explanation is obvious. It comes from the idea that descriptions refer indirectly, by connoting attributes of objects, while proper names directly refer to their bearers, as if they were labels that had been pinned on them. This fact makes the references of proper names independent of the many descriptively representable properties of their bearers. So considered, it seems as if the act of referring were a kind of sorcery by means of which an object could be directly connected to its name without the mediation of properties of any kind.

Kripke thinks along similar but more sophisticated lines. As in Mill's case, proper names also refer to their objects without connotative intermediaries like descriptions of identifying properties. This alone should explain why, unlike definite descriptions, proper names have objects of reference that are the same in any possible world. There is, however, an ontological question to be considered here. Should we not resort to any specific entities as identifiers for the references of proper names? Kripke considers two possible alternatives which create what he calls a false dilemma. As he writes:

What I deny is that a particular is nothing but a 'bundle of qualities', whatever that may mean. If a quality is an abstract object, a bundle of qualities is an object of an even higher

30 This is also the conclusion of specialists like David Braun and Marga Reimer in their respective articles for *The Stanford Encyclopedia of Philosophy*. For a supportive defense of Kripke, see Scott Soames (2002, Chapter 2). A well-balanced critical approach was given by Arif Ahmed (2007, Chapter 2).

degree of abstraction, not a particular. Philosophers have come to the opposite view through a false dilemma: they have asked: are these objects *behind* the bundle of qualities, or is the object *nothing* but the bundle? Neither is the case: this table is wooden, brown, in the room, etc. It has all these properties, and it is not a thing without properties, behind them. But it should not therefore be identified with the set or 'bundle' of its properties, nor with the subset of its essential properties. (Kripke 1980: 52)

Indeed, the dilemma, as he poses it, is not acceptable: individuals (particulars) are neither bundles of abstract properties without possible individuation criteria, nor bare particulars, which should be accepted as unknowable naked substrates. But in the end, Kripke rejects the dilemma simply by assuming that there is no matter of fact in it: individuals are simply given to us as having properties like "the brown wooden table in the room". Accepting that there is no alternative, he just asks us to accept that we identify individuals as what they are in a naturalistic way, without requiring a further ontological commitment.

Kripke's solution, however, may sound like a clear shortcut: a magical way to justify reference which solves the problem by rejecting its existence without giving sufficient reasons.³¹ It defies our more commonsensical way to avoid magic, which would be the search for an explanation that assumes that the identification of individuals happens by our usually tacit recognition of the right object-identifying spatiotemporally located properties, whatever they may be, even if they are changeable and non-indispensable. Indeed, when we think that there might be criterial identification rules descriptively ordering the valid combinations of object-identifying properties, we begin to see that not all doors are closed.

3 Individuation and trope-theory

If there were no other ontological alternative except the usual forms of nominalism and realism, Kripke's answer would be admissible, and our dissatisfaction with it could be qualified as an anthropological, rather than an ontological problem. However, there is an alternative! It consists in adopting the emerging *ontology of tropes*. For the ontology of tropes would neatly explain phrases like "the brown wooden table in the room" and "having all these properties" in terms of reference to localizable tropical properties. This seems the most reasonable way to avoid the

³¹ For the contrasting view, see Arthur W. Burks' important but neglected short paper on proper names (1951: 39f.). Following our robust common sense, Burks suggested that a proper name refers through the satisfaction of "changeable and generally non-indispensable properties".

dilemma. Although this ontology was already invented at the time Kripke developed his ideas, only today is it more widely appreciated.³²

Since it will be useful later, as an explanation for the applicability of criterial rules attached to referential terms, I will make a short digression here to explain the essentials of trope theory. This is an ontological view that might be the most important alternative after more than a thousand years of endless realist and nominalist discussions.

Trope theory is a radically new naturalist one-category ontology first introduced by Donald Williams.³³ According to him, “any possible world, and hence, of course, this one, is completely constituted by its tropes” (2018: 28). But what are tropes? They are what Williams called *abstract particulars*: they are what is left behind when we sort out a few spatiotemporally given properties of an individual, separating them from all the others (2018: 27). Thus, if I am holding a rose, its redness, smoothness, shape, and fragrance are tropes. But the rose itself is not a trope, since it is an individual, a material object. However, according to Williams, it is entirely constituted by its tropes. The obvious existence of tropes is made clearer by the fact that they are objects of selective attention: if you are on the beach, you can pay attention to the colors of the sea, the forms of the waves, their sounds, the local temperature, and these are all tropes (Loux 1988: 81). As Williams also wrote, not only are physical qualities, geometrical forms, and relational properties tropes, but also events and processes, like a smile, a sneeze, a scream, a cold snap, a storm, a conspiracy... a musical performance... and, as he also wrote, not only Mary’s figure but also her complexion and digestion... There are also psychological tropes, like an acute pain, feelings of love, sorrow, and pleasure, as much as mental acts, thought processes, dispositions, beliefs, moral decisions, desires, purposes... Socrates’ wisdom and Mary’s beauty, he wrote, are all tropes. And there are also mixed tropes (partly conscious and partly behavioral) such as a love affair, an act of contrition, or a piece of impudence... (Williams 2018: 30–38) Abstract particulars or tropes are to be contrasted with *concrete particulars*, the wholes that are individuals, most often material objects,

³² Today, trope theory is already a major player in ontological discussion, together with realism and nominalism. See, for instance, John W. Carol and Ned Marcosian (2010, Chapter 9).

³³ Donald C. Williams’ groundbreaking work (1953) was the proposal of a radical naturalist alternative to the traditional but always controversial realist and nominalist answers common in ontology. A relevant attempt to develop a trope-ontology was made in Keith Campbell’s 1990 book. Since then, the literature devoted to trope-ontology has grown steadily, though too often weakening Williams’ original insight. The development of a fully adequate theory of tropes remains an unfinished task. For bibliographical access, see Anna-Sofia Maurin (2018).

which he sees as also totally constituted by their tropes. Thus, for Williams, the rose, Socrates, Mary, a household, a nation, and humanity are *not* tropes (2018: 38).

Like most theorists, I prefer to define “abstract particulars” or tropes in a non-comparative way, as *any spatiotemporally localizable properties in the widest sense of the word*. This understanding gives more clarity to the ubiquitous ontological goals of trope ontology. All the above-given examples of tropes can be viewed as properties insofar as we can predicatively attach them to individuals. Thus, Socrates’ wisdom and Mary’s beauty are non-relational properties of these persons. A musical performance and a conspiracy can be respectively seen as processual properties of an orchestra and of a society. A love affair is a relational mixed causal property between two human beings. And a psychological thought process can be seen as a mental property of a person.

The decisive difference between trope theory and traditional realist two-category ontologies can be stated as follows. According to (Platonic or Aristotelian) realism, a property is an abstract, general, non-spatiotemporal entity, able to be instantiated in many spatiotemporally existent individuals, while strangely remaining *one and the same*. For a trope theorist, however, a property-trope is more often a spatiotemporally localizable constituent of a spatiotemporal individual. A decisive difference between trope theory and nominalism is that according to the former predicates have proper references, which are tropical properties and not objects or classes of objects or even classes of possible objects. Considering tropes as spatiotemporally localizable properties, we can easily extend their view to the basic forces of nature, which can be seen as dispersed localizable properties.³⁴ This is not so easy when we consider things apparently abstract in the Platonic sense, like numbers. But even in this case, considering that numbers are experientially learned in applied mathematics, they can possibly also be seen as tropes. Consider, for instance, a book that I take from a shelf. I see that it is just *one* book. It is true that I cannot see this applied number one. But I reach this conclusion by means of sensory-perceptual experience, and this number one seems to be localizable when I ask you how many books I am holding. The same would occur if someone shows the ten fingers of his two splayed hands: these applied numbers seem to be located. Therefore, it also seems possible to treat an applied number one as a higher-order non-sensible but localizable tropical property, though depending upon sensible properties, in a way that recalls the Frege-Russell treatment of the property of existence. If a similar view could be extended to abstract mathematics, we could solve an old puzzle, which is the possibility to apply

³⁴ Keith Campbell (1990) called them *quasi*-tropes, though from the here explained perspective there is no good reason to go this way.

mathematics to the material physical world, since the entities from the mathematical and from the physical world would not be categorially distinct—they would still share a same tropical nature.³⁵

It is clear to me that trope theory is an attempt to salvage our common-sense concept of property, which can be seen as having for too long been corrupted by philosophers. Consider the following: When asked what a property is, ordinary persons will not point to abstract properties; they will naturally begin by pointing to things belonging to their surroundings, like the hardness of the table, its quadratic form, or the blueness of the sky. They will not start by mentioning some directly cognizable abstract entity like triangularity-in-itself or justice-in-itself, assuming that this is possible.³⁶ For this reason, in this book tropes will also be called *tropical properties*, *t-properties*, or simply *properties* in their most proper ordinary language sense.

Trope theory has its own ontological ways to build material objects and universals. Accordingly, individuals such as physical-material objects no longer need to be identified with sets of abstract properties, as Kripke supposed. These objects are diversely organized compositions of *concurrent* (i. e., suitably co-temporal and co-located) tropical properties (Williams 2018: 28–29).³⁷ Such tropes have nothing to do with the problematic abstract-general properties (building those ‘still more abstract bundles of qualities’) targeted by Kripke’s criticism, since trope theory identifies *universals* with *sets or classes of tropes precisely similar (qualitatively identical) to each other* (Williams 2018: 29). It is true that this last suggestion by Williams was criticized because it could possibly multiply tropes infinitely by adding tropes of precise similarity between two tropes of precise similarity, since they

35 My tentative proposal was that the natural number as a universal could be defined as a located higher-order (ideally) countable set-trope taken as a model or any other located higher-order (ideally) countable set-trope strictly similar (equinumerous) to the model (see Costa 2018b).

36 Friedrich Nietzsche (e.g., 2017, § 9, and 2021, § 372) made a case on what he saw as an *ascetic supernaturalism* that had afflicted philosophy since Socrates, continuing with Plato, Plotinus, and most Judeo-Christian philosophers. It is plausible to think that the real explanation for the fact that trope theory emerged only in the second half of the 20th century was a cultural pathology, namely, a psychologically, socially, and culturally grounded form of escapism. This has gradually been surpassed by the enlightenment provided by Freudian psychoanalysis, sociological analyses, the hard sciences, and the technological advances that are changing the human life-world (cf. Flanagan 2002: 105–106).

37 The details concerning these compositions of concurrent or compresent tropes are, however, more complex and diversified than it seems at first sight (see Simons 1994). Speculatively, I have suggested that the derivative trope of what physicists call *inertial mass* could be considered the fundamental criterion for the identification of material objects in the widest sense. After all, it comprises all physical individuals, from macroscopic objects, including persons, to microphysical particles, excluding energy waves (Costa 2018: 172).

are also precisely similar to each other, and so on (cf. Campbell 1990: 32f.). However, in my view, as it stands, Williams' suggestion is inadequate for another reason, namely because we usually do not have any cognitive access to such sets or classes of tropes, which (to use a standard objection) can have immense and changeable sizes, while universals have no magnitude and no size. To circumvent the demand for cognitive access to immense and changeable sets of tropes and other difficulties, I prefer to say that from the viewpoint of trope theory the universal can be cognitively seen as consisting of:

U: *a randomly chosen model trope T_m or any other given trope T precisely similar to T_m .*³⁸

The randomly chosen trope T_m works here as a *model*. Its function remembers that of a triangle drawn on the blackboard, which for the finality of a proof can be drawn in the place of any other. *The ability to apply this operation recursively to any given trope T is all we need in order to make a trope T_m work as a universal property, allowing us to be able to say one over the many*, which Plato understood as necessary for the postulation of an abstract universal (that is, his idea or form, which would be in the place of the one, while its instantiations in individuals would be in the place of the many (Rep. 596a–b)). It is true that from this operation, we could derive sets, and, in this way, as traditional logic demands, an extensional set, which can be indeterminately large and was already sometimes confused with the universal concept.³⁹ But this would be a too expensive mistake. If this were the case, then we would need to stuff our heads with innumerable samples of red when thinking of the universal of redness, since it would imply knowledge of its extensional set.⁴⁰ Indeed, we do not need to know any extensional set in speaking of universals. To know the extensional set would be the capacity to say

³⁸ See Costa 2018: 165. In order to see more clearly how it works, imagine a group of persons without any memory of colors. For some reason, they use pieces of paper colored with burnt sienna as samples to distinguish this color in many different paintings. They examine a painting and compare the color of parts of the painting with the sample, writing down the result in their notebooks. According to my view, they are using the sample in their hands as a universal, enabling them to say the one over many. Normally, however, we resort to our memories when searching for a property.

³⁹ Williams and Campbell, as much as the nominalists, have made this mistake in my view.

⁴⁰ To this, we can add the rejection of some equivocal semantic assumptions: the reference of a predicate is not its extension, but a trope or any other trope precisely similar to it (even if it implies an extension). The reference of a statement is not its truth-value, but a corresponding tropical fact (even if this relation implies a truth-value to be attributed to the content as a verifiability rule.) (see Costa 2018, Chapter 7).

one over all, which is somewhat different from the more modest human capacity to *say one over the many*.

Trope ontology is a metaphysical theory. But from a linguistic perspective, tropes, complexes of tropes, and the bundles of tropes constituting material objects could in principle be identified by means of criterial identification rules able to be expressed by means of descriptions. In this way, spatiotemporally given properties of individuals could satisfy the criteria demanded by those rules.⁴¹ Therefore, at least in principle, we have in our hands the instrument for an auspicious response to the Kripkian objection that there is no set or sub-set of essential properties to be identified with the object.

A trope-theoretical ontological alternative would also fit perfectly well with what Kripke should mean in the quoted passage where he identifies a table as (having the spatiotemporally located properties of) “being wooden, brown, in the room, etc.”. Kripke could not consider trope theory because in the 1960s, when he developed his ideas, Williams’ ontological insight was still largely ignored. Furthermore, it would have been of no value to Kripke’s theory of reference, since trope theory seems to conform much better to some version of descriptivism that picks out variable combinations of properties based on their satisfaction of criterial rules expressible by variable definite descriptions. After all, if the object referred to by a proper name is something like a more or a less organized composition of compresent tropes, it seems that the way a proper name refers to it must be by identifying what Burks (1951) called “changeable and generally non-indispensable properties”. This means appropriately chosen changeable tropes or combinations of tropes through which a singular object can be selected by us and distinguished from all others. These changeable individuating tropes, in turn, would eventually be able to satisfy the criterial conditions required by the identification rule (Ernst Tugendhat’s *Identifikationsregel*) belonging to the object’s proper name and, in some way, able to be expressed by definite descriptions. We will see in the next chapter how this kind of rule can be effectively constructed.

4 Baptism and the causal-historical chain

The next question is how Kripke explains the attribution of names to their bearers without the intermediation of descriptions connoting their individuating proper-

⁴¹ Consider the form “Ce [Ci => A]” in the addendum of the last chapter.

ties (1980: 88–97). The answer he offers is based on his picture⁴² of the referential relation. According to it, a proper name gains its reference to its bearer through an appropriate causal-historical and communication chain. Here is how he presented his view⁴³:

A rough statement of a theory might be the following: An initial 'baptism' takes place. Here the object may be named by ostension, or the reference of the name may be fixed by a description. When the name is passed 'from link to link' the receiver of the name must, I think, *intend* when he learns it, to use the name with the same reference as the man from whom he heard it. If I hear the name 'Napoleon' and decide it would be a nice name for my pet aardvark, I do not satisfy this condition. (Kripke 1980: 96; emphasis added)⁴⁴

There are two stages here: first that of *reference fixing*, then that of *reference maintenance and transmission*.⁴⁵ The reference fixing of the proper name is achieved by a process that he calls baptism. There are two kinds of baptism: (i) by *ostension*, that is, the baptizer indicates the object he is naming by means of acquaintance; (ii) the baptizer refers to the object he is naming by means of a *description*. The two kinds of baptism often occur together; for instance, "this newborn, the son of Nicomachus, will be called 'Aristotle'", accompanied by a gesture of ostension.

There are proper names that are introduced by a descriptive baptism without an acquaintance with the object, as Kripke himself acknowledged. He considered the case of the proper name of an inferred object, such as the planet Neptune. The astronomer Le Verrier calculated that there should be a previously unknown planet located in a certain region of space, which would be responsible for deviations in the orbital axis of Uranus. Le Verrier called this planet 'Neptune' even before he located it in the sky, keeping in mind descriptions corresponding to its approximate location and mass (Kripke 1980: 79). Kripke also notes that the definite description used to *fix* the reference does not commit us to descriptivism, since it

42 Kripke prefers to use the term 'picture' instead of 'theory', since what he presents is a rudimentary sketch, not even applicable to all proper names. 'Jack the Ripper', for example, is better explained descriptively, since the identity of that murderer was never discovered (Kripke 1980: 79–80, 94). Moreover, Kripke's sketch outlines a theory of reference, not a theory of meaning, since he tends to share Mill's idea that proper names have "no signification".

43 There are other versions of this view, such as those of Keith Donnellan (very similar to Kripke's) and Michael Devitt (a somewhat deviant view). My criticism of Kripke's view can easily be extended to others.

44 See also Kripke 1980: 91. Keith Donnellan adopted a similar hypothesis: "It seems clear to me that in some way the referent must be historically, or, we might say, causally connected to the speech act. But I do not see my way clear to say exactly how in general that connection goes. Perhaps there is no exact theory" (1970: 377).

45 E. g., Noonan (2013: 117).

does not need to be synonymous with the name (1980: 96). It is even possible to use an incorrect description insofar as it picks out the right bearer of the name.

After baptism, a process begins that may be called reference maintenance and transmission: the name of the referred object is transmitted from speaker to speaker in a causal-historical-communication chain in which the hearers maintain the intention of referring to the same object as the speaker.

Kripke's causal-historical view has major implications. It means that if I now write the name 'Aristotle', it is because this name appears at the end of an immensely complex causal-historical network that began in 384 BC in Stagira, when someone for the first time baptized the newborn Aristotle with that name. If my writing of the name 'Aristotle' now came at the end of a causal-historical chain that began with the naming of the shipping magnate Aristotle Onassis, this would be the wrong chain, and I would not be speaking of the philosopher Aristotle anymore. The condition for the correct reference of a proper name must be *its belonging to the right causal-historical chain*, which must maintain as a criterion *the intention of speakers to refer to the same object referred to by the baptizer*. Finally, we should note that for Kripke the first link of the causal-historical chain is not the bearer but rather the act of baptism. After all, a causal-historical chain can begin even in the case of empty names that were not ultimately caused by any bearer. This might be the case when the proper name is empty.

An important question concerns the role of causality. Kripke assumes that the historical chain that begins with the act of baptism is causal. However, concerning the relationship between the object of reference and the act of baptism, Kripke avoids a full commitment to causality. This is because he accepts mathematical entities like the number π as non-causal bearers of proper names, along with *inactualia* like Lauranda, the hypothetical girl who could have been born if the sperm that fertilized Laura's egg had fertilized the egg that generated her sister Amanda. (See Hughes 2004: 45 and Burgess 2013: 32.)

Some have tried to deflate the more controversial causal element by emphasizing the historical-communication web (e.g., Burgess 2013: 33). However, it is clear that any historical-communication chain must also be causal, since any form of communication chain is causal, as much from the psychological as from the physical viewpoint.⁴⁶ Moreover, it remains defensible that the relation between the

⁴⁶ Gareth Evans has rightly spoken of the "causal theory of names" (1973). Indeed, it seems very implausible to assume a historical-communication chain made up of non-causal successions of events. This succession would either be arbitrarily chosen or, at least, graspable by means of cognitive relationships among their components. Being descriptively representable, these relationships would lead us in the most direct way back to some form of descriptivism.

baptizer and the object of reference is also causal. Cognitive causality is a form of causality like any other.⁴⁷ An information-historical chain is also, physically considered, a causal chain since there is no information without any physical substrate. And the relationship between the first speaker, the baptizer, and the bearer of the name is plausibly always causal. It is true that if the baptizer is having a hallucination, he is failing to refer to anything. But even if he were baptizing his hallucination, it would be because of the causal effect of the hallucination within his mind. Moreover, the potentially infinite number 3.141592... can always be further calculated, and this reasoning can already be a causal mental factor in the production of the name π .⁴⁸ Moreover, there is no difficulty in conceiving the imaginary Lauranda, who would then be a mental causal factor in our choice of her name. Consider, finally, the discovery of the planet Neptune. It was the knowledge of the real change in the axial orbit of Uranus, effectively caused by Neptune, along with knowledge of physical laws, that *causally* produced in the mind of Le Verrier the plausible hypothesis that Uranus should be attracted by an unknown planet, which he called 'Neptune'. (If there were no Neptune, there would be no change in the axial orbit of Uranus, and therefore no hypothesis and no naming.) It was not the kind of direct causation that involves observing Neptune through a telescope, but there was, however, a series of causal relations that were later found to be indirectly related to the planet. Even if causal input from the referent does not need to be considered as the first link of the causal chain, it seems it must in some way (even, as we will see, in only an imaginary way) be causally involved in the formation of any non-empty proper name.

5 Some proposed counterexamples

John Searle (1983: 238f.) has pointed out several difficulties in causal-historical theory using counterexamples, showing that in some cases a causal-historical chain is not even necessary. Concerning this point, I am a bit more on Kripke's side. Causality, even if in the most indirect ways, seems to me an unavoidable element of effective naming. In what follows, I will discuss some of these counterexamples, since I find their exploration instructive.

A first counterexample concerns names that do not seem to have any causal relationship with their references. I want to start by considering two examples

⁴⁷ Donald Davidson (1963) convincingly introduced in the analytic discussion the view that cognitive states like reasoning have causal effects (reasons cause volitions, volitions cause actions...).

⁴⁸ Assuming a consequent trope ontology, as Williams did, we are committed to seeing "abstract" entities like numbers as causally effective (see Costa 2018b).

given by Searle, for whom there seems to be no cause for the proper name's utterance by the proper name's bearer. First, knowing that there is a 5th Avenue, we can infer that there is also a 4th Avenue, thus referring to a street in New York of which we have never heard and that consequently cannot be the causal-historical origin of our utterance. The second example concerns Pharaoh Ramses VIII. All we know about this Pharaoh is that his name would have to be listed after Ramses VII and before Ramses IX. But with this information, we can already infer that Ramses VIII did exist, without any causal-historical chain having existed from his baptism in the distant past to us in the present.

To these examples, it is possible to reply considering that what we call an efficient cause is only what we see as a more relevant element of a distinctive set of causal factors. These factors are constituents of a situation, a state of affairs, and even (why not?) a unified temporal process, many of these factors being such that they can be foreseeable to exist as objects of reference.⁴⁹ Thus, knowing that 5th Avenue is the effective causal factor that is the origin of the causal chain that allows us to name it, and knowing that parallel avenues are usually consecutively numbered, we can infer that a 4th Avenue would be a constituent of a unified state of affairs constituted by a sequence of numbered avenues assumed as associated causal factors, and, consequently, that a 4th Avenue should *probably* also exist. Along with this, we also conclude that 4th Avenue could potentially be a baptized cause of our referential use of this name by means of acquaintance (which is not only irrelevant to the theory of baptism, but can also be a false hypothesis). Likewise, Ramses VII and Ramses IX are part of a unified causal process of succession of pharaohs that of course should include a Ramses VIII. This last pharaoh, though unknown to us, is an element of the unified causal process that has Ramses VII and Ramses IX as factors known to us. Causal-historical chains from these two pharaohs have effectively reached us, allowing us to recognize a Ramses VIII as an associated unknown causal factor. It does not matter that such unknown causal factors (spatially or temporally linked) are not among the efficient causal factors that have reached us, like those initiated with the baptism of 5th Avenue or Ramses IX. The relevant point is that they must have been part of the respective state of affairs and the process which formed the main complexes of causal factors

⁴⁹ In his classic work on causality, John L. Mackie (1974, Chapters 2 and 3) showed that what we call the 'efficient cause' is the result of a merely *pragmatic choice* of a causal factor that is an unqualified but non-redundant part of a set of causal factors that is itself an unnecessary but sufficient condition for the effect to take place (the *inus* condition). There is much more to say about causation, but Mackie's definition remains arguably the most powerful, serving well enough in the context of the present discussion.

that initiated the causal-historical chains extending from the past to us in the present.

Other examples are baptisms of things that will only exist in the future, such as a hurricane called 'Katrina', which received this name before it came into existence. The question is: how could it be possible to baptize something non-existent that will perhaps be created in the future? For Kripke, this would not be a problem since he does not demand a causal relationship between the act of baptism and the reference. Anyway, we could still find, as with the case of the planet Neptune, present causal circumstances enabling us to predict a hurricane by appealing to causal laws and circumstances, and this would justify naming it in advance. I could add to this the example of the planned city called 'Brasília', which received this name in 1823 from José Bonifácio de Andrada e Silva. He was the first to propose moving the capital of Brazil to the dry, hot, and almost uninhabited interior of the country. Only in 1956, by the decision of President Juscelino Kubitschek, did work begin on the new capital with the name Brasília. Causal circumstances seem to be out of the question regarding the visionary idea of José Bonifácio. But this is in fact no problem. The name Brasília was simply borrowed from José Bonifácio, and the real causal circumstances were intentional, namely, the decisions and plans of Kubitschek and his government to build a new capital with that name. The decisions were ultimately caused by delusional dreams of grandiosity regarding the idea of a new capital. Thus, here only the idea of the object of reference and the motivations behind it had a causal role. We can consider, finally, the baptism of things belonging to the remote past, for instance, the 'Snowball-Earth'. Geophysicists think that 650 million years ago the Earth was totally covered by a layer of ice and snow many hundreds of meters thick. Existing geological evidence, combined with knowledge of the laws of nature causally led scientists to conclude that the earth was once frozen in a glacial ice age lasting as long as ten million years. The baptismal name 'Snowball-Earth' was chosen because of an awareness of the causal reasons that had such and such known effects—the once existing icecap that produced the now existing evidence—which generated a causal-historical chain preserving the name. Even if, unlike the cases above, it is physically impossible to have any immediate, direct physical acquaintance with something that occurred in the past, we can still speak of a causally related awareness leading to the act of baptism.

Another type of objection is one that results from the elaboration of imaginary situations in which a causal-historical chain does not exist. Searle envisioned a small linguistic community in which each proper name is established indexically in the presence of all other speakers, so that no causal chain needs to develop

(1983: 240).⁵⁰ In fact, his argument demonstrates that under very special circumstances a causal-historical chain could be unnecessary. I agree with this. However, it does not prove that baptism has no point, or that no external causal relation is necessary for the constitution of the referential function of proper names. (Following Searle, I call an *external* causal chain a physical and, in this sense, third-personally accessible causal chain, which differs from a causal chain conceived at the psychological level.)

It seems plausible to conclude that something near to Kripke's positive doctrine ends up being reduced to two causal conditions regarding non-empty names: (i) the causal condition of acquaintance with the bearer of the name, supposedly valid even for the so-called abstract entities reconsidered by trope theory (such as the numbers); (ii) the condition of having circumstances causally producing a baptism, not only in a direct way but also in indirect ways, as in the case of Neptune, caused by orbital changes, the intentional baptism of Brasilia, causally influenced by its psychological ideas and motivations, and the retrospective baptism of the Snowball-Earth, caused by the discovery of its geological effects. Both conditions can be united in the following causal condition for the introduction of a non-empty proper name, followed by some causal-historical-informational chain or network:

C-condition:

Effective referential introduction of a proper name is only possible if:

(i) a baptism occurs as the consequence of some kind of acquaintance with the object of the name's reference, producing a shared causal factor or a causal-historical-information network that preserves its name.

And/or if

(ii) there are circumstances somehow involving a possible object of the name's reference, at least as it is imagined or conceived; these circumstances causally produce the awareness that allows some baptizer to descriptively name an object of reference, usually initiating a causal-historical-information chain or network that allows us to confer the name and helps to preserve it. In many cases (ii) can give place to (i).

Once we assume the ontology of tropes, a C-condition seems to be the most plausible way to think about what is true in Kripke's idea of an act of baptism and the subsequent causal-historical chain. It starts casually and ends causally. However,

⁵⁰ Searle added that this reference is only possible because people form intentional representations of objects when baptizing them (1983: 240–241).

the admission of a C-condition has a crucial limitation regarding our real goals: it does not mean accepting that in itself such a causal network could give any useful or even principled explanation or justification of proper names' references, as will gradually become obvious in the course of this chapter.

We can ask if there are more resistant difficulties with the causal-historical view: are there no references of proper names that turn out to be causally inexplicable?

It seems we can imagine situations where the successful referential use of a proper name is possible, even without a C-condition. Let us say there is a fortune-teller called Wanga who, gazing into her crystal ball, can tell people proper names she has never heard before, and inform them of all sorts of things about their reference. She peers into her crystal ball and exclaims 'Kamchatka!', referring to the many volcanoes on this remote peninsula. She looks again and exclaims 'Tom Castro!', going on to talk about the life of this notorious villain. If, after making all the conceivable tests, we did not discover any trick, we would begin to suspect that she can associate the names with all these details without knowing them beforehand, and without resorting to either causal-historical chains or any circumstances that would enable her to infer the causes for her claims about the bearers of the proper names. It seems that just by peering into the crystal ball, she really is able to refer accurately. The problem with this story is that even so, we would not abandon our assumption that to use it referentially, a name requires some kind of causal connection with its reference. Even if the causal relationship of what she sees is never clarified by means of causal chains, this does not prove that they do not exist. Moreover, it loses its plausibility if confronted with our presently known physical laws. Our belief in the universality of causality is so deeply ingrained that it would be easier to believe in extreme coincidences than to abandon our belief in causality.

A philosopher could try to conceive of a more extreme situation: a possible world endowed with pre-established harmony, in which people live like Leibnizian monads; they do not need to learn the senses or references of proper names and communicate them to each other to teach and learn their uses. Each person would have proper names popping up in his or her mind, with an inexplicable agreement between the senses and references that each other person gave to these names; one person would utter a proper name only to communicate something (apparently) contingent about its bearer that other people still do not consciously know. Nevertheless, this hypothesis seems still more implausible than the last one. This is not the way we use proper names to refer to anything in our world, nor are we able to imagine how this could be the case in any possible world where proper names could be used. We are not interested in the reference of something called a 'proper

name' in a wildly incoherent Leibnizian world. We are interested in explaining the reference of *our own* proper names.

It seems that none of the objections considered so far is strong enough to discredit the causal-informational or causal-historical aspect of a name's attribution, as presented by a C-condition, even though this condition, as will be clear later, must be interpreted in ways that considerably weaken Kripke's original semantic intuition of it as the royal road to explaining reference. A C-condition is nothing but the philosophical elaboration of the almost trivial hypothesis that the referential use of proper names invariably involves causal relations somehow related to the object of reference, even if this object is presently given only in our imagination.

6 Coincidental reference

There is a last case that still seems to resist the idea that a C-condition is indispensable for a proper name's reference: it concerns what we might call *purely coincidental references*.

Consider the following imaginary case of a proper name with no causal relationship to its reference. In an insane asylum in Georgia, an inmate dreams that there is a volcano named Osorno on the shores of a lake in southern Chile. He even draws a picture of a snow-covered volcano and is convinced of its existence. Indeed, as a matter of fact, there is a beautiful volcano called Osorno with those characteristics in that region. But suppose that there is absolutely no causal relationship between the name that appeared in the dream and the volcano. This would be a case of a merely coincidental reference.

To give a more detailed example, let us say that a teenager called Jaime, who likes to play childish games, knows a girl named Elaine very well. Suppose now that he creates a name, 'Ivny', for a crockery doll he imagines belongs to Elaine, adding to his story that the doll was given to her when she was younger and that she keeps it in the back of a wardrobe. Now, by mere guesswork, Jaime has already produced a considerable group of merely invented descriptions that he associates with the name 'Ivny'. Let us just suppose that by an incredible coincidence, all his guesses turn out to be true. In that case, could we say that Jaime has referred to Ivny? Should we not admit that he has referred to the doll, even if only by pure coincidence? It seems possible to claim that the name 'Ivny' has a descriptive meaning in his mouth, a Fregean sense, and that it would even be possible to determine its reference in this way. In this case, the conclusion seems to be that, although there is *no causal chain* between the object and the ut-

terance of its name, there is still a coincidental reference, and this reference is authentic.

The existence of merely coincidental reference seems even more convincing if it is found in indexical utterances. Suppose that Mary is blindfolded and tries to guess what was placed on a table in front of her by saying:

1. There is a flowerpot on this table.

Suppose that by pure chance, she hits on the truth: a flowerpot was placed on the table. Does Mary, when guessing, thinking, and saying the sentence (1), correctly refer to the flowerpot on the table? Favoring this conclusion, it should be remembered that the statement is obviously true. Since a true proposition was stated, it seems that an insightful philosopher will conclude that Mary has truly referred to the flowerpot. Hence, there is, after all, a reference lacking any causal relationship with its referent.

Would our insightful philosopher be correct? The answer is clearly negative: careful consideration of the foregoing conclusions shows that they are all wrong. The above reasoning exemplifies the kind of philosophical game that, when pursued by philosophers in sufficiently sophisticated ways, is capable of leading an incautious, pragmatically careless philosophical readership astray. The defender of some form of causal relationship between these acts of naming and their references might with good reasons reply that in all these cases there is deception. In the case of the mentally disturbed inmate, his judgment is impaired, and one can find neither internal nor external reasonable justifications for his application of the name in the making of a true statement. In the case of Jaime, the name gains reference only for those who already know there is a doll in the wardrobe and only afterward for Jaime, since his guess was not backed by any justification. The only reason the name 'Ivny' could have a reference in what Jaime says *before* Elaine's agreement with its truth would be previous knowledge; but this is precisely what he did not have. And in the case of Mary, she does not know that the sentence is true, because although the thought expressed by the sentence is in fact true, it is only true *for the witnesses*. One example could be an interpreter who hears the sentence and compares the thought it expresses with the corresponding fact, verifying its truth and its indexical reference. This might give us the illusory impression that Mary could be successful in asserting and referring by chance. It might be that we have the impression that in this case, as in the previous ones, the reference is made, albeit in a purely coincidental way. But this impression would be nothing beyond the kind of linguistic puzzlement so often pointed out by a philosopher like Wittgenstein as a philosophical trap.

One could also think that Mary would be successful in referring if what the declarative sentence says, the proposition, were understood to be the same as Frege's thought (*Gedanke*), namely, an a-temporal, abstract entity at the level of the senses (*Sinne*) (Frege 1918). However, it is important to note that by presupposing a trope ontology, as we do here, there is no thought in the Fregean realist sense of a non-spatiotemporal abstract proposition. Thought or proposition must be considered here to be either a semantic-cognitive trope or a combination of such tropes (i.e., a temporal thought-event), or a universal in the sense of a sum or set of precisely similar tropical thoughts (Williams). Or, as I prefer to think, it could be seen as *a tropical thought used as a model or any other tropical thought that could be regarded as precisely similar to it*. So considered, the proposition turns out to be something equivalent to a non-Platonic Fregean thought, which would be spatiotemporally disseminated, but not dependent on a single psychological mind, unlike a thought-event.⁵¹ But in any case, the speakers (the insane, Jaime, and Mary) would be unable to give such thoughts/propositions their truth-values. This is due to their being unable to make the proper names included in their linguistic expressions gain reference in some verifiable way. And this would be so because these thoughts, being coincidentally true, are not directly or indirectly verified by those who utter them. Indeed, these thoughts or propositions are verifying rules verified as applicable or true by others, not by their speakers while they are speaking or at any time before.⁵²

In the face of the above considerations, we conclude that a non-causal, purely coincidental reference is nothing but a rough linguistic illusion. It is as unreal as a name engraved on a stone in an isolated region, which by chance is the same as the name of a traveler who happened to find and read it. A representational process is causal in nature, however indirect this relationship may be. Reference is an association we make between the word and the world, and this association must inevitably involve some form of causation from world to word and, as one could already guess, some reciprocal form of intention from word to world. There is no true reference by luck.

⁵¹ As far as I know, a not very different view is nowadays proposed by Scott Soames (2020) concerning propositions as repositories of meanings, though without the improving appeal to trope theory as the ontological foundation for universalization.

⁵² See Chapter VI, § 2.

7 Internal problems

Now, I want to move on to a critical analysis of the Kripkian approach, beginning with some internal difficulties of his causal-historical theory of reference.

The first problem concerns what we could call *intentional emptiness*. In the passage where Kripke introduces his idea of the causal-historical chain, he explicitly appeals to at least one intention, which is “to use the name preserving the same reference as that of the person from whom he heard it”. This intention serves to preserve the reference to the object selected through the communication links of causal-historical chains as being the same as the one the baptizer initiated (Kripke 1980: 91 and 96).⁵³ However, there is a problem here. It seems unavoidable that the intention to use the name with the same reference must include internal cognitive contents able to preserve this same reference. It must have some intentional content. If a hearer uses the name ‘Aristotle’, preserving the intention of referring to “the baby born in 384 BC, the son of Nicomachus, the physician at the court of Macedonia”, the reference seems to be preserved. Furthermore, the degree to which this intention succeeds in preserving the same reference must correspond to the degree to which it includes relevant cognitive contents associated with the name. If, after hearing the name ‘Aristotle’, I say, for instance, “I will use the name Aristotle, preserving your intention to refer to a person born in 384 BC in Stagira, son of Nicomachus, the physician at the court of Amyntas II, who crossed the Aegean Sea to study with Plato in Athens and later wrote the Aristotelian opus”, I will have a much better chance of preserving the same referent than if my intention were only to refer to someone born in 384 BC in Stagira. Unfortunately, these considerations lead directly *to resorting back to descriptivism* because these intentional contents are already those that, to be interpersonally accessible and efficacious, must be expressed through definite descriptions. But if so, descriptivism emerges from the very heart of the Kripkian causal-historical view, ruining the supposed advantage of his picture.⁵⁴

53 Searle realized the difficulty by noting that the explanations given by Kripke and Donnellan for introducing proper names are entirely descriptivist: “Implicitly”, wrote Searle, “he also resorts to an intention when he speaks of the perception of the object by the speaker and hearer in the act of baptism since the perception has an intentional content, which ends up presupposing descriptivism” (Searle 1983: 234–235). However, a causalist-referentialist philosopher could still suggest that the act of baptism (even if intentional) includes a mechanical (non-conscious), unintentional sharing of reference, insisting that this could be all that really matters as a causal factor.

54 Claims to find hidden descriptivism in Kripke’s views were first clearly posed by John Searle (1983: 245), remaining a recurrent theme in the recent literature (e.g., Kippen and Soyzal 2022).

One can try to circumvent the problem of intentional emptiness by suggesting that the relevant intention is simply to preserve the same reference independently of being able to conceive anything like tropical properties externally or internally associated with its intentional object. Nonetheless, if the hearer does not need to have any idea of what the speaker's intention might be, then the intention of referring to the same object with the same name is reduced to an *arbitrary wager*. It would be as if someone says, "I have the intention to buy exactly the same things you bought at the Shopping Center, but you don't need to tell me what you bought"—which expresses an empty intention that serves no purpose. Or suppose an inebriated gambler says before placing his bet when at the roulette table: "I do not know the number you chose when you won, but my intention is to bet on the same number, whatever it may be!" Such a statement would be foolish, since the intention to refer to the same thing without knowing anything about it is empty, and its explanatory power is null (the right words for this could be 'wishful thinking'). Moreover, if "to have the same intention" means an intention empty of content, this cannot prevent all kinds of errors concerning the right referent: I can intend to refer to the same Aristotle you are referring to, thereby imagining that Aristotle is the name of a prime number. Indeed, it would not be of any help if, when asked who Aristotle was, someone answered: "You should follow the same causal chain I am following when I utter the name 'Aristotle'... but don't forget to have the intention of referring to the same person I am referring to".⁵⁵ An empty intention is no intention.

The conclusion is that if Kripke wished to be fully consistent in his anti-descriptivism, he should drop the demand for intentionality. This means that his causal-historical chain should be solely what Searle called an *external* one, in his sense of a third-person accessible physical chain.

A minor but telling difficulty concerns change of reference. Gareth Evans formulated an interesting counterexample to the causal-historical view, which concerns the proper name 'Madagascar' (1973: 11). He imagines that the name 'Madagascar' was once used to refer to the eastern region of the African continent. But when Marco Polo visited that region, an incorrect translation led him to think that Madagascar was the name of the great island situated near the east coast of Africa. Later, due to Marco Polo's accounts, people came to call the island itself Madagascar, forgetting the original reference. Certainly, if the name's reference were fixed only by an appeal to an initial baptism, this change could not have occurred. Marco

⁵⁵ The emptiness of a descriptively unsalvageable intention was already made clear by Gareth Evans' example (1973) of someone who identifies Kingston correctly as the capital of Jamaica, when the person from whom he picked up this scrap of information was actually making a racist remark about Kingston upon Thames in England.

Polo surely also *intended* to refer to the same thing as the person from whom he first heard the proper name and not to introduce a new reference for the same name; but since the intentional content was incorrectly translated, the reference changed.

An answer to this type of objection was suggested by Michael Devitt. According to him, the meaning of a proper name does not have to do with the reference itself, but with the *ability* to designate an object (Devitt 1981: 2.1–2.3). This ability, or habit, is seldom acquired from a single baptism, but more often from many, in a process he called *multiple grounding*. Thus, the name Madagascar had been fixed through multiple baptisms as an eastern region of the African continent, until it was inadvertently renamed by Marco Polo. If Polo and his auditors subsequently referred again and again to the island, multiple grounding came into effect, forming a new habit of referring and thereby giving a new and different sense to the name.

This appeal to multiple grounding that creates a habit or custom seems in some cases to really occur. Consider the case of an encampment of diamond seekers that is called ‘tents’ because people standing on the mountains above it could only see a collection of tents in the valley below. With time, the encampment grew into a village, which then received the official name of ‘Tents’ (a kind of postponed baptism). However, this cannot be generalized. We can suppose that Marco Polo confused Madagascar with the island and, later, while in prison, dictated this error to Rustichello de Pisa who wrote the book *Il Milione*. Nonetheless, they did not afterward need any multiple grounding to spread the new name. Likewise, after his baptism, Aristotle’s name would not have needed reinforcement by repetition. Repeating is not renaming.

This again leads back to Kripke, who gave probably the most convincing answer regarding usual cases (1980: 163 Appendix). For him, an intention, in this case, Marco Polo’s intention to refer to an island, *overcomes* the intentions of past users of the name and establishes a new social practice. His intention gave the proper name a new meaning and new reference. The change of reference, therefore, turns out to be a mere case of homonymy. Although this response may be more appropriate, it inevitably also suffers from camouflaged descriptivism by reflecting a new element of cognitive intention. After all, Marco Polo’s intention to refer to the island must be able to be expressed by a definite localizing description such as ‘the great sub-equatorial island near the eastern coast of the African continent’, since he must have had something like that in mind.

A descriptivist would have no difficulty with Evans’ example. There were indeed two occasions on which identifying-localizing descriptions were created. The first is the reference to ‘Madagascar’ as *the eastern region of Africa*, which could have been maintained and strengthened by natives over a long period of

time. On the second occasion, Marco Polo unwittingly *called the great sub-equatorial island near the eastern coast of Africa* ‘Madagascar’, introducing a homonym with a new identifying-localizing description.

Another counterexample taken from Evans concerns two babies, one baptized as Jack, and the other as John, which were accidentally switched by a nurse. The nurse mistakenly gave John to Jack’s mother, and Jack to John’s mother. The respective parents did not notice the switch, and they and their relatives simply continued calling their child by the wrong name. If the causal-historical view were correct, the boys would always be known by the name that was used for them, despite the original baptism under a different name. The best Kripkian answer would be the acceptance of a less restrictive concept of baptism. John was unwittingly rebaptized as Jack by his parents, giving rise to a much more extended causal-historical chain.

An additional difficulty, which I want to briefly consider, concerns the meanings of two or more proper names which are used in referring to a single bearer. There are cases where these proper names have the same informative content (e. g., “Everyone calls Beatrice Bia”). But there are also cases where the informative content differs. For instance, Father Marcial Maciel was the founder of the Legionnaires of Christ order and unfortunately also a scoundrel. Among his many illegal activities was the use of false identities. One was that of Raúl Rivas, an alias he used when claiming to be a Shell employee and CIA agent. In 1976, Rivas met Blanca Gutiérrez, a naive woman who fell in love with him, knowing him only as Raúl Rivas and being completely unaware of his true biography. Rivas had two children with her without her ever having discovered his true identity. The informative contents of the names ‘Marcial Maciel’ and ‘Raúl Rivas’ are certainly very diverse, although they referred to the same person.

Cluster theory would find no problem in explaining this difference. A supporter of this theory would say that the set of descriptions abbreviated by the false name Raúl Rivas would have been publicly considered completely different from the set of descriptions abbreviated by his real name, which is why their meanings were seen as so diverse. Later it was discovered that the set of descriptions abbreviated by the alias was only a partially feigned *subset* of descriptions belonging to the set of descriptions comprising the whole cluster summarized by the name ‘Marcial Maciel’. Thus, the meaning-content given by the sub-cluster of descriptions associated with the false name Raúl Rivas was part of a more complete meaning-content. This was, namely, that of the entire cluster of descriptions associated with the original name Marcial Maciel. Thus, for instance, the indirect description ‘the Shell employee and CIA agent invented by Marcial Maciel to go with his alias Raúl Rivas’. It belongs to the cluster of descriptions summarized by the name Marcial Maciel, just as does a non-feigned description of Raúl Rivas physical appearance,

which was the same as that of Marcial Maciel. Because he was so a skilled impostor, he was able to keep these two sets of information separate and hidden from Blanca Gutiérrez. This not only explains why the two identities belonged to the same person, but also why he was able to keep Blanca Gutiérrez ignorant that they were the same person: she was only aware of the cluster associated with Raúl Rivas.

It seems difficult to produce a reasonable, convincing explanation for what happened from the perspective of the causal-historical view. Supposing that the source of the referential function is the act of baptism, then we can imagine that there were two different ones, the original baptism of Marcial Maciel, and the baptism that Marcial Maciel gave himself under the alias Raúl Rivas, and used to deceive Blanca Gutiérrez. We could now object that in this case, there would no longer be any reason to believe that the two names refer to the same person. However, the Kripkean philosopher can still hope to answer this objection by insisting that while the baptismal acts of the two names had the same referent, the impostor only told Blanca Gutiérrez of the causal chain associated with his identity as the self-baptized Raúl Rivas. He hid from her the causal-historical chain initiated by the first baptism of Marcial Maciel to make her believe he was none other than Rivas.

Even so, the causal-referential explanation is fraught with persistent troubles. How could the causal-historical view explain that Raúl Rivas and Marcial Maciel were in fact the same person? How could it explain why Blanca did not become aware early in their relationship that Raúl Rivas was Marcial Maciel, considering that the two baptisms were of rigid designators of the same bearer, who stood there in front of her? (“Raúl Rivas = Marcial Maciel” would be, for Kripke, an example of a necessary identity.) Why did she only much later make the shocking discovery that Raúl Rivas was in fact the same person as Marcial Maciel using information and cognitive awareness communicable only by descriptions? By now, it is becoming clear that a causal-historical theory based upon baptism, although having a point, is quite incapable of standing alone.

8 The radically consistent Kripkian automaton

Several authors have objected that referentialist/externalist views have been unable to give an adequate account of the relation between semantics and psychology. As Francesco Orilia wrote:

...a complete semantic theory must be, say, cognitivist, i.e., capable of going hand in hand with a plausible psychological account of mental processes that are involved in the generation

or interpretation of a linguistic token and of the mental representations that such processes give rise to. (Orilia 2010: 5)

Using a *reductio ad absurdum*, this section aims to show the indispensability of the often rejected cognitive-representational and potentially descriptive element. For this, we draw on the idea of what one could call a complete Kripkian automaton. This would be an automaton capable of creating and using proper names satisfying Kripke's anti-cognitivist causalism in a fully consequent way. It is complete in the sense that it does not run any risk of implying descriptivism since it does not even need to satisfy the requirement of the intention to use words with the same reference as the other automatons of the same kind in any cognitive sense of the word 'intention'. It is, therefore, a primitive mechanism, devoid of any form of mind or consciousness, but still capable of "identifying" people through their photoelectric sensors and "baptizing" them with "proper names". Imagine now a "society" of these automatons. They would be able to retain images and behavioral traits of the persons they have "baptized" with proper names like 'Rwzf', and even transmit them to other similar automatons, relating them to the same bearers (the physical mechanism can be here called "K-intentionality"), in this way "communicating" them. This would enable them to repeat the person's "name" when they "see" its bearer, or when appropriately "asked" what a person with such and such characteristics is called. The "reference" mechanism is reduced here to a *purely external* causal-historical chain, that is, to a third-person accessible causal chain devoid of any psychological content.

What is interesting about this thought experiment is that it makes evident how unconvincing the act of referring becomes in the absence of any truly cognitive element. We do not know how it would be possible for a complete Kripkian automaton to really refer in the proper sense of the word. Words such as 'denotation', 'name', 'identification', 'reference', 'K-intention', 'communication', 'seeing', and 'society', were all applied with quotation marks due to the simplified and analogical use that was made of them. All these automatons could do would be to produce mechanical *imitations* of the referential processes that take place in our conscious minds. This is demonstrated by their almost complete lack of flexibility, inferential complexity, and behavioral sophistication.

Imagine, to strengthen the argument, that there are no longer complete Kripkian automata, but instead extremely sophisticated androids, such as those seen in Steven Spielberg's popular film *A.I. Artificial Intelligence*: they are outwardly similar and hard to distinguish from us, so that they can share our way of life and learn all the details of our natural language, using our own names as correctly

and competently as we ourselves do.⁵⁶ The problem now is that in this case, we willingly suspend disbelief while watching the film and are less prone to consider their acts of naming mere terminal links of purely external causal chains. By analogy with ourselves, it will be inevitable to attribute mental capability to them. That is, we would be compelled to treat some unknown nodal points of their external causal pathways as internally describable in psychological terms such as cognitions, representations, intentions, and volitions.

After all, we cannot prevent ourselves from identifying the consciousness of others by analogy with our own. We find it hard to imagine that androids completely devoid of consciousness would be able to behave and speak and refer in the same way as human beings. Even if they came to talk to us, trying to convince us that they were completely devoid of consciousness, not really possessing thoughts, having no intentions, no will, no desire, it would be hard to believe such statements, for they would sound ridiculously incoherent. We would be irresistibly tempted to endow them with consciousness.⁵⁷

If we want to rescue the intricacies of our own use of proper names, external third-person processes, like neuro-physiological ones, will have to be so elaborate that we will inevitably assume androids to possess the internal form of our psychological processes. Moreover, their cognitive-representational-intentional element will have to play such a preponderant role that we will return to the initially rejected assumption they have a descriptively explicable cognitive constituent.

9 Empty and imaginary names

A resilient problem not very well answered by causal-historical views concerns empty proper names. Here are some examples:

⁵⁶ I say this falsely assuming it is physically possible to construct such androids. It seems much more defensible to claim that only biological beings produced by processes of organic chemistry, alive in the same way we human beings are, would be able to use natural languages precisely as we do. One does not have to know much about biology and human brains in comparison with silicon-chip-based computers and similar machines to realize that computer “brains” and human brains made up of living nerve cells are *immeasurably different*. It is only our present ignorance of how the human brain really works that allows such an approximation.

⁵⁷ I say “almost” out of respect for our immense powers of wishful thinking. Also in this way, officials in nazi concentration camps convinced themselves that Jews and Gypsies were sub-humans (*Untermenschen*).

1. Vulcan
2. Eldorado
3. Zeus
4. Rumpelstiltskin
5. Gandalf
6. Urville

There is an important difference between the names from (1) to (3) and from (4) to (6). Only the first three are empty proper names in the full sense of the word. They are what we could call *proper names of non-existent real objects*. They are meant to be applied to references belonging to the domain of our real world (the first because it is empirically empty, the other two because of their mythical character). The last three are *proper names of merely fictional (imaginary) objects*. They are not empty insofar as they are applied to referents belonging to the proper fictional or imaginary domain, where they were conceived to be applied. They only appear empty if they are misleadingly seen as applying to references in the domain of the real world.

None of these examples of proper names would be a problem for descriptivist theories. The first three are not, because their status as proper names depends on their descriptive meanings and not on the existence of referents in the domain of our real world. After all, for descriptivists, what constitutes the status of a proper name is its referential function, its meaning, which belongs to the modes of representation given by its associated descriptions, and the ultimate success of its referential function is not what makes a word a proper name. About the last three proper names, they can also be seen as abbreviations of descriptions that give them their meaning, making them able to refer within fictional contexts, which recombine elements of our own, where they can appear as terms in true or false statements insofar as they are consistent with these imaginary recombinations (“Gandalf was a wizard” is true, while “Rumpelstiltskin was a prince” is false).

Nonetheless, the admission of names without a reference can be a real problem for causal-referentialist theories, which tend to make much of the semantic content of a proper name dependent on its external reference.⁵⁸ Thus, referentialists working under Kripke’s influence must invent strategies to save the causal-his-

⁵⁸ *Quasi-referentialists*, like Kripke, tend to dismiss the meaningfulness of proper names. Hard externalists, like Nathan Salmon, David Kaplan, and Scott Soames, attributed meanings to their references.

torical theory of proper names belonging to a fictional domain.⁵⁹ They could easily suggest that fictional names like Rumpelstiltskin, Gandalf, and Urville, were “baptized” by their creators, who were respectively the Brothers Grimm, J. R. R. Tolkien, and Gilles Tréhin, who would be at the beginning of an informational causal chain. As was said, the baptismal relation could be seen here as a causal-mental relationship with the fictional worlds.

However, this solution would open the doors to the objection that no matter what kind of “baptism” is performed, a *petitio principii* continues to haunt the causal-referentialist view. Such characters can only be identified by those who know their roles in fictional stories. Only with the help of cognitive descriptions of these characters, their intentions and their actions, are people able to identify them and understand their places in the respective fictional worlds. Since all these things must be described, it seems that the causal-historical theorist must here assume the priority of descriptivism in a wide-open way.

A greater problem for referentialists, however, concerns what I have called proper names of non-existent real objects⁶⁰, like ‘Vulcan’, ‘Eldorado’, and ‘Zeus’. If they do not have references, it also seems that they will never be able to be really tagged or baptized. They cannot have a direct referential causal function, which seems to deflate their significance as real proper names. There is an extensive debate about such empty names whose discussion would lead us too far from our present intentions.⁶¹ Along causal-historical lines, however, the most auspicious answer to the problem departs from remembering that the first link of the causal-historical chain is not the object referred to, but the baptism itself. This warrants that the act of baptism, even though it can be empty, is already sufficient to produce a causal-historical chain... Thus, as Keith Donnellan insightfully suggested, the empty proper name is one whose historical explanation ends up by offering empty indications. As he wrote concerning a statement like “Santa Claus does not exist”:

When the historical explanation of the use of a name (with the intention to refer) ends in this way with events that preclude any referent being identified, I will call it a “block” in the history (Donnellan 1974: 23).

⁵⁹ Above any concern, Kripke's *Reference and Existence* (2013) is by far the most recommendable work about the related issues.

⁶⁰ There are also proper names for non-existent non-real objects: in Samuel Beckett's play “Waiting for Godot” (1953), the characters are anxiously searching for something or someone that is almost certainly a creation of their minds (for fictional-fictional circumstances cf. Kripke 2013: III).

⁶¹ See, for instance, van Inwagen 1977, Braun 2005, Salmon 1998, Caplan 2004.

The explanation for the existence of Santa Claus ends up in a “block” because one cannot point to its bearer in the actual world. He is purely a product of the imagination.

Nonetheless, according to the causal-historical view, the causal effect of a given referent in the baptizer’s mind makes no difference for the subsequent causal chain. But in this case, how can we distinguish the causal-historical chain that begins with an empty baptism? Should the existence of some causal relationship between the referent and the act of baptism not be essential to real naming, allowing the proper name to pick out its reference in a way that justifies the all-important property of rigidity? If not, would these empty names still deserve to be called authentic proper names?

10 Empty names descriptively understood

Instead of trying to figure out how the defenders of the causal-historical view would answer questions like those presented above, I wish to consider another referentialist response, according to which empty names are not true proper names but *only disguised definite descriptions*. For supporters of this view, if there are any,⁶² since empty proper names are only disguised descriptions, they are made to refer by means of a mechanism completely different from the direct causal-historical baptismal way proper names usually refer. Consequently, they do not deserve to be called real proper names, since such empty proper names do not really exist!

This view is implausible and would be rejected by Kripke. However, I do not choose to consider this view because of its plausibility within the causal-historical or referentialist framework. I do this here only as an exercise for a better understanding of how empty proper names could be interpreted from a *descriptivist* viewpoint—as a springboard to what will be discussed in the next chapter.⁶³ What I wish to make clear is that a careful examination reveals that empty proper names for real objects (just as much as proper names for fictional objects) are too much like the most common proper names to force us to distinguish seriously between the two cases—a conclusion that will favor cluster descriptivism.

⁶² This implausible alternative was probably based on Russell’s view of names as disguised descriptions.

⁶³ This illustrates what Avrum Stroll, a Wittgenstein specialist, called *philosophizing by examples*; careful consideration of individual cases to avoid the dangerously reductive character of displaced formalism.

First, consider again examples (1) to (3). If we examine them more closely, we will see that these names do not replace a single definite description, but a variety of descriptions, leading us back to a cluster theory. In the case (1) of Vulcan, it is the name of a small planet postulated by Urban Le Verrier in the 19th century as orbiting about 21 million km from the Sun, to explain changes in Mercury's perihelion (which after 1915 were precisely explained by general relativity theory). It is possible to replace this last sentence with a single composite definite description, formulated to localize and characterize a referent that actually does *not* exist.

Examples (2) and (3) can be seen as proper names with more elaborate informational content, not differing much from what we expect to find with cluster theories of proper names. The proper name (2) 'Eldorado' comes from various indigenous accounts and rituals, which led the Spanish conquistadors to believe that in some regions of the western Amazon, there could be a city whose king dressed in gold and possessed unbelievable riches. Based on these and other localizing and characterizing descriptions, adventurers and explorers descended to the Amazon lowlands searching in vain and sometimes ending up as feasts for cannibals. If an implausible city like Eldorado were found, it would only be because at least some of the descriptions in the cluster applied. Consider now (3): the name 'Zeus'. He was considered in Antiquity to be the ruler of all the gods on Mount Olympus, the sixth son of Chronos and Rea... There is a whole range of localizing and characterizing descriptions that mythology has associated with the name 'Zeus', which creates a cluster not too different from the clusters of our usual proper names.

Now compare the functioning of the name 'Eldorado' with that of the name 'Troy'. In the latter case, all that was available was a very limited cluster of localizing and characterizing descriptions taken from Homer's *Iliad*. It was believed to be a mythological name. However, unlike the previous cases, the site of Troy was discovered in modern Turkey by Heinrich Schliemann. As is well known, having taken seriously the localizing descriptions, Frank Calvert indicated to Schliemann where he could find the ruins of the historical city of Troy, which enabled him to discover the place he identified as the city of Troy and build a well-grounded causal chain for the name. What is the difference between the name 'Eldorado', on one side, and the name 'Troy', on the other? In my view, only one thing: the former name is certainly empty, the latter not. Other than that, they behave the same way. Therefore, a word like 'Eldorado' is certainly a truly empty name, and a causal-historical theory does not seem very apt to explain why it is rigid or why it seems informative and meaningful.

It is true that the description clusters of the above examples are still poor and uncertain if compared to those of common proper names such as Paris and Aristotle. But this is not because these names are misleading descriptions. The main

reason is the simple fact that the real bearers of the usual proper names persist in their complex causal interaction with the world, *often allowing us over time to accumulate identifying information, continually enriching their clusters of descriptions*. In contrast, empty proper names are in this respect as fragile as the name 'Neptune' shortly before the discovery of its existence by Le Verrier. Moreover, none of the considered examples adumbrates the necessity of postulating some mysterious identification mechanism essentially different from what possibly could be given by well-grounded definite descriptions, which supposedly require the satisfaction of variable complexes of tropical properties. Furthermore, as we will see with the peculiar proper name 'Urville', poverty of descriptions is not an unavoidable property of empty names.

Let us now consider once more the fictional names (3) to (6), which, unlike (1) to (3), are meant as referring to merely imaginary objects. Here we often have rich clusters of identifying descriptions of the object, only they are not made to be applied to the real world but are limited to the domain of objects that exist only in our imagination. 'Rumpelstiltskin' abbreviates the identifying description of a greedy dwarf in a fairy tale, 'Gandalf' abbreviates detailed characterizing descriptions of a wise magician belonging to the fictional world created by J. R. R. Tolkien. It seems clear that the identification mechanisms remain similar. What changes is the *domain of application*, which in these cases is the second-order domain of a merely fictional reality.

The last case I would like to consider is that of (6): Urville. This city is located in the southeast of France. It was founded in the year 1,100 BC by the Phoenicians, was transformed into a city-state in the Middle Ages, and was occupied by the Nazis during World War II... These are the main descriptions by which we build the rule that enables us to locate the city in space and time. Urville is also the largest city in Europe, the present capital of France, with about 12 million inhabitants... These are only a very small part of the uncommonly complex cluster of spatio-temporal localizing and all the many characterizing descriptions constitutive of the criterial rule by means of which we are enabled to identify Urville. The only problem is that Urville, obviously, does not exist. This city was the product of the imagination of an autistic artist named Gilles Tréhin, who for more than twenty years conceived and drew that city in its smallest details. He created for the name 'Urville' a precise and extraordinarily complex cluster of fictional descriptions able to be used as its identification rule. Although constructed in the most realistic possible way, this rule does not apply to our actual world. It is made up as if it belonged to a close possible world, in which history had undergone a small but significant change: Urville in the place of Paris. The case of the proper name 'Urville' shows beyond any doubt that an empty proper name cannot simply be reduced to a definite description, even to a composite one. Urville is an empty proper name

summarizing an immensely complex cluster of logically related descriptions since realism was Tréhin's main aesthetic goal. Searle's cluster theory would be at home concerning Tréhin's city: in a possible world where a sufficient but undetermined number of localizing and characterizing descriptions associated with the name 'Urville' were satisfied, the city would certainly exist.⁶⁴

Finally, it is worth noting that *localizing* and *characterizing* descriptions were present in all the examples of proper names given above. In the next chapter, we will see that their place is fundamental in articulating the proper identification rules for proper names in general, and why it must be so.

11 Causal chains and cognitive links

Even if I am convinced that causal relations in some way satisfying a C-condition are indispensable for any given proper name to have a reference, the crucial and until now unanswered question is that of *explanatory power*. Theories without explanatory power are empty. However, a fully consistent causal-historical theory should be able to be fundamentally constructed without the admission of any psychological link such as content-filled intentions, cognitions, or psychological (conscious or not) t-thoughts—things that in general could be expressed as descriptions. But it does not seem that the mere use of an external causal chain consisting only of interpersonally accessible elements like neurophysiological phenomena, sound waves, bodily movements, etc. could in itself be sufficient to explain the reference. Even if Kripke admits that we need to have the intention of referring to the same object, we have already seen that to be fully anti-descriptivist he would need to reduce it to an intention to reproduce unknown content, which would be nothing more than an arbitrary wager.

Now, how far can we go when we try to explain or justify the reference of a proper name through a purely external causal network? The first difficulty is that there are countless causal chains to which we are continually being exposed but whose final link can be anything but the referential use of a proper name.⁶⁵ How then can we identify the causal chain that has as its final link the referential use of a proper name? How do we know, for example, that from a purely external viewpoint the spelled word 'White' is being used as a person's name and not as the

⁶⁴ The fictitious history of Urville, together with more than 300 drawings, was published in book form in 2006.

⁶⁵ Even advocates of Kripke's view have difficulties with the problem of finding the right causal-historical chain: "...if one, say 'James', uses that expression attributively as a proper name, and has in mind no particular source, how do we decide which branch to follow?" (Kaplan 1989: 583).

name of a color? How can we be sure that a person is using the proper name 'Aristotle' correctly, as the last link of an appropriate, but hugely complex causal-baptismal network? Let us imagine that when first hearing the name 'Aristotle', a schoolboy concludes that the speaker wants to refer to a school in his city which bears that name. How can the speaker explain to the schoolboy that this is not the correct causal-historical chain, without resorting to cognitions-descriptions that we relate to Aristotle's own person? Imagine, giving wings to our imagination, that in the act of baptizing Aristotle, the sounds of the words being uttered made a nearby mirror swing, which because of this reflected a photon that crossed the stratosphere and sped toward the Moon, from whence it was reflected back again, returning by chance to the surface of the earth, where it was absorbed by a carbon atom in a field of grain. Further, suppose that this tiny amount of energy remained stored in that atom, even if it passed through the bodies of animals that were fed grain, dancing about for millennia until the moment when it somehow contributed (very slightly!) to the polarity change of a neuronal membrane when neurons are activated in the process of speaking the name 'Aristotle' by which someone in the present utters the name Aristotle. Is this extended series of events part of the causal baptismal network with the utterance of the name 'Aristotle' as its last link? The obvious answer is "of course not!" However, assuming a fully consequent Kripkean view, the question "Why not?" remains.

We have difficulty seeing the physical absurdity of the issue because we are normally unaware of the fact that *we are continuously immersed in an inextricably complex ocean of causally interconnected events*. That is, our universe is an incredibly intricate causal network, where events are constantly causing and being caused by other events on multiple sides and in a myriad of ways. Richard Feynman, restricting himself to the behavior of electromagnetic waves, once gave an impressive description of how complex just this tiny parcel of the causal network must be:

...even the trajectory of the light waves that allow us to see the most different things around us from different places and perspectives... makes a tremendous mess, and this without counting short and long invisible electromagnetic waves, like the many radio waves of different frequencies that simultaneously reach us in the same spot... only this already gives us a quaint idea of the absurd causal complexity of the universe, the inconceivable nature of nature (Feynman, *Fun to Imagine*, BBC Series, 1983).

Considering the incredibly complex ocean of external causal chains that simultaneously occur and intersect, how can we identify those responsible for a particular act of naming? Suppose I utter the name 'Aristotle'. It is undeniable that I can only designate this philosopher if there is, within the indescribably intricate causal ocean, an already vastly complex causal chain that (at least partially) had its begin-

ning in the act of baptism of the newborn Aristotle and ended with my current utterance of his name... However, just as certain as the very existence of external causal-historical chains linking the first speaker (and, in most cases, the referent) with its name is the certainty that if searched for only in itself and by itself, this search would give us no clue for its identification. These remarks show that it is impossible to identify and isolate relevant external chains from the innumerable other connections forming the incommensurately vast causal network in which we are immersed.

Although at first view the situation seems hopeless, we can imagine a procedure for the identification of some links of the relevant external causal chain that can teach us something. It is based upon the assumption that there are neurophysiological external causal links that may also in some way be described in psychological terms, namely, *as coinciding with cognitions, representations, or intentions to designate a single object*. This would allow us to locate some external neurophysiological causal links of a causal-historical chain. The trouble, however, is that the appeal to this resource makes it inevitable that we should first identify cognitions (or internal representations) in order to become able to perceive a correlation between these cognitions and their third-person counterpart in the form of neurophysiological links of the external causal chain, whatever they may be. Since these cognitions and communicable internal representations are typically expressible through descriptions, if we admit that this is the proper way to identify causal chains, it seems that we will end up committing ourselves to some form of descriptivism. Hence, a way out of this commitment does not seem humanly possible.

We can also perform thought experiments helping us to support the conclusion that cognitions and connected descriptions are inevitable for the identification of correct causal chains. The first is the following: Imagine that a very powerful brainscope is invented. This brainscope is a device able to identify the moment when person A, an Aristotle specialist, by remembering and saying the name 'Aristotle', articulates the final link of the correct causal chain, by reading the appropriate type⁶⁶ of neurophysiological link in the neuronal behavior of A's brain. With this information, the brainscope will be able to tell us that another person B is using the word 'Aristotle' in the final sequence of the correct causal chain, simply by reading in B's brain the same type of neurophysiological link as that of person A. Problems emerge when we consider that it will only be possible to know that the brainscope is reading the correct final causal link if both speakers, A and B, *agree*

⁶⁶ I say *type* because I wish to sidestep a possible objection suggested by the controversial concept of multiple realizability (see Polger and Shapiro 2016).

that they are referring to the same Aristotle—the philosopher—and not to another referent (e.g., Aristotle Onassis or Greta Garbo or, say, the Cheops pyramid, even if always uttering the same word ‘Aristotle’). This agreement, however, is cognitive and in the end descriptively expressible. Worst of all, this agreement is *the ultimate criterion* for the conclusion that the brainscope identified the correct final causal link. In other words: the identification of the right neurophysiological type of causal link will depend on cognition and the related descriptions, which shows a fatal *petitio principii* in the explanatory goal of the Kripkian causal-historical *quasi*-referentialism.

An example of a psychological explanation can illustrate the same crucial point of cognitive indispensability. Suppose I decide to buy a gift for a friend named Kate to reward her for a favor. If someone asks me, “Why did you decide to buy the gift?” I will answer, “I was feeling grateful because she did a favor for me”. In this case, it is a decision at the psychological level, which is explained by a feeling that is also psychological. Both the *explicandum* and the *explicans* belong to the same psychological level. But suppose it is possible to explain my decision to buy the gift and my reason for making it by appealing to neurophysiological processes in my brain corresponding to my feeling of gratitude for the favor. Would this isolated explanation be appropriate to explain and justify my decision to buy the gift? Surely not. For it can only be considered appropriate if it is already known in advance that the neurophysiological process in question coincides with the reason and decision to buy the gift, and the feeling of gratitude can be explained as a reaction to another person’s mental states and behaviors. In other words: an external causal explanation of mental acts could only be justified to the extent that we are able to translate it into some sort of supervening internal causal-psychological explanation.

Something similar happens when we consider a possible explanation of the reference by appealing to external causal chains as a whole: such explanations will only make sense to the extent that some of their links are seen as containing external correspondences to internal mental events. Taken by themselves, external causal-historical networks are like shadows in the dark; they are only able to tell us that proper names refer by means of some causal mechanism, which is as true as it is worthless as an explanation.

Imagine now that nearly omniscient alien beings, while visiting our planet, decided to study our linguistic praxis. Suppose they were able to record all our communicative acts and identify causal-historical chains that lead us to utter our proper names correctly in the most diverse contexts. It seems reasonable to think that they would eventually become able to identify these chains without recourse to our descriptions of cognitive-representational links. This seems to suggest that a purely causal third-person explanation is logically possible. However, even this sug-

gestion would be illusory. After all, to identify our language as a proper language, and our referential uses as such, the aliens would need to become aware of our language by identifying cognitive-representational states in our minds corresponding to those *they themselves experience*. In other words, it will always be necessary to find patterns consisting of cognitive-representational-intentional states at some previous stage of the process, explicit or not, which for this reason are demonstrated to be the true causative links interpretable in physicalist terms. We conclude that *cognitively given states must be the ultimate criterion for the identification of external, third-person causative links, even though the latter are indispensable*.

To sum up, the central point of my criticism of Kripke's causal-historical view is that *considered as an anti-descriptivist attempt to explain reference, causal-historical quasi-referentialism inevitably ends up begging the question, by demanding some kind of cognitive-descriptive explanation*.⁶⁷ A purely external causal chain can always be appealed to, and we all know that external causal chains are needed. We cannot avoid a descriptive commitment because the only satisfactory way to find the links that would lead to the correct utterance of a proper name within an external causal ocean is with the help of internal mental states, cognitions, representations, intentions... which to be communicated, must be able to be descriptively translated.

The foregoing considerations are not only true concerning possible neurophysiological links, but also concerning occurrences in the external world like someone baptizing a baby, Aristotelian works being copied in antiquity, Aquinas citing Aristotle, a professor teaching about him, etc. Being necessary, but extremely meandering and independently unachievable, these external causal chains are in and by themselves *completely inscrutable*. The final conclusion is that *if taken in themselves, causal-historical chains have no explanatory power; being unable to justify our referential application of any chosen proper name*.⁶⁸ Kripke's positive view is, therefore, unable to explain how proper names refer.

67 This conclusion can easily be extended to any anti-descriptivist causal-historical communication network view (cf. Donnellan 1972: 337 and Sterelny 1983).

68 It is worthwhile to note that without using all this battery of arguments, Searle came to a similar conclusion forty years ago: "The external causal chain plays no explanatory role whatever in either Kripke's or Donnellan's account... The only chain that matters is a transfer of intentional content from one use of an expression to the next, in every case reference is secured in virtue of descriptivist intentional content in the mind of the speaker who uses the expression" (1983: 244–245).

12 Causal records

Should we conclude from the above arguments that the appeal to external causal chains is never capable of playing any role in explaining reference? Not exactly. Although it is practically impossible to screen external causal chains (sounds made in baptismal acts, specific effects on the brains of participants, multiple resulting actions, etc.), it is often possible to identify what we might call a *causal record*. This can be characterized as *the relevant manifestations resulting from causal-historical communication chains initiated by the object of reference of a proper name or at least relevantly related to it that are cognitively recoverable for the linguistic community*. Although the idea of a causal record can include the causal chain initiated by a relevant baptism, many historical events related to the bearer of a proper name belong to its causal record. Consider, for instance, the fourteen books of the *Metaphysics* in connection with the name ‘Aristotle’ together with the well-known, remarkable historical fate of this work.⁶⁹

The idea of causal records leads us to see another important point, namely, that causal-historical chains associated with the bearer of a proper name extend far beyond a mere baptism. Consider, for example, the name ‘Socrates’. Although we know he was born about 470 BC, we know virtually nothing about his baptism. What we do know about Socrates is found in the testimonies of contemporaries who knew him personally, such as Plato, Xenophon, and Aristophanes, who were later remembered in writings by Aristotle, and the minor Socratics. In these reports we can discern causal records—relevant manifestations—obviously resulting from causal-historical chains, which have come down to us through many ramifications. Although we will never have access to the past causal events and occurrences associated with the real Socrates, we know very well what causal repercussions his acts and words had on the minds of Plato, Aristotle, and the minor Socratics... which produced causal records that have left permanent, memorable landmarks, such as the descriptions of Socrates’ trial and his condemnation to

⁶⁹ After Aristotle’s death, the original Aristotelian manuscripts passed from one hand to the next until they were hidden in a cave for more than two hundred years. Then they were sold to a bibliophile, acquired by the Roman conqueror of Athens, transported across the sea... and finally published in Rome by Andronicus of Rhodes, who gave the work called *First Philosophy* the new title of ‘*Metaphysics*’, a work that ultimately became the most canonical philosophical text of the Occidental Tradition (see Guthrie 1981, Vol. VI, Chapter 3). Specialists have evidence that the texts were actually written by Aristotle, mainly because they know the history of how the manuscripts survived and were passed down to us. The coherent record of *descriptions* punctuating the causal trajectory makes credible the reference of the characterizing description of Aristotle’s works and his *Metaphysics*.

death, as reported in the Platonic dialogues *Apology* and *Phaedo*. A definite description belonging to the causal record, such as ‘the Greek philosopher condemned to die by drinking poison hemlock’ in association with the name ‘Socrates’ has come to us with the help of causal-historical chains. It belongs chiefly to its characterization which, since presented in Plato’s dialogues, serves as a causal record in such a way that *its exposition by Plato in his Apology and Phaedo must also belong to the recorded description*. As we will see later, information about causal records may become extremely relevant to the explanation and justification of reference, and we can easily become aware of it. Conversely, the complete absence of causal records could even lead us to reject a supposed historical reference to the bearer of a proper name as illegitimate.

Important to remember is also that causal records can only gain any explanatory force concerning the determination of the reference because we can represent their components cognitively, which means making them susceptible to descriptive representation. Therefore, *a descriptivist theory of proper names should also be able to incorporate information from causal records into the cluster of descriptions constitutive of the meaning of a proper name*. This requires that the linguistic community (at least through its privileged members) must have some nodal points that have produced descriptive representations of a name’s story in order to justify the name’s referential use. We will discuss in more detail one concrete case justifying this view in Chapter IV, when we critically examine Donnellan’s example of Thales, the first philosopher of the Western tradition.

13 No fear of causal chains

After the above arguments, we are led to ask the question: if the existence of a referred object is at the origin of so many causal-historical chains, why should we give baptism such a special place? We often forget the names of persons and things we know well. Sometimes, we do not even know a name, or something has no name. Consider the case of a monster in a cheap horror film, a creature that has received *no* name there, except “the thing”. Would the lack of baptism be more important for our identification of “the thing” than its terrifying behavior?

Furthermore, besides baptism, we can find a whole network of causal-historical chains initiated by the bearer of a proper name that effectively reaches us, and there are as many of them as there are of the supposedly satisfied descriptions we associate with the name. Consider the case of Aristotle. That he wrote the *Corpus Aristotelicum* seems to be an extremely important fact about Aristotle, which presupposes a causal-historical-informative chain that has come down to us, and with-

out which we could not gain knowledge of those writings or attribute them to him. That Aristotle was born in Stagira in northern Greece in 384 BC and died in Chalcis in 322 BC on the island of Evvia are also important historical events in his biography. But they are only known to us because there are causal-historical chains that extend from the recording of these facts by others up to our awareness of them. It is also by means of causal records, grounded on causal chains, that we know Aristotle traveled to Magna Graecia when he was 17 years old to become Plato's student, that he was Alexander's preceptor, married Pythias, founded the Lyceum, and was called by Dante 'the master of those who know'. Our awareness of these and many other facts is always ultimately assured by not just one, but a multiplicity of associated causal-historical external chains—a network whose existence we are prepared to accept beyond a reasonable doubt, even if as such it remains completely inaccessible to us, though leaving many relevant traces as causal records. But then, why select a specific causal-historical chain—that of baptism—as the only appropriate one? What does a person's baptism—a perfectly accidental sound or visual linguistic sign—do that makes it categorially different and superior to any other causal-historical links producing relevant cognitions associated with a proper name, such as the localizing and characterizing cognitions of its bearer? (Remember that the same reference could receive innumerable other names and forms of baptism in different conceivable worlds.) What is so special about baptism as to justify its causal priority in so many cases? The answer seems to be: not very much.

It is not difficult to show that the causal-historical effect of baptism can be superseded. With the help of counterfactual situations, I can give two examples showing this. The first concerns imaginary events and persons in a possible world very near to ours, where in the remote hamlet of Obljaj, in July of 1894 a baby was baptized with the name 'Ligzarb Rijab'. He was the second son of a married Christian Orthodox Bosnian-Serbian peasant couple... Even though the parents were not called Marija and Petar Princip, soon after his birth Ligzarb Rijab began to have, in all details precisely the same life history as our Gravelo Princip: he excelled as a student, moved to Sarajevo, became radicalized, joined the Black Hands terrorist group and, with his two friends Trifko Grabez and Milan Ciganovic, planned the assassination of the Austrian Archduke during his visit to Sarajevo. In fact, Ligzarb Rijab murdered Archduke Franz Ferdinand and his wife on 28 June 1914 at 10:15 a.m., a crime regarded as the trigger to World War I. As you can already expect, Ligzarb Rijab died in prison some years later in appalling circumstances, exactly like Gravelo Princip. Would the baptism of Ligzarb Rijab under those somewhat different circumstances make us iden-

tify him as a person other than the Gravilo Princip of our world?⁷⁰ Intuitively not. He would be identified by many as *our* Gravilo, only with another name and somewhat different circumstances of birth and genome. The baptismal causal-historical view, even if reinforced by Kripke's here artificial sounding essence of origins, is too poor even by its own standards.⁷¹

Another example of this kind could concern the name 'Napoleon'. Gareth Evans (1973) imagined a Napoleon who was impersonated by a *Doppelgänger* after having fled from Elba in 1814... This idea can easily be further embroidered. In the biography of Napoleon, it is well known that in 1769, in Ajaccio, Corsica, a newborn was baptized as 'Napoleone di Buonaparte'. Now, let us imagine the aberrant counterfactual situation in which the following implausible discovery is made. There was a super-smart malevolent orphan of the same age called Nicólo, whom no one could distinguish by his physical appearance from the real Napoleon.⁷² Knowing that the Buonaparte's were a minor aristocratic family, the boy studied them and did what only his nature would enable him to do. He killed Napoleone when he was almost ten years old, taking his place in his family and entering a military school when he was ten years old. The rest of this story you already know. This Napoleon went to France, where he began a military career leading France to victories in the Napoleonic wars, and at the height of his powers proclaiming himself Emperor of France. Unfortunately for him, he made the fatal mistake of invading Russia, which led to his final defeat at Waterloo and bitter exile on the remote island of Saint Helena. There he dictated his deceptive *Memorial* to one Las Casas and died of cancer four years later.

Now, the question is: who was the real Napoleon? Napoleone di Buonaparte or Nicólo? For Kripke it should be the former since he was baptized as 'Napoleone'. Moreover, he satisfies the individuating essence of origin since the bearer of this name by baptism is the real son of the true parents. Consequently, it should not be Nicólo but rather the child killed by him. Napoleon's family, once knowing the facts, would also think like Kripke, and I have nothing against this choice. Nevertheless, most of us are interested in *our* Napoleon, and our Napoleon is the Na-

70 Curiously, in photos, Ligzarb Rijab looks very much like our Gravilo Princip, and his parents look a bit like Marija and Petar Princip. In fact, even if the parents were called Marija and Petar Prince while the name remained 'Ligzarb Rijab', our story would remain effective against the relevance of the baptismal name in the given example.

71 Certainly, there are cases, like that of Queen Elizabeth II (Kripke 1980: 112), where the essence of origins, namely, to be the daughter of the official parents, takes priority, but this is an *ad hoc* example.

72 This phenomenon of practically indistinguishable persons who lack any family relations is statistically endorsed. Anyway, its real existence does not need to be part of our story.

pooleon who achieved fame in the world. From this last perspective, our linguistic intuition would say something very different. For some, it could even say that we have uncovered a mystery surrounding our Napoleon: as it should already be clear to many, they say, the world's most infamous megalomaniac could not be a true member of the Buonaparte family; our historical Napoleon should consequently be the clever but evil psychopath called Nicólo. This would also explain Napoleon's immense narcissism and his almost complete lack of sensitivity concerning the lives of other people... Indeed, if the switched identity stories were true, future historians would most likely forget Buonaparte and write biographies of Nicólo's Great Deeds, performed under his alias of Napoleon. The conclusion is that the spatiotemporally *localizing* descriptions would be far more important than his baptism. (These include his birth in 1769 in Ajaccio, his further life in France, his retreat from Russia, his time spent in exile on the Isle of Elba, and his exile and premature death on Saint Helena in 1821.) In addition, there are the *characterizing* descriptions (a military genius who conquered much of Europe, started the Napoleonic wars, reformed the legal order, crowned himself Emperor of France, invaded Russia and was decisively defeated by European armies at the Battle of Waterloo...). These things in some way *overcome by far* the force of his baptism. For the true Napoleon—as our historical Napoleon—was not the poor child literally named 'Napoleone di Buonaparte', but the evil, ambitious impostor—the military genius who with justification was called Napoleon, the man of destiny, even if regarding his birth name he was still just Nicólo.

In fact, to be fair, we should better say that in the foregoing case, we have *two meanings* for the name 'Napoleon': (i) the meaning of 'Napoleon' that takes his baptismal name as central and therefore concentrates on his parental origin; (ii) the more common meaning of 'Napoleon' that centers on what more properly counts as the characterizing and localizing descriptions regarding the life of a man generally known to historians as 'Napoleon'. Although determinations of baptism and our most cherished fundamental descriptions usually converge, in the present case they diverge.

Another remarkable point is that in essence, what we said above about causal historical chains regarding proper names also applies to definite descriptions. It contributes to dissolving the impression that the distinction of proper names as rigid designators gives them a radically different way to pick out their references, in contrast to definite descriptions. There are definite descriptions such as the one with which Dante in *La Divina Commedia* "baptized" Aristotle as *Il maestro di color che sanno* (the master of those who know), and such baptisms have generated causal chains reaching down to us. Cervantes also "baptized" his Don Quixote with the description *El caballero de la triste figura* (the knight of the sorrowful figure). In Burkina Faso, there is a building called *La Maison du Peuple* (the house

of the people); it was certainly so “baptized”. The same can be said of the Champaner-Pavagadh Archaeological Park, the Aga Kahn Palace Building, and the Tomb of Abdul Rahim Khan-I-Khana, all of them located in India. Some definite descriptions change their bearers when baptism is publicly asserted: the definite description ‘the Eagle of The Hague’ was initially suggested as an epithet for Joaquim Nabuco, though by chance it ended up as a description satisfied by Ruy Barbosa, who instead of Nabuco went to The Hague.⁷³ Although the words of such descriptions often begin with capital letters (like proper names), no one would deny that they all have strong connotations associating them semantically with their bearers. Furthermore, there is no reason to deny that satisfied definite descriptions are known because of causal-historical chains that usually begin with their causal associations with their references, following a C-condition, as much as it should be in the case of baptism. For instance, ‘the defeated general at Waterloo’ came to us by means of a causal-historical chain, like any other definite description, and the “baptismal” causal chains of descriptions, since they reflect the connotations inscribed in them, seem to be more important than those we associate with typical proper names. A consequence of this is that the puzzling difference between rigidity and accidentality must be sought elsewhere (see Chapter III, § 14).

It is also worthwhile to note that according to Kripke, bearers of proper names have essentiality of origin. His main example is that of Queen Elizabeth II (1980: 112f.), since she would not have become Queen were she not the daughter of Albert, Duke of York, and his wife, Lady Elizabeth Bowes-Lyon.⁷⁴ This example is, however, biased, since in the case of a queen, biological parenthood acquires maximal importance. If we look at present theories of parenthood, we see that the point is highly controversial and conventional (see Ahlberg and Chobli 2017). Often the true parents are considered those who educated and nurtured the child, independently of its biological origin, which is considered less important.⁷⁵ Moreover, in the case of proper names of physical objects, the origin is often irrelevant: Who really cares which quarry produced the marble used in building the Taj Mahal? Thus, the importance of origin must be relativized, as much as the importance of baptism (Costa 2018: 98–100).

⁷³ Both men were Brazilian writers, diplomats, and statesmen.

⁷⁴ Her father became King of England after his brother Edward abdicated the throne, and this made her next in line of succession.

⁷⁵ For Kripke, the essentiality of origin is shown by the fact that if one were born to parents *x* and *y*, then one could not have been born to any other parents (1980: 113). But so understood this is nothing beyond a trifling tautology like ‘If *A*’s only cause is *B*, *A* cannot be caused by anything other than *B*’, showing no relation to the referent.

If we relativize the role of baptism, then the appeal to causal chains, though unavoidable, does not contribute to *categorially* distinguishing proper names from descriptions, since definite descriptions are also only able to refer because they are, if satisfied, in some way or other causally related to their creation in acts of reference, satisfying some kind of C-condition. Consider the definite description ‘the man who created the idea that form, unlike matter, is what gives a thing its identity’. Independently of being Aristotle or any other person, if the person existed, this person, by means of his writings or utterances, was a causal factor directly or indirectly related to the fixation of that description, along with its intentional maintenance and transmission by means of a causal chain responsible for the description’s reference. Even fictional descriptions are causally determined. The definite description ‘the man in the iron mask’ is causally related to a historical novel written by the French writer Alexander Dumas. The almost trivial fact that the relationship between naming and reference maintenance and transmission is causal does nothing to differentiate the mechanisms of reference of proper names from those of definite descriptions.⁷⁶

14 A very simple example

Before completing this topic, I wish to recap by giving a didactic example. It concerns a very simple proper name for a playful dog named Dodó (a corruption of ‘Dona’), which my wife and I once owned. Before this female dog had a name, we already knew how to identify her as ‘our dog’. We identified her perceptually by t-properties like her size, the brown color of her fur, the shape, and the white color of her nose, not to mention the localizing fact that she was the only canine living in our house. When she came to be called Dodó, we used that name keeping in mind the creature with the described characteristics, along with some peculiar behavioral traits. Moreover, we also remember some causal records left by Dodó, like being chased by a furious owl after unwisely sticking her nose in its nest... Thus, what we did was to associate the name with representations capable of being interpersonally shared and to a large extent expressible in the descriptive form of a spoken portrait, if necessary. Those who really knew Dodó, knew a de-

⁷⁶ The same point could be extended to indexicals. If a host says to her servant, “When the dinner table is set, take that chair with red upholstery you can see in that corner and put it at the head of the table”, the host, by the act of pointing together with a complementary description, is creating a localizing and characterizing identification rule for the chair: This rule is causally grasped by the servant, who is aware of it and at the right time will take the chair and put it in the required position.

scription with a characterizing and a localizing form: 'the female dog with such and such t-properties, who belonged to such and such people and who lived in such and such a place'. Of course, I was able to tell the name to other people who had never seen her without the aid of that description, saying she was our dog. These people knew, therefore, the representation expressed by the very secondary description: 'Claudio's dog', even if they were unable to identify the dog by themselves, do not know her name, and never heard about her baptism. They borrowed the reference from me (in Searle's terms, their reference is parasitic on my non-parasitic reference.)

It should be noted that we are here considering a variety of causal factors, including a causal-historical chain (the satisfaction of a C-condition) regarding the baptism of the dog with the name 'Dodó'. These things are necessary to explain how it is possible after all these years to speak about that same dog. However, it is even more important to note that the causal factors and some links of the causal chain come to be cognitively registered as internal cognitive-representational contents that can occasionally be updated (perhaps in a non-reflective way) in peoples' minds. Typically, they are expressible-communicable through definite descriptions expressing what, as it seems, could be called criterial identification rules (criterial description-rules, as we will see).

It is true that when we speak of Dodó, we satisfy the requirement of having the intention of referring to the same object... Nevertheless, this intention was at no time devoid of cognitive content. It was the intention to designate the same object by sharing cognitive elements in the form of definite descriptions mostly known and shared by the name's privileged users. Of course, these intentional elements only exist because the links of the causal chain are in this case neurophysiological events of a certain type, whatever they may be. They could be presented to us internally in terms of cognitive-representational contents which are normally able to be descriptively communicated in proportion to their relevance... These links, when thought of by various speakers, present an indispensable degree of similarity and complementarity to each other. The example also suggests that some broadly constructed causal-historical network is a necessary background condition for the cognitivist-descriptivist explanation and a justification of our acts of naming. However, the work of explanation is on the descriptivist side: the more weighted definite descriptions we add, the more we know what that dog was like, and, it seems, the better we are able to referentially identify her.

15 Conclusions

As I have shown, the existence of a C-condition including some very broadly constructed external causal or causal-historical connection between the name and its reference—no matter how indirect—remains an indispensable condition for a proper name to possess a reference. This is an indisputable background condition and (as far as I know) was already agreed upon by sophisticated descriptivist philosophers such as P. F. Strawson.

However, if our goal is to explain how a proper name refers, the C-condition or any broadly constructed external causal-historical connection, taken alone, is useless. Explanatory relevance, justification, and even the intelligibility of reference, as our examples have shown, emerge only when external causal factors are cognitively interpreted in the form of mainly localizing and/or characterizing definite descriptions that as a whole seem to be sufficiently weighted to support reference to a unique individual.

People tend to believe in what they wish. Yet the conclusion of the *ad nauseam* argumentative evidence collected in this chapter is that with his view of causal-historical baptism, Kripke tried to suggest as a necessary and sufficient explanatory condition for the reference of many proper names something that, albeit pointing to a real fact—the fulfillment of a C-condition—when closely examined reveals he is either begging the question against descriptivism or giving an explanatorily empty condition for a name's reference. All the illuminating aspects of his views ask for the development of a more refined kind of descriptivist approach. Hence, it seems that descriptivist views of how proper names refer do not deserve rejection, but rather, improvement. This is what I hope to do in the next two chapters.

III Metadescriptivism: Developing a theory

The mainstream of our philosophical community sometimes behaves like a pendulum, which first oscillates to one side and then to the other.⁷⁷ One result of this is that, when considered over a short period, it offers us illusory reassurance that the pendulum will continue to move in the same direction forever. The theory of the direct reference of proper names attributed to John Stuart Mill did not have a long lifetime. It lost credibility with the appearance of the internalist-descriptivist theories of Frege, Russell, Wittgenstein, P. F. Strawson, John Searle, and others. In the sixties of the last century, it seemed as if the true theory of reference for proper names had finally been outlined. However, what a surprise it was when in the early seventies the philosophical world was shaken by a new conception of how proper names refer!—One that sounded like a rebirth of Millianism, sophisticatedly re-conceived as the causal-historical externalist view of proper names first advocated by Saul Kripke and Keith Donnellan, and later by others, in a movement that persists to the present day? As I endeavored to show in the previous chapter, it is not at all certain that this movement is definitive. Indeed, my goal in this chapter is to reverse the direction of the pendulum's trajectory toward a new kind of neo-descriptivist theory. Notwithstanding, my approach must be considerably more complex and nuanced since it must take enough account of the considerable range of reflections produced for and against the later causal-referential view. Although the argument I will present in what follows is lengthy and detailed, requiring some effort from the reader, I believe it is in the end clear and convincing and can lead us, ultimately, to the only reasonable alternative.

My working hypothesis on descriptivist theories of proper names is that they fail due to a "lack of structure". A proper name cannot take the place of some haphazard cluster of non-differentially weighted descriptions, as orthodox cluster theory seems to claim. Indeed, a look at the examples analyzed in the last chapter makes somewhat intuitive the idea that definite descriptions concerning the spatiotemporal localization of the object of reference ("localizing descriptions"), as much as those definite descriptions concerning the main reasons why we use a proper name ("characterizing descriptions"), should occupy a place of pride against more fortuitous descriptions. That is, the descriptions that make up a cluster must be subject to some *structuring principle*. And the main reason why Searle's version of cluster theory lacks explanatory power is that it does not take account of the internal organization of the cluster, giving the impression that a causal-historical view constitutes a plausible option.

77 Bencivenga 1987.

Now, what structuring principle are we seeking? Thinking hypothetically, a plausible way to find an answer seems to arise when we consider what we have seen in the appendix of Chapter I. The constitutive descriptions of any cluster can be seen as what could be called *description-rules*, i.e., *linguistic expressions of semantic-cognitive criterial rules*, insofar as they must be able, somehow and to some extent (even if minimally and only tacitly) cognitively⁷⁸ to connect a proper name with its bearer. Since the definite descriptions constitutive of a cluster summarized by a proper name are expressions of rules, the structuring principles used to choose them should be *rules of rules*. By this, I mean *meta-rules*, *higher-order rules* having as their field of application those first-order rules expressible as the descriptions belonging to the cluster of descriptions of proper names. Hence, I call these structuring principles (assuming their existence) *general meta-descriptive rules* since my aim would be to apply them selectively to the cluster of descriptions of any proper name. Because of this, I call the version of descriptivism that I am searching for a *metadescriptive* theory of proper names. (Some would say this is a form of *causal-descriptivism*.⁷⁹ But I must disagree: It would not be fair, since even if this view assumes an indispensable causal element, this element, as we saw in the last chapter, has no explanatory power, being therefore unable to tell us how a so-called proper name reaches its reference.)

Before trying to justify the existence of general metadescriptive rules and explain them, we need a classificatory investigation of the types of descriptions belonging to the clusters. The reason is that many definite descriptions do not seem very relevant or even just minimally relevant. Consider the following one: ‘the person who in the winter of 1938 lay in the grass of the dikes that enclose the Mississippi, and in the presence of the moving waters of that magnificent river experienced one of his rare moments of peace...’ (Russell 2010: 460) This is an irrelevant definite description that I found in the autobiography of Bertrand Russell; irrelevant because almost no one knows or ever knew it. To select the more important kinds of definite descriptions, we should start by systematically investigating the main types of descriptions belonging to the proper name’s clusters. These are the ones shared by privileged users, since it is certain that if there are general metadescriptive rules, they will not apply to irrelevant descriptions.

Before arriving at the proposed classification, however, it is worth noting that philosophers who defend descriptivist views of proper names often take as examples vivid, but in fact arbitrarily chosen definite descriptions associated with a

78 As already noted, I use the term *cognitive* to include tacit non-conscious cognitions; one does not need to be able to explain the descriptions or rules one has in mind when applying a word.

79 The term ‘causal descriptivism’ was coined by David Lewis in a 1984 article to designate mixed theories of proper names. See also Kroon 1987.

proper name. These descriptions are chosen for their often-alluring character. Nonetheless, they are deceitful and can frequently be dismissed as having almost no importance for the real identification of the object to be referred to by a proper name. Frege, for example, suggested that the name ‘Aristotle’ could be used in place of the descriptions ‘Plato’s greatest disciple’ and ‘the tutor of Alexander the Great’. Wittgenstein suggested that the name ‘Moses’ could be used in place of the description ‘the man who as an infant was discovered in a basket floating in the Nile by pharaoh’s daughter’. And Searle remembered in connection with Aristotle the description ‘the founder of the Lyceum school in Athens’. But, as we shall see, none of these folk descriptions plays a relevant role in identifying the persons they indicate.

1 Fundamental description-rules

There are undoubtedly more and less weighted definite descriptions associated with proper names. Consider, for example, the proper name ‘Moses’. The description ‘the man who led the Israelites to the promised land’ seems far more relevant than ‘the man who as an infant was found in the Nile by pharaoh’s daughter’. After all, it is intuitively clear that the falsehood of the latter description would cause far less semantic damage than the falsehood of the former.

To hierarchize description-rules, I want to distinguish three groups of definite descriptions capable of expressing parts of the informative content of proper names:

groups A and B, containing what I call *fundamental descriptions*,
and
group C, containing what I call *auxiliary descriptions*.

I want to show that groups A and B are those of descriptions that are truly relevant to the identification of the object, while group C is that of descriptions which, although often exemplified and having greater or lesser value for the connection with the object, do not play a really grounding role in the identification. However, as we will also see, they might gain a very important communication role, particularly in borrowed or parasitic references. The rationale for these distinctions will be given in what follows.

Let us first look at what I called the fundamental descriptions belonging to groups A and B. To prove that they are not my arbitrary invention, I begin by showing why they are the most relevant description-rules in the practice of naming. But how to do this? Unexpected as it might seem, there is an easy way. As is

well-known, J. L. Austin, the quintessential ordinary language philosopher, advised that when doing philosophy, one should always have the *Oxford English Dictionary* at hand.⁸⁰ This can be helpful when we need to get a pre-philosophical understanding of the plural meanings of concept words that are central to our understanding of the world.⁸¹

However, many have objected that we cannot look up the most important types of descriptions associated with proper names... After all, proper names are generally not found in dictionaries. This is a reason why some philosophers have decided that proper names have no meaning. But this should not discourage us. Even if proper names are not usually included in dictionaries, at least many of them are explained in encyclopedias. Hence the new advice: “if you wish to find the descriptions that matter for a proper name, you should start (if possible) by consulting articles in encyclopedias!”

To begin with, consider the ‘Aristotle’ entry of my pocket *Penguin Philosophical Dictionary*. I chose this because it is the shortest competent entry I could find. There we read:

Aristotle = (384 BC–322 BC) was born in Stagira, he produced the greatest philosophical system of antiquity. (What follows is a short list of Aristotle’s main works.)

When we examine this or any other encyclopedia entry for the proper name ‘Aristotle’, we always find a similar pattern. They especially abbreviate two description-rules, one establishing at least the *place and time* of Aristotle’s life, to

80 His words also serve as a warning against formalist overconfidence: “Our common stock of words embodies all the distinctions men have found worth drawing, and the connections they have found worth marking, in the lifetime of many generations: these surely are likely to be more numerous, more sound, since they have stood up to the long test of the survival of the fittest... we are looking again, not merely at words, but also at realities we use the words to talk about: we are using a sharpened awareness of words to sharpen our perception of reality... Certainly then, ordinary language is not the last word: in principle, it can be everywhere supplemented and improved upon, and superseded. Only remember, it is the *first* word”. (See Austin 1979: 182–185; for objections concerning the abuses of this method, see Grice 1989, Part I. It must be remembered that Austin’s book from 1962, as much as P. F. Strawson’s book from 1959, went far beyond the ordinary language philosophy depicted in Austin’s quoted passage.)

81 Consider, for instance, the plural meanings of the verb ‘to know’. There are at least three thinly related meanings of this verb: knowing as ability (one knows how to swim), knowing by acquaintance (one knows the Dolomites), and knowledge of truths (one knows that the square root of 2 is an irrational number). Really important is only the last one.

which are added the stages of his *career* in space and time,⁸² while the other establishes *the most important properties* attributed to Aristotle, those which constitute *the very reason* why we apply the name. These properties are, above all, the central ideas and arguments presented in the *Corpus Aristotelicum*.

We can now abstract from this concrete case two types of fundamental description-rules justifying what I called groups A and B, respectively:

A) Localizing description-rule: expressed by the description that establishes what we consider to be the object's space-time location and career (with the possible inclusion of spatiotemporal antecedents and consequents).

B) Characterizing description-rule: expressed by the description that establishes what we consider to be the object's most relevant properties—those that constitute the very reason we name it (possibly including relevant antecedents and consequents).

We must note that the spatiotemporal career may include causal paths before and after the object's existence, as the final clauses of (A) and (B) show, insofar as they are seen as relevant. Thus, concerning causes, it is relevant to the name 'Aristotle' that he was the son of Philip of Macedon's court physician; it is particularly relevant to Queen Elizabeth II that she was the daughter of Prince Albert, Duke of York, who later became King George V... Moreover, concerning effects, it is relevant to the name 'James Mill' that he was the father of John Stuart Mill; and it is still more relevant to our memory of the name 'Gavrilo Princip', the Bosnian Serb student who assassinated Archduke Franz Ferdinand of Austria and his wife, that his crime unintentionally triggered the First World War. However, it does not seem relevant to identify Anaxagoras' parents (there are no historical references to them) or the causal reason for the Greenwich meridian being located where it is (since it is arbitrary). Kripke reserved an entirely different place for such things with his story about the essentiality of origins, while my intention is only to link them to descriptivism, without a further commitment to metaphysical essentialism.

Let us now consider Aristotle's localizing and characterizing description-rules, by more explicitly stating them. Both descriptions are highlighted in encyclopedias and can be briefly summarized as follows:

⁸² The fact that spatiotemporal localizing rules have a privileged role has not gone completely unnoticed. Paul Ziff, for example, judged that localizing descriptions or localizing implications form a central part of a proper name's reference mechanism (1960). (See also Tugendhat 1976, Chapters 21–25.)

- (a) Localizing description-rule of the name ‘Aristotle’: the person who was born in Stagira in 384 BC as the son of Philip of Macedon’s court physician, who lived most of his life in Athens, had to go to Assos, returned to Athens, but in the end had to flee to Chalkis, where he died one year later in 322 BC.
- (b) Characterizing description-rule of the name ‘Aristotle’: the author of the relevant philosophical doctrines explained in *Metaphysics*, *Physics*, *Nicomachean Ethics*, *Organon*, *Topics*, and other main works of the *Corpus Aristotelicum*.

Such fundamental description-rules or conditions can be more and more descriptively detailed; for instance, we know that he crossed the Aegean Sea when he was 18 to study with Plato, and that for a short time 20 years later, after the death of Plato, he taught Alexander and then lived for two years on the island of Lesbos. There, with the help of Theophrastus, he conducted important biological research in a lagoon (...). And we could give detailed summaries of the 14 books of his *Metaphysics* or his *Ethics* or his *Organon* (...). In Aristotle’s case, these accounts are ultimately justified by historical testimonies and the surviving exoteric writings. Moreover, it seems that in this case, the characterizing rule is somewhat more relevant, which would give it greater weight. Anyway, both description-rules are clearly relevant and, as you must have noted, not completely separable.

To underline the importance of fundamental description-rules, here are some examples of definite descriptions of group A, which I took directly from the headings of *Wikipedia* entries.⁸³ They are presented as conditions for localizing identifying properties of the objects referred to by proper names:

1. Churchill (Sir Winston Leonard Spencer Churchill): a person who was born on 10/11/1874 in Oxfordshire and died on 24/1/1965 in London. He lived most of his life in England, except for some short holidays in cities like Venice, though as a young man, he worked as a correspondent in the British colonies...
2. Taj Mahal: a mausoleum commissioned in 1632 near the city of Agra, India, existing from 1653 to the present day.
3. Paris: a city of more than ten million inhabitants situated in the center of northern France, on the banks of the river Seine. Its emergence as a city dates back to the 9th century.

⁸³ I chose *Wikipedia* because of its ease of access; but any other encyclopedia will emphasize the same kind of information, often in the same order.

4. Amazon: a river whose source is in the mountains of Peru, and which empties into the Atlantic, following the line of the equator. Together with its tributaries, it forms the world's largest watershed. It has existed since time immemorial...

Note that the localizing description has at least one characterizing element, which consists in classifying the *kind* of object referred to. Thus, Churchill is classified as being a person, the Taj Mahal a mausoleum, Paris a city, the Amazon a river..., Venus a planet... This minimum characterization is indispensable for the localizing description to make sense. Furthermore, the kind of object has some *priority in weight*: it would not be possible to mean what we mean with the name 'Churchill' if he were a dog, 'Taj Mahal' if it were a shack, 'Paris' if it were a long house, 'Amazon River' if it were a stream..., 'Venus' if it were an asteroid.

Group B of description-rules is also in a sense fundamental. One can make this clear by scanning the headings of encyclopedias in general. In the same order, here is what *Wikipedia* briefly states:

1. Churchill = was a remarkable British statesman, who was the prime minister of the United Kingdom from 1939 to 1945, in the critical years of the Second World War, and again from 1950 to 1955.
2. Taj Mahal = the wonderful marble mausoleum constructed by Emperor Shah Jahan for his beloved wife, Mumtaz Mahal.
3. Paris = the capital of France, the economic, cultural, and political center of the country, and one of the most beautiful cities in the world.
4. Amazon = the river carrying the most water and possibly also the longest river in the world, source of 1/5 of the freshwater flowing into the oceans.

In the course of this chapter, I want to make it evident that the primacy of the localizing and of the characterizing descriptions is in no way an extravagance of encyclopedias. It is pretty much because of the importance of properties denoted by the definite descriptions of these two lists that we are able to apply these names. Properties like these are considered of greater importance because they result from an agreement among privileged users about what would be the most fundamental properties associated with their bearers.

2 Auxiliary description-rules

Now I want to consider the definite descriptions that have still not been covered. They are what I call the *auxiliary description-rules* belonging to group C. There are

many of them, some colorful and used in everyday life in the place of names. That is why, as I have suggested, they have often confused philosophers, making it hard to determine what is most important about reference. In the following, I present a classification of auxiliary description-rules as (a) metaphorical, (b) accidental but well-known, (c) accidental and generally unknown, and (d) adventitious. Though unsystematic, this classification can be helpful. Here it is:

(a) The first case, the auxiliary description-rules belonging to group C, consists of those that can be called *metaphorical*, often used in place of proper names. Examples are descriptions such as ‘the lady of the camellias’, ‘the eagle of The Hague’, ‘the city of light’, ‘the knight of the sorrowful figure’, ‘the master of those who know’. The properties they allude to are not, in general, those that draw attention to their most relevant peculiar feature. But they do draw attention to their usefulness as suggestive and picturesque mnemonic devices. Thus, ‘the iron marshal’, for instance, draws attention by pointing to a striking characteristic of Marshal Floriano Peixoto, his authoritarian and uncompromising character. But this is of little value in the sense of helping us identify Floriano Peixoto unequivocally, because there were many other persons with similar character traits. What most properly allows us to identify Floriano Peixoto is, certainly, our awareness that he satisfies the localizing description (a) of having been ‘the military officer born in Joazeiro in 1839, who served in the war between Paraguay and Acre and died in 1895 in Barra Mansa’, in addition to the characterizing description (b) of having been, mainly, ‘the first vice-president of Brazil and the second president, responsible for acts of repression that consolidated the republic’. Both descriptions are unavoidably and necessarily found in encyclopedias.

(b) There are also non-metaphorical auxiliary description-rules, which we can classify as *accidental, but well-known*. Examples of well-known accidental descriptions are ‘the man who as an infant was found in the Nile by pharaoh’s daughter’ and ‘the tutor of Alexander the Great’. These descriptions are known to most people who can be said to know what is meant by the names ‘Moses’ and ‘Aristotle’ and often also by some who do not. Yet they are quite accidental, for surely neither Moses nor Aristotle would cease to be the persons we consider them to be if the information provided by these descriptions were false.

To this type also belongs a peculiar definite description, which has the form of ‘the bearer of the name “N”’, for example, ‘the bearer of the name “Aristotle”’, understanding this description as referring to only one distinct individual, namely, our ancient Greek philosopher Aristotle.⁸⁴ Definite descriptions of this kind are

⁸⁴ This well-known accidental description was the basis for metalinguistic theories of proper

accidental, for their referents would not cease to be what they are, nor to be easily identifiable as such if they had changed their name, or if in a different but conceivable world they had received another name. Thus, imagine that in a counterfactual situation Nicomachus, a physician at Philip's court, had baptized his son born in Stagira in 384 BC with the name 'Pittacus' instead of 'Aristotle'. Supposing that this Pittacus had studied with Plato, written the entire *Corpus Aristotelicum*, and had the same biography as Aristotle, we would not hesitate to say that in this possible world Pittacus was our Aristotle, only with a different name. Indeed, it is a mere accident that Aristotle was baptized with the name 'Aristotle', while it does not seem to have been equally accidental that he wrote the Aristotelian works or that he lived in the classical period of ancient Greece.

That the description-rule of the form 'the bearer of the name "N"' is not fundamental to the identification of a particular object is made evident by the fact that we can use a name—as a phonetic-graphic sensible form, a *name-word*—and, after discovering that it is incorrect, replace it with the correct name-word for the same person. In addition, we can know who a person is—her appearance, where and when to find her, what is relevant about her—without remembering or even knowing what the person is called (some people keep forgetting proper names). The proper name, understood as a sensible form, is like the label on a binder that contains a cluster of description-rules: We can replace the label ('Aydes' changed his name to 'Adilson'), and we can even be deceived as to the most appropriate label, as in the case of the self-baptized name ('Raúl Rivas' was actually baptized as 'Marcial Maciel'). Although at least some label is in the end indispensable, what really matters here is the internal *content* of the binder, seen as a kind of identification rule for the name's referent. After all, even if some sensible mark and a disambiguating context are necessary for us to know which binder we are considering, such a mark is, in the end, the result of often arbitrary and potentially changeable choices (the Russian city currently called 'Volgograd' was previously called 'Stalingrad', although it was originally called 'Tsaritsyn'). In the end, it is the internal semantic content that has true epistemological and ontological import.

This last comment leads us to a curious conclusion. If we admit that in our reflections on language, a philosophically relevant explanation is one that has epistemological and ontological import, then a philosophical theory about the semantics of proper names is not a theory restricted to what we usually call a 'proper name' in the current language, as a phonetic or orthographic expression of what

names, according to which the meaning of a proper name N is given by the description "the bearer of the name 'N'". The idea was the source of immense literature that will not be of interest here.

we mean with a proper name. After all, the main reason why the philosophy of language is distinguished from linguistics is not as much the breadth of its scope, which goes beyond a particular language (symbolic logic could also do such work), but the presence of epistemological and ontological imports. It is in this sense that Frege's semantics, as much as the present discussion, is eminently philosophical, unlike, for example, Saussure's linguistics (2016).

The phonetic and orthographic expressions are what lead us to regard the word 'Köln' as a different proper name than 'Cologne' (name as a symbolic expression), while we could also say that they are respectively the German and French *forms* of the same proper name (a name as an expressed cognitive content). In contrast, a philosophically relevant theory of proper names should be essentially *a theory of internal semantic-cognitive contents expressed by proper names' forms, which should be seen as identification rules for proper names' bearers, associated with names as sensible marks, such as the ones for which we are searching.* If this is so, a theory of proper names must be essentially a binder theory and not a label theory, since although required for communication, labels are arbitrary and capable of substitution.

Although not very helpful, I think we can make a distinction here that is to some extent parallel to the distinction between the *lexical sense* and the *semantic content* of indexicals. Indexical terms are singular terms like 'this', 'that', 'I', 'you', 'she'... which can refer to different things in different contexts. However, they have a fixed lexical sense; for instance, "this" should usually indicate something near to the speaker', "I" should usually indicate the speaker when she utters it'. However, indexical terms must also have semantic content, the sense they gain when applied to an object given in a particular context (for instance, when I say *this* and am referring to this notebook or when I use *I* to mean myself). Correspondingly, the proper name is by definition a term whose sense is not expressed through its syntactic complexity, which is used to identify a single object, distinguishing it from a multiplicity of others (Tugendhat 1976: 425f.), and the proper name of a person can be categorially distinguished from the proper name of a geographic location in a way to some extent parallel to the lexical senses of indexicals, like 'I' and 'this'. What really matters, however, is the semantic-cognitive content of the proper name, which a neodescriptivist will understand in terms of senses as criterial rules (Michael Dummett) expressible by descriptions.⁸⁵

Semantic theories on the superficial linguistic level of a proper name's function are possible, I concede, but they will lack epistemic and ontological import, since they will not give us the criterial rules that would allow us to properly indi-

⁸⁵ See Chapter I, Addendum.

viduate any name's bearer. A theory of the semantic-cognitive content of a proper name, in turn, should be a theory like that of its (neo)fregean sense, of its cognitive meaning, or of the identification rules establishing the criteria for the identification of its bearers and what is common among them. Only such a theory will have the explanatory force to clarify the epistemic relationship between a chosen proper name and its object of reference. But for this very reason, the sensible mark of a proper name becomes, in the end, something accidental, explaining why a set of different sensible marks can conventionally express an identical or similar internal semantic content, thereby not failing to produce the act of naming the same referent. Therefore, for us, *a proper name is an identifying (internal) semantic-cognitive content added to an arbitrary conventional sensible mark that makes that content communicable*. For a philosophically relevant theory of proper names, these sensible marks are only their unavoidable symbolic expressions.

(c) There are also *accidental and generally unknown description-rules*. Examples are 'the husband of Pythias', 'the lover of Herphyllis', 'the grandson of Achaeon'. Not many people know that these descriptions are all associated with the name 'Aristotle'. Such definite descriptions can, of course, be multiplied at will, and are found in abundance in biographies. There are, however, still less familiar definite descriptions, for instance, 'the first naturalist to make a hole in a fertilized chicken egg in order to describe the living embryo within it', whose bearer was also Aristotle when he lived in Lesbos. Because such descriptions are known to only a few persons, they have in themselves almost no relevant function in their association with the proper name. Thus, imagine that all a speaker knows about Aristotle is that he was Achaeon's grandson. In most cases, he will not be able to make use of this name to communicate with other people, since a description that is shared by only a few cannot help people recognize it as referring to Aristotle the famous Greek philosopher, rather than, say, the Greek multi-millionaire Aristotle Onassis, who could also have had a grandfather called Achaeon⁸⁶—here, the contexts of the utterance and the proper name's learning could eventually disambiguate the word 'Aristotle'.

(d) Finally, there are *adventitious auxiliary descriptions*, such as 'the philosopher mentioned by the teacher yesterday' or 'the girl who was introduced to us at the party'. The rules expressed here associate the name with some context in which it was properly used. They are typically provisional: at first spontaneously produced in public speech, then used for some time, and later usually abandoned

⁸⁶ I assume for the sake of argument that the person does not know who Achaeon was and when and where he lived in antiquity, for this knowledge would already imply that she associates the name with descriptions such as a Macedonian philosopher from the 4th century BC.

and forgotten. Consequently, they are for the most part non-permanent semantic constituents and characteristics of the name. However, because these description-rules refer to a context known only to a group of speakers in a certain period, they may suffice for a speaker to be able to use them alone or associated with the proper name in conversations. Hence, the speaker will need to be recognized by interlocutors to allow for subsequent exchanges of information about the proper name's bearer.

At this point, the following more general objection could be made. Apart from the fact that they appear in the headings of encyclopedia entries, there does not seem to be any compelling reason to privilege the so-called fundamental description-rules of groups A and B. After all, just as auxiliary descriptions are contingent, the same can be shown to be the case with fundamental descriptions themselves. We can imagine improbable empirical possibilities; for instance, that Aristotle did not write his philosophical works, that Churchill did not become a British statesman, that the Taj Mahal was for some reason not built near Agra, and that Paris did not arise where it did, but rather in the south of France... but these are certainly not impossibilities. We can, after all, imagine possible worlds where neither the rules of characterization for Aristotle and Churchill, nor the rules of location for the Taj Mahal and Paris are applicable, but even then, the philosopher and the statesman as well as the ivory-white marble mausoleum and the city of light still exist in them. In isolation, fundamental description-rules do not designate anything necessary for the identification of a proper name's bearer. On the other hand, it seems that we can identify a single object through a single auxiliary description: as the case might be, to know that someone is talking about Aristotle may be enough to know that he is speaking of the founder of the Lyceum, or Alexander's tutor, or even to know that he is speaking of Pythias' spouse, Herphyllis' lover, etc.

The only thing I can do in the face of objections like these is to ask the reader for patience! What we have done so far is to consider with some attention the main pieces of a puzzle. Only after the introduction of second-order rules capable of selecting the weighted combinations of first-order description-rules able to justify the application of a proper name, will the importance of the descriptions of groups A and B become indisputable.

3 Disjunctive rule

From our working hypothesis and from what was said above, it seems to follow that we need to search for ways of identifying combinations among the description-rules of a proper name's cluster that make possible the name's referential ap-

plication. To do this we need to look for some second-order rule (or description expressing it) that can be applied to the cluster's first-order description-rules associated with any proper name, so that the second-order rule is able to select the combinations or amounts of information that make it possible to apply any name. This rule of rules should therefore be a general meta-rule, a *metadescriptive rule* applicable to bundles of descriptions that we associate with proper names in general.

Is there such a general metadescriptive rule? If there is, we should be able to find it. Assuming by hypothesis an affirmative answer, the question becomes: how can we find such a rule? The strategy I propose is the following. To begin with, it seems quite advisable to dismiss group C descriptions as insufficiently relevant. They seem to be relevant identifiers in the sense of assisting the speaker in his communicational connection with the object by means of a parasitic way of reference. This function is realized to the extent that they enable us to insert a name into a *discourse*, understood as a communication medium, assuming the true identification rules of the object capable of completing this connection are in some way already known. If the true identification rules are not known by all, they can at least be known by privileged users of a name, or even partially known by each of them, on the assumption that they may have different and complementary focuses of specialization.

What evidence can be offered for this suggestion? There is actually quite a bit available. Whenever the fundamental description-rules belonging to groups A and B are accepted as applicable, the auxiliary description-rules could be absent, even on the whole! To prove this, imagine that the group of conditions A and B for the name 'Aristotle' are well satisfied. That is, the proper name 'Aristotle' satisfies (a) its localizing description rule of being the person born in Stagira in 384 BC as the son of Amyntas II, the court doctor, lived most of his life in Athens, studied with Plato for 20 years, went to Assos, returned to Athens, and later found refuge in Chalkis, where he died a year later in 322 BC... and satisfies (b) its characterizing description-rule of being the author of the relevant philosophical doctrines presented in *Metaphysics*, *Physics*, *Nicomachean Ethics*, *Organon*, *Topics*, and other famous works of the Aristotelian works. Now, try to imagine a counterfactual situation where he did not satisfy any auxiliary description rule used to identify him. Thus, suppose that he was neither Alexander's tutor, nor Nicomachus' son, nor Pythias' husband, nor Herphyllis' lover, and never founded the Lyceum. You can even imagine that his grandfather was not called Achaeon, that he never had a son named Nicomachus, never spent time on Lesbos, and was not called by Dante the master of those who know, even that his birth name was not 'Aristotle'... All the same, he would perfectly well still have been the greatest Greek philosopher alongside Plato... that is, *our* Aristotle!

However, the same cannot be said of fundamental descriptions. We cannot imagine that *no* fundamental description-rule applies; we cannot conceive of “ $\sim A \ \& \ \sim B$ ”. Suppose that neither the localizing nor the characterizing description-rule applies, and a person is still called Aristotle. Then he will not be *our* Aristotle at all. To make this clear, just remember the example presented by Searle of the expert on Aristotle who claimed to have discovered that Aristotle could not have written any works attributed to him, because he was only an illiterate Venetian fishmonger of the late Renaissance... (1967: 490) We will answer that at most he may be talking about some homonym of ‘Aristotle’ who has nothing to do with the person we rightly call by this name. This we know, because he did not even minimally satisfy any of the fundamental description-rules associated with the name ‘Aristotle’.

If the meta-identifying rule excluded “ $\sim A \ \& \ \sim B$ ”, could it be reduced to “ $A \ \& \ B$ ”? Would it require the conjunction of the localizing description with the characterizing description, or would it be better to just reject its disjunction? Surely, it would not require conjunction in all cases. For although objects referred to by proper names usually satisfy a conjunction of groups A and B of the description-rules, we can easily conceive of unusual situations and cases where a name refers without satisfying the descriptions constitutive of one of these two groups.

To highlight this point, consider once again the name ‘Aristotle’. We can easily imagine possible worlds close to ours where the famous philosopher existed without satisfying the conjunction of the rules of location and characterization for his name. The spatiotemporal localizing rule for Aristotle does not necessarily need to be what his identification-rule demands: we can perfectly well conceive of a possible world close to ours where he wrote the Aristotelian works, even though he was born and died in Rome a few centuries later, and there was no disciple of Plato born in Stagira in 384 BC.

We can also conceive of a possible world where only the localizing rule for Aristotle is satisfied, but not the characterizing rule, because in this world the philosophy of Aristotle never existed. Imagine a world where Aristotle was born in Stagira in 384 BC, the son of Nicomachus, the physician at Philip’s court, and at age 18 went to Athens intending to study under Plato. Unfortunately, shortly after arriving, he was afflicted by a brain fever that left him unable to pursue intellectual activities for the rest of his life, dying in Chalkis in 322 BC. Despite the deviations from standard biographies, it seems there were enough elements to recognize him as our Aristotle “*in potentia*”. But here only the localizing rule is satisfied. Kripke was the first philosopher to consider such possibilities and draw conclusions, even if they were not the right ones.

Further evidence that the conjunction of descriptive identification rules is not always necessary is that there are proper names that *conventionally* refer to a single object only through its location or solely through its characterization.

As an example of the first type, let us say someone decides to call the center of a given circle *Z*. This point satisfies the condition of type A of having a well-defined space-time location. Even if this point had no relevant function, it could still be identified without having any distinctive, non-geometric characteristic. In our example, it is just a point that once established can be used, let us say, for any desired purpose. I am speaking here of what could be called a *one-foot* identifying rule.

Another example that can be recalled in this context is the name 'Venus'. The localizing rule is most likely 'the second planet in the solar system, orbiting the Sun between Mercury and Earth, which was identified as such thousands of years ago (and has probably existed for more than four billion years)', while the characterizing rule could be 'a planet with nearly the same mass as the Earth and a very hot, dense, poisonous atmosphere'. However, what matters here is that the localizing rule must be satisfied, while the characterizing rule matters less. We see that even if Venus lost part of its mass or all of its atmosphere, which has made it the brightest planet we can see with the naked eye, it would remain Venus as long as it remained a planet—a condition already included in the localizing rule. We can also imagine that Venus lost so much of its mass that it shrank to the size and form of an asteroid. In this case, it would satisfy neither its characterizing rule nor the relevant part of its localizing rule, which already demands that it must be a planet, for the loss of so much mass would change it from a planet to an asteroid. If that happened, it would cease to be Venus... We can also imagine that it could for some reason cease to orbit the sun. In this case, it would not cease to satisfy the localizing rule, as some might think, because at the time when it was named (and so baptized) it would satisfy that rule, orbiting the Sun as the second planet. Even if it were discovered that it did not belong to the early solar system, but was a latecomer, arriving from outer space a mere million years ago, it would still satisfy the localizing rule, since it was called 'Venus' during the relevant time period. On the other hand, it would be wrong to identify Venus by the satisfaction of the characterizing rule alone, as a disjunctive rule would allow, since in this case any similar planet of the universe could be called Venus, inasmuch as it satisfies that rule. We need to accept that the identification rule for Venus is very much another case of a one-foot localizing rule.⁸⁷

Perhaps the best way to understand the above cases is to say that for them the characterizing rule is the localizing rule itself. Let us remember that the character-

⁸⁷ For a more detailed analysis of 'Venus', see Chapter IV, § 1.

izing rule was defined as the reason why we chose to use the proper name. Nevertheless, in the case of *Z*, the center of the circle, the only reason for the name is the location itself. In the case of Venus, the identification rule for the name is based on the localization as the second planet from the Sun during its baptism and for at least some time afterward, until the rule was publicly conventionalized.

Some examples require only the satisfaction of the characterizing rule. One of them is offered by the name ‘Almostásim’, which appears in Jorge Luis Borges’ short story entitled *El acercamiento de Almostásim* (The Approach to Al-Mu’tasim). Almostásim is a being, possibly a person, that when in contact with people emanates perfection. We do not know where this being is, and if it really exists somewhere in space and time. It is believed that we can approach it through contact with human beings who have become limited repositories of its infinite glory. Only these vague indications constitute the characterizing rule of that name. But there is no rule identifying its spatiotemporal location, as no one has ever encountered Almostásim face to face, and some even committed the heresy of denying its existence. This is a further case of a one-foot disjunctive rule.

Furthermore, there is even an example of a proper name that by definition *cannot* have a localizing rule: this is the word ‘Universe’ (or ‘Multiverse’, as preferred by some). The object referred to by that name has a one-foot characterizing rule: it is *all* that could be shown to exist empirically, including things that are still to be verified or could not be. But it cannot have a localizing rule: since it contains all space and time, the Universe cannot be *in* space or time.⁸⁸

If we exclude the possibility of “ $\sim A \ \& \ \sim B$ ” and abstract the possible need for “ $A \ \& \ B$ ”, it seems that the better candidate for a metadescriptive condition for the application of the proper name could be “ $A \ \vee \ B$ ”, that is, an *inclusive disjunction* of the localizing and characterizing descriptions. We can conclude these considerations with a first and more rudimentary version of the general meta-identifying reference rule for proper-names, to be applied to fundamental first-level description-rules belonging to groups A and B. This meta-rule, called the *disjunctive rule*, as will be shown below, is incomplete and inadequate, but furnishes a working model that in the following sections will be revised and supplemented.

To formulate a second-order disjunctive rule, we should proceed as follows: Call N_{vs} any desired linguistic proper name, and use ‘vs’ to mean ‘and/or any possibly given synonyms’. In this way we stress the arbitrariness of the choice in-

⁸⁸ God could also have no location because he is said to be simultaneously everywhere or omnipresent. But this is a problematic case, because either his existence is unverifiable, or his nature is distorted. A clue to a possibly more refined concept of God seems to have been expressed by Baudelaire when he wrote: “*Dieu est le seul être qui, pour régner, n’ait même pas besoin d’exister*” (God is the only being that to reign does not even need to exist) (1867, 75–76).

volved in the rule's instantiation by a proper name's sensible expression ('Aristotle' could indeed be called 'Pittacus'...). This allows us to account for a set of possible alternatives. Calling G, the nearest relevant class of objects to which the proper name refers that does not mix with its descriptions. (Aristotle is not classified as a philosopher, since this already belongs to his characterization, and not merely generically as a living being, but rather as a human being.) Call A and B, respectively, the localizing and characterizing description-rules. Then we can create the following second-order *disjunctive rule*:

DR:

A referent x , belonging to a class G of objects, is referred to by privileged speakers with the proper name N_{vs}

iff,

(i-a) x satisfies A: its localizing description-rule

and/or

(i-b) x satisfies B: its characterizing description-rule.

An example will make the application of the disjunctive rule clear: we can apply the proper name 'Aristotle' to an object of the class of human beings (G), if and only if there is an individual who (i-a) satisfies the localizing rule (A) for 'Aristotle', which is that of being a person born in Stagira in 384 BC, who was the court physician's son, lived the main part of his life in Athens, lived for some time on Lesbos, returned to Athens and, in the end, as a refugee, died in Chalkis, in 322 BC and/or (i-b) satisfies the characterizing rule (B) for 'Aristotle', of being the philosopher who produced all the Aristotelian writings. This instantiation of DR can already be considered an *identification rule* (*Identifikationsregel*) for the bearer of the name 'Aristotle'. Nevertheless, an identification rule for Aristotle that takes this form, as we will see later, is still unqualified and rudimentary.

Some additional considerations about DR are indispensable. First, the applicability of a DR assumes the satisfaction of some causal precondition like a C-condition since some kind of causal relation is indispensable for a name to have a bearer. However, since the C-condition is an assumed background condition, without any independent explanatory or justificatory power, it is not in itself part of what explains how a proper name refers to its bearer or what explicitly justifies its application. Thus, it does not belong properly to a DR. (We will see that we can derive descriptions called causal records from C-conditions.)

A second, additional consideration is that the disjunctive rule assumes as probable, though in no way necessary, the satisfaction of auxiliary description-rules, though these conditions also do not belong properly to a DR. A disjunctive rule

can apply without the application of any auxiliary descriptions, which makes them redundant for that task.

A third, additional consideration is that '*N*' refers *properly* or *self-sufficiently* to object *x*. We define a proper or self-sufficient reference as a reference made by idealized users of the name who know the rule well enough to employ it alone. This is often only possible for *privileged users or namers* (specialists, primary users, baptizers, close family members...). Here, it is the case of a reference of its own in the sense that it is made with a sufficient cognitive basis, for instance, by an Aristotle scholar. More often this is not what happens. For instance, one can refer to the pop singer Amy Winehouse, even if one only knows that she co-wrote a song called 'Back to Black', which is a central part of her characterizing rule, and even without knowing the proper name 'Amy Winehouse'. In the right context, if you say, 'the singer who co-wrote the hit Back to Black', others will instantly understand.

A final additional consideration is that class G corresponds to a *genus proximum*, a concept used by Aristotle as part of the definition of concepts to distinguish the nearest relevant class of properties to which the *specific differentia* belongs. In our case, G has the limiting function of establishing the nearest, most relevant genre of things to which object *x* belongs, such as living beings, material objects, celestial bodies, etc. The use of class G serves to limit the scope of the definition in advance because without this we would have to pick out just one thing among all the objects in the universe, which could be a cognitively impossible task. Concerning the name 'Aristotle', for example, G can designate the class of human beings, since the class of philosophers is already embedded in Aristotle's characterizing description-rule as the greatest philosopher of antiquity. Consequently, with G we exclude in advance that 'Aristotle' is the name of a college or a computer program, or a prime number. Even if in a possible world an extremely advanced supercomputer with a program called 'Aristotle' produced the *Corpus Aristotelicum*, assuming G, we would *not* need to admit that this supercomputer is our Aristotle, even in the case where it was built by aliens in the year 384 BC in Stagira, used for more than twenty years in Athens, and finally dismantled in 322 BC in Chalkis. We would consider this a coincidence or a forgery. Unlike what Kripke would think, even if someone believes that Aristotle is an extra-terrestrial being, or supposes that he is an android, he will nevertheless be seen as human, that is, a human extra-terrestrial being or a human android (cf. Soames 2002: 64). Furthermore, using a stricter G-class (not necessarily a scientific one) can be useful for disambiguating proper names. If G is understood to be the class of ancient philosophers, this excludes the possibility that Aristotle could be the name of a 21st-century philosophy student at the University of Athens.

Here, we could still ask the following question: in the DR, auxiliary descriptions disappear; but what then is the role of auxiliary descriptions? The answer begins to emerge when we ask ourselves whether auxiliary descriptions alone would be able to identify the bearer of a proper name. Suppose that a certain object satisfies many or all auxiliary descriptions associated with its name, but without satisfying any of the fundamental descriptions. Consider once again the Searlean illiterate 16th-century Venetian fishmonger. Further, suppose he still satisfies many auxiliary descriptions we have for the name 'Aristotle'. He could have been the son of a man named Nicomachus, Achaeon's grandson, Pythias' husband, and had a lover called Herphyllis... he could have taught Alexander and founded a Lyceum... However strange these coincidences would be, they would only be irrelevant, as they would lack the appropriate contexts of localization and characterization. After all, the Nicomachus could not be the physician named Nicomachus, whom we know served at Philip of Macedon's court, nor can the grandfather Achaeon be the same one who lived in the 4th century BC, and neither Pythias nor Herphyllis could be women of ancient Greece, despite their names. The Alexander whom this false Aristotle taught could not have been the famous general and conqueror from Macedonia. And the Lyceum that this inept person founded could have nothing to do with the Lyceum of the ancient Aristotelian School. The conceptual mess created in an attempt to conceive a situation where only the auxiliary descriptions remained is not able to produce more than a series of curious, odd coincidences, which present themselves to us as a strange, counterfeit reality. It is unable to convince us that the proposed Aristotle is the real one. One can even imagine circumstances where the application of auxiliary descriptions would be justified. Suppose that the fishmonger called 'Aristotle' was a laughable comic figure who worked near a school called the Lyceum and that schoolboys called his lover Herphyllis... or that by chance he employed a young fishmonger called Alexander... No matter how much they complement each other, auxiliary descriptions alone cannot create a true identification rule. As we will see, the leading role of auxiliary descriptions is much different; they help us to insert the proper name into *discourse* (mostly public dialogue and communication, but also including written texts), where they can, in senses to be explained later, at least point in the direction of the ultimate identification rule.

Now, what about one-foot fundamental rules? One possibility is that in these cases the DR could be transformed into a rule of either the kind "A \vee A" or the kind "B \vee B". In cases of complete absence of one fundamental rule, such as the proper name 'universe', which simply lacks any localizing disjunct, the best form must be "B \vee B", while in the case of the center point Z, the best form will be "A \vee A". Consider, finally, the case of the planet Venus. The DR form "A \vee B" cannot be applied to this case, since if it could be, then any planet in the universe with the internal

characteristics of Venus (any planet with almost the same size as the Earth, and a very hot, dense, poisonous atmosphere) would, according to the disjunctive rule, be an example of the planet Venus since the isolated satisfaction of the characterizing condition is already sufficient. Instead of “ $A \vee A$ ”, this case can also be summarized as having the form “ $A \ \& \text{possibly } B$ ”, where B is practically redundant, as A already includes the characteristic of being a planet. To include names like ‘Universe’ or ‘Almostásin’, which only have one fundamental condition, the generalized form of one-foot fundamental conditions must be:

“ $A \ \& \text{possibly } B$ ” or “ $B \ \& \text{possibly } A$ ”.

These anomalies are uncommon but important because they will remain a possibility in the more complex rule formulations to be developed in what follows, most of them comprising DR.

Finally, it is important to see that even the foregoing relativization of DR is insufficient. Surprisingly, it is not impossible to find two-foot identification rules demanding sufficient satisfaction of *both* A & B , which would result from a *conjunctive*, not a disjunctive meta-identifying rule! Consider the Mariana Trench. It is located in the western Pacific Ocean, and is characterized as the deepest ocean trench on Earth. We can imagine some changes in the location, as far as they remain sufficiently close to the Mariana Islands. And you can imagine changes in depth, so that it would not be as deep as the second deepest trench, the Puerto Rico Trench. But you cannot think that the Mariana Trench is not a trench or that it is not located near the Mariana Islands. Both localizing and characterizing conditions must be at least *sufficiently* satisfied. Another example could be the rule for the identification of a singular event such as the famous Krakatoa volcanic eruption. Assuming we use ‘Krakatoa’ as its event name, this eruption must clearly have been localized in a certain place and time, having the characterizing properties of a volcanic eruption. We can imagine counterfactual situations where the Krakatoa eruption occurred some years later or earlier than it did, on another island of the archipelago, although still in Java, or that the eruption was much less extreme, inasmuch as we maintain a reasonable balance by adding the weights of the fundamental descriptions. This $A \ \& \ B$ type requirement is more distinctive for natural geographical accidents, places and occurrences, just as $A \vee B$ is more distinctive for persons and man-made objects.

4 Meta-identification rule: A preliminary version

In what follows, I will discuss and refine the disjunctive rule, since it represents the most common case by far. Although the above-considered disjunctive rule is important because it highlights the role of descriptions that really matter, it is by no means sufficient, since it is too narrow on the one side and too broad on the other. Regarding narrowness, we will soon see that there are cases of application where just one of the fundamental description-rules is satisfied, and even so only partially, while the other is not satisfied at all, although the name is still found to have a reference. As for breadth, where there is excessive amplitude, we will see that there could be cases of application of the proper name where both fundamental rules are applicable, and even then, the name has no reference!

Let us first consider a case that demonstrates the disjunctive rule's narrowness of application. This is the obvious case where the localizing rule is incompletely but sufficiently satisfied, and the characterizing rule is not satisfied at all, even though the proper name applies. Imagine a possible world close to ours, where there was never an Aristotelian philosophy, but there was an Aristotle who died at a young age because while en route to Athens to learn from Plato, his ship sank, and he was lost in the Aegean Sea. Even so, if we learn that he was born in Stagira in 384 BC, was the son of Nicomachus, the physician at Philip's court, and was sent by his grandfather Achaeon to Athens at the age of 18 to learn from Plato, we will not doubt that he was our Aristotle, even if only *in potentia*, and even if the DR is not satisfied. The localizing rule, we can see, is only *partially* satisfied, since the information we have about Aristotle's biography ends in this case at age 18. The characterizing rule, on its side, is not satisfied at all, since this young man, whose life was so tragically cut short by fate, left no writings behind. Our intuition is that even in this counterfactual situation our Aristotle would have existed, though the disjunctive rule is too coarse-grained to satisfy it.

Let us now take a case where only the characterizing rule is satisfied, and even that incompletely, though the name does apply. Consider a possible world close to ours where there was no Aristotle and no Aristotelian work in the ancient world, although Plato and other Greek philosophers lived then. Imagine that in 10th century Damascus there was an Arab philosopher who wrote all the main parts of Aristotle's work in Arabic, including the *Organon*, the *Metaphysics*, and the *Nicomachean Ethics*, using the pseudonym 'Aristotle'. We would tend to recognize this person as our Aristotle, despite being an Arab philosopher and not Greek.

Of course, we can find limitations involving insufficient satisfaction of fundamental description-rules. Imagine a possible world close to ours, where there never was an Aristotelian philosophy. In 384 BC, the court doctor in Stagira fathered an anencephalic son who was called Aristotle, but as could be expected,

died shortly after birth. Only a minimum of the localizing rule and none of the characterizing rule is satisfied, and consequently, this minimum seems unqualified and insufficient, so that it will be hard to believe the newborn was our Aristotle. Again, suppose that in a possible world with no Aristotle, an Arab philosopher with the pseudonym Aristotle had written only the first two paragraphs of Book Alpha of *Metaphysics*. Without any other contextual clue, we certainly could not recognize him as our Aristotle because the characterizing description-rule would be insufficiently satisfied. We can thus regard a case like this as a strange, inexplicable coincidence. Clearly, the satisfaction of only one fundamental condition does not need to be complete, as DR demands. We conclude that to identify a person, the DR does not have to be completely satisfied, as long as there is a strong enough incomplete satisfaction of at least one fundamental condition.

To complicate things a bit, let us consider cases where the fundamental descriptions are conjunctively satisfied, though only partially. In such cases, it appears that the minimum threshold of satisfaction required for each description would become lower than the minimum threshold of satisfaction for the description in the case where only one of the fundamental description-rules is incompletely, but sufficiently satisfied. So, if in a possible world there was a single person called 'Aristotle' who was born in 384 BC in Athens instead of Stagira, studied with Plato, but only wrote the *Categories* before dying, this would still be enough for us to decide he was (probably) our Aristotle... In such cases, it seems clear that limited satisfaction of each disjoint results in sufficient satisfaction of the disjunctive rule as a whole. In other words, the requirement of sufficient satisfaction of an inclusive disjunction must also include consideration of the sum of the satisfactions of the disjoints. We can see that the disjunctive metadescriptive rule must be supplemented by a new condition, which can be called a condition of *sufficiency*. We can state this condition as follows:

Condition of sufficiency: it must be required that the sum of the satisfactions of each of the two fundamental description-rules should be sufficient, in accordance with the given circumstances.

A question that remains is about the exact measure of what we should understand as sufficient. The most reasonable answer is that there is no exact measure. After all, much of our language is inevitably vague, and our criteria for applying words do not define their extensional boundaries in a precise way. There are always ambiguous cases, where we cannot decide if our criteria apply. Important is that, despite the pervasive vagueness of our natural language, we are in general—actually in almost all cases—quite capable of publicly referring to objects without ambiguity. Therefore, the vagueness of natural language—which in all likelihood reflects

the vagueness of the objective divisions of reality that we wish to categorize—should not be seen as an imperfection. It is at the least a fact to be admitted. In fact, the right amount of linguistic vagueness is capable of modulating discourse satisfactorily, opposing pointless and often undesirable insistence on precision. This vagueness only *seems* troublesome when—in the philosophical effort to scrutinize the limits of our concepts—we insist on overvaluing unusual limiting cases. Wittgenstein would see this as the result of a “one-sided diet” (1984b, § 593)

Another important point is that in counterfactual situations Aristotle would cease to be our Aristotle if there were competitors who also satisfied the disjunctive rule in equal measure. So, consider a possible world where it would not be rare and unusual, but in fact quite natural and commonplace, for people to have two heads. Imagine then that in 384 BC, Nicomachus, the physician at Philip’s court, had a son who was born with two identical heads, both baptized with the name ‘Aristotle’. Suppose that the two-headed Aristotle sailed to Athens to study with Plato, and further, by working together, these two separate persons sharing a single body wrote the entire Aristotelian work. Now, how many Aristotles would we have? The first intuitive conclusion would be that in this world there would be no Aristotle, because a proper name is, in its usual sense, a singular term that by definition can only be applied to a single object able to be distinguished from all others. Thus, in order to deal with the case, a better solution would be to distinguish the “Aristotle-on-the-right” from the “Aristotle-on-the-left” (or Aristotle-A from Aristotle-B), giving these two persons a parallel but non-identical spatiotemporal career; and treating this case as one of homonymy.

Reflecting on such cases leads us to realize the need for an additional condition, which is that a proper name must have only one and the same reference. Consequently, it seems that for the application of a metadescriptive rule we need to add a condition of *uniqueness*:

Condition of uniqueness: this is the condition that in the considered domain, only one and the same object of reference satisfies the disjunctive rule.

The main case where the uniqueness condition is no longer satisfied is one where the localizing rule is satisfied by one object, while the characterizing rule is satisfied by another. This would be the case in a possible world W1 where there existed (a) a Greek Aristotle, son of Nicomachus, who was born in Stagira in 384 BC but contracted brain fever upon reaching Athens and as a result was so severely handicapped that he could do no work in philosophy in the years before dying in Chalkis in 322 BC, and (b) a philosopher named Aristotle, who wrote a Latin version of the *Categories* identical to our version but did so in Rome about three centuries later. In such unusual circumstances, we could no longer decide who the real Ar-

istotle was, whether the Greek or the Roman, because our two fundamental conditions of the identification rule would conflict. The most reasonable immediate alternative is to abandon the assumption that our Aristotle existed in such a world since the condition of the object's uniqueness is not satisfied. (In criterial logic, $1 + 1 = 0$.)

By adding the conditions of sufficiency and uniqueness to the disjunctive rule, we create what could be called a *meta-identifying rule* (MIR) namely, a rule that will show in a more precise and adequate way than the disjunctive rule, under what conditions most proper names are typically applicable to their references. This rule will tell us the adequate combinations of the fundamental description-rules that must be satisfied by most proper names, in order to allow us to say that the name refers to its bearer. Here is how this rule can be formulated:

MIR:

A referent x , belonging to a class G of objects, is (self-sufficiently) referred to by privileged speakers with the proper name N_{vs}

iff

(i-a) x satisfies a localizing description-rule A of N

and/or

(i-b) x satisfies a characterizing description-rule B of N

And

(ii) the satisfaction of A and/or B of N by x is overall (on the whole) *sufficient* and

(iii) *univocal*

(On the tacit assumption of the satisfaction of a generally unknown C -condition and the probable, though not necessary satisfaction of complementary auxiliary descriptions...)⁸⁹

The rule resulting from the application of the meta-identifying rule MIR to the fundamental description-rules of a given proper name is what I call the *definitional* or *identification rule* of that proper name.—It is a case of what Ernst Tugendhat hypothetically called the *Identifikationsregel* of that singular term (1983: 235). (This identification rule may also be regarded, I think without a real difference, as a simple *instantiation* of MIR in which the variables, N_{vs} , G , A , and B , are replaced by constants insofar as we consider MIR as a general form of many identification rules).

⁸⁹ It must be remembered that variations of the MIR covering the cases of A & possibly B , B & possibly A , and A & B can easily be derived.

Let us also remember that condition (ii), of sufficiency, is to be applied “as a whole”, that is, to the sum of the satisfactions of the disjuncts taken together. This allows us to rescue the intuition that the rule can be applied (and is, therefore, applicable) even when in isolation every single fundamental description-rule is considered to be satisfied without qualification. The rule will apply if the sum of the satisfactions of each fundamental description-rule is considered by the privileged namer—tacitly reflecting the evaluation of the linguistic community—as sufficient for its application.

Finally, once we apply an identification rule that instantiates MIR, we are necessarily led to the hypothetical conclusion that a C-condition must have been satisfied. Here one may ask if the MIR might not be derogated in its application if we discover that the C-condition is not satisfied... But how could we discover this except by cognitive-descriptive means? We will see in the next chapter that when public information resulting from causal records begins to gain explanatory value, it is integrated into the disjunctive rule itself, in this way gaining explanatory power.

Let us now look at a case where the MIR is applied to the specific bundle of descriptions associated with the name Aristotle. By doing this we formulate what Tugendhat could call the *identification rule* for the proper name ‘Aristotle’, which I will abbreviate as IR for ‘Aristotle’. Here it is:

IR-“Aristotle”:

A referent x , belonging to the class of human beings, is referred to (self-sufficiently) by privileged speakers with the proper name ‘Aristotle’_{vs}

iff

(i-a) x satisfies the localizing description-rule of having been born in Stagira in 384 BC, lived much of his life in Athens, and died in Chalkis in 322 BC (...)
and/or

(i-b) x satisfies the characterizing description-rule of having been the philosopher who developed the great ideas that form the *Corpus Aristotelicum* (...)

And

(ii) the satisfaction of the localizing description-rule and/or of the characterizing description-rule for x is overall sufficient and

(iii) univocal.

(On the tacit assumption of the satisfaction of a generally unknown C-condition and the expected satisfaction of complementary auxiliary descriptions...)

As already noted, the name Aristotle is also placed in quotation marks here in order to indicate the sign; moreover, as ‘vs’ shows, the specific sensible name-

mark is not indispensable: another sign could possibly be agreed on to meet the same conditions. We can conceive of a possible world where Aristotle is called ‘Pittacus’ by privileged speakers. Although calling our Aristotle by the name Pittacus, they would be referring to our Aristotle in their possible world, even if using a name different from the proper name used by our privileged speakers. The same could be said if someone made the (highly improbable) discovery that our Aristotle was in fact called Pittacus in our actual world.

It is also important not to forget that the meta-identifying rules we are considering are meant to be applied by ideal types of speakers, whom I call the privileged users of the proper name. Very often, speakers do not know enough of the identification rule, and in many cases, they are only oriented by some group of more or less irrelevant auxiliary descriptions. As we will see later, we very frequently use proper names “referentially” in a weaker, parasitical sense of the word, without having fulfilled the ideal expressed by their identification rule, inserting a name in a meaningful way in a sufficiently vague discourse. It is at this point that auxiliary descriptions show their full importance in the cluster of descriptions associated with a proper name. Nonetheless, as this is not the focus of the present discussion, I will ignore for now the role of descriptions belonging to group C.

Finally, there is an ontological point that reinforces and is reinforced by the proposal made in the last chapter that a trope ontology might offer us the true key to the identification of individuals. Indeed, an indeterminate number of combinations of tropes can be adequately congruent with the demands made by identification rules derived from a MIR. An identification rule is able to tell us which possible combinations of definite descriptions along with the degree of their satisfaction will be necessary to justify the application of a proper name, allowing us to say that it refers to its bearer. But in doing this, the rule will also show which combinations of tropes or t-properties must be found in the world to allow us to judge and say that the identifying rule is satisfied or applicable. Concerning examples with the proper name ‘Aristotle’, in a collection of different possible worlds, the tropical criteria (or complexes of tropes) can vary as much as the following:

- a. One (only) Aristotle from 10th century Damascus, who satisfies the t-properties of having written the *Organon*, the *Metaphysics*, and the *Nicomachean Ethics*, and of having chosen ‘Aristotle’ as a pseudonym, satisfying sufficiently the characterizing condition.
- b. One (only) Aristotle who was born in Stagira in 384 BC, the only son of the court physician, contracted brain fever while sailing to Athens, dying in Assos in 322, satisfying most of the tropical properties concerning the spatiotemporal career demanded by his localizing condition, but having written no Aristotelian work.

c. One (the only) Aristotle born in Stagira in 384 BC, the only son of the court physician, who died when he was 18 years old, trying to cross the Aegean Sea to study with Plato in Athens but who sufficiently satisfies the tropes of his spatiotemporal career.

d. One (only) Aristotle born in Stagira in 384 BC, who satisfies the t-properties of first becoming a doctor like his father, joining Alexander's army, and succumbing to dehydration and starvation while returning from the military campaigns in the East. He sufficiently satisfies the localizing condition.

(...)

The important philosophical point is that we do not need any objective “individuating essence” (here understood as a necessary and sufficient tropical property) *common* to these four Aristotles, and, indeed, to any conceivable Aristotle, one which must always be present. What we need to find are only “changeable and generally non-indispensable properties” (Burks 1951). The old idea of an objectively shared identifying essence of a single object, which has always been shown to be illusory, is here replaced by the demand for *an objectively grounded essence inscribed in the identification rule only*. The identification rule gives us ways to unify those very different combinations of tropical properties found in the world that confirm the applicability of a proper name, allowing us to identify the Aristotles (a), (b), (c), (d)... as referring to one particular person existing in different possible worlds. In other words: we agree that it is not necessary to find any “essential” property always belonging to the bearer of a proper name like Aristotle, which enables us to individuate him.

What we have found is a way of formulating the identification rule for a proper name like ‘Aristotle’ that makes it possible to unify the most diverse objective tropical properties (which includes complexes or clusters of t-properties) by means of which the same referent can be presented to us. *If there is here an essence, it is given by the rule as a nominal, not a real essence*. As we will see later (Chapter VI), the lack of unifying criterial essences can also be found with general terms. In this way, the problem of essence is more apt to find a plausible, non-compromising solution.

5 Solving Theseus’ paradox

The MIR already allows us to give the best answer to the famous puzzle of Theseus’ ship, so often cited in philosophical handbooks. Let us suppose that Theseus’ ship

was named the 'Calibdus'.⁹⁰ Over the years, Theseus gradually replaced the worn-out planks of his ship until eventually they were all replaced. However, it was decided to repair the old planks, which had been saved and kept in storage, and use them to build another ship identical to the first. Suppose that someone then asks, "Which of the two ships is the true Calibdus?" Paradoxically, we do not know how to answer this apparently simple question. An inadequate answer could be that both are Theseus' Calibdus. That would be logically unacceptable because a singular term cannot refer to more than one object. In fact, most people will tend to say that Theseus' real ship is the one on which he sailed for all those years... But there will still be uncertainty: after all, the second ship is the only one that is made of the same planks as the one that was initially built! The problem is not irrelevant, because, as Roderick Chisholm once noted, if the two ships were to collide head-on and start sinking, Theseus, who, like every good captain was honor-bound to go down with his ship, would have had to decide whether to stay on the old ship or jump onto the new one.

What we have considered so far makes possible a better answer to this old puzzle. The reason for the uncertainty is our realization that the question of which of the two ships is the true Calibdus has become unanswerable, due to a criterial conflict between the two fundamental description-rules for that name. The first ship satisfies a localizing rule, which tells us that Theseus' ship is the one built in a specific place and time, having then enjoyed a long space-time career under the command of Theseus. The second rule, satisfied by the second ship, belongs to the characterizing dimension. It tells us that Theseus' ship is the one built from a specifically given material continuant... This conflict is understandably the reason for the puzzling feature of the case.

At this point, someone can rightly object that the characterizing rule is much more complex. It not only concerns the same material, but also includes functional and structural characteristics that were preserved by both ships. Consequently, it seems that the first ship must be the Calibdus captained by Theseus, as it more completely satisfies the fundamental description-rules. That is why most people tend to choose the first Calibdus as Theseus' real ship.

Nevertheless, we can balance this intuitive difference by increasing the speed of replacing the old planks with new ones to *shorten* the ship's space-time career until the replacement of all parts is complete. In this case, the spatiotemporal career, being shorter, loses importance, while the criterial importance of the amount

⁹⁰ It could also be called 'Theseus' ship' since a definite description without an associated proper name (which I will call *autonomous*) should express an identification rule like that of a proper name.

of material remaining the same, gains importance in comparison. Imagine that the entire series of plank replacements took place in just two months. In that case, we would start having doubts. What if the replacement took just one week? On Monday, Calibduis is launched, baptized, and then, with Theseus supervising the work, the replacement of planks begins with the immediate construction of another ship... until the next Sunday, when the new ship has all the planks of Calibduis. Then we start to think that at the end of the week, Theseus cannot be the captain of the first ship anymore. The true Calibduis must be the second ship, the ship that was built with its original planks. Imagine, finally, that the construction of Theseus' ship is completed but that it is not yet launched. Hours after it is ready, workers begin to build a second identical ship, next to the Calibduis. When both ships are completely built, the first one is baptized with the name 'Calibduis', while the second remains unnamed. Then workers begin to substitute the planks of Calibduis with planks from the second ship and vice-versa. After two days all planks of each ship have been removed and replaced by planks of the other. Which ship is now the true Calibduis? The answer seems obvious to us: the second ship is now the real Calibduis because all that has happened is that the two ships, so to speak, have exchanged places. Here the identity of the Calibduis' original material is what truly warrants our intuition. It seems that the identification rule derived from the application of MIR can give us the final explanation for the puzzle of Theseus' ship, since in this case the second ship better satisfies the identification rule for Calibduis.

Finally, MIR also allows us to give a straightforward answer to the oldest and simplest version of the puzzle. In this version, the question is whether the Calibduis would still be the same ship after having all its planks replaced.⁹¹ The obvious answer is that since the Calibduis must be a single ship, and since it continues to satisfy the localizing and most of the characterizing rule, it does indeed remain the same ship.

Let us now return to the initial story of the Calibduis having sailed for a certain time under the command of Theseus. Suppose the situation is such that we feel unable to decide. Because the same proper name cannot refer to more than one object, the strategy of renaming ships turns out to be a convenient way to avoid misunderstandings. We can give different names to the ships, assuming the existence of two ships: the Calibduis-1, which fully satisfies the localizing rule and much of the characterizing rule, and the Calibduis-2, which although not satisfying the localizing rule, completely satisfies the characterizing rule, which among other things requires sufficient preservation of the same material of the ship ever since

⁹¹ This is the version originally proposed in Plutarch's *Theseus*.

it was initially built during a reasonable time-interval. Similarly, in the previous example, we can propose the existence of two Aristotles in the possible world W1: Aristotle-1, who lived in ancient Greece and satisfies only the localizing rule, and Aristotle-2, who is the author of only a large part of the Aristotelian work and satisfies at least part of the characterizing rule, without satisfying the localizing rule. It would be a mistake, however, to see this as an answer to the same problem. It is simply a new tactic in the name game, a proposal for new conventions, for new reference terms, to be used in place of failed ones.

6 Meta-identification rule: Final version

MIR is already a very satisfactory rule, explaining most standard cases of a proper name's application. However, it results from a still incomplete analysis. After all, it is not hard to demonstrate that the condition of uniqueness is a derived condition and that MIR does not answer counterexamples that depend on a prior stage of derivation. To prove this, I will examine two counterexamples.

A first counterexample concerns a Twin-Earth fantasy. A Twin-Earth must be like ours, and everything on each planet must exist and happen identically (or almost identically) to what exists and happens on the other. Thus, all that applies to an object on our Earth should apply to its *Doppelgänger* on the distant Twin-Earth. Nevertheless, even if we knew of a Twin-Earth somewhere in outer space, we would continue to have the very strong intuition that when we say the name 'Aristotle' we are referring to our Aristotle and not to some other Aristotle on the Twin-Earth. However, if we consider our first formulation of the identification rule for Aristotle (IR-"Aristotle"), it no longer seems applicable. We can see that both the Aristotle of our Earth and that of the Twin-Earth sufficiently satisfy the disjunctive rule. Both seem to satisfy the rule of space-time localization since both were born in 384 BC in Stagira, sons of the physician at Amyntas of Macedon's court, etc. In addition, both Aristotles surely satisfy the characterizing rule: both wrote identical versions of the *Corpus Aristotelicum* down to the last comma. Hence, concerning the satisfaction of the disjunctive condition "(i-a) ∨ (i-b)", both of the two Aristotles sufficiently satisfy the identification rule for the name 'Aristotle'. If so, condition (iii) of *uniqueness* is no longer satisfied, resulting in the counter-intuitive conclusion that Aristotle did not exist. However, it is intuitively clear that he not only existed, but was also *our* Aristotle and not that of the distant Twin-Earth.

Counterexamples involving possible worlds can easily be conceived. Let us say that in a possible world W2, Nicomachus, the court physician, became the father of twins in Stagira in 384 BC, both baptized with the name 'Aristotle'. The first be-

came a physician like his father, joined Alexander's army, and succumbed to thirst and hunger while crossing the desert as he was returning from the East. The second went to Athens, where he learned philosophy from Plato and wrote the entire *Corpus Aristotelicum*. Since both sufficiently satisfy the localizing rule, both sufficiently satisfy the disjunctive condition "(i-a) \vee (i-b)" required by the identification rule resulting from the application of MIR to the cluster of descriptions associated with the name. Because of this, condition (iii) of uniqueness is no longer satisfied, leaving the identification rule for the name 'Aristotle' inapplicable and leading to the conclusion that Aristotle did not exist. However, such a result is also counter-intuitive. We never doubt that there is a single true Aristotle in W2 and that he is the *second* Aristotle and not the first one. Only in a possible world W3, which only differs from W2 through the fact that the second Aristotle was not born, would we consider the first one, the unfortunate physician, to be our true Aristotle *in potentia*. Here the MIR leads us to the puzzling conclusion that if we find an incomplete Aristotle, we are allowed to call him our Aristotle, but if we find two Aristotles, then we cannot.⁹²

The question we should ask here is: what leads us in the first counterexample to choose the Aristotle of the Earth over the Aristotle of the Twin-Earth? And, in the second, what leads us to choose the Aristotle who wrote the Aristotelian work instead of the one who became a physician? There can be only one answer: the sufficient satisfaction of the disjunction of localizing and characterizing conditions by more than one object cannot be resolved by a condition of uniqueness. What is needed is a condition that objects less able to satisfy the disjunction must be excluded from the competition for the right to satisfy the conditions for applying a proper name, as in the case of the Twin-Earth Aristotle or the Aristotle who decided to become a physician. The most complete solution, therefore, is to replace the condition of uniqueness with what could be called a *condition of predominance*, which can be stated as follows:

Predominance condition: the condition that in a case where more than one object sufficiently satisfies the disjunctive condition of a proper name, the bearer of the proper name must be the object that most completely satisfies it.

Such an addition allows us to easily solve the two counterexamples above. For in the first, the Earth Aristotle satisfies the disjunctive rule added to the condition

⁹² It should be noted that the Kripkian theory of baptism would find it difficult to explain our preference for the second Aristotle in W2. This theory would not be able to distinguish the true Aristotle, for it would not have at its disposal enough descriptive resources to privilege it; moreover, it could not explain why the real Aristotle happens to be the first one in W3 but not in W2.

of sufficiency better than the Twin-Earth Aristotle, since the condition of localization implies that the true Aristotle should have been born in the Stagira on *our* Earth, lived in the Athens on *our* Earth... and died in the Chalkis on *our* Earth... a condition that the Aristotle from the distant Twin-Earth cannot satisfy. In the second counterexample, the Aristotle who wrote the Aristotelian work also much better satisfies an identification rule that replaces the condition of uniqueness with the condition of predominance, since he is the only one who satisfies the condition of characterization by having written the Aristotelian work.

Based on such considerations, I now want to suggest an improved formulation of the meta-identification rule, which incorporates the predominance condition. Here it is, remembering that we are considering our rules only as used by privileged namers:

MIR*:

A referent x , belonging to a class G of objects, is self-sufficiently referred to by privileged speakers with the proper name N_v

iff

(i-a) x satisfies N 's localizing description-rule A

and/or

(i-b) x satisfies N 's characterizing description-rule B ,

(ii) x satisfies A and/or B to an overall sufficient extent, and

(iii) x satisfies A and/or B better than any other object of class G ,

(On the tacit assumption of the satisfaction of a generally unknown C -condition and the probable satisfaction of complementary auxiliary descriptions.)

Here, we replace condition (iii), which was one of uniqueness, with the condition of predominance, which is prior to that of uniqueness since it serves to guarantee it. The predominance condition is applied in such a way as to select the object that sufficiently satisfies the inclusive disjunction of the disjuncts more than any other object of the same class G of objects that also satisfies it, from which we obtain an unambiguous identification of the proper name's reference.

As in the previous case, when the MIR* is applied to the fundamental description-rules constituting a proper name (or, treating MIR* as the usual general *form* of the identification rules, when we consider the last ones as simply instantiations of the MIR*'s formal variables), it produces an *identifying* or *definitional rule* for the proper name, to be applied by an ideal speaker. Here is how this identification rule can be summarized for the name 'Aristotle':

IR*-'Aristotle':

A referent x , belonging to a class G of objects, is referred to (self-sufficiently) by privileged speakers with the proper name 'Aristotle'_{vs}

iff

(i-a) x satisfies the localizing description-rule of being born in Stagira in 384 BC, having lived much of his life in Athens... and died in Chalkis in 322 BC, and/or

(i-b) x satisfies the characterizing description-rule that he was the philosopher who produced the relevant content of the *Corpus Aristotelicum*.

(ii) x satisfies the disjunction (i-a) and/or (i-b) to a degree that is overall sufficient and

(iii) x satisfies the disjunction (i-a) and/or (i-b) better than any other human being.

(On the tacit assumption of the satisfaction of a generally unknown C-condition and the probable satisfaction of complementary auxiliary descriptions.)⁹³

Detailing what we have noted above, the identification rule IR*-'Aristotle' resulting from the application of MIR* to Aristotle's fundamental description-rules gives us a clear and intuitive answer to the problem of the Twin-Earth's Aristotle. According to this answer, although both the Earth Aristotle and the Twin-Earth Aristotle satisfy the disjunctive rule sufficiently, the Aristotle of our Earth is the only one who truly satisfies the condition of spatiotemporal localization. After all, as philosophers like Kant have plausibly noted, there is only one space, and we are talking about our own region of this space. Since only the first Aristotle exists in *our* spatiotemporal region, and the localizing description-rule is made to be applied to *our* spatiotemporal region of a single space that includes both Earths—and not to the analogous spatiotemporal region located on the Twin-Earth—our first Aristotle is the only one who really satisfies the localizing condition. Correspondingly, even if it were an analogous, independent spatiotemporal region, the satisfaction of a C-condition (in this case, the baptism) would occur in the Stagira of our Earth and not that of the Twin-Earth. Thus, our Earth Aristotle satisfies the disjunctive condition "(i-a) \vee (i-b)" more completely than the Twin-Earth Aristotle. In doing so, he fulfills the predominance condition of the identification rule for Aristotle resulting from the application of MIR* to the fundamental description-rules asso-

⁹³ I will not repeat the content in parenthesis in all the following presentations of rules, since it is only an assumption not properly belonging to the rule by means of which the referent is ultimately identified. As we will see, this assumption is important and too often indispensable, particularly for non-privileged users, who can be the great majority.

ciated with that name, which is in full agreement with our intuition that we are referring to our Earth Aristotle.

The application of IR*-'Aristotle' also solves the problem of the twin Aristotles who sufficiently satisfy the disjunctive condition (i) in W2. Only in his childhood did the first (who marched to India with Alexander) satisfy the localizing rule, satisfying this rule sufficiently, but he never satisfied the characterizing rule. The second (who went to Athens and wrote the Aristotelian work) not only completely satisfies the localization rule but also completely satisfies the characterizing rule. For this reason, due to his great predominance in satisfying the disjunctive rule, we choose the latter Aristotle as the true one, which also conforms to our intuitions. In a world W3, where the second Aristotle never existed but only the first, we will tend to identify the first as our Aristotle, even if he never wrote the work we usually attribute to Aristotle.

Returning to MIR*, we can still consider the case of two proper names with very different clusters of descriptions competing to be the right identifiers of the same reference. Suppose it is discovered, as has long (and implausibly) been speculated, that Francis Bacon was the true author of Shakespeare's works. This would mean there was no Shakespeare who independently satisfied the characterizing condition we attribute to him of having written the complete Shakespearean opus. So considered, it seems that the identification rules for Bacon and Shakespeare should compete. However, they need not do this. We are not really forced to choose between Bacon being Bacon and Bacon being Shakespeare. In this case, we will extend Bacon's attributes to encompass the characterizing attributes of Shakespeare, saying that in addition to being a scientist, philosopher, and diplomat, Bacon also anonymously wrote the poems and plays attributed to Shakespeare.

But what about the Shakespeare born in Stratford-upon-Avon in 1564, who married Anne Hathaway and only returned to his hometown many years later to die? That must now be another person, another referent, for whose identification we need a different identification rule. The important thing to note is something no one denies, namely, that for the case in question, the weightiest element is by far the satisfaction of the characterizing description-rule, besides the fact that Bacon lived in London at that same time, thus partially satisfying the localizing condition. Thus, in our imaginary example, Bacon better satisfies the identification rule for the proper name 'Shakespeare' than does the Shakespeare born in Stratford-upon-Avon. Several utterances could sum up this identity dispute: not only "Bacon was the real Shakespeare" and "The person baptized as Shakespeare was not the person we call Shakespeare" but also, say, "Bacon was the great playwright we call 'Shakespeare'; Shakespeare was just a fellow thespian and theatrical director".

7 Proper names' semantic geography

Let us now look at the question of a proper name's meaning or, to avoid ambiguities, of the internal semantic content that can be attributed to it. To arrive at an answer, it helps to recall the argument presented in the introductory chapter suggesting that any meaning—here restricted to the semantic-cognitive meaning corresponding to the Fregean sense (*Sinn*) of a singular term—is plausibly clarified in terms of rules or combinations of rules that enable the effective application of expressions.⁹⁴ The reason seems simple. Rules are the originating source of what we call meaning, since rules are meaningful *per se*. Following a rule is the same as giving meaning to something. Consider the two following signals:

#& ... →\$

Why does the symbol “#&” seem less significant than “→\$”? The answer is that we are used to regarding an arrow as the expression of a rule (*Regelausdruck*) indicating a direction, and the dollar sign as a rule indicating value. Where there is a rule, there is a meaning of some kind, even if usually not of the kind that may interest us here, as in the case of syntactical and morphological rules or, say, in the case of illocutionary forces. More specifically, assuming Wittgenstein's dictum that “meaning is what the explanation of meaning explains” (1984b, § 560), it seems clear that when we talk about the meaning of a linguistic expression, we are usually more properly considering the rules we rely on in explaining what we mean by the expression. Moreover, a metadescriptive theory of proper names is a theory of semantic-cognitive rules expressible by replacing descriptions. It is thus a theory of the referential or cognitive criterial meanings of proper names since these description-rules are constitutive of the referential meanings of the names. Furthermore, from the ontological viewpoint assumed in the last chapter, these rules can be nothing other than repeatable tropes of a psychological nature. Hence, all we need to know, by knowing a rule, is to be able to identify any instance of its application (i.e., trope-rules) as precisely similar to what we have in mind as a model-instance of its application (a trope-model). This is what we mean when we think of a rule as a universal.⁹⁵ And this does not require the appeal to some uninstantiated

⁹⁴ Always remember that the cognitive or epistemic meaning, the sense (*Sinn* or *Erkenntniswert*) of a word can be much more than its literal (linguistic) meaning, and according to the adopted ontology, it should be essentially taken as constituted by internal tropic rules (like psychological criterial conditions) able to be repeated identically in the same or different minds. Because of this, there is no “abstract rule” in any platonic sense.

⁹⁵ See my revision of Williams' trope theoretical view of universals in Chapter II, § 3.

rule conceived as a purely abstract entity, the kind of universals a realist philosopher would be prone to accept. Meanings promise to lose their mystifying character when seen from this perspective.

The acceptance of proper names' meaningfulness contrasts sharply with the view of those who argue that proper names are meaningless. The reasons they offer for this position are well-known: when asked the meaning of a proper name, we do not know what to say (Ziff 1960: 93–94). Moreover, as we have previously noted, proper names are generally not defined in dictionaries; and as the purpose of dictionaries is to clarify the meanings of words, this is an additional reason for rejecting the claim that proper names have meanings.⁹⁶

However, the thesis that proper names are empty of meaning does not withstand closer scrutiny. Certainly, any proper name has a meaning in the sense of having the lexical function of a proper name, which is that of identifying some singular object as its bearer, excluding others. But it also has meaning in the most substantive sense of possessing semantic-cognitive content constituted by identification rules. That a proper name should have meaning in this last sense is immediately clear when we consider sentences about identities between proper names. Repeating something basic, we can think of Robert Louis Stevenson's story about a man with two diametrically opposed personalities alternately competing for control of his psyche: Dr. Jekyll and Mr. Hyde. The statement "Dr. Jekyll is Mr. Hyde" would be tautological and non-informative if the proper names 'Jekyll' and 'Hyde' were not intended to refer to rather contrasting things—if they did not have diverse characterizing semantic-cognitive contents, that is, different cognitive meanings. After all, even though Dr. Jekyll and Mr. Hyde shared the same body, they differed in their guiding intentions, thought processes, and subsequent behaviors. While Dr. Jekyll was a good person, sometimes a bad side dominated his psyche after he took a potion that ceded control of his personality to the demonic Mr. Hyde. In other words: the localizing description-rule continued to be satisfied by the same human body, while the satisfaction of the characterizing description-rule alternated intermittently from Dr. Jekyll's character traits to Mr. Hyde's character traits, changing what we are emphasizing about the meanings of the two names.⁹⁷ The sentence "Dr. Jekyll is Mr. Hyde" says two things: (a) that there is

⁹⁶ It should be noted that there are specialized dictionaries or lexicons for proper names, such as ones that explain the etymological meanings of peoples' proper names and even provide generic information about their best-known bearers. An etymological meaning, however, is precisely what we are *not* searching for, since it might belong to a proper name's sensible mark, independently of what it can refer to regarding each circumstantially different bearer.

⁹⁷ Today, the tendency would be to call it a problem of a split personality of the same (mind-body) person, so that "Dr. Jekyll = Mr. Hyde" means not only "Jekyll's person = Hyde's person" but also

an identity in the object that can be expressed using the identity sign: “Dr. Jekyll = Mr. Hyde”, as the whole identification rule for Jekyll-Hyde is the same. But it also says (b) that there is a difference in what Frege would call the mode of presentation, the senses (*Sinne*), here constituted by the alternative employment of two, in important aspects very different, characterizing rules, one for Dr. Jekyll’s good character, the other for Mr. Hyde’s evil character. This semantic-cognitive difference can be made explicit when we communicate that the two characters are different with a sentence like “Dr. Jekyll is not Mr. Hyde” or “Dr. Jekyll ≠ Mr. Hyde”. (More about this in Chapter V.)

Moreover, if we admit the Fregean understanding of semantic content, it explains itself as a meaning (*Sinn*) which is informative content (*informatives Gehalt*). But if it is informative, then it becomes increasingly clear that in this aspect proper names are not empty, but rather full of meaning, significance, content. As Arthur Burks noted in his short insightful paper on proper names:

That proper names have meaning is shown by the fact the people apply them consistently and use them to communicate. A person using a name correctly must have in mind *some properties...* which enable him in favorable circumstances to decide whether or not a given individual is the designatum of that name. (Burks 1951: 38; emphasis added)

From this perspective, we can see many proper names as repositories of meanings, now understood as diffuse masses of variously accessible informational content (never forget that ‘meaning’ is a big “suitcase-word”). Consider, for example, the immense amount of informational content we can associate with the names of the emperor Napoleon or the philosopher Bertrand Russell. Russell’s excellent autobiography is full of informative content about himself, and all this information has come to be at least implied by the proper name ‘Bertrand Russell’. From such a perspective, the issue is not so much that the proper name contains (or implies) less meaning but rather *too much*. And so much so that the best place to look for the meanings of influential proper names is not in a dictionary, but rather an encyclopedia. If we want still more information than we find in an encyclopedia, a biography or memoir often contains the most detailed and complete account of what a proper name can mean. Consider short biographies such as Plutarch’s *Parallel Lives*, autobiographies, such as Ingmar Bergman’s *The Magic Lantern*, or the mammoth memoirs of Giacomo Casanova (12 volumes). These books are rich sources where we can find the most detailed expositions of the information contents

“Jekyll’s character ≠ Hyde’s character”, namely, that with the names ‘Jekyll’ and ‘Hyde’, we are also eliciting two different characterizing rules, two semantic-cognitive contents alternately applied to the same object of reference.

associated with the corresponding proper names—contents that can in their essentials easily be compressed and abridged into definite descriptions. In such works, the rules of localization and characterization are not stated in an abbreviated form, as we have done here, but rather in more complete detail. For the purpose of identification, they could even be excessively detailed (we read Casanova's memoirs with social-historical interest rather than a desire to identify the author).

There is also another reason why some regard proper names as meaningless. It is a fact that, when we casually use a proper name, all we often know about it are vague and changeable aspects of its meaning, limited parts of its information content, whose domain generally varies from speaker to speaker, and even from occasion to occasion for the same speaker. The full content of many proper names, particularly scientific ones, is sufficiently known by only a few privileged users, and often not one of them has mastered the complete relevant content. When we contrast this situation with the permanent, distinct, and universally shared meanings of the simplest general terms (such as, say 'red' and 'round'), we have the impression that because proper names do not mean anything specific for their users, they cannot mean anything at all. As I noted, proper names have so much meaning that they seem to have none.

Having identified cognitive meanings with criterial rules and their combinations, let us now consider the meanings of proper names in terms of their reference mechanisms. What is the semantic value that really matters? A first rule to be excluded is the meta-identification rule and its derivations, the MIRs*: the distinctive semantic nucleus of a proper name cannot be constituted by a meta-rule, as it is no more than a simple *form* shared by the identification rules of a multitude of the most diverse proper names. For the meaning of a term, what matters most is what semantically distinguishes it from homonyms and other terms of the same kind. Furthermore, the meaning should not be relevantly constituted by the auxiliary rules expressed in descriptions of group C. These are accidental in their relation to the application of the name, although they are expected to contribute to some extent to its informative content and even to a great extent to its use in discourse. What remains are the fundamental rules of localization and/or characterization, expressed respectively by the descriptions of groups A and B in the clusters. Entering into the identification rules of proper names, they singularize both the names and their references. The upshot is that *the fundamental localizing and characterizing conditions usually belonging to the identification rule of a proper name are what in a relevant way constitute its relevant meaning.*

If we ask ourselves, as educated persons, which descriptions express the core of what should be meant by the name 'Aristotle', we tend to accept that it means the ancient Greek philosopher from Stagira, who studied with Plato in Athens and who developed ideas that profoundly influenced the course of Western philosophy;

ideas presented in works such as *Metaphysics* and the *Nicomachean Ethics*. When all that a person is able to say of Aristotle is that he was ‘a famous Greek philosopher’, her knowledge is already implied by the fundamental descriptions. Thus, the fundamental description-rules are those that express the indispensable informative content constituting the central nucleus of meaning of that proper name. So, imagine a person who watched a film about Alexander the Great and learned that he had been taught by a philosopher called ‘Aristotle’, after which he identifies the philosopher as Alexander’s teacher. We conclude he is referring to our Aristotle simply because we associate this definite description with fundamental localizing and characterizing descriptions we already know, even if in most cases only in a vague way, say, by knowing not much more than the indefinite description given above.

Apart from the central semantic nucleus, we can see that there is certainly a halo of secondary meanings, generally expressed by auxiliary description-rules. Thus, the metaphorical auxiliary description ‘the master of those who know’, formulated by Dante to connote Aristotle, also contributes to the mass of informative content that constitutes the full significance of this proper name. In the same way, better-known accidental descriptions do so as well, such as, e.g., ‘Plato’s greatest disciple’, ‘the tutor of Alexander’, or ‘the founder of the Lyceum’. They are even better in parasitical uses since those who know them are already able to give some clearly convergent meaning to the name Aristotle. Not all auxiliary rules, however, contribute to enriching the informative contents of proper names. Ignored accidental description-rules, such as ‘Achaeon’s grandson’, certainly do not contribute in a relevant way. Even parasitical uses are here very improbable. By their circumstantial nature, adventitious description-rules, such as the rule expressed by ‘the philosopher mentioned by the teacher in the classroom’, contribute nothing to the permanent informative content of the proper name. That is why they will not be found in encyclopedias or biographies. Nevertheless, adventitious descriptions can be sporadic repositories of sense: they express an occasional sense which is intended by a user who employs a name, and a borrowed reference when it is correctly understood by his hearers.⁹⁸

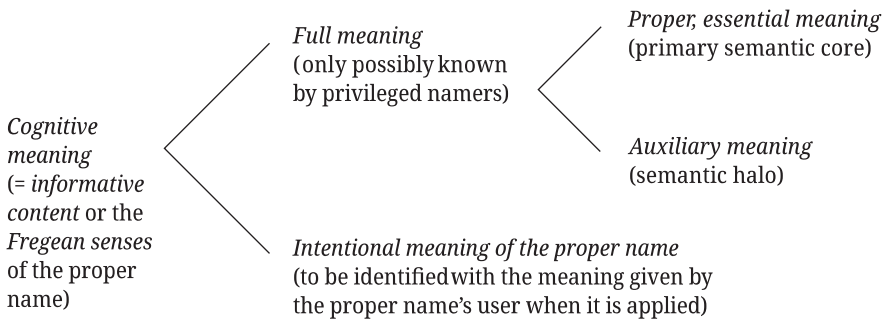
To avoid confusion, it is always indispensable to distinguish between the *complete or full meaning* and the *intended meaning* of a proper name. Let us start with the intended meaning. This is the variable content that different people and even the same person have in mind when employing a proper name at different times.

⁹⁸ It is not always so transient, as is attested to by the well-known scathing remark of a London critic about James Joyce and his almost illiterate wife: “I was introduced to a sick old man accompanied by a cow” (O’Brien, 2011).

It is what Frege and Searle usually considered and what Russell called the “description in our minds” (1980: 30). And it can often be extended as giving those *nuances of meaning* connected by Wittgenstein with the uses of a word in different linguistic contexts (1984b, § 42; 1984a, §§ 63–64...). We can say that it consists in what is mostly unconsciously intended by a speaker when he thinks or utters a name, considering that the intention does not need to be consciously elaborated. I say that this meaning is at least fully intended, because what is intended in terms of description-rules—which can be both fundamental and auxiliary—does not need to be reflexively considered at the time of the name’s application, although it determines a meaning-in-use of the name by the speaker and in principle can be made explicit. Moreover, it is common for us to know very little about the meaning-contents of many proper names we use, so the intended meaning rarely coincides with the complete meaning. Who knows, for example, the complete meaning-content of the name ‘string theory’? Even specialists do not and perhaps cannot know the full range of theoretical alternatives attached to this term.

As for the complete meaning, it is primarily constituted by what we can call the *proper or essential meaning*: first, this is the set formed by localizing and characterizing description-rules—the *primary semantic core*. Second, it also consists of what we might call *auxiliary meaning*: the one constituted by auxiliary rules—the *semantic halo*. Furthermore, it is important to note that the borders are blurred between descriptions belonging to the semantic core and those belonging to the semantic halo. It is not clear, for instance, if the definite description ‘the greatest of Plato’s disciples’ belongs to the characterizing or the auxiliary descriptions of the bundle we associate with the name ‘Aristotle’.

The following scheme summarizes the distinctions made above concerning the meaning of a proper name:



With this picture in mind, it becomes easy to clarify the semantic role of the auxiliary rules expressed by group C descriptions. Clearly, a person who knows only one auxiliary description-rule does not yet have sufficient knowledge of the proper

name's meaning content. But auxiliary description-rules such as 'the iron marshal', 'Plato's greatest disciple', or even 'the philosopher quoted by the professor', may already suffice to enable the speaker to insert a proper name into speech in a communicatively effective manner, achieving referential success in a derived sense of the word. As we will see, this unqualified reference, understood under the assumption that a complete reference can in principle be socially rescued, is based on the improved form of reference-borrowing fully captured by Searle's concept of parasitic reference.

8 Ordinary proper names

You may be wondering whether MIR* would apply to the proper names of ordinary people, whose meaning contents can be found in neither encyclopedias nor biographies. The answer is that there is no essential difference in the above-considered cases. A relevant difference is that, since personal names have a multiplicity of competing homonyms (like the many anonymous Marys and Johns...), the insertion of the name in *the right corresponding context* gains its maximal relevance, since this is the usual way to distinguish homonyms (see SCB-3 in the next section). However, the most relevant difference usually lies only *in the much greater spread or dispersal of the characterizing description-rules, which can more often be only aspectually known through contacts with the most diverse speakers differently moved for a variety of practical reasons.*

An example can be helpful. Imagine an elderly man remembering a woman he once knew named Bärbel Hildish. If asked who Bärbel Hildish was, he could perhaps say that she was (i) "the nice lady who helped me several times when I went to ask about rooms in the Student Dormitories at the University of Bielefeld and who had fascinatingly exotic facial features" (adventitious description). Her former husband, Felix Schneider, might remember something very different. Perhaps he would say that she was (ii) "the woman who was my wife for sixteen years and who had two children with me" (part of the characterizing description-rule). The children, for their part, could perhaps agree that (iii) "our mother was a cheerful person with great human understanding" (widely known accidental description). Her father, Tobias Hildish, might recall that she was (iv) "a very playful child" (little known accidental description). The last ones emphasize emotional motivations.

Descriptions like these are often *aspectual*, perhaps because this is the way we frequently know people. But let us say someone wants a more detailed and precise characterization of Frau Bärbel Hildish, for example, as a civil servant. In this case, they probably request documents like a passport, driver's license, or other official ID, which typically specify the place and date of birth, including a photo

and a fingerprint. Such descriptions are less aspectual and more concerned with fundamental elements. Let us now say that Frau Hildish was involved in a lawsuit. In this case, the judicial system could require that she also present a history of the addresses where she formerly lived, in addition to personal details, her education, professional history, police records, and of course photos, fingerprints, etc.⁹⁹ Let us just say, finally, that someone in her family decides to write a biography of Frau Hildish. In this case, all the above elements will certainly be drawn upon. The conclusion we reach is that aspectual knowledge plays a more important role in the legal case, and also in the many accidental circumstances of personal acquaintance with ordinary people. And there is no major reason for them to be included in the fundamental descriptions associated with their proper names. However, this aspectual knowledge always exists in implicit connection with the fundamental description-rules of the corresponding proper names. This is why in the legal case more information is required, including that of fundamental description rules. For the name ‘Bärbel Hildish’, the fundamental localizing description-rule can be summarized as follows:

The person who was born on 12.3.1926 in Berlin, whose parents were Tobias and Frida Hildish, who spent her youth in Stuttgart and later lived in Bielefeld, where she died on 26.4.2022.

Followed by the characterizing description-rule summarized as follows:

The woman who was married to Herr Felix Schneider, with whom she lived for sixteen years and had two children. She was a cheerful person, full of human understanding. After their separation, she worked in the Student Administration of the University of Bielefeld, later was a diligent manager of the same, and looked very much as shown in photos.

The descriptions one initially knows are either auxiliary or, to a greater or lesser extent, components of Frau Hildish’s localization and characterization rules. Here, a question arises: few know in detail the localization and characterization rules. So, how is it possible that many people can refer to Frau Hildish with as little information to go on as the descriptions (i) to (iv)? The obvious answer is that they do it by means of parasitic reference. Details of this will be addressed in the next section.

⁹⁹ For an impressive example of a biography being fully scrutinized in a court trial, see the long documentary *The Staircase* about the American writer named Michael Peterson, who allegedly murdered his wife in 2001.

9 Socio-linguistic division of cognitive labor

Against the MIRs and the consequent identification rules, one could still raise the following objection: We do not need to know the fundamental descriptions associated with a proper name to use it in a sufficiently correct manner. Perhaps the only thing most people know about Aristotle today is that he satisfies the indefinite description ‘a great philosopher of ancient Greece’. A person who knows only this knows nothing more than a generality implied by Aristotle’s localizing and characterizing descriptions. Even so, we would still say that this person is referring to Aristotle. Moreover, a person can be understood as referring to Aristotle, even associating this name with a single auxiliary description such as ‘Plato’s greatest follower’ after seeing a picture of Raphael’s famous fresco, *The School of Athens*. Or the name could be associated with the expression ‘Alexander’s tutor’, after watching a film about Alexander’s life, or even with an adventitious auxiliary description such as ‘the philosopher my grandfather considered the greatest of the great ones’. Furthermore, following Kripke, a person could refer to Aristotle by associating him with an erroneous description, such as ‘a Greek general’ or ‘a medieval philosopher’. We have already discussed the problem in a generic way. My intention now is to address the details.

One way to give a complementary answer to the question of parasitic or borrowed reference consists in the appeal to what might be called a descriptivist-internalist understanding of the hypothesis that there is a division of labor in language. This division was originally proposed by Hilary Putnam in his non-descriptivist, externalist view on the conceptual references of general terms. According to him, many words are used by different people in different ways, each including greater or lesser amounts of information, which can be more or less specialized, so that they are all interrelated in the social network of our language. For him, words achieve their meanings not through psychological states, but in “the sociolinguistic state of the collective linguistic body” (Putnam 1975: 229). Here, he uses the pertinent metaphor of a steamship:

We may summarize this discussion by pointing out that there are two sorts of tools in the world: there are tools like a hammer or a screwdriver, which can be used by one person; and there are tools like a steamship which require the cooperative activity of a number of persons to use. Words have been thought of too much on the model of the first sort of tool. (Putnam 1975: 229)

Essentially, different people use ships for different functions and purposes; most people use them as passengers who do nothing but ride on them to reach their destination. Others are crew members, having more active roles. They can be pilots, work in the engine room, or perform on-board services... This variety of in-

terlocked functions is surely a factor in applying most general terms with scientific connotations, like ‘water’, ‘atom’, ‘force’, ‘quark’, ‘entropy’, ‘photosynthesis’, ‘neoplasia’, ‘psychosis’, less so in applying more everyday ones like ‘stone’, ‘chair’, and ‘house’. Putnam was thinking of natural kind words. We will discuss his views in the last chapter. My question here, however, is: can we apply a similar understanding of a socio-linguistic division of labor to our cognitivist-descriptivist understanding of proper names’ referential function?

Committed to his semantic externalism, Putnam considered the linguistic division of labor as involving social groups and did not resort to cognitive-descriptive semantic aspects that psychologically viewed should belong to the diversified component members of those groups. However, it is important to note that *prima facie* his externalist commitment is arbitrary, since it is even easier to imagine a division of semantic labor comprising various levels of descriptively expressible *cognitive* abilities that speakers, or even groups of speakers, need in order to warrant the most complete referential use of a word. After all, as A. D. Smith noted (1975: 70–73), allusions to something like the division of labor in language can be found in the writings of internalist philosophers preceding Putnam, beginning with John Locke himself. The latter was the classic advocate of a descriptivist semantics in which meanings are psychological ideas.¹⁰⁰ Moreover, Putnam’s arguments for his externalism of meaning are, as we will see later, more than controversial.¹⁰¹

Having this in mind, my goal is to apply the above view to proper names, first classifying the divisions of language work. There are degrees of cognitive abilities in the application of the descriptively expressible semantic-cognitive contents that various speakers can associate with those terms. It seems clear that when we attribute reference to a name, we can mean different degrees of referential success. Three prominent cases can be easily identified:

100 According to Smith, the appeal to a division of linguistic labor can be found in the writings of philosophers like John Locke and C. S. Peirce. A closer look shows that Locke was emphasizing the frequent inadequacies in our ability to reflect in words the different aspects of our ideas. He thought ideas corresponding to words can be inadequate and faulty in different minds, distant from the patterns or archetypes they should designate (Locke II, 31, § 4–5). For him, ideas that are collections of simpler ideas can be attached to names in ways remote from those who use the names in their most proper signification (Locke II, 32 § 12), and confusing complex ideas are bound to render the use of words uncertain (Locke II, 29, § 7). Thus, many do not use such words in their precise sense, which often defeats real communication (Locke III, 10, § 22). Children often learn imperfect notions of our complex ideas, and as adults sometimes remain ignorant of important aspects, so that, although they master our grammar, they may still use many words improperly... (Locke III, 11, § 24).

101 See Chapter VI of the present book, § 7.

- (A) that of a proper, self-contained, *self-sufficient reference*,
- (B) that of a parasitic or borrowed, *unqualified reference*.
- (C) that of an unhappy, *failed reference*.

Let us first consider case (A) of the reference I call self-sufficient (proper referenc-ing). We can understand it as the reference made by *privileged users* of a name, capable of offering the identification of an object as a referent that exists in the actual world. This is guaranteed by the application of its proper name's identifica-tion rule. In typical cases, by the sufficient and predominant application of the proper name's localizing and/other characterizing description-rules.

There are many proper names, for example, those of our close relatives, whose identification rules we can self-sufficiently know, so that we are essentially privi-leged users. But there are other proper names whose relevant informative con-tents are known by only a few privileged users, such as experts, historians, biog-raphers, and witnesses of their baptism... Consider, for example, the proper names 'Kublai Khan', 'Battle of Salamis', 'Andromeda Galaxy'. A self-sufficient ref-erence to the bearers of these names requires privileged users who can properly refer to their bearers, ideally being responsible for their institution and mainte-nance. Furthermore, among these privileged users/namers, we can find sub-speci-alized divisions of labor: The Battle of Salamis, for instance, will be seen differently by a historian, a military strategist, and a geographer, each knowing more than the others about different special aspects of that event.

It often happens that when we attribute a reference, we are considering an unqualified reference. What a person has in mind is only an *unqualified* (unhappy) description-rule (case B), which can be:

- (B₁) *insufficient*, in the sense of being correct but schematic or accessory, or even
- (B₂) *inappropriate*, in the sense of being erroneous, although still convergent in the sense of being correctly classified—a reference whose character is derived.

As for insufficiency, it is customary to attribute this to people who know only gen-eralities or auxiliary descriptions associated with a proper name. Thus, two people can agree about the existence of "the great Spanish painter called "Velázquez"" without ever having seen any of his paintings and knowing nothing more about him. We do not deny that they can refer to Velázquez, although in an unqualified way, in the deficient sense B₁. They are able to insert the name into discourse, and people who know something about Velázquez will usually agree that they are ref-erring to the great 17th-century Spanish painter. However, in a more demanding sense, they know little about that painter and are very far from being competent in

referring to him. The same can be said of people who only know that Aristotle is a figure in a famous fresco painted by Raphael or who have seen him in a Hollywood movie where he was portrayed as Alexander's tutor. These persons are referring to the philosopher only in an *extended* sense of the word, in the sense that they are able to insert the name 'Aristotle' in undemanding conversational contexts. They assume that there are interpreters able to do something with the name, either because they are privileged namers or because they know more or less as much as the speaker. Thus, they are confident that there are privileged namers who have sufficiently mastered the identification rule to recognize that they are trying to identify the same person, e.g., the painter that only privileged namers could actually refer to in a self-sufficient way. To this, we must add that such a mechanism of reference-borrowing works insofar as there is a *common general context* that is sufficiently determined to enable users to disambiguate the proper name. Thus, Aristotle is understood by hearers as the name of a thinker, and not as the name of a school or a Greek shipping magnate... Velázquez is understood by hearers as a great painter and not a friend who presently lives in Barcelona. Through an enhanced mechanism of reference-borrowing, generalities regarding fundamental description-rules (e.g., the Greek philosopher Aristotle) and popular auxiliary descriptions (e.g., the greatest disciple of Plato) are recognized by others as potentially rescuable in the appropriate common social context. Satisfaction of B_1 or B_2 and of an appropriate common general context allows the sharing of a borrowed reference without directly appealing to privileged namers, although assuming their existence.¹⁰²

Insufficiency occurs in degrees. A degree of insufficiency that is somewhat lower than that of the above cases is given by Kripke's example of a person who can associate a proper name only with an indefinite description, as in the case of someone who associates the proper name Feynman with the indefinite description 'a great physicist'. A description can, however, also be clearly inappropriate, though still worthy of the term 'referential' in our natural language. Thus take Kripke's example of an erroneous description such as 'the inventor of the atomic bomb' used in referring to Einstein (1980: 81–85). Usually, people make such associations with a full understanding of the grammar of proper names, that is, implicitly knowing MIR* and possible variants. They have sufficient background information to be aware of what they can—and especially of what they *cannot*—do with a proper name. In such cases, we are still used to saying that the person was success-

¹⁰² This also occurs frequently when we hear scientific expressions like 'quantum entanglement' or 'string theory'. The little that most of us know of physics allows us to use such concepts to at least share a similar *locus* in our cognitive networks.

ful in referring, since the speaker, as well as his audience, know that Einstein was an “inventor”, a scientist, and therefore a human being belonging to the class G of scientists. Often the audience knows enough to correct the speaker, and all the participants assume that some members of the linguistic community are privileged users. That is, participants in the communicational praxis assume that some members of the group are able to correct and complete the name’s reference because they have properly mastered their identification rules.

Nevertheless, there are limits to the ability to refer using incorrect information about the possessor of a proper name. What if someone uses the proper name ‘Aristotle’ in the erroneous belief that it names an imaginary number, or if someone uses the name ‘Feynman’ thinking it is a brand of perfume, or if someone uses the proper name ‘Einstein’ supposing it means a precious stone? These users have *divergent* understandings of those names—wrong in the sense of being *failed* (case C). They make use of names in which even class G (in these cases, of human beings) is not recognized. Here the speakers will no longer be considered able to correctly insert these names into discourse in any acceptable sense. We conclude that they cannot make the right gesture toward a fully referential use of these names. They have no idea of what they are talking about, and thus they cannot be said to be referring at all.

Keeping in mind the derivative referential use of a name by a speaker with insufficient knowledge of its identification rule, we can concede a secondary, weaker, borrowed, parasitic sense of referential success. It concerns (B) unqualified references that are (B₁) insufficient or (B₂) inappropriate but not (C) failed. For the identification of the “so-called” referential success belonging to class (B), we can propose the following threefold criterion:

SUCCESS CRITERION FOR UNQUALIFIED REFERENCES:

SCB-1. *Convergence condition*: we understand by a convergent use one where a person can at least *correctly classify* the referred object in the nearest relevant class G that together with the corresponding proper name makes its reference sufficiently recognizable for other speakers and, in the end, for privileged namers, who are assumed to exist (comparable to knowing a *genus proximum* regarding conceptual terms).¹⁰³

103 I am detailing something that John Searle already noted as he considered the transference of relevant information from speaker to the hearer in order to secure reference: “...the *type* of thing named by the name—whether it is a mountain or a man or a mouse or whatever—is generally associated with the name even in the parasitic cases; and if the speaker is wildly mistaken about this, we are disinclined to say that he has really succeeded in referring” (1983: 249).

SCB-2. *Condition of linguistic competence*: implicit knowledge of MIR* and variants... and of the mechanisms of reference-borrowing on the speaker's part. This enables a person to at least *know that she does not know* (e.g., if all I know about Aristotle is that he was Alexander's preceptor, and I implicitly know MIR*, then I know that I am far from knowing enough about who Aristotle really was to believe I am able to identify him properly).

SCB-3. *Condition of socio-contextual adequacy*: in the linguistic interaction there must be an adequate social context, where people who already know generalities about the proper name are already able to *disambiguate* it (e.g., one can introduce the name 'Aristotle' referentially, linking it with the erroneous description 'a pupil of Socrates' in a social context where he is already known to have been an ancient Greek philosopher, but one cannot do the same in a context exclusively limited to children who know nothing about Aristotle).

In other words: a person is admittedly able to use a proper name in the above classified extended senses of the word insofar as, minimally, these three main criterial conditions are satisfied. First, the uses must be convergent, falling within appropriate general classifications (satisfaction of SCB-1). This is so simply because by inserting the name into discourse in a convergent manner, a person should already be able to employ the name in communication, based on her expectations concerning the linguistic community. The spelling of proper names in convergent senses and adequate contexts already makes it possible for other users—assuming the ultimate support of privileged namers—to accept this insertion of the proper name into discourse as successful, since in this way the path is cleared for a more complete reference. Second, it is assumed that the person tacitly knows MIR* and its contextually identifiable variants, that is, the metalinguistic schemata for the construction of proper names' identification rules (satisfaction of SCB-2). Usually, this makes the person aware that to use a proper name referentially in a self-sufficient way she would need to know more about it than she actually does know. Third, the linguistic community where the name is inserted must be inclined to recognize contextual generalities about the name enabling disambiguation (SCB-3): the community must know that the speaker is referring to a philosopher in the case of Aristotle, to a world-famous historic building in the case of the Taj Mahal, etc. Without the satisfaction of these minimal conditions, a proper name could not be suitably introduced into discourse, even in the form of an unqualified reference. Although the first two conditions are sufficient for personal unqualified reference, only the additional satisfaction of the third condition will be sufficient for the unqualified referential insertion of the name into social discourse.

Parasitic references are derivative acts of referring that belong to our everyday communicative actions. However, speakers perform such acts of unqualified reference because they are counting on the support of a linguistic community able to recognize well-known generalities about the bearer and eventually complete their references with the help of privileged namers. Only with the aid of better-qualified speakers is it cognitively possible to correct and complete the senses of the expressions a speaker has in mind, and this is why they are necessary.

Here, it is worth repeating that although this process is social, it is obviously internal. The meaning-content of the proper name is internal, and it is located especially in a speaker's and his audience's heads, even though it is *distributed differently in the heads of the different speakers*. Meaning is internal in all its moments, apart from its origins. —And here lies the original sin of externalism: the *genetic fallacy* of mistaking the external origins of meaning for the meaning itself.¹⁰⁴

By embracing internalism, I am obviously not defending anything near to idealism. Obviously, without external, non-mental realities, there would be no internal meaning. However, externalists like Putnam, David Kaplan, John Perry, and Tyler Burge did not have this platitude in mind when they originally introduced their provocative thought experiments. It is a fallacious maneuver to say that externalism means only that meaning is determined by environmental conditions (cf. Kallestrup 2012) since this makes it sound like a harmless truism and is so indiscriminate that it could easily be extended even to any healthy form of internalism.

Making my own use of Putnam's metaphor: a person is successful in referring according to the criteria of unqualified referential success, in contrast with a self-sufficient reference, in a way comparable to that of a passenger who is taking a ship to a certain destination knowing that the crew will sail and steer it there. The passenger's situation is obviously different from that of the ship's captain, who actually uses onboard controls to steer the ship to its destination, and is comparable with that of the name's privileged users. If we want to be strictly demanding, we must admit that people who use a proper name without knowing its fundamental description-rules do not really know enough of what they are saying when using the name. In fact, we only agree to say that they can insert a name into language referentially because we know they can rely on the existence of privileged namers who are actually able to identify its bearer. Finally, unqualified non-failed references form a spectrum ranging from knowledge of almost irrelevant descriptions (such as the overly vague 'a philosopher' or the too little

¹⁰⁴ See Chapter VI, §§ 4 to 8, for criticism of Putnam's externalism and an internalist examination of the meanings of general terms.

known ‘grandson of Achaeon’) to the knowledge of important identifiers (such as ‘Plato’s greatest pupil’) or parts of fundamental descriptions (such as ‘the Greek philosopher who wrote the *Metaphysics*’).

To emphasize the social dependence of unqualified references on self-sufficient references—references in the most proper sense of the word—we can imagine a situation where, for some reason, there are no longer any privileged namers. For example, imagine a catastrophe such as a nuclear war or the impact of a great asteroid on the Earth occurred, and only a few almost illiterate people survived, reduced to a primitive state. Suppose that these survivors found a scrap of paper preserving some auxiliary descriptions concerning Aristotle, such as ‘the greatest disciple of Plato’, and nothing more. Never having heard about Aristotle, they would only be able to recognize the word ‘Aristotle’ as the name of a person. However, they would not actually be able to refer to Aristotle, even in the sense of making an unqualified reference, simply because they lack any support from a linguistic community, which must include speakers capable of filling gaps guaranteeing the reference and giving it a sense of what it originally was. Without privileged namers able to (at least jointly) master the identification rule, a proper name’s effective referential use would be impossible. It is as if the passengers of a ship were abandoned by its crew in mid-ocean. Having not the slightest idea of how to navigate a ship, they could never reach a port by their own efforts.

10 Why are proper names rigid designators?

A problem that has always haunted descriptivism is the *prima facie* impossibility of explaining why proper names are (obviously) rigid designators. After all, it seems clear that there is no identifying property that must satisfy some weighted definite description of a proper name’s cluster in all possible worlds. Searle tried to explain why:

[the name can be used as a *rigid designator* because] ...we have a notion of the identity of an object which is separable from those particular intentional contents which are used to identify the object. (Searle 1983: 260)

This is the right insight, although insufficiently explained, because of the lack of the right conceptual device, which is given by the *form* of the identification rules: MIR* and its variants. Now, what I intend to show in this section is that another great advantage of the identification rules resulting from the application of meta-identification forms to a proper name’s cluster is to explain clearly and decisively

why proper names must be rigid designators, even in the domain of a neodescriptive theoretical approach.

In order to give a metadescriptive answer to the question, we need to begin by examining some semantic properties of the identification rules for proper names. One is that *these rules can always be translated into the form of complex definite descriptions able to be read as analytical-conceptual truths in the sense of definitions*. We can make this clear by rewriting the MIR* of proper names. Instead of the usual vertical presentation of the rule, we make a horizontal presentation in the form of a complex definite description, which can be made simply by “slanting it” as a long description, which I call a DD (a *definitional description* that can be simply understood as the MIR* expressed in a descriptive form). Here is the most common general form of DD-rule:

MIR* presented as a *definitional description*:

DD-*N*'_{vs} = *The*¹⁰⁵ object belonging to class G that for privileged speakers satisfies (ii) sufficiently as a whole, and (iii) more than any other the localizing condition (i-a) and/or the characterizing condition (i-b).

As you can see, the three conditions of the MIR* are contained in the DD form of a definitional description. To make the function of a DD clear, we can apply (or instantiate) DD to a proper name, in order to construct its identification rule. If the proper name is ‘Aristotle’, the summarized result is the following:

DD-‘Aristotle’_{vs} = *The* person named by privileged speakers as ‘Aristotle’, satisfying (ii) sufficiently as a whole and, (iii) more than any other, the condition (i-a) that he was born in Stagira in 384 BC, was the son of Philip’s court physician, lived in Athens and died in Chalkis in 322 BC (...) and/or the condition (i-b) that he was the author of the major texts comprising the *Corpus Aristotelicum* (...).

The crucial point to be noted about a DD expressing the identification rule of a proper name is that it is a definitional description that is a *tacitly accepted rigid designator*. After all, it applies to the bearer of the name ‘Aristotle’ *in any possible world where Aristotle can be said to exist and cannot be applied in any possible world where Aristotle cannot be said to exist*. That is, we cannot conceive of a pos-

¹⁰⁵ The definite article ‘the’ is redundant here, serving only to make it clear that we are dealing with a definite description. It is redundant because the satisfaction of the predominance condition (iii) already warrants the singularity of the referent.

sible world where Aristotle exists—i. e., where he can be found—and the identification rule provided by such a definitional description *does not* apply, since it is this same identification rule that *defines* what entity we can possibly identify as the single object of reference for the name ‘Aristotle’.

These considerations give us the most interesting clue to a new understanding of reference mechanisms that bridges the at first view apparently insurmountable gap between Kripke’s insight and descriptivism. All we need to see is that the expressions of identification rules of proper names can be translated as rigid definite descriptions, that is, definitional descriptions applicable in all possible worlds or world-circumstances where the referent can be found. This is important because it solves a central problem of descriptivism pointed out by Kripke, namely, the apparent impossibility of explaining how we can extract rigidity from a definite description or a cluster of descriptions. This also means that from the ontological viewpoint, we do not need any common essential property existing in the most diverse possible worlds to warrant the rigidity of a proper name—we do not need it as a *real* individualizing essence. It suffices to have a DD description-rule functioning as a *nominal* individualizing essence.

11 Blurred conceptual borders

We can now ask ourselves: could there be ambiguous cases, possible worlds where there is no way of knowing whether we can apply an identification rule? Could there be possible worlds where there is only, so to speak, “half” an Aristotle? The answer is: yes, of course, but that does not matter at all! Vagueness is a pervasive characteristic of language and supposedly also of the world in the many ways it can be subdivided, and an adequate semantic treatment of the concept of possible worlds also needs to cope with this fact. Certainly, there are possible worlds where Aristotle does not sufficiently exist, so that we cannot decide whether or not to apply his identification rule. In such worlds, there is no way to attribute either existence or non-existence to Aristotle, and (assuming the plausible idea that vagueness arises from the very nature of things) Aristotle neither exists nor does not exist. This does not mean that the name ‘Aristotle’ is not a rigid designator. It is rigid because, outside the boundaries of indeterminacy, the name can still be guaranteed to apply or not.¹⁰⁶

106 Wittgenstein accused formalist philosophers like Frege of having too willingly ignored the fact that our concepts usually do not have sharp boundaries. Psychologically, they were easily led astray by the attempt to make natural language conform to impossible ideal standards. Here, we are examining a similar case.

There is an intuitively clear way to accommodate the concept of a rigid designator in such cases. For our purposes, it is sufficient to redefine such a concept as designating the property of a referential expression of applying in all possible worlds where the referred object *definitely exists*. Rigidity is, in other words, the property of the semantic-cognitive criterial rule of a referential term of “constituting” the existence of its referent in all possible worlds where this rule can reveal itself to be not hypothetically, but *effectively applicable*. This means, warranted and continuously applicable in a defined way, that is, without doubts about its applicability, which can occur only by applying direct or indirect verifiability procedures to sentences containing the term. For example. We can say that our Aristotle existed in our world simply because we have already applied the identification rule for the proper name Aristotle in a multiplicity of verifiability procedures, particularly regarding the reliable information left by historical testimonies. Therefore, we know for certain that the identification rule for Aristotle (IR*–‘Aristotle’ or DD–‘Aristotle’) is effectively or warrantably applicable.

It would still be possible to object to the foregoing view by recalling the *Sorites* paradox. If there are boundaries of indeterminacy, where do they begin or end? If there is no clear limit to its extent, what justifies our saying that we have already reached a zone of clarity in the application of a concept, where the bearer of the name can be said to exist? The only answer we need to present here is that *Sorites* can be generated for virtually any vague term of our language without this fact making it practically inapplicable. Indeed, even if we are aware of *Sorites*, we do not fail to apply the word ‘bald’ to a really bald head, nor the word ‘mountain’ to a mountain so high that it is impossible to confuse it with a hill. We do not need to solve the *Sorites* to apply our predicates. Similarly, we do not need to eliminate all undecidable cases to admit that the proper name ‘Aristotle’ might express a semantic core constituted by an identification rule applied as a rigid designator.¹⁰⁷

12 Rule-changeability

We already know that changes in an identification rule are possible and that the changes in this rule can bring changes in the cognitive meaning (see Wittgenstein 1984b, § 79). This fact raises the following question: would the changeability of the identification rule undermine our assumption that proper names are rigid designators?

¹⁰⁷ Notice that a similar problem could be found with causal-historical views: there could be a half-Aristotle who was unjustifiably baptized or labeled, etc.

There is an easier and a more difficult way of answering this question. The easy way consists in demanding that the rigidity of a proper name must be defined under the assumption of the identification rule accepted by the linguistic community *at the time of its evaluation*. This solution excludes the possibility that rule changeability undermines rigidity simply by eliminating the possibility of change while considering rigidity. This would already satisfy the requirement for a distinction between a rigid proper name and the accidentality of the related definite descriptions, since the difference can be found by assuming the system of conventions accepted at the time of the evaluation. However, this is not the ideal solution, since it is clear that an identification rule can undergo changes without ceasing to identify the same object. For instance, we know much more about Pharaoh Tutankhamun since the discovery of his tomb in 1922. But the reference remains the same. Furthermore, it seems the possible counterfactual circumstances in which the same Tutankhamun could be identified have not changed either. Considerations of this kind lead us to the more difficult way to answer the question.

Before presenting the argument, it is useful to consider a case of reference change due to the creation of a completely new rule. This is the already considered example of Gareth Evan's name 'Madagascar', now to be interpreted according to the metadescriptive view. According to him, Madagascar was first identified by natives as a region on the east coast of Africa. However, when Marco Polo visited the region, he mistakenly took Madagascar to be the great island near the east coast of Africa, which led to the formation of a completely new dominant identification rule for a new bearer of the proper name. Notice that the description 'the region on the east coast of Africa with such and such characteristics' summarizes a localizing one-foot identification rule for the old reference of the proper name 'Madagascar'. The description 'the greatest island near the east coast of Africa' summarizes the localizing one-foot identification rule for the new reference of *the same* phonetic-graphic sensible proper name's form. Consequently, we are left with two homonymous proper names with different meanings and different references. These two rules identify different objects of reference in our world, supposedly in a rigid way. And they surely identify different Madagascars in any possible world where their references exist. It is of the utmost importance to see that in this case, the change is so great that we have another rule and that this different rule has another primary semantic core (another essential meaning) for the proper name's form. Indeed, since the identification rule for our 'Madagascar' is a geographic one-foot identification rule depending on location, the complete change in the localizing description-rule changes the whole identification rule for an ambiguous proper name's form and in this way also its semantic core.

In order to tackle the problem of how much a rule can change without changing its referent or without undoing its property of rigidity more effectively, I will

now consider three different ways of change within an identification rule, and consider if they could affect the assumption that proper names are rigid designators:

- (a) changes in the auxiliary description-rules,
- (b) changes in the fundamental description-rules, which can be:
 - (b-i) changes by increasing or decreasing the number of required criteria in fundamental rules,
 - (b-ii) changes by replacing required criteria in fundamental rules.

Case (a), of *changes in auxiliary description-rules* belonging to a proper name's cluster, is easy to handle and does not require much consideration. Here, the change is in the semantic halo (the auxiliary meaning). Auxiliary descriptions can be added, subtracted, or replaced without changing the applicability of the identification rule since they do not really belong to it. To give examples: Suppose that in a possible world, Aristotle was not called 'the master of those who know' because in that world there was no Dante to invent the description. This, of course, does not change the name's reference. Nor does it really matter (*ceteris paribus*) whether Proxenus of Artaneus was Aristotle's guardian after his father's death, nor whether Eudemus of Rhodes and not Theophrastus really accompanied him to the lagoon on Lesbos Island... The reason these things do not matter is that while belonging to a proper name's cluster, auxiliary rules do not belong properly to the identification rule. Consequently, they are able neither to change the essential meaning nor suppress the name's rigidity. The possible worlds where the identification rule applies remain the same.

To strengthen the case, consider again our two-headed Aristotle in a possible world where having two heads was normal. Suppose again that they had the same biography, jointly wrote the *Corpus Aristotelicum*, etc. But suppose that it was the Aristotle-on-the-left who had the unfortunate idea to write the hymn in honor of Areté while his brother was sleeping... This small poem was decisive to Aristotle's fate since it was used by the authorities in Athens to charge him of impiety after the death of Alexander, forcing him to flee to Assos in order to save his life (Guthrie 1981, Vol. VI: 44–45). Although this was decisive for the life of our twin Aristotles, it would be in no way sufficient to lead us to the conclusion that the Aristotle-on-the-left must be our true Aristotle, since the description expresses an auxiliary description-rule known by only a few. The best strategy to deal with the case remains the same: we need to rename the twins as Aristotle-1 and Aristotle-2, or something of the kind, since both Aristotles satisfy the condition of sufficiency, and we are unable to in any relevant way apply the condition of predominance to one of them in particular.

Consider now (b-i), the second way of change, which is by *increasing or decreasing* the number of details concerning the fundamental localizing and/or characterizing conditions. This is very common with regard to the semantic core. As to the fundamental description-rules, the number of details relevant to location and character usually increases over time insofar as our knowledge of the bearer increases. For instance, after the discovery of Tutankhamun's tomb, we know more about its location, more about him and his family through objects, new data obtained from autopsies, DNA investigations, etc. However, the number of details can possibly also decrease when we discover mistaken attributions, as in the case of the discovery that Pluto was not properly a planet of our Solar System. Under appropriated limits the increase or decrease in informational details will not matter, provided the changes are all within the blurred limits of conceptual application. If so, it will *not* change the reference or the possible world-circumstances where the name could effectively apply.

Now consider case (b-ii): the third way of change, change within the fundamental description-rules originated by the *replacement* of criteria belonging to the identification rule of a proper name. This means a change in the primary semantic core, the essential meaning. This change can be so great that it alters our choice of the object of reference in the actual world, creating a new proper name, as in the case of Gareth Evan's Madagascar. This would not be a problem, since such a replacement in the rule means replacement of the core meaning and consequently a change in the object of reference, producing a homonym.

However, one could ask what would occur if we were to conceive of minor replacements in the fundamental descriptions. Could they change the possible worlds in which the proper name applies to its referent without creating a new reference in our world and thereby eliminating the name's rigidity? I will present examples seeming to show that this is really possible, and then show that they fail to achieve their goal.

To begin with, suppose we discover that Aristotle actually did not write the *Nicomachean Ethics*, but instead the *Magna Moralia*. (The latter work was once attributed to Aristotle, although currently, scholars reject this attribution.) This small alteration in the characterizing description-rule would not change the possible worlds in which Aristotle exists. For he would be identified by the much greater weight of the remaining identification rule, assuming there is no other suitable competitor for the status of Aristotle. Now, suppose there is a possible world W1 where there are two Aristotles with exactly the same known biography, except that one wrote the *Magna Moralia*, while the other wrote the *Nicomachean Ethics*. In this case, given the change of the rule, it seems we would choose the Aristotle who wrote the *Magna Moralia* as *our new* Aristotle in W1, instead of the author of

the *Nicomachean Ethics*, since the first satisfies our present condition of predominance.

We can also give an example regarding the localizing description-rule. Suppose we are led to accept a minor replacement in the localizing rule which is insufficient to produce a new identification rule. Suppose we discover that Aristotle was born in 396 BC and not 384 BC. As in the above example, if in a possible world-circumstance (a counterfactual situation) W2 there were two Aristotles with the same biography, one born in 396 BC, and the other born in 384 BC, it seems we would need to agree that the Aristotle born in 396 BC is our new Aristotle in W2, according to the condition of predominance.

Nonetheless, there is in my judgment delusional problems in both examples. We were not informed about the background circumstances. There is nothing assuring us that the Aristotle who wrote the *Magna Moralia* is our Aristotle in W1 since the *Nicomachean Ethics* is a far more important work. Moreover, why must the Aristotle born in 396 be our Aristotle in W2 but not our old Aristotle again? We cannot affirm that we can really apply the condition of predominance in such cases, since in its application this condition cannot be determined, at least as far as our information goes.

Now, suppose we unreasonably increase the weights of the replacement. Suppose we discover that instead of his *Metaphysics* and the *Organon*, Aristotle wrote a book called *De Proprietatibus Elementorum*, a medieval Arabic treatise on geology written by a Pseudo-Aristotle who lived in the 9th or 10th century A.D., while the *Metaphysics*, the *Nicomachean Ethics*, and the *Organon* were written by another Greek philosopher born in Stagira... Or try to imagine we discover that he did not write his *Metaphysics*, but instead a book called *Le Città Indivisibili*, which as far as I know no author has written. If this last case were true, then if we had a possible world with two Aristotles with a similar known biography, one who wrote the Aristotelian work with his *Metaphysics* and the *Organon* while the other wrote the Aristotelian work plus *Le Città Indivisibili* but without the *Metaphysics* and the *Organon*, should we choose the second one as our revealed Aristotle? Of course, such fictional examples make little if any sense. They are informatively lacunar, introducing in this way an indeterminacy in our methods of semantic evaluation that makes it impossible to apply the condition of predominance in any reliable way.

My conclusion is that when we replace parts of the disjunctive condition of the identification rule sufficiently to get different references in possible worlds, we have already changed the proper name's essential meaning, so that what we have is a different rule, identifying a different object of reference. The following suggestion seems correct concerning the identification rule of a proper name:

LR: The limits of rule-changeability without a change of reference, the limits of the essential meaning's identity, and the limits of rigidity are all the same.

A name is a rigid designator because it is applicable in the possible worlds {W1, W2... Wn}, but not in others, simply because its identification rule may change only in ways that preserve its application in the possible world {W1, W2... Wn}, but not in others. The blurred limits of rule identity and rigidity must be the same simply because of the definitory nature of the identification rule: this rule is *what we understand as defining what must be the single reference of a proper name in any possible world in which this reference exists*. Using the expression 'conceivable circumstance' instead of 'possible world' we would say that a change great enough to change DD would require the change of the conceivable circumstances in which the proper name applies. In other words: LR is reasonable because the identification rule is "constitutive" of the object in the sense that its application already defines the existence of its reference in any conceivable circumstance where the reference can be said to exist. Consequently, one cannot have the object in any conceivable circumstance without the applicability of its proper identification rule and vice-versa. We have in the conditions (i-a or i-b), (ii), and (iii) of our identification rules three poles of vagueness that can be explored in different measures, which contributes to confusing the identification rules' blurred limits of application. This can make us misleadingly think that the limits of rigidity would not be the same as the limits of sameness in the core meaning of the identification rule of a name. It is only lack of knowledge of the ways of reference and prejudice against vagueness that can mislead us to think otherwise.

13 Existence as a property of criterial rules

A related point regards the attribution of existence to objects of reference in statements like "Aristotle exists". I will tentatively consider here only a natural association between identification rules and the second-order view of existence traditionally defended by philosophers like Aquinas, Kant, Frege, and Russell.¹⁰⁸ According to Frege's version of this view, existence is not a property of things, but in some way a property of concepts, which we could generally render as the prop-

¹⁰⁸ Although today there is a wide range of literature opposing the higher-order view of existence, it remains questionable if first-order views are really unavoidable, particularly regarding their unacceptable conclusion that one cannot deny existence. For a discussion, see Costa 2018: 213–217.

erty of being satisfied by at least one object.¹⁰⁹ Formally speaking, if we call \exists the attribution of existence, and if we call A the expression of the concept involved in the word ‘Aristotle’, we can express “Aristotle exists” or, in other words, “There is only one x such that x is-Aristotle” (see Quine 1953: 8)¹¹⁰, in a formal way written as “ $\exists x [(Ax) \& (y) (Ay \rightarrow y = x)]$ ”. Here we can clearly see that A applies to x , while \exists applies to A, more precisely, we see that the concept expressed by A applies to something at the level of reference, while the concept of existence expressed by \exists applies to the concept expressed by A and not to x itself. Now, if we accept that a concept is a criterial t-rule (a sense), we can replace A with the identification rule for Aristotle (predicatively understood as an is-Aristotle), and \exists with the *satisfaction* of this rule, which can be understood as the metaproperty of *effective or warranted applicability* of the criterial rule. I say “effective or warranted applicability” in order to exclude merely logically possible, hypothetical applicability, intending to say that this applicability would warrant itself *if* there were someone in a position to verify a sentence of the form “ ξ exists” or “ $\exists x [(\xi x) \& (y) (\xi y \rightarrow y = x)]$ ”, where ξ occupies the place of any proper name. Hence, to say that Aristotle exists is to say that his identification rule is effectively applicable in the sense that if someone were in a position to apply his identification rule, it would inevitably be applicable. This means that to say that Aristotle exists is to say that his identification rule has the property of being effectively (warrantedly) applicable to its bearer in an appropriate domain. In other words: I am suggesting that the higher-order property of existence can be paraphrased as *the meta-property of the effective or warranted applicability* of conceptual rules in their proper domains.¹¹¹

I will try to make my point as clear as possible by offering an example: suppose someone utters the indexical sentence: “The object on this table is a pencil”. Let us say that the criterion for the ascription rule for the concept of a pencil can

109 Frege regarded a concept as an incomplete abstract entity on the level of reference of a predicative expression. This view left him unable to say anything about the corresponding sense of the predicative expression, which intuitively should be its expressed concept. Following our linguistic intuitions, I will here locate the concept (as a t-rule) on the level of sense or meaning, placing the referred t-properties on the level of reference (Frege 1891; cf. also Searle 2008: 186).

110 I am assuming that the proper name ‘Aristotle’ can appear in the place of a predicate, in a way similar to Quine’s invented words ‘is-Pegasus’ or ‘pegasizes’, which can appear predicatively regarding the concept involved in the proper name ‘Pegasus’.

111 I take this terminology from my reconstruction of J. S. Mill’s definition of matter as “the permanent or warranted possibility of sensations”. What I call ‘warranted applicability’ is the property of the rule of having its continuous applicability warranted by some form of direct or (mainly) indirect verification (taken as something possible) within an assumed proper domain of entities (for details, see Costa 2018: 204–233).

be summarized as: “a long thin tube containing a fairly solid rod of a black or colored material like graphite, suitable for writing or drawing”. If we claim that the pencil *exists* (a claim implicit in the sentence) we are saying that this rule is *effectively or warrantably applicable* to the object on the table, usually by means of some direct verification, even when we are not near that object, and even when we are not applying the rule. Moreover, a rule is warrantably applicable not only if it is directly or indirectly verified as applicable, but even in cases where we do not yet know of its warranted applicability in the domain of the world around us (e.g., we do not yet know that there is a pencil in the drawer, but there is one), inasmuch as we know that if a person were in a position to apply the rule, this person would, by will, inevitably apply it. Similarly, to assert the existence of a proper name’s bearer, such as Aristotle, means that this bearer must be able to be identified by means of a warranted applicability of the conceptual rule that we normally associate with the word ‘Aristotle’. Here, the conceptual rule is the *identification rule* (expressed by IR-‘Aristotle’ or the DD definite description) for this proper name. Thus, existence is a t-metaproperty of effective or warranted applicability of the identification rule—the existence of something, which establishes a referent as the bearer of the name in any possible world.

With the above explanation, I am offering a more detailed analysis of the higher-order concept of existence, in my view somewhat equivocally analyzed by Frege as the second-order property of a conceptual function of having at least one object falling under it (Frege 1961: 65). According to my analysis, the existence of the property designated by the ascription rule of a predicative expression is the higher-order t-property (or metaproperty) of this t-rule of being warrantably applicable. This is because the conceptual rule itself can be regarded as a first-order t-property in a world made up of tropes, as much as its property of warranted applicability (they are all t-properties because they are localizable, even if only vaguely¹¹²). Consider, as a further example, the statement “Aristotle was Greek”. This sentence can be formalized as $\exists x [Ax \ \& \ (y) (Ay \rightarrow y = x) \ \& \ Gx]$, where ‘ \exists ’ expresses the second-order predicate of existence, while the first-order predicates are expressed by ‘A’ = is-Aristotle and ‘G’ = is Greek. Now, according to our neofregean understanding, A and G rules apply to x , while \exists applies to the conceptual rules expressed by A and G. Considering the conceptual rules expressed by A and G as first-order tropic rules, A is an identification rule warrantably applied to (or satisfied by) some variable composition of concurrent criterial t-properties (which are expressions of

112 Aristotle, as a compresent cluster of tropes, does not exist presently in China or in the future; he existed more than 2,000 years ago in Greece, though residing in different parts of Greece at different times.

the Aristotelian person), and G is an attribution rule applicable to (or satisfied by) a t-property (which is the Aristotelian ‘Greceness’ or ‘being Greek’). The second-order conceptual rule expressed by \exists attributes to these first-order rules a second-order property of existence, which is nothing but the second-order t-property of these first-order rules of being warrantably applicable in a proper domain.

At first, the proposed view may seem puzzling if we think of existence as a t-meta-property of warranted applicability as something non-objective, floating above the object supposedly constituted by its tropical properties. But we can easily get around this objection insofar as we paraphrase the above explanation more naturally as saying that *the existence of an object is its dispositional t-meta-property of having its identification rule effectively applicable to it, while an object that does not possess this t-meta-property is not a real object, but merely an imaginable or conceivable one*. This way of speaking not only protects us from the accusation of lacking objectivity in attributing existence, but also against the expected accusation of *anthropomorphism* regarding existence: an object can have an identification rule warrantably applicable to itself—thus not being a merely conceivable or imagined object—even if this rule has never been thought of or applied by any *cognitive agent*. This also means that if a human agent were in the right evaluative circumstance, he could warrant the applicability of the identification rule by means of its actual application. For instance, suppose there is a possible world where the planet Vulcan exists. We can simply say that Vulcan has the dispositional property of having its identification rule warranted or effectively applicable to it in that possible world. Now, suppose there are cognitive agents in this possible world in circumstances such that they are able to construct this identification rule and try to apply it to the planet Vulcan. Given that Vulcan exists, given that its identification rule is warranted or effectively applicable to it, these agents will inevitably succeed in applying the rule and be able to verify, under adequate conditions, the existence of Vulcan. In other words, the warranted applicability of the identification rule, the existence, is a t-meta-property that can be thought of as “constitutive” of an object and, according to our ontology, as a *dispositional tropical* (spatiotemporally localizable) meta-property of it.

14 Why are definite descriptions accidental designators?

In this section, I present what I regard as an irrefutable demonstration of the greater explanatory power of the theory of proper names presented here.

In Chapter II, we have already seen that a significant advantage of the causal-historical view is its explanation for why definite descriptions are accidental designators, while proper names are rigid designators. In conformity with this view,

it seems that proper names identify their bearers in any possible world where these bearers exist by being more directly connected, even if mysteriously, with their references by means of baptism and causal-historical chains. Definite descriptions, on the other hand, can identify different objects in different possible worlds. They do so, it appears, by indirectly connecting with their references through what they mean (or, according to J. S. Mill, through what they connotatively express). Although never explicitly stated, it is a natural consequence of Kripke's remarks (1980: 52–53). And the reason it is never stated is because it would unsatisfactorily resort to some supernaturalist “direct connection to the object” supposedly acquired by proper names through the ceremony of baptism, even if often accomplished with the help or by means of descriptions.

In contrast, it is a great advantage of the metadescriptive theory of proper names that it allows us to explain differences in usage between definite descriptions and proper names simply by showing that what makes such descriptions accidental is their associations with proper names. To arrive at this explanation, however, we will need a detailed argument. One can start by asking: in what cases do definite descriptions become rigid designators? I am not, certainly, speaking about the stipulation of rigidified descriptions referring to an object in the actual world, such as, e.g., ‘the *actual* last great philosopher of antiquity’, referring to the actual Aristotle even in worlds where he was not a philosopher (cf. Searle 1983) or anything of the kind. What I want to consider is the case of perfectly normal assignable definite descriptions which are naturally interpreted as rigid designators simply because we are unable to see them as abbreviated by any proper name. Such descriptions could not be intrinsically associated with proper names as belonging to their clusters of descriptions. And they are *not* as rare as one may think. Here are some examples:

(A)

- (i) the least rapidly convergent series,
- (ii) the easternmost point in South America,
- (iii) the Rafflesia discovered by Dr. Joseph Arnold on 20 May 1818,
- (iv) the III Cavalry Corps of the *Grande Armée*,¹¹³
- (v) the Last Glacial Period,
- (vi) the assassination of Austrian Archduke Franz Ferdinand in Sarajevo in 1914.

¹¹³ An uppercase first letter is often used as an indicator that a definite description is being used as a proper name.

There is no proper name associated with the abstract definite description (i). As Frege noted, description (i) is an empty singular term with a sense but without a reference (1892: 28). It cannot serve as an example for us now since it is not applicable in any possible world. However, it could be called a rigid designator *de jure*, understood as something *made* to be applicable in any possible world.¹¹⁴

What really interests us here are the definite descriptions from (ii) to (vi), whose content is empirical. Whether or not we regard them as rigid designators does not usually depend on how we interpret them. Consider case (ii). It is true that in our world the easternmost point of South America is located in Northeast Brazil near the city of João Pessoa. This geographical fact, however, can surely be considered irrelevant, for suppose that in another possible world, Patagonia bends towards Africa, making it farther east than João Pessoa. In this case, description (ii) would apply to *the same* easternmost point, which would be located in Patagonia. It remains a rigid designator notwithstanding the difference in latitude and longitude and any other geographical specification since these are not to be considered in cases where a point can change its spatial position. Worth noticing is that this reading of (ii) as a rigid designator is not a new and artificial stipulation but can be seen as a natural interpretation of the description's content (ask yourself about the relocation of a Euclidian geometrical point).

My argument is strengthened when we consider other cases of rigid descriptions that are more obviously not associated with proper names. Consider (iii): The *Rafflesia Arnoldi* is regarded as the largest flower in the world. The first known specimen was discovered by Sir Stamford Raffles and Dr. Joseph Arnold on 19 May 1818 during an expedition to the Manna River in Sumatra. Description (iii) is rigid, since it is true in any possible world where there is a Dr. Joseph Arnold who discovered that *Rafflesia* specimen on 19 May 1818. Hence, (iii) is a rigid designator. Indeed, if we try to understand it as an accidental designator, the question will arise: accidental concerning what?

Consider now (iv): if we have in mind only Napoleon's III Cavalry Corps of the *Grande Armée*, forgetting the particular soldiers and horses that constituted it, its description is clearly seen as a rigid designator, applying to the same cavalry corps in any possible world-circumstance where that cavalry corps can be said to exist. We should note that in this definite description both the localizing description-rule (France, 1804–1815) and the characterizing description-rule (the III Cavalry Corps of Napoleon's *Grande Armée*) are already expressed.

Now, consider descriptions (v) and (vi). They should also be interpreted as rigid designators. Description (v) can be understood as designating a state of affairs char-

acterized by the Earth's last cooling period. In our world, it lasted from 111,000 years ago until about 11,700 years ago, but in a counterfactual situation, it could have occurred in a very different period insofar as it could still be identified as *the last* glacial period. Description (v) is a rigid designator of a past state of affairs that we have located on our planet. Description (vi), finally, refers to an event explicitly containing its characterization as the assassination of Archduke Franz Ferdinand. In our world, he was tragically gunned down by one Gavrilo Princip, but in another near possible world, he could have been stabbed, poisoned, strangled, etc. His death might not have ignited World War I in some possible worlds... Nevertheless, what matters for us here is that the description would not fail to be satisfied by the event of the assassination as a rigid definite description, applicable in all possible worlds where Archduke Ferdinand was assassinated.

If we apply rigidity tests to the above examples, we see that they also pass the tests, since the corresponding statements are, as demanded, false.¹¹⁵ Thus, applying the test to A-(iii) we get "Something other than the *Rafflesia* discovered by Dr. Joseph Arnold on 20 May 1818 might have been the *Rafflesia* discovered by Dr. Joseph Arnold on 20 May 1818", which is clearly false. Applying it to A-(vi) we get: "The assassination of Austrian Archduke Ferdinand in Sarajevo in 1914 might have been something other than what was in fact the assassination of Austrian Archduke Ferdinand in Sarajevo in 1914". Surely not. The same results are reached by applying Hughes' version of the rigidity test. Thus, applying it to A-(v) we get: "The last glacial period could have existed without being the last glacial period". In any possible world, such statements would involve a logical contradiction and are therefore false, which demonstrates that we are dealing with rigid designators.

We see now that there are definite descriptions naturally interpretable as rigid designators, in our examples referring to points (ii), objects (iii), groups (iv), states of affairs (v), processes (vi), and events (vii). It is obvious that these descriptions are or can be considered rigid designators. Now, there are two features common to all of them. The first feature, crucial and decisive for our whole argument, was already mentioned at the beginning: there are *no proper names abbreviating any of these descriptions*.¹¹⁶ We cannot find any proper name cluster to which they may belong. That is why I call them *autonomous descriptions*. Below I show why this is a decisive feature: by nature, autonomous descriptions must be rigid designators.

¹¹⁵ See Chapter II, § 1

¹¹⁶ A difficulty is that too many descriptions can be intrinsically associated with proper names as belonging to their clusters. Thus, using Google Search, I now see that the easternmost point of South America can also be called by the name 'Cabo Branco', a place I once visited in João Pessoa. However, it is not difficult to find more adequate examples. We can replace (ii) by (ii'), 'the easternmost point of Iceland', to counter the objection (I could not find a proper name for that).

nators. A second feature is a consequence of the first: since these descriptions are not abbreviated by proper names, they must be used to instantiate some MIR*, and thus they must also express fundamental rules of localization and/or characterization. They cannot express mere auxiliary rules without much weight, as often found in the cases of metaphorical, accidental, and adventitious descriptions used in intrinsic association with proper names. This point is less important, because we may well invent a linguistically metaphorical or accidental description in place of the cases above, and they may also be rigidly interpreted as tacitly containing fundamental description-rules.

In contrast to the descriptions of group A, let us now consider a group B containing examples of usual definite descriptions which clearly behave as accidental designators, referring to different objects in different possible worlds. Here are some examples:

(B)

- (i) the Eagle of The Hague,
- (ii) the iron marshal,
- (iii) the founder of the Lyceum,
- (iv) the first Roman emperor,
- (v) the City of Light,
- (vi) the third planet of the solar system.

In opposition to the examples given in list A, the above definite descriptions are designators so typically accidental that no Kripkian follower would be vexed to use them as examples. Contrarily to the previous descriptions, one cannot make them rigid, except by the deceptive means of stipulation. Consider (i): it is usual to think of the description ‘the Eagle of The Hague’ as a laudatory metaphor for Rui Barbosa’s oratorical powers, as displayed in his address to The Hague Peace Conference in 1907. But we can also imagine a possible world where the ship carrying Rui Barbosa to the congress at The Hague sank in the middle of its voyage, taking with it that outstanding orator. Then he was replaced by another excellent speaker, who was subsequently called by his devoted compatriots ‘the Eagle of The Hague’. The same goes for any other description in group B.

The descriptions of group B *do not* pass the Kripkian tests of rigidity. Consider, for instance, the statement B-(v). Applying the test to (v), we get “The City of Light could have existed without having been the City of Light” (Hughes’ incremental test). This is a true statement, failing to pass the rigidity test, since the test requires its falsity. For it is obvious that Paris, the City of Light, could have existed as a city without ever being called the City of Light!

To the question of what makes group B descriptions accidental, in contrast to the rigid descriptions of group A, defending Kripke one could try to answer that those descriptions of group B are only auxiliary. However, even if most of them are auxiliary, we could add to this list descriptions such as (vii) ‘the most famous soccer player in history’ and (viii) ‘the 45th president of the United States’. These descriptions are fundamental (localizing and/or characterizing) and yet they are accidental designators, since in some possible worlds Pelé might not have become the most famous soccer player, and someone other than Donald Trump could have become the 45th president of the United States.

To the question of what makes group B descriptions accidental, the real answer is more profound and, I think, you have already guessed it. The answer is that the descriptions of group B, unlike those belonging to group A, *are semantically associated, albeit loosely, with proper names insofar as they belong to their clusters, allowing abbreviation*. In group B the proper names are respectively (i) Rui Barbosa, (ii) Floriano Peixoto, (iii) Aristotle, (iv) Julius Caesar, (v) Paris, and (vi) the Earth. An intrinsic association is established by the place of group B definite descriptions as belonging to these proper names’ clusters, and this also makes them conditions constituted by the identification rules of such corresponding proper names. Yet these descriptions *do not need* to be satisfied by the same objects referred to by the corresponding proper names in all possible worlds where those objects exist. After all, there are possible worlds where Rui Barbosa stopped undertaking diplomatic missions, Floriano Peixoto was a candid adept of the monarchy, Aristotle did not found a Lyceum, Julius Caesar tenaciously defended the Republic, and Paris was destroyed in the 14th century, never becoming the City of Light. And let us imagine that there were a possible world where a first planet called Vulcan really existed in its orbit around the Sun, so that Venus was the third planet from the Sun, and the Earth was consequently the fourth planet from the Sun. However, these proper names do not cease to apply to their respective objects in all these conceivable world-circumstances. They are rigid designators, continuing to satisfy the respective identification rules that we have derived from MIRs*. The respective definite descriptions, in contrast, are established by their names’ identification rules as unnecessarily belonging to their rigid applications.

A consideration of this point leads us to reject the problematic Millian-Kripkian explanation of definite descriptions, according to which they would be accidental because they denote accidentally or flaccidly instead of rigidly. Although Kripke does not say this, it seems that the descriptions denote accidentally because they do so indirectly. This would be so because they denote based on their connotative properties, and do not denote directly-rigidly, as is the case of proper names. This suggests a categorial separation. However, the categorial separation between

descriptions and names is a philosophical delusion. For a definite description is not, if taken alone, accidental, and is called accidental only regarding the associations we usually need to make between descriptions and proper names. More precisely, a definite description becomes accidental *only comparatively, by being loosely, contingently, not necessarily associated with the proper name to whose cluster it belongs*. And this conclusion is true not only for auxiliary descriptions but even for fundamental descriptions belonging to proper names. The reason is that the identification rule allows the possibility of *dissociation* between the application of a proper name and any isolated application of *both* kinds of description.

We can further clarify this idea by noting that virtually any description belonging to the cluster of descriptions represented by a proper name can be found to have an intrinsic but contingent semantic association with the rest of the description-rules constituting the name's informative content. This association is made because we consider those definite descriptions weakly connected with the application of the identification rule, which is the case whenever a proper name is applied in the fully referential act characteristic of a self-sufficient reference. That is, contrary to the many combinations of descriptions belonging to a DD's possible factual applications, descriptions of the cluster are accidental in the sense that they are usually not an indispensable aspect of a proper name's self-sufficient reference. This being so, a definite description belonging to a cluster and the proper name with which it is associated only *tend to refer* to the same object, not necessarily doing so: the founder of the Lyceum as well as the philosopher who died in Chalkis in 322 BC are descriptions that only tend to refer to the same object referred to by the name 'Aristotle'.

Here, some examples can be helpful. Although the auxiliary description 'Herphylis' lover' applies to the reference of the name 'Aristotle', as far as we know, it is not impossible to imagine, for instance, the counterfactual situation in which the surviving texts constituting Aristotle's heritage were incorrectly copied... And although in our world, the characterizing description of Aristotle is 'the author of the Aristotelian works', in another possible world, Aristotle could have died as a teenager and never lived to write the Aristotelian works. This description—for speakers in that world—will lack the semantic association it has for us with the semantic content (the cluster of descriptions) of the proper name 'Aristotle', even if it is a fundamental (but not indispensable) portion of our identification rule for that name. In summary: *There is a possible disconnection between the reference of the proper name and the reference of definite descriptions because, as cluster members, these definite descriptions are in different degrees loosely but intrinsically associated with the proper name. For this reason alone, such definite descriptions become capable of designating another or perhaps none of the expected references in other possible world-circumstances where the proper name associated*

with them continues to apply or even ceases to apply to its reference. It is only for this trivial comparative reason that proper names are called rigid designators, while the intrinsically associated definite descriptions are not. Only the DD definitory description, expressing the proper name's identification rule, remains applicable in all possible worlds where its bearer exists, making the name a rigid designator.

Consider, for instance, description (iv): 'the first Roman emperor'. It expresses a fraction of the characterizing description-rule defining the character of Julius Caesar (he was *de facto* the first Roman emperor). As the DD (or the IR*-'Julius Caesar') for the identification of Julius Caesar is more complete, allowing us to identify the object much more specifically, we consider the description 'the first Roman emperor' to express a contingent, albeit important, property of Julius Caesar. It is contingent because according to its identification rule, expressed by DD, Caesar can be identified as such even in cases where that description-rule could not be applied. That is the only reason why the description 'the first Roman emperor' is accidental, namely, because there could be counterfactual circumstances where Caesar did not become the first Roman emperor. Thus, for instance, there could be conceivable worlds where Pompey won the Battle of Pharsalus against Caesar and became the first Roman emperor, or even choose not to do so... or a possible world where Julius Caesar was a vigorous defender of the Republic and where this institution persisted until the end of the Roman Empire.

Of course, we could also *stipulate* that the proper name 'Julius Caesar' abbreviates the definite description 'the first Roman emperor' or 'the *actual* first Roman emperor' (ignoring that in its proper sense even actuality can be discredited in skeptical contexts). In such cases, the description becomes a rigid designator, for it will designate the first Roman emperor in any possible world where *he* comes into existence. Such an artificial strategy can be applied to any other description associated with a proper name if there is any reason for doing this. However, in the case of descriptions (ii) to (vi) belonging to group A above, rigidity is not a result of stipulation, but a natural feature of referential terms. Consider A-(iii): 'the III Cavalry Corps of the *Grande Armée*'. Because of the tacit conventions established by our specialized practice, there are implicit localizing and characterizing descriptions within the identification rule that will force us to apply the description in any possible world where that cavalry corps can be found. The foregoing explanation shows why this is the case. Since the descriptions of the A group are *not associated* with the full semantic content (as the cluster) of any proper name to be related to them, they cannot refer to objects other than those referred to by them in any possible worlds where their objects of reference exist, which makes them rigid designators. We see, therefore, that quite unlike the implications of Kripke's arguments, the relationship between a description/accidental designator

and a proper name/rigid designator has nothing to do with a difference between the indirect (connotative in Mill's sense) reference mechanism of the definite description and some mysterious direct-rigid reference mechanism of proper names resulting from some form of baptism.

One point to be emphasized is that in cases where a definite description has an auxiliary role as a component of a proper name's cluster, its rule of connection to the referent is not made to be seen as sufficiently qualified to identify it as the object referred to by the proper name associated with it. A definite description such as B-(i), 'the Eagle of The Hague', is not capable, solely on the basis of its explicit and in fact usually known content, of identifying Rui Barbosa independently of the identification rule usually associated with this proper name. The reason is that this honorific description, understood as intrinsically associated with the abbreviating proper name, does not have enough descriptive content to do so. The speaker who applies the description 'the Eagle of The Hague' often also has in mind at least some share of the localizing and characterizing description-rules for Rui Barbosa when using it, though not necessarily associating its full identification rule with the definite description (suppose he is mistaken about the association, as often occurs). Because of this, in differently conceivable worlds an auxiliary description such as 'the Eagle of The Hague' can more easily become contingent. It is not so hard to associate it with another proper name, say, Joaquim Nabuco, then belonging to the semantic halo of this last name's cluster.

Now, we also know why the definite descriptions of group B do not resist the rigidity test. The reason is that we are able to unwittingly associate one of their occurrences with the proper name, leaving the other unassociated with it in the rigidity test's statement. Applying the test to B-(i) we get "Someone other than the Eagle of The Hague [Rui Barbosa] might have been the Eagle of The Hague [e.g., Joaquim Nabuco]". (In fact, the metaphor was first suggested by the Baron of Rio Branco for Joaquim Nabuco, although in the end it applied to Rui Barbosa.) Applying the test to B-(iii) we get "The founder of the Lyceum [leaving open *who*] might have been other than the founder of the Lyceum [Aristotle]". These two statements are true since the first occurrences of the descriptions in them can be detached from the proper names with which they are weakly associated, failing to pass the test. Also true is B-(vi) "The second planet of the solar system [leaving open *what*] could have existed without having been the second planet of the solar system [Venus]". It is true, since the second planet could, e.g., have been replaced by a rogue planet in the 3rd century AD without any visual confirmation. It is the weak association that we make with the proper name and the consequent possibility of dissociation in the first occurrence of the descriptions that leads us to regard these statements as non-contradictory and consequently true, failing to pass the rigidity test.

In order to make crystal clear what we mean with terms like a ‘loose’, ‘weak’ or ‘tendential’ semantic association, we can apply here the Wittgensteinian distinction between *primary criteria* and *symptoms* (or *secondary criteria*) already explained in the first chapter of the present book.¹¹⁷ Repeating what we explained there, criteria are regarded by Wittgenstein as *defining properties* (1958: 24; 2001: 28)¹¹⁸. Once identified as given, they constitute conditions that for us *guarantee* the applicability of a conceptual term. Symptoms, or secondary criteria, in contrast, are properties that, once accepted as given, make the applicability of the conceptual term only more or less *probable*. For instance, *plasmodium falciparum* found in a patient’s blood can serve as a criterion of malaria, while intermittent fever is only a symptom.¹¹⁹ A criterial rule is a semantic-cognitive rule that necessitates (for us) the satisfaction of its criterial conditions in order to be applied. For this reason, the term ‘criterion’ is ambiguous: it means both what the criterial rule requires for its application and what satisfies this requirement; the criterion as a requirement belongs internally to the linguistic rule, while the criterion as what satisfies the requirement belongs to the external domain of reference. The ambiguity of the primary criteria extends to the secondary criteria or symptoms.

Equipped with the above distinctions, we can now summarize our view as follows: *The identification rule of a proper name is its proper (tropical) semantic-cognitive criterial rule. The changeable t-properties or t-property bundles required for the warranted applicability of the identification rule of a proper name are nothing but criteria guaranteeing for us the name’s applicability.*¹²⁰ On the other hand, *the t-properties required by definite description-rules belonging to the bundle of descriptions associated with a proper name are only facilitating symptoms for the application of the name, since they only make that application more probable. For this reason, a definite description behaves accidentally concerning the reference of its intrinsically related proper name, and the proper name behaves rigidly if compared with its intrinsically related description.* Metadescriptivism relativizes the rigidity-accidentality distinction.

117 Chapter I, § 4

118 The precise interpretation is controversial (see Costa 1990: 147–167; cf. Baker 1974).

119 Wittgenstein suggests that the confusion between criteria and symptoms is a main source of philosophical confusion (1958: I). To illustrate: a person’s face and body are only symptoms of her personal identity, even if at first view seen to be criteria, since they are the first thing we perceive when recognizing someone we know.

120 As already shown, a semantic-cognitive rule does not need to be considered an abstract object, as in the judgment of a realist philosopher. For the trope-ontology, the criterial rule, regarded as a universal, can be analyzed as an arbitrarily chosen tropical rule T_m or any tropical rule T precisely similar to T_m .

These considerations allow us to predict that the dependency a definite description has on the semantic context of the corresponding proper name should diminish in proportion to its irrelevance for the identification of the object. This makes most descriptions in the bundle weaker but helpful symptoms since they are probabilizing the application of the identification rule. It is easier to consider separately accidental and generally unknown definite descriptions like ‘Alexander’s tutor’ or ‘Achaean’s grandson’ or ‘Herphyllis’ lover’ as giving us symptoms of the object referred to by the proper name ‘Aristotle’, since they play only a secondary role in determining the reference of that name. But it will be harder, although still possible, to do the same in the case of fundamental descriptions such as ‘the author of the Aristotelian work’ and ‘the Greek philosopher born in Stagira in 384 BC’. And if the definite description contains in the right way all that is essential for the content of the proper name to which it is subordinate, it will inevitably become rigid. This is only the case with DD-rules. Thus, the DD-‘Aristotle’ is the descriptive formulation of the identification rule for the name ‘Aristotle’, which, as we have seen, is a rigid designator and, as such, the primary criterion and the name’s essential meaning.

If an accidental designator is derived from the contrast of a definite description with the associated proper name, we can ask ourselves if an accidental designator could also be derived from the contrast between one proper name and another proper name. This should be the case for two proper names of the same object, when one of them contingently includes in its cluster all the descriptions belonging to the other. Indeed, this sometimes happens, especially in the case of nicknames. Consider the case of a young schoolboy, call him Bud, who because he has trouble figuring things out, was nicknamed by malicious schoolmates ‘Anvil-head’, or for short, ‘the Anvil’. There are possible worlds where Bud was not an inept pupil or had no malevolent schoolmates, or where his friend John was the actual recipient of that nickname. In these worlds, the nickname ‘Anvil’ either does not apply or identifies someone other than Bud. The nickname ‘Anvil-head’ is—if considered in contrast to most common proper names—an accidental designator, an accidental proper name, which is only a symptom of the person who bears Bud’s name. The ‘Anvil’ does not pass a rigidity test: “The Anvil-head [?] could exist without being the Anvil-Head [Bud]” is a true statement. The same could be said about Father Marcial Maciel and his alias Raúl Rivas: “Raúl Rivas [?] could exist without being Raúl Rivas [Father Marcial Maciel]” is true. In a possible world where Marcial Maciel were an honest man, Raúl Rivas would not be

said to exist as an alias of Marcial Maciel, but could still exist as the alias of another person.¹²¹

The above explanation for the difference between the semantic behavior of proper names and that of definite descriptions seems much more clarifying than what the causal-referential theory obscurely suggests. The latter theory suggests that through an act of baptism, a proper name comes to designate by possessing some secret and inscrutable intimacy with its object. In contrast, according to the metadescriptive view, the rigidity of the proper name ceases to be viewed as something arising from a mysterious property of the baptized object in abstraction from its cognition and without the resource of properties. Instead, rigidity arises from the identification rule as its t-property of being applicable in any conceivable world-circumstance where criterial configurations possibly generated by it are satisfied by criterial t-properties belonging to the bundle of compresent t-properties constitutive of the referred object—at least insofar as the criterial constituents of the fundamental conditions prescribed by the rule are not replaced. Finally, our explanation is not only natural but also more powerful, since it justifies the exceptional cases given by autonomous definite descriptions.

This is how the concept of rigid designator loses its mysterious aura. It is deflated since in the end, any decent singular term (and, in fact, any general term) can be a rigid designator; namely, a term applicable in any conceivable world-circumstance (possible world) where it can be warranted applied to a given object (in which its object of reference exists not only as something conceived of but also as something objectively given). A definite description only refers, either because it is detached from proper names and consequently seen as rigid or because it is regarded as belonging to the cluster of descriptions of a proper name in the application of the identification rule of that name.

15 Autonomous definite descriptions

Finally, there is the question of how to analyze autonomous definite descriptions. The reasonable way to consider the case is to think that to work independently of proper names, these descriptions need to have their own identification rules constructed upon fundamental conditions, which must be localizing and/or characterizing description-rules. In fact, the same MDR*s we apply to a cluster of descriptions of a proper name should be applied to an autonomous definite description insofar as, being a singular term working independently of any proper name, it

¹²¹ See Chapter I, § 7.

needs to be a rigid designator. Hence, an autonomous description must be able to identify a single individual in any reasonable world-circumstance while expressing, in its essentials, the same rule. The difference regarding our proper names is not just that in the case of autonomous definite descriptions the rule is in some way made explicit through symbolic forms as their connotations or meanings; the difference is that the identification rule is usually less complex.

Consider first the definite description ‘the Last Glacial Period’. Because it is autonomous, the fundamental descriptions belonging to the identification rule contain both a localizing and a characterizing description. The first one is the following:

Localizing description-rule: the last glacial period occurred on the planet Earth¹²² and continued so long that there has been no other ice age from its end until the present day.

Although it occurred during the Pleistocene period, from approximately 115,000 to 11,700 years before our time, and although it was preceded by several other similar glacial periods, it could have occurred in some other longer or shorter period, ending before or after. Furthermore, there is also a rule of characterization for the last glacial period, even if it is redundant. Here is how we can summarize it:

Characterizing description-rule: a long period of decrease in the temperature of the Earth’s surface and atmosphere, resulting in the expansion of continental and polar ice sheets, as well as glaciers and alpine snowfields.

Because the autonomous description ‘the last glacial period’ functions like a proper name, its application requires enough of the complexity needed by an identification rule. This is not needed in the case of auxiliary descriptions used in place of names, as is the case with ‘the City of Light’ parasitically applied. A person can utter this description without knowing more about Paris than that it must be a beautiful city, taking it literally.

Now, we can assemble the complete identification rule of the autonomous description ‘the last glacial period’ as follows:

IR*–‘the last glacial period’:

A referent x belonging to the class of glacial periods in the Earth’s history is

122 Notice that in a conceivably different world-circumstance, the Earth could be a very different planet.

self-sufficiently referred to by privileged speakers with the autonomous definite description ‘the last glacial period’_{vs}

iff

(i-a) the last glacial period occurred on the Earth and lasted so long that there has been no other ice age from its end until the present day,

And it was...

(i-b) a more or less lengthy period of decrease in the temperature of the Earth’s surface and atmosphere, resulting in the expansion of continental and polar ice sheets, as well as glaciers and alpine snowfields,

(ii) *x* satisfies the conjunction of (i-a) and (i-b) to a degree that is overall sufficient, and

(iii) *x* satisfies the conjunction of (i-a) and (i-b) better than any other glacial period.

(...)

The condition (i-b) is only an explanation of what is expressed by the term ‘ice age’ already included in (i-a), which makes this identification rule a one-foot rule.

A second complete example of the identification rule for an autonomous definite description can be the definite description ‘the 52nd Regiment of Foot’. It has the following (summarized) localizing description-rule:

The 52nd Regiment of Foot existed from 1757 to 1881 and was stationed in Oxfordshire; it saw active duty particularly during the American War of Independence, the Anglo-Mysore wars in India, and the Napoleonic Wars.

The characterizing description-rule for the 52nd Regiment of Foot can be summarized as follows:

The 52nd Regiment of Foot was a highly regarded regiment whose troops were recruited chiefly from Oxfordshire, consisting of one or two battalions of light infantry, each comprising approximately 1,000 men.

The whole identification rule of this autonomous definite description will be the following:

IR*-'the 52nd Regiment of Foot':

A referent *x* belonging to the class of military units is self-sufficiently referred to by privileged speakers with the autonomous definite description ‘the 52nd Regiment of Foot’_{vs}

iff

(i-a) x satisfies the localizing description-rule of having existed from 1757 to 1881, and was stationed in Oxfordshire; it saw active duty, particularly during the American War of Independence, the Anglo-Mysore wars in India, and the Napoleonic Wars,

and/or

(i-b) x satisfies the characterizing description-rule of having been a highly regarded regiment whose troops were recruited chiefly from Oxfordshire, consisting of one or two battalions of light infantry, each comprising approximately 1,000 men,

(ii) x satisfies the disjunction of (i-a) and/or (i-b) to a degree that is overall sufficient, and

(iii) x satisfies the disjunction of (i-a) and/or (i-b) better than any other military unit.

(...)

Unlike ‘the last ice age’, this is an example of the most usual identification rule derived from the application of MDR* to a bundle. It seems clear, for instance, that in other possible worlds, the 52nd Regiment of Foot could consist of troops not recruited in Oxfordshire, but, e. g., in Cambridgeshire (still in England), and existing only from 1726 to 1832... nevertheless satisfying sufficiently and more than any other regiment important characteristics such as serving during the American War of Independence and Anglo-Mysore wars, and made up of one or two battalions of light infantry comprising approximately 1,000 men... This would be sufficient for the identification of the 52nd Regiment of Foot in that near possible world, even if it were regrettably non-Oxfordian.

But then, what is the difference between the identification rules of autonomous descriptions and those of proper names? Regarding fundamental descriptions, the difference often lies in the complexity of the rule. The main difference concerns the lack of auxiliary definite descriptions, which are often so helpful to the work of inserting a proper name into discourse. It is not that they cannot exist. The 52nd Regiment of Foot was associated with the following auxiliary laudatory definite description: ‘a regiment never surpassed in arms since arms were first borne by men’. The use of this auxiliary description can be sufficient to allow someone to convergently insert the description into discourse. The same surely applies to many other autonomous definite descriptions.

The contrast here is with definite descriptions strongly associated with proper names like the auxiliary descriptions ‘the City of Light’ with Paris or ‘the tutor of Alexander’ with Aristotle. We can also contrast them with definite descriptions that express the fundamental description-rules, like ‘the Stagirite’ or ‘the author of the *Nicomachean Ethics*, the *Metaphysics*, and the *Organon*’. Also in these

cases, the descriptions are viewed as appended to the identification rules of the respective proper names, which emphasizes the descriptions' explicit meanings and eschews their possible autonomy. As such, auxiliary descriptions are seen only as helpful though not indispensable complements to the identification rules of their associated proper names. Finally, we can always artificially abstract definite descriptions from the proper names they are associated with, analyzing them as autonomous. One could speculate as to whether or not this was what philosophers were trying to achieve when they proposed that we could rigidify descriptions by indexing them to the actual world.

IV Metadescriptivism: Answering counterexamples

The main purpose of this chapter is to examine the most persuasive counterexamples against cluster-descriptivist theories of proper names that have been suggested by proponents of causal-referential theories. I want to demonstrate that the metadescriptive theory of proper names can offer answers to these objections that are much more detailed and convincing than the answers of traditional cluster theory. In the course of my discussion, some details of the metadescriptive theory will be further developed and clarified.

1 Responses to Kripke's counterexamples

Beginning with Kripke, let us first make some general considerations against the central objection of rigidity, according to which if descriptivism were correct, proper names could not be rigid designators, since descriptions are accidental or flaccid.

We have already given a decisive principled answer to this kind of objection: it is not true that by their own nature, definite descriptions have a modal profile different from that of proper names. What causes the different modal behavior of definite descriptions is that, as components of the clusters of proper names' descriptions, they are in general mere symptoms, able only to make more probable the application of identification rules of the corresponding proper names. Only the identification rule establishes criteria warranting the application of proper names in any differently conceivable world-circumstance. Our awareness of such mechanisms of reference answers more fully the modal objection of rigidity. According to it, the identification rule of a proper name can take the form of a DD-description. A definitory definite description that contains the primary meaning of a proper name making it a rigid designator, necessarily applicable in any conceivable world-circumstance where the referent definitely exists.¹²³ With this, we also have a better answer to the epistemic objection of undesirable necessity. This objection is typically answered by the application of MIR*s to the clusters of proper

¹²³ As we have already seen, there may be possible worlds where one cannot definitely know whether the identification rule of a proper name applies; but such worlds are the same as those where the object also does not have a definite existence. This is because the very existence of the object is defined by the warranted or effective applicability of its identification rule, which also defines what counts as the proper name's bearer.

names, considering that the resulting identification rules can cope with the most variable criterial configurations without losing their rigidity.

Kripke considers cases where our fundamental definite descriptions do not apply, such as where Aristotle for some reason had no hand in the “famous achievements” commonly attributed to him, like having written the Aristotelian work (Kripke 1980: 62). There could even be a possible (even if hardly imaginable) world where Aristotle lived five hundred years later (Kripke 1980: 62), though Kripke does not tell us anything more about him. Restated in metadescriptive terms, what Kripke suggests are cases of non-application of the characterizing rule which seems to make sense because we think of them as accompanied by a tacit application of the localizing rule to a sufficient degree, or vice-versa (cf. Kripke 1980: 62–63, 74–75), assuming uniqueness of reference. However, we have already seen that these cases are fully compatible with the application of most proper names' identification rules. What Kripke never considers, as we have also emphasized, is a concrete counterexample in which none of the cluster's fundamental descriptions applies to any extent. Indeed, until now no one has ever given us any convincing counterexample in which the DD-description of a proper name is in no way applicable although the bearer exists. And the evident reason for this is that the proper name's identification rule expressed by DD-descriptions is *definitional* of what its bearer can be, which makes such a counterexample inconceivable.

What follows is a close examination of Kripke's most important examples.

The displaced Hesperus

For a start, I wish to deal with what has been for me the most confusing and troublesome counterexample to descriptivism. It begins by considering the baptism of a celestial body with the help of a description. As Kripke writes:

When the mythical agent first saw Hesperus, he may well have fixed his reference by saying “I shall use the word ‘Hesperus’ as the name for the heavenly body appearing in the yonder position in the sky”. He then fixed the reference of Hesperus by its apparent celestial position.¹²⁴ (Kripke 1980: 57)

Kripke then notes that this description cannot express the meaning of ‘Hesperus’ (1980: 57). After all, Hesperus could occupy a different position or no position in

¹²⁴ I think that the example was initially suggested by Ruth Barcan Marcus, using the name ‘Venus’ at a conference, possibly assisted by Kripke. But Kripke gave the idea a more sophisticated turn. (See Marcus 1993: 11.)

the sky at the time in question. He exemplifies this by means of the following example:

If Hesperus had been hit earlier by a comet, it might have been visible in a different position at that time. In such a *counterfactual* situation, we would say that Hesperus *would not have occupied the same position, but not that Hesperus would not be Hesperus*. The reason is that Hesperus *rigidly* designates a certain heavenly body and that ‘the body in the yonder position’ does not... (Kripke 1980: 57; emphasis added)

The goal of this argument is clearly to show that descriptively given spatiotemporal properties are unable to rescue the proper name’s fundamental property of being a rigid designator, since these properties can completely change without a change in the proper name’s reference.

Now, as Wittgenstein once noted, the critical work of untangling the knots of philosophical thinking requires at least as many movements as tying those knots (1996: 183).¹²⁵ It seems that this objection from Kripke exemplifies very well what Wittgenstein had in mind.

My strategy to counter this argument is to show that Kripke is misleadingly appealing to the wrong spatiotemporal descriptions. The real descriptively given spatiotemporal properties are those demanded by the spatiotemporal localizing description-rule required by the identification rules of proper names. This means that we must first discover the real localizing description-rules constitutive of the essential meaning of ‘Hesperus’, which are those regarding the orbital place of the planet Venus and not the ways it may appear to us in the sky.

To make a more detailed analysis, we need to begin by noting that the name ‘Hesperus’ is ambiguous. It has two different meanings that must come into consideration when we consider Kripke’s argument. They are:

- (A) *what we see there,*
- (B) *a discovered planet.*

To explain the meanings of (A) and (B) we need to analyze them in terms of our identification rules. As we will see, they give us an all-important device for a deeper critical reading of Kripke’s argument.

¹²⁵ Wittgenstein saw that in philosophy there is a dialectical connection between tying insightful (deep) philosophical knots of thought, as Kripke does here, and (therapeutically) untying them in the search for surveyable representations (*übersichtliche Darstellungen*). Sometimes we find both approaches used by a single philosopher, for instance, in Plato’s Dialogues, and also in Wittgenstein’s own work (see 1984b, I, §§ 111, 122, 132).

Let us consider first the sense (A) of 'Hesperus' as "what we see there". In this sense, the name 'Hesperus' or 'Evening Star' can be understood as referring only to something perceptually given, like the brightest celestial body that appears to us in the direction of the Sun at dusk.¹²⁶ Certainly, this was so understood with the name *before* astronomy advanced to its modern form, at a time when humanity was still unable to differentiate a planet from a shining angel. In this primitive, archaic sense, the identification rule of what we can call 'Hesperus-as-the-Evening-Star', derived from the application of a variation of MIR*, must have a modified form already called by us a two-foot identification rule, demanding sufficient satisfaction of *both* A & B, which we have called a conjunctive rule.¹²⁷ Here is how we can formulate the resulting identification rule for this Hesperus, literally understood as the Evening-Star:

IR-'Hesperus-(Evening-Star)':

A referent x belonging to a class G of celestial bodies is (self-sufficiently) referred to by privileged speakers with the proper name 'Hesperus',_{vs}

iff

(i-a) x satisfies its localizing rule of being a celestial body that at least at the time of its baptism could be seen at dusk in the positions so-and-so,¹²⁸

And,

(i-b) x satisfies its characterizing rule of being (after the Moon and some comets...) at least during the time of its baptism and sometime later, the brightest celestial body that was visible during that time from Earth.

(ii) x satisfies the conjunction (i-a) and (i-b) to a degree overall sufficient, and

(iii) x satisfies the conjunction (i-a) and (i-b) better than any other celestial body.

(...)

Here, we could not have a disjunctive condition since it is impossible to imagine Hesperus being identified by the satisfaction of condition (i-a) alone (only a star shining at the indicated spot in the evening and nothing more) or by (i-b) alone (only the brightest star in the firmament). The form is "A & B": localizing and characterizing conditions must together be sufficiently satisfied. After all, if Hesperus could be identified by the satisfaction of (i-b) alone, then any brightest star appearing somewhere in the sky could be baptized with the name 'Hesperus'. Further-

¹²⁶ It appears in the direction of the Sun because it is an inner planet with an orbit closer to the Sun than the Earth's.

¹²⁷ See Chapter III, § 3.

¹²⁸ The precise positions change during the year, so that Hesperus can also disappear from view.

more, it is indubitable that ten thousand years ago this was the only conceivable cognitive meaning for the word ‘Hesperus’, and the rule expressed by IR-‘Hesperus-(Evening-Star)’ was the only achievable way to establish its reference.¹²⁹

Even if IR-‘Hesperus-(Evening-Star)’ expresses a rigid identification rule, it refers only to a perceptually given celestial body, and can easily be rendered descriptively as a DD-description. However, today no one uses that archaic sense of the word, even if it is possible to teach this to a child in that way. Regarding this first sense of the name ‘Hesperus’, if a wandering planet collided with the (unknown) corresponding planet Venus and hurled it out of the solar system, the members of the primeval tribe might have thought that Hesperus had disappeared for good, that it no longer existed. And if the wandering planet took the place of Venus in a way that could not be detected, they could have supposed that surely the same Hesperus continued to exist there in the heavens. For their identification rule continued to be sufficiently satisfied by the mere perceptually given manifestations demanded as the only criteria for its application.

Surely, Kripke did not mean (A) as the sense of ‘Hesperus’. Although his first quoted passage strongly suggests the sense (A) by introducing Hesperus with an indexical description, and his mythical agent is committed to its spatiotemporal locations in the sky, Kripke hastens to note that this is just a way to reach the planet Hesperus (Venus) as the reference of its rigid designator.

Let us now look at the sense (B) of Hesperus as a discovered planet that we are used to calling ‘Venus’. This is the currently accepted meaning of the proper name ‘Hesperus’, with which we recognize that it is actually the second planet of the solar system, a planet here regarded as the brightest planet appearing at dusk... Let us call it ‘Hesperus-as-the-planet-Venus’ or simply ‘Hesperus-(Venus)’. Here (as always, on the assumption of a satisfied C-condition and probable satisfaction of auxiliary descriptions), the identification rule¹³⁰ resulting from the application of MIR* can be expressed as:

129 We can imagine a situation where the star called ‘Hesperus’ by those primeval tribes began to fade, though preserving its expected position... becoming harder to locate. Assuming there was no comparably bright celestial body in view, this faded Hesperus would still be regarded as the same object of reference. We can also imagine that the star called by the tribe ‘Hesperus’ began to change its place in the sky, so that after a few seasons it was located in the direction opposite to the sun... or that it began to change its place each night, increasing the distances and the directions until it came to be so erratic that no one would be able to predict where that bouncing Hesperus could be found in the next night. The first case is covered by (ii). The others would require further elaboration of IR-‘Hesperus-(Evening-Star)’.

130 See our first considerations on the identification rule for the name ‘Venus’ in Chapter III, § 3.

IR-‘Hesperus-(Venus)’:

A referent x that belongs to the class of planets and has been so named as the brightest celestial body (after the Moon) visible at dusk is (self-sufficiently) referred to by privileged speakers with the proper name ‘Hesperus-(Venus)’_{vs} iff

(i-a) x satisfies its localizing rule of having been baptized as the second planet of the solar system, which has orbited the Sun between Mercury and the Earth at least since some time after it was so baptized, and probably has been doing so for billions of years,

And possibly...

(i-b) x is a planet with ca. 80% of the mass of the earth and a hot, dense, reflective, very acidic, poisonous atmosphere.

(ii) x satisfies (i-a) to an overall sufficient extent, and

(iii) x satisfies (i-a) better than any other planet.

(...)

The first thing to be noted concerning this identification rule is that it is also a *one-foot rule* that can be expressed as containing two fundamental description-rules, of which only the first plays an indispensable role. The localizing description (i-a) is what really counts, since the non-satisfaction of (i-b) by Venus or the satisfaction of (i-b) by another planet would make no real difference, since (i-b) alone could be satisfied even by a planet in a different galaxy. If ‘Hesperus-(Venus)’ did not exist in our solar system or this system had only one planet, this would not be ‘Hesperus-(Venus)’, even if it satisfied (i-b).¹³¹

Another striking aspect of this rule concerns its perspectival baptism of Venus. Its initial requirement is that Hesperus must be classified under the definite description ‘the brightest celestial body (after the moon) that has been seen at dusk’. This perspectival approach is proper only for ‘Hesperus-(Venus)’, our Evening Star, in opposition to the baptismal approach of ‘Phosphorus-(Venus)’, our Morning Star.

Now, my take is that guided by his own “no-description-no-property” view, and lacking the analysis given above, Kripke tends to confuse spatiotemporal criteria introduced by the archaic, primitive sense (A) of the name ‘Hesperus’ as a perceived celestial body with the spatiotemporal criteria of our usual sense (B) of the name ‘Hesperus’ as the cosmically located planet Venus. Led astray by this confusion, he subtly induces us to see the part of the second as if it were the first. He speaks as if we should require the celestial spatiotemporal location

¹³¹ See the final remark in § 3 of the previous chapter concerning one-foot rules.

of Hesperus (which appears only in the naming scene of IR-‘Hesperus-(Venus)’ in place of the cosmic spatiotemporal location of Hesperus as the second planet, which was the true baptismal reference. So, Kripke treats his baptizer (the “mythical agent”) as if he were descriptively baptizing a localizable perceptual appearance of Venus, whereas he should in fact be baptizing a second planet descriptively localizable between Mercury and the Earth, even if with the stipulated help of contingent perceptual spatiotemporally given appearances. Or, if you wish: Kripke treats the contingent descriptive way in which ‘Hesperus-(Venus)’ was introduced to us as if for a descriptivist it should be its essential localizing condition (i-a). He concludes that the localizing condition is totally non-essential—a subtle form of equivocation.

The point is made clearer by the continuation of Kripke’s argument. He proposed the counterfactual case of Hesperus being struck earlier by a comet so that it might have been visible in a different position at the time of the reference-fixing utterance by the baptizer. He thinks that in this case, the descriptivist would be in trouble, forced to think that Hesperus is not Hesperus, since the Hesperus (as it is in fact located) is not the (counterfactually located) Hesperus. But such an objection would only refute those descriptivists who naively think that the indexical description ‘the celestial body in the position over there in the sky’¹³² should have the same epistemic status as the identification rule for Hesperus. But this could only be the case if Hesperus were defined by IR-‘Hesperus-(Evening-Star)’ with the primitive (A) meaning. However, the only thing a reasonable baptizer could do would be to use the indexical description as a helpful way to introduce us to the planet Venus and the description of its real place in the solar system. The final result of the baptism should be the construction of the identification rule expressed by IR-‘Hesperus-(Venus)’ by means of which the name ‘Hesperus’ refers to the second planet of the solar system as identified in a certain time period. Thus, it has probably been there for more than four million years, though possibly appearing in a different position in the sky because of having been hit by a comet... Of course, the location really demanded by the identification rule is the cosmic one, expressed by (i-a), and not the contingent even if unavoidable celestial location.¹³³ The admission of this point leads us to the conclusion that Hesperus-(Venus) could have changed its position without forcing us to abandon descriptivism concerning spa-

¹³² Christopher Hughes noted that Kripke’s reference-fixing description ‘the heavenly body appearing in yonder position in the sky’ has an indexical component (‘over there’), which makes it inadequate for the role of a cluster-member of a pure descriptivist theory (2004: 7–10).

¹³³ The naming of ‘Hesperus-(Venus)’ as the brightest celestial body seen at dusk was unavoidable but contingent in its relation to the baptism of Hesperus as the second planet; they could even occur independently and at different times.

tiotemporal location. The imaginary case only makes it clear that Kripke treats the celestial location typical of sense (A) as if it were the location required by sense (B), giving the impression that the description of the visible celestial location must, from the descriptivist perspective, be fundamental for the identification of Hesperus, without any further consideration.

We can now add variations in Kripke's thought experiment with the result that the metadescriptive analysis agrees with our most intuitive reactions. Let us first consider what we should say regarding the case of a wandering planet that collided with Hesperus-(Venus), taking its place while hurling it out of the solar system. Should we say that this wandering planet is now Venus? If we use the primitive sense (A) of Hesperus this is expected, though no one will have this in mind today. Should we say that the planet thrown out of the solar system is not the planet Venus anymore since it no longer satisfies the localizing description 'the brightest celestial body (after the moon) that has been seen at dusk' or 'the heavenly body appearing over there in the sky'? Of course not! According to IR-'Hesperus-(Venus)', this would be a totally misleading answer. After all, condition (i-a) does not say that Hesperus-(Venus) must *in the future* (or long enough after some baptismal constitution of (i-a)) continue orbiting the Sun as the second planet. It does not even demand that the planet we now see is still Venus... It only demands that during the baptism and sometime later, and probably a long time before... it remained the second planet orbiting the sun, appearing as the brightest celestial body in the dusk... Also for this reason, if we imagine people discovering that such a collision and replacement occurred one million years ago, leading us to the conclusion that our Hesperus-(Venus) did not belong to the primitive solar system, we would continue to call our present second planet appearing in the evening sky 'Hesperus', since the identification rule does not demand that our Venus belonged to the primitive solar system.

Suppose, finally, that in a counterfactual situation, 1 billion years ago, a wandering planet collided with the second planet of the solar system, a bright planet seen at dusk, breaking it into an immense number of fragments that scattered into space together with the wandering planet. In this counterfactual situation, the Earth would become the second planet and we, after cosmological research, would be tempted to say that there was a Hesperus-(Venus) that once was the second planet in the solar system, orbiting between Mercury and the Earth, which existed from 4.5 billion to 1 million years ago belonging to the primitive solar system. From Kripke's perspective, one could object that we now have no description able to explain why we think we can call that earlier planet Hesperus. However, in this case, it is perfectly possible to say that that planet was a Hesperus, since it sufficiently satisfies IR-'Hesperus-(Venus)', even if it does not presently exist, for it once existed (remember the case of the Snowball-Earth). It satisfies the rule,

which does not specify how long Hesperus would exist. To make this possibility more factual, we can (and in a complete elaboration of the example we would need to) assume the existence of privileged users, for instance, members of a civilization that existed in the conceivable solar system who baptized the planet more than a million years ago. Or they could be members of a present civilization who retrospectively baptized the planet using astronomical evidence insofar as the planet would have satisfied the identification rule IR-‘Hesperus-(Venus)’. Only the adequacy of the proposed meta-identification rule (MIR*) for proper names—in the case adapted to the one-foot fundamental condition—justifies the intuitive character of these conceived referential variations. A typical flaw of counterintuitive philosophical thought experiments lies in the unintentional forgetfulness of inevitable factual details.

Gödel-Schmidt’s case

Let us now consider Kripke’s most famous counterexample. It concerns a description that most people associate with the logician Kurt Gödel, which is: ‘the man who discovered the incompleteness of arithmetic’. Kripke asked us to imagine that Gödel did not actually discover the incompleteness theorem. Suppose, says Kripke, that Gödel had a friend, an unknown logician named Schmidt, who on his own first developed the theorems of incompleteness in an unpublished article, but died soon after under suspicious circumstances. Gödel then stole the article and published it under his own name. Also imagine that, like many other people, all that a certain person, whom I will call Mary, associates with the name ‘Gödel’ is the description ‘the discoverer of the incompleteness theorems of arithmetic’. In this case, Kripke thinks, according to descriptivism, if Mary learns that it was Schmidt who discovered the theorems of incompleteness, she should conclude that the name ‘Gödel’ means the same as ‘Schmidt’, that is, Gödel is Schmidt. But that is not what happens! It remains quite clear, even to Mary herself, that Gödel is Gödel and not Schmidt.¹³⁴

Disagreeing with Kripke’s analysis, John Searle would note that a person like Mary will say that Gödel is not Schmidt because she understands by Gödel “the man my community claims to have the name Gödel, or at least those members from whom I learned that name, assuming that something else is required” (1983: 51). Indeed, if all Mary knows about Gödel is that he discovered the incompleteness of arithmetic, and if she still thinks this is enough for his identification,

134 Kripke 1980: 83–84.

then she does not understand the grammar of proper names, and actually she does not even know what a proper name is.

Now, thanks to the metadescriptive analysis of the form of the identification rule for proper names, we can go much further. Just look at the identification rule generated by a disjunctive MIR* regarding famous scientists and the conditions (i-a) and (i-b), more typically applied to persons. This alone leads us to realize that Kripke's conclusion is incorrect. After all, it does not take account of the identification rule that the linguistic community must have for the name 'Gödel', which includes the tacit assumption made by Mary, as a competent speaker of the language, that she does not know enough to be led to conclude that the reference has changed its bearer—Mary certainly grasps MIR* and its applicability to humans, knowing that she does not know.

To take a better look at the case, let us first consider what the identification rule for the name 'Gödel' would be like for the privileged namers of our linguistic community. From the viewpoint of these users, there are two reasons why Gödel should not be identified with Schmidt. First, the description 'the discoverer of the incompleteness theorems' is no more than part of the characterizing description-rule for Gödel. The incompleteness theorems were only the most important of Gödel's varied contributions to science. Also, even without being Schmidt, Gödel was sufficiently competent as a logician to hold a position for many years at Princeton, where he had friends such as Albert Einstein. Thus, the characterizing rule for Gödel would remain partially satisfied by the name 'Gödel' (say, 2/3 of it), even if he had not discovered the theorems of incompleteness considered in the example. Furthermore, the main reason why the linguistic community will continue to call Gödel 'Gödel' is that the localizing description-rule remains *fully satisfied* by Gödel! After all, it remains the same localizing rule for Gödel, having nothing to do with the unknown localizing rule for Schmidt. Summarizing, here it is:

Localizing rule: the man who was born in Brünn in 1906, studied at the University of Vienna, and in 1940 emigrated via the Trans-Siberian railway to the USA, where he worked as a logician at Princeton University until his death in 1978.

So, after all, the identification rule remains much better satisfied by Gödel than by Schmidt, at least for those who really know this rule, the name's privileged users.

Now, what about Mary? She is not a privileged user. She does not know the localizing description-rule for Gödel. However, she is assumed to be a competent speaker of the language, and as such, she knows that she does not know enough of the identification rule for Gödel. Knowing that she lacks information about the

localizing description and that she does not have sufficient information about Gödel, she simply *suspends her judgment*. After all, she is aware that she does not have the linguistic competence since she satisfies SCB-2. Mary's mastery of the grammar of proper names leads her to conclude that she does not have enough information to assert that Gödel is Schmidt. She is certainly aware that by associating the name 'Gödel' with the description 'the person who proved the incompleteness of arithmetic' she knows only part of Gödel's characterizing description-rule, which should be much more completely known to certain other members of the linguistic community. But the crucial point is that, as a competent speaker of the language, Mary knows that since Gödel is the name of a person, there must also be some description-rule of space-time localization for Gödel which she does not know. —This rule must be different from the localizing description-rule for Schmidt, since the information she has is that Schmidt is another person (Gödel could not kill himself in order to steal his manuscript). Knowing this and knowing that she does not know the localizing description rule, she knows that she is not in a position to conclude that Gödel is Schmidt. Only we, as privileged speakers, really know that Gödel cannot be Schmidt. All that Mary knows is that she does not know enough about the name Gödel to reach the conclusion that Gödel is Schmidt.

There is something odd about all this. Gödel has two fundamental descriptions, and at least part of one is satisfied by Schmidt. Because of this, it can be said that Schmidt inherits something of the meaning of the name 'Gödel', even if it does not gain his reference. And that really happens. Let us say that a logician, disgusted by news about the theft of the theorems and full of pity for Schmidt's fate, exclaims: "Schmidt was the real Gödel!" This would be a true statement if understood as hyperbole. And the reason is given by metadescriptive theory, which predicts that the name 'Schmidt' inherits something relevant, even if unqualified, from the meaning of the name 'Gödel'.

There is, finally, a way to make Gödel really be Schmidt, but while it lets Kripke have his cake, it does not let him eat it. Imagine the unlikely story of a young man named Schmidt, who for some reason murdered the teenage Gödel and then assumed his identity. However, Schmidt was not just a cold-blooded murderer but also a genius as a logician. He studied at the University of Vienna, wrote a paper proving the incompleteness of arithmetic, married a dancer named Adele, fled Nazism via the Trans-Siberian railway, and became a professor at Princeton, where he died in 1978. So, you should not be fooled by appearances: that skinny man standing close to Einstein in the famous photo of both was in fact the criminal Schmidt! In that case, there is no doubt that Gödel is Schmidt. And the identification rule explains this. He is Schmidt because the predominant characterizing and localizing description-rules—apart from some less relevant descriptions concerning a remote childhood—are those of Schmidt and not of the child who was

once called Gödel and has long since ceased to exist, *pace* Kripke's identity of origins.

Semi-fictional proper names

Let us now look at cases involving semi-fictional proper names. They are important because they illuminate the social character of the representational contents involved in the reference.

A special case of ignorance and error (in addition to undesirable necessity) presented by Kripke was that of *only partially fictional* proper names, such as Jonah the biblical Prophet. He distinguishes these cases from those of purely fictional proper names, such as Santa Claus. Even though there was a Christian Saint Nicholas in the past, we know that our Santa Claus never existed and is entirely different from him. The similarity of the names is a case of a mere accidental homonym as much as is the name Napoleon, which, although it is the name of a famous historical figure, can also be the name of a pet dog so baptized. However, the same does not occur, thinks Kripke, in Jonah's case (1980: 93, 97). According to the Bible, Jonah was a prophet sent by God to the city of Nineveh to convert the pagans. Frightened by this command, he tried to flee from God on board a ship, and when it sank in a storm, Jonah was swallowed by a great fish, which saved him from drowning. Of course, no one believes these descriptions could be literally true. Even so, Bible scholars think that there really was a person who originated the story. But if so, then descriptivism is wrong, for we have no description capable of uniquely identifying Jonah. And the causal theory must be true because the semi-fictional use of the name should really begin on the basis of its bearer (Kripke 1980: 67–68).

Since there are doubts as to whether Jonah was not really a purely fictional character,¹³⁵ a more appropriate example of a semi-fictional name is that of Robin Hood (Lycan 1999: 70). Historians believe that the legend of Robin Hood is based on some real person who lived in the 13th century. Among the candidates, however, are people who were not poor and not outlaws, did not take from the rich to give to the poor, did not live in Sherwood Forest, and were not even called Robin Hood! However, the referent of this partially fictional figure is supposed to be one and the same person, even though he does not properly satisfy any description. For a philosopher like Kripke, the reason we are dealing with people who really existed is that the causal chain leads us back to a real person, independently

135 As far as I know, most scholars believe that this biblical person is entirely fictional.

of any description. Thus, the causal-historical view seems to possess an explanation for something that a descriptive theory is not able to explain, namely, semi-fictional names.

Before we respond, it is helpful to remember that there are things that can be accepted as bearers of a name and others that cannot. Considering the negative case, I give an example of a possible cause of the story of Jonah and the whale, followed by two examples concerning Robin Hood:

- 1) Suppose that an ancient biblical scribe stepped on a sea urchin and that in the painful period of convalescence that followed, memories of the accident inspired him to invent the story of Jonah.
- 2) While crossing a forest one night, some 13th-century storyteller was ambushed by an unknown assailant, who beat him unconscious. This traumatic incident caused him to imagine the story of Robin Hood.
- 3) A medieval bard had a brave, faithful dog that followed him when hunting in Sherwood Forest. This dog had been baptized 'Robin'. The dog inspired him to imagine the story of a hero named Robin Hood, who lived in the forest and robbed the rich to help the poor.

Obviously, no one will say that the sea urchin is Jonah, that the unknown assailant is Robin Hood, or that the dog baptized with the name 'Robin' is Robin Hood if they were discovered to be the ultimate causes of the later invention of the famous character. Someone may at this point object that for Kripke the causal-historical chain needs to be associated with an act of baptism. But the dog named 'Robin' was baptized with that name. Why, then, if this could be proven, should we reject the conclusion that Robin Hood is the name of a brave, loyal medieval dog? What is more, this would not have happened with the name 'Robin Hood' in a case where the person who originated the legend had been baptized, as some suggest, under another name. As for the name 'Jonah', we can still imagine that the ancient scribe kept the sea urchin in his house and that soon after inventing the story of Jonah and telling it to his friends, he had taken the sea urchin in his hands and said, "That is why I baptize you with the name Jonah". It does not seem that he would in this way have become able to originate a causal chain capable of making us apply the name 'Jonah' to the sea urchin. For Jonah should have been a person, while a sea urchin would never have been more than a sea urchin, just as the bard's dog would never have been more than a dog. Kripke's theory lacks the resources to deal with cases like these. From our viewpoint, however, things cannot be that way. MIR* rules require proper classification, anticipatorily excluding sea urchins and dogs. The identification rules for names of humans resulting from MIR*s already forbid—by enrolling the classificatory condition G—non-human be-

ings from being eventual recipients of semi-fictional proper names such as those of the biblical Jonah and the legendary Robin Hood.

Why do we recognize a causal chain as appropriate for the name bearer in certain cases and not in others? The answer already suggested in the second chapter is that the causal chain we recognize (through its causal records) as adequate is one capable of satisfying cognitive elements that we associate with the name. Therefore, it is more than reasonable to think that in cases of semi-fictional names such as Jonah and Robin Hood, even if there is a causal chain, what confers adequacy (even if only in an extremely vague way) on this supposed causal chain, are descriptively expressible cognitions. The stories of Jonah and Robin Hood have been handed down to us since their creation, and we draw hypotheses from them as to where and when they originated and were elaborated. Indeed, from biblical history, we can learn about the localizing description. We infer something from the disjunctive rule containing the too vague localizing description of Jonah as *a person who lived in biblical times (between 1,000 and 600 years BC) somewhere in the Middle East*. And we also learn something very vague about the characterizing description, such as that he would have been *a person belonging to the Hebrew religion*. And as for the person celebrated in the legend of Robin Hood, we know that he must satisfy part of a disjunctive rule containing the vague localizing description of *having lived in England around the 12th to 13th centuries AD*. And we also learn something very vague about the characterizing description, such as his property of *having been a sort of fighter who inspired medieval ballads*. Henceforth, in both cases, vague causal lines may be assumed. According to MIR*, the admission of grounding by a supposed satisfaction of fundamental description-rules that are still too generically known would be what makes these semi-fictional names indicators of things allegedly real. The exclusion of such vague descriptions would leave us with no reason to believe that Jonah and Robin Hood are more than purely fictional characters. These descriptions are, of course, unqualified for the unambiguous identification of Jonah and Robin Hood, but that is not what we want from them because, after all, we are not in fact able to identify these people. What they allow us to do is just to propose plausible hypotheses suggesting that these legendary persons really existed.

We can distinguish two elements in the descriptions associated with the names of semi-fictional persons. The first is (a) *the merely fictional element*, consisting of generally colorful and fanciful descriptions, which were not meant to apply to reality, such as Jonah's spiritual torment inside the big fish or the fanciful heroic deeds of Robin Hood. The second is (b) *the non-fictional element*: it is based on the vague localization and/or characterization descriptions considered above, which are too vague to allow any trustworthy real identification. These vague descriptions should be implied by unknown localizing and characterizing rules that, we

assume, could be completed if we had sufficient information about the name's bearer. What we call a semi-fictional name is defined by the inclusion of imaginary details, based on unqualified identifying criteria that originally would have been bequeathed to us. Added to this is the impossibility of satisfactorily separating a mere product of the imagination from what would be the remaining traits of the original identifying criteria.

There is reason to think that in some cases the dichotomy between (a) and (b) could be clarified, transforming the semi-fictional proper name into a real proper name. Imagine that scholars discover old documents proving that Robin Hood was in fact a man called Robert Fitz Odo. They discover that he became an outlaw who really lived in Sherwood Forest in the late 12th century, linking him to the medieval ballads... In this case, our presently too vague localizing and characterizing descriptions would be filled with details that are sufficient to allow the identification of our present alias with its real bearer. However, suppose this is not the case. Then we may be faced with the possibility of having an example similar to that of Santa Claus, whose connection with some original historical person is merely accidental. There is, consequently, an expected parallel between the uncertainty associated with semi-fictional names and the insufficiency of the fundamental description-rules that we are able to associate with them.¹³⁶

Elliptical and incorrect descriptions

We must now reconsider Kripke's semantic objection of ignorance and error in light of our new understanding of proper names' reference mechanisms. As already considered, his goal was to demonstrate that people can use a proper name referentially, even when it is associated with only one indefinite description or even an incorrect description.¹³⁷ His examples of the first case were the names 'Cicero' and 'Feynman', which many have associated only with an indefinite description, such as 'a famous Roman orator' for the first and 'a great American physicist' for the second. Only a few people would be able to explain the political discourses of Cicero or understand Feynman's contributions to microphysics (1980: 81–82). Even so, according to him, many speakers could be able to refer to Cicero and Feynman using such

¹³⁶ As in the case of Jonah, in the case of Robin Hood, another plausible explanation is perhaps that the medieval ballads which served as the sources of later stories were actually inspired by the many outlaws who spent summers in English forests and not by just one of them. In this case, the proper name is unable to identify a unique real bearer, and 'Robin Hood' must be considered nothing more than a purely fictional name inspired by historical facts.

¹³⁷ Chapter II, § 1.

indefinite descriptions; more than that, some people are able to use proper names referentially, even when they associate them with blatantly erroneous descriptions. As Kripke noted, in his day many Americans associated the name 'Einstein' with the description 'the inventor of the atomic bomb'; and even based on the association with this phrase alone, people could already refer to Einstein. But Einstein never worked on the atomic bomb, which was actually constructed by a team of scientists working on the famous Manhattan Project (Kripke 1980: 85).

We can return here to the previously discussed comment that the description a speaker has in mind can be successful in the derivative sense of a borrowed (Strawson) or parasitical (Searle) reference. This is what we analyzed as the *unqualified* form of reference insofar as it satisfies the criterion of success for unqualified references, which is constituted by the convergence condition (insertion of the name in the right class), the condition of linguistic competence (knowledge of MIR*s), and that of contextual adequacy (Chapter III, § 9). This criterion is normally satisfied by all the examples above. Thus, by associating the names 'Cicero' and 'Feynman' with indefinite descriptions and even associating the name 'Einstein' with an erroneous but convergent description, assuming contextual adequacy (the right audience), people already become able to put them in the orbit of the reference by communicating them adequately. That is, they become able to use them in linguistic practices where their role is sufficiently vague, but adequate to be understood by other users as satisfying the conditions SCB-1, SCB-2, and SCB-3, assuming the existence of privileged namers able to refer self-sufficiently to their bearers.

For example, someone could give the proper name Richard Feynman and say it refers to a famous physicist who once performed with members of a samba school in front of the Copacabana Palace in Rio de Janeiro... without knowing anything about his contribution to quantum electrodynamics but already classifying him as a scientist. The speaker would in a weaker sense be referring, even if the audience had no idea of what it means to be a physicist or to do scientific research, which means that he would not be able to referentially insert the word into discourse. Normally, however, this weak form of reference, although clearly unqualified (and if taken in isolation, only a pseudo-reference, since no one will be able to identify Feynman by means of this information alone), will be accepted by others, some of them possibly knowing more about Feynman. These indications will only be completed after people who hear them meet privileged speakers who know enough about Feynman to identify him correctly. In this way, even if one only knows that Feynman was an American physicist, it will always be on the assumption that there are privileged speakers who know the real localizing (Caltech, USA, etc.) and characterizing (developer of quantum electrodynamics, idiosyncrat-

ic personality, etc.) description-rules belonging to the identification rule for Feynman.

Concerning an incorrect definite description such as ‘the father of the atomic bomb’ associated with the proper name ‘Einstein’, even if wrong, the speaker is already able to classify the bearer as a scientist and a human being, and so he is already able to insert the name in undemanding conversational situations. If someone says that Einstein invented the atomic bomb, others can understand that he is speaking about a famous scientist, maybe also believing that Einstein invented the atomic bomb or at least had some other great scientific accomplishments. Some others will be able to understand the name and make the necessary correction, on the contextual assumption that all these speakers wanted to refer to the same famous scientist they referred to with that name. In all these cases, *enhanced reference-borrowing* or *parasitic reference* is at work. However, there are limits to this, which are reached in the case of what I have called *failed* (unhappy) *references*. As I have already noted, if a person uses the name ‘Cicero’ to designate a small bird, or the name ‘Feynman’ to designate a brand of perfume, or ‘Einstein’ to designate some diamond, these uses will be so contextually inappropriate that it would be impossible to acknowledge that the speaker is referring to the owners of these names. That person has failed in referring to the class of things we normally refer to by using those names (SCB-1 is lacking), being therefore unable to adequately insert them in conversational situations occurring within the appropriate context (SCB-3 is lacking). Not even an unqualified reference is achieved here.¹³⁸

It would be possible to object to the descriptive response that the main reason we remember the physicist Robert Oppenheimer is that he was the person most responsible for constructing the first atomic bomb. Hence, anyone who says Einstein invented the atomic bomb is using a characterizing description more appropriate for the name Oppenheimer. This means he should be referring to Oppenheimer, not Einstein and thus would be making, according to our view, a mistaken reference...

The answer to an objection like this, in addition to relying on the success criterion for unqualified references, depends on what is being emphasized. If the utterance were “The father of the atomic bomb was Einstein”, the speaker would in fact be told that the person most responsible for the atomic bomb was the physicist

¹³⁸ The same occurs with conceptual words. If a fisherman thinks a whale is a great fish in the ocean, this (indefinite) description is wrong since a whale is a mammal, not a fish. However, this description is already convergent since the person is referring to something belonging to the class of marine animals. But if a child says that ‘Whale’ must be the name of a mountain in the Appalachians, this is a divergent (indefinite) description, devoid of referential function simply because no mountain in that range has been given this name (see Chapter VI, § 8).

Robert Oppenheimer and not Albert Einstein. However, when the name 'Einstein' is in the grammatically usual position of subject, what the speaker emphasizes is the rule associated with the auxiliary description 'the bearer of the name "Einstein"', which is assumed to belong to the definitional IR-'Einstein'. The subject's usual position would only become deceptive if the information were more detailed. If a person said, "Einstein was the outstanding theoretical physicist who directed the Manhattan project, which constructed the first atomic bomb; he was born in 1904 and died of cancer in New York in 1967", we would not correct him by saying that Einstein was not responsible for the atomic bomb. We would say that the proper name 'Einstein', which belonged to a theoretical physicist who developed relativity theory and died in 1955, is mistakenly being used to refer to Oppenheimer, a quite different object of reference.

Circularity

Still, an influential argument of error is Kripke's appeal to circularity: the name 'Einstein', he says, cannot be explained by the description 'the originator of relativity theory', because the term 'relativity theory' is explained by the description 'the theory created by Einstein' (1980: 81–82). A similar circularity he points to the explanation of the proper name 'Giuseppe Peano'. Many people associate this name with the description 'the discoverer of the axioms of arithmetic'. This is, however, a mistake. Peano only improved the axioms, adding to his text a note in which he correctly attributes their discovery to Dedekind. The mistake was nevertheless perpetuated. One solution, he writes, would be to say that Peano is 'the person most *experts* refer to as Peano'. But that would be circular. How then can we identify Peano experts? Suppose that some experts are mathematicians. It could be that most mathematicians mistakenly associate the name Peano with the description 'the discoverer of the axioms of arithmetic'. We could then suggest recourse to the description 'the person most Peano-experts refer to with the name Peano'. But this solution would also be circular because to identify Peano experts, we already need to have identified Peano, thus already knowing who Peano was (1980: 84–85).¹³⁹

These circularity objections are clearly fallacious, and I wonder if anyone has ever taken them seriously, except by naively agreeing to reduce descriptivism to its caricatural one-description form. It is obvious, for instance, that in principle

139 See Scott Soames' exercise of wishful thinking in Soames 2003, Vol. II: 361.

we could learn about the theory of relativity independently of any reference to Einstein's name. This could even become common someday in the future...

Consider now the example of Peano, which is more complicated. If all a person knows about Peano is that he was 'the discoverer of the axioms of arithmetic', what that person has to go on is merely a parasitic, borrowed, unqualified, and erroneous but convergent definite description (inappropriate as B_2). And since MIR*s and SCBs belong to our tacit conceptual grammar for proper names, the person must have the competence of (implicitly) being aware of not knowing enough about the referent (SCB-2). One tacitly knows that to be a true namer one needs to know the fundamental descriptions of Peano's name cluster. Consequently, the person would not ask the first mathematician she meets about Peano's axioms as his only distinctive mark, as Kripke suggests... but instead would search for the most reliable information. Usually, she would begin by looking for the terms 'Peano' and 'the discoverer of the axioms of arithmetic' in encyclopedias, where she could find the precise localizing and description rules. Soon she would find the mistake, learning that Peano's achievement consisted in improving on previous developments. She thereby corrects the first clue.

In order to prove this, I will now (on March 12, 2023) make a practical experiment. I will enter the word 'Peano', followed by the description 'the discoverer of the axioms of arithmetics', in Google Search. The first informative text I find is detached on the head of the Internet page:

On August 27, 1858, Italian mathematician and philosopher Giuseppe Peano was born. He was the author of over 200 books and papers, and is considered the founder of mathematical logic and set theory. *The standard axiomatization of the natural numbers is named the Peano axioms in his honor.*

With this information, I already know something of the fundamental descriptions. Still not enough, as I am looking for more detailed information. Next (on the same page) I read a short article in the *Encyclopedia Britannica*, which presents the five axioms but says nothing about their origins before Peano. But now (still on the same page) I find a very short article called "Peano's Axioms: Their Real Origin", stating that they were first devised by Herman Grassman (1860), then presented by C. S. Peirce (1881) and Richard Dedekind (1888), and later improved on by Peano (1889). This new information corrects the false but convergent description 'the discoverer of the axioms of arithmetics', still classifying Peano as a mathematician... I will stop here, knowing that I am on the right contextual track.

My next step, if I really wished to know who Peano was, would be to search for the name 'Giuseppe Peano' in trustworthy encyclopedias and reference works, which would probably confirm and eventually correct some of my present infor-

mation. To learn even more, I would search in reliable books on the history of mathematics in the 19th century. There I would find detailed information provided by clusters of descriptions of greater or lesser significance offered by specialized mathematicians and historians. In possession of this information and a bibliography, I would find specific texts on Peano written by Peano experts, and (finally) the texts written by Peano himself. More importantly, in this case, I would find biographies of Peano explaining the most proper localizing and personal characterizing description-rules. Finally, as an accomplished Peano's expert, I would become a privileged user of the name. In all these searches, the main tacit guides would be awareness of SCB-1 (convergence condition), SCB-2 (real workings of MIR*s), and of SCB-3 (contextual condition).

This thought experiment makes it clear that the whole process, rightly followed, is not at all circular. It arises instead in what we could call an *ascending bascular movement* or, if you prefer, *a spiral ascendant movement*. Thus, for instance, based on the generic preliminary information I_1 (in the case given by an equivocal convergent description) about x , I am able to search for and find the additional information I_2 and I_3 on x . Based on the set of information $\{I_2, I_3\}$ about x , I correct I_1 , which enables me to search for and find the information I_4 about x ; then based on the set of information $\{I_2, I_3, I_4\}$, I increase my knowledge until I become a true Peano expert with $\{I_2, I_3, I_4 \dots I_n\}$.

Of course, each new body of information acquired *already* contains the previous information and the initial set, which may include corrections of possible errors in the previous information, which could make careless readers fear circularity, particularly if they are prone to misunderstanding descriptivism... But that is not enough to make the process circular since it is the information *added* to our knowledge and not information saved or removed that helps us in the further acquisition of referential knowledge.

2 Responses to Donnellan's counterexamples

In addition to Kripke's objections, we need to address some brilliant counterexamples suggested by Keith Donnellan in an important 1970 article where he defended a causal-historical theory similar to Kripke's. These insightful counterexamples are dialectically fruitful, the first allowing us to further develop the neo-descriptivist view presented in the last chapter.

Thales, the well-digger

The most interesting counterexample concerns the philosopher Thales, about whom we know little more than the definite description ‘the ancient Milesian philosopher who proclaimed that everything is water’. Imagine now that our sources, Aristotle and Herodotus, were misinformed, and that Thales was just a world-weary well-digger who, exhausted by his hard labor, exclaimed, “I wish everything were water so I wouldn’t have to dig these damned wells!” (Donnellan 1972: 374). Suppose that lacking detailed knowledge of the local dialect, a traveler mistakenly understood this as the profound insight of a great philosopher concerning the ultimate nature of reality. This erroneous interpretation was then perpetuated by Herodotus and Aristotle, who eventually bequeathed it to the philosophical tradition. Apart from that, Donnellan imagines that in more ancient times, there once lived a hermit who never shared his ideas but who was actually the first thinker who claimed everything is water. According to Donnellan, a descriptivist should say that the name ‘Thales’ really refers to this hermit, for he was the true bearer of the definite description ‘the philosopher who said that everything is water’. But this is not what would in fact happen. Our tendency, he writes, would be to think that with the name ‘Thales’ we are not referring to the hermit but to the well-digger, although he does not satisfy our description.

The outcome of this counterexample, according to Donnellan, is that we must make references due to some causal-historical connection between the referent and the speech act (Donnellan 1972: 377). That is, what really counts for the reference of a proper name is the causal-historical chain that would begin with some first linguistic tag of Thales, even if this reference was later associated with erroneous descriptions. In favor of this conclusion is the fact that there is no causal relationship between our use of the name ‘Thales’ and the hermit. Suppose the definite description ‘the philosopher who said the world is made of water’ was remembered by successive generations of philosophers as related to the name ‘Thales’. The hermit’s thoughts (perhaps never communicated to anyone) cannot make this proper name refer to him because the causal-historical relationship is lacking.

Before answering, let us first see how John Searle tried to answer this counterexample. He began by relativizing Donnellan’s conclusion. He does this by devising a version of the example that seems to contradict the causal-historical view. Suppose that Herodotus had a well where a frog lived that made sounds suggesting the phrase “Everything is water”, and the frog belonged to a species called ‘Thales’. He could have said, “Thales said that everything is water”, himself giving rise to the misunderstanding. But if the causal-historical theory is correct, once enlightened about this fact, we should conclude that the name ‘Thales’ refers to the frog in Her-

odotus' well, which is certainly not the case. What we would conclude, of course, is that Thales never existed. It seems, therefore, that a causal origin alone is not enough (Searle 1983: 252–253).

What is implicit in Searle's example can be inferred from our MIR* since the identification rule for Thales must demand that he belongs to a class G of human beings, and not one of talking frogs. However, what I wish to show is that our metadescriptivism is not only able to produce a more complete response to Donnellan's counterexample but also a response that enriches our own proposal. This can be made by the introduction of descriptions belonging to what I called a *causal record*.¹⁴⁰ We can understand these records as descriptions of those nodal events outlined and remembered in the course of causal-historical chains; events that because of their cognitive relevance are descriptively retained by our linguistic community. Searle seemed to have realized their existence when he observed that:

When we say, "Thales was the Greek philosopher who maintained that everything is water", we don't just mean that *anyone* maintained that everything is water, we mean the person who was known to other Greek philosophers as arguing that everything is water, who was referred to in his time or subsequently by some Greek predecessor with the name 'Thales', whose works and ideas came to us posthumously through the writings of other authors and so on. (Searle 1983: 253)¹⁴¹

What is remarkable about Thales is that his importance lies largely in his specific place in the history of Western philosophy, which was that of its origin in Greek civilization. Because of the resulting long causal chains, and many stories, what justifies the application of the name has largely been a belief in what was *said* by means of a great variety of descriptions given by other philosophers demonstrating his place, presence, and influence as the first Greek thinker to be properly called a philosopher.¹⁴² After all, if any contemporary philosopher suggested that everything is permeated by water, this statement would be considered simply ridiculous. As a result, if we made the astounding discovery that Thales was just a well-digger, we would tend to hesitate between conceding that he really was a well-digger and (as Searle also noted) deciding that the philosopher 'Thales' simply never existed.

It is interesting in the case of Thales to think about all the historical data considered authentic, since they are few and, in this way, provide a good case study

¹⁴⁰ Chapter II, § 12.

¹⁴¹ Due to passages like this, Searle was already interpreted as a causal descriptivist, which is surely a mistake.

¹⁴² "Thales abandoned the mythical formulations; this alone justifies the claim that he was the first philosopher, naïve though his thought still was" (Kirk and Haven 1995: 99).

for grasping the real path towards a historical reference. When we examine the data, we see that even if we cannot cognitively rescue supposed causal-historical chains, we can cognitively rescue important traits left behind by causal chains, which are constitutive elements of a causal record. That is, we can recover important, historically remembered events expressing nodal points of causal chains, mainly through the reiteration of representational links that have occurred in the minds of some people and are capable of being linguistically manifested. In Thales' case, there are well-known descriptions, such as that he was "the person identified second hand by Aristotle in the doxography as the pre-Socratic philosopher who stated that water is the principle that originated the world and permeates everything and that all things are full of gods..." (Kirk and Haven 1995: 89–97). Such descriptions allow us to rescue cognitively charged nodal points of the supposed causal-historical network initiated with Thales, which were representations that must have occurred in the minds of Aristotle, Herodotus, Simplicius, Diogenes Laertius, Proclus, and still others.¹⁴³ After all, Thales left no writings, and everything we know of him and his thoughts comes from what later philosophers said about him. In this special case, the importance of these historical elements is so great that they have become part of a more complete characterization rule of 'Thales'—the philosopher. This fundamental rule for the identification of Thales can be briefly summarized as:

Characterizing description-rule: The philosopher who left behind no writings, but was second-hand referred to in the doxography written by Aristotle as having been the first Greek philosopher, who in his cosmology stated that the earth rests on water, water being the principle that originated the world and that permeates everything, that in sum, all things are interpenetrated by some life principle, and that all things are full of gods... He was also an astronomer who once predicted the year of a solar eclipse, according to Herodotus, Diogenes Laertius, and Dercyllides... and also a geometrician, who, according to Diogenes Laertius, based on Hieronymus, measured the pyramids by their shadows. (See Kirk and Raven 1995: 81–97.)

Even if this much more impressive and plausible characterizing description were satisfied by the well-digger, it is crucial to note that we are informed about him by

¹⁴³ It is instructive to read the documented doxography, based on many lost sources, along with the commentaries of specialists, substantiated by their historical and cultural knowledge of the Hellenic world. These give us a sense of the full complex of fundamental and auxiliary description-rules that allow privileged namers to *refer* to Thales in the most appropriate sense, thereby attributing existence to him. (See Kirk and Raven 1995: 76–99.)

quotations found in the doxography by Aristotle, Herodotus, Diogenes Laertius, and Deircyllides. This last fact would remain true even if it were not the case that Thales was the first philosopher who said that water is the principle that originates and permeates the world, etc. He continues to satisfy the definite description of his having been *the philosopher alluded to by doxographers as having said all these things*. With such remarks, I call attention not only to the much more complex real characterizing description, but mainly to the fact that what counts most is that the voices of the doxographers who left these descriptions for us are also included as belonging to them. Even if it could be discovered that the content of these descriptions has a considerable degree of error; they still concern the person referred to by doxographers, and not to some other person who lived in a remote time, such as Donnellan's hermit philosopher, even if the hermit were a coincidental truth-bearer for all these descriptive contents. Even if he existed, he could not be our Thales because he was not even mentioned in the doxography.

Furthermore, we should add the fundamental condition requiring the satisfaction of the spatiotemporal location and career summarized as the following:

Localizing description-rule: The person who, according to the doxography of Diogenes Laertius, was born in 640 BC and died in 548–545 BC. According to Laertius and Herodotus, Thales was a Milesian, and Laertius wrote that he was the son of Examynes and Cleobuline. According to Laertius and Proclus, he visited Egypt, the traditional fountainhead of Greek science, at some point in his life. (See Kirk and Raven 1995: 76–80.)

The addition of this new fundamental disjunctive record is decisive since according to it the Milesian philosopher Thales satisfies the doxographic information much better than Donnellan's hermit or any other causal-historical philosophical invention.

Given all these complementary sources, it is easy to understand why we continue to affirm with great certainty that we know the name 'Thales' refers to our Thales, even if the doxographers were all wrong about his profession, and he was only a Milesian well-digger who made no contributions to philosophy. Thales satisfies sufficiently and more than any other person the disjunctive condition as part of his identification rule, and so he remains our Thales. Certainly, Thales also satisfies an external causal chain (through the C-condition), though this is only an assumption we make about the nature of our world. Likewise, Donnellan's hermit satisfies very little of the characterizing condition B, since he does not satisfy the essential condition of having said something important for philosophy according to information given by doxographers (they didn't write that the hermit said

everything is water), and also satisfies nothing of the localizing condition A (the hermit lived somewhere in a remote time). Consequently, from the metadescriptive viewpoint, the hermit cannot be our Thales.

The assumption of the causal record as part of the characterization rule in the above-discussed case is still of fundamental importance since in a sense it allows cognitive expressions of nodal points left by external causal-historical chains to participate in the identification. To highlight its importance, it is enough to imagine that the hermit considered by Donnellan, in addition to having claimed that everything is water, satisfied the localizing condition for Thales that he lived between 624 and 548–550 BC, was born and died in Miletus and once visited Egypt. Let us also imagine we discover that Thales the well-digger lived in the same period in Miletus, although he never visited Egypt and was no philosopher. In this case, it may be objected that the hermit better satisfies the localization rule and also even the characterizing rule than Thales. In this case, we could conclude that the hermit, and not the well-digger called by the name ‘Thales’ would be our real Thales and even the most plausible causal origin of our doxographic information, wrong only by misnaming the philosopher. Of course, by changing the information, we can make the balance shift to either side or even to the conclusion that Thales did not exist.

The famous philosopher

The second counterexample is about a student at a party who was talking to a person he mistakenly believed was the famous philosopher J. L. Aston-Martin, author of “Other Bodies”.¹⁴⁴ Although the person at the party was also named Aston-Martin, he only pretended to be a well-known philosopher. Donnellan (1972: 364) notes that the statement (a) “Last night I spoke to Aston-Martin” is false, as it associates the name ‘Aston-Martin’ with the following description:

D1: the philosopher and author of “Other Bodies”,

while the statements (b) “At the end of the party Robinson stumbled over Aston-Martin’s feet and fell flat on his face” and (c) “I was almost the last to leave, only Aston-Martin and Robinson, who was still out cold, were left”, are true, as they are associated with the following description:

¹⁴⁴ Donnellan is playing with the name ‘J. L. Austin’, the excellent philosopher who wrote the article entitled “Other Minds”.

D2: the man named 'Aston-Martin' whom I met at the party.

The objection is that cluster theory does not explain this change: for the student in (a), (b), and (c), the name Aston-Martin should be associated with the same cluster of descriptions that includes 'the author of "Other Bodies"'.

In order to answer this counterexample, all we need to do is to see how a metadescriptive theorist should handle Donnellan's example. First, there are two persons with homonymous names: J. L. Aston-Martin, a philosopher, and Aston-Martin, the name of a man who only pretends to be the philosopher. The only description-rule the student seems to have is 'the famous philosopher and author of "Other Bodies"', whom he associates intrinsically with the proper name J. L. Aston-Martin. As a competent speaker, the student knows that he is only able to make the kind of parasitic reference we have classified as insufficiently qualified (B_1), and he also tacitly knows that this implies the satisfaction of conditions SCB-1 of convergence (Aston-Martin is correctly classified as a philosopher), condition SCB-2 of linguistic competence (knowledge of MIR*s), and condition SCB-3 of socio-contextual adequacy (we can imagine that the party is held in the city of Oxford, where the philosopher J. L. Aston-Martin lived...). Until now, there is nothing wrong with these assumptions. The trouble is that the naïve student is deceived by Aston-Martin, who instead of correcting his misconception impersonates the philosopher J. L. Aston-Martin. Deception regarding the identification of a name's bearer made by an homonymous bearer concerning himself is not what we normally expect when we insert a proper name into discourse. This blocks the expected reference-borrowing. The suggestion that descriptivism cannot explain the failure of the student in identifying the true Aston-Martin is here not proof of the inadequacy of meta-descriptivism, but of its *insufficiency in cases of deception*. In order to solve this problem, all we need is to add a SCB-4 to the SCBs: a Gricean condition of *truthfulness* on the part of the audience concerning their reaction to parasitic utterances of proper names. The audience could help by honestly adding new helpful descriptions, if it had any to offer, and not hindering true identification by introducing misleading ones. This explains why the student, though having the description D1 and believing in the truth of (a), is unable to refer to the intended person, the famous philosopher who wrote "Other bodies".

About the sentences (b) and (c), they are associated with D2, which is an adventitious description, telling us what the person called 'Aston-Martin' did later at the party. They are true adventitious descriptions belonging to the cluster of the person called 'Aston-Martin' present at the party but not to the cluster belonging to the homonymous philosopher. Just by their association with the auxiliary description 'the man called "Aston-Martin"', they are not committed to the philos-

opher since proper names are almost always polysemic when detached from a determining social context (SCB-3 is lacking).

Donnellan thinks his example challenges descriptivism because he ignores that one can be deceived regarding a proper name's polysemy and the fact that many adventitious descriptions can belong to any cluster of homonymous proper names.

Inverted squares

Another of Donnellan's counterexamples is that of person A who, wearing special glasses, identifies two identical squares on a screen, one placed directly above the other (1972: 368–370). The top square is called Alpha, and the lower one is called Beta. The only description provided for the Alpha square is:

- (a) the square on top.

If descriptivism were right, the person would refer correctly to Alpha as the square on top, applying the description (a) to identify Alpha. However, without the person wearing glasses knowing this, her glasses reverse the positions of the squares, so that for her the true Alpha square appears underneath the other. But it is intuitive that she is not referring to the Beta square on top. Donnellan thinks he has thus demonstrated that the square to which the person *really refers* is the Alpha square (the one appearing to her below), even if the word is associated by the person with the erroneous description (a).

The answer to this counterexample is so obvious that I spent a long time asking myself if I was not missing something. Of course, Donnellan is wrong in saying that person A is really referring to the Alpha square. Since person A does not know she is wearing inverted glasses, she points to the square she sees on top as the Alpha square, guided by her definite description (a). Because of this, she must make a *wrong* reference to the Beta square as if it were the Alpha square. Donnellan's argument about the two squares is nothing but an intellectual catch. Once we see that person A cannot be referring to the Alpha square, his argument deflates like a punctured balloon.

“Tom is a nice person”

One last counterexample offered by Donnellan is particularly important because it is an attempt to show that a name can be used without any attached description.

It is the story of a child who is already asleep in bed and is awakened briefly by his parents (Donnellan 1972: 364). A friend of the parents, who is named Tom, has come over unexpectedly to pay a visit and asks to meet their youngest son, whom he does not know yet. The mother wakes the child and tells him: "This is Tom". Tom says: "Hi, youngster!"; the little boy says "hello" and immediately falls asleep again. The next day when the child wakes up, all he can say about Tom is that he is "a nice person". The child does not even remember being awakened the night before. But he refers to Tom without the aid of definite descriptions. William G. Lycan, who emphasized this counterexample, believes this is solid evidence for the causal theory of names: the child is able to refer to Tom only through a demonstrative causal transfer (1999: 46–47; 2006: 376).

Examining this example, Brian Loar noted that it may well be that in this case, language deceives us, as in the case where a person realizes that some guests are absent for dinner but does not remember who they are; we are entitled to say that the person refers to those who did not attend. However, the word 'refers' does not seem to be used here in the appropriate sense. Indeed, if the child actually remembers nothing about Tom when saying he is "a nice person", we cannot even distinguish his uttering this from a mere expression of willingness to please his parents (Loar 1976: 367).

My own answer depends on a precise consideration of the child's words. It can be that the child says "Tom is a nice person" only to *please* his parents, although he does not remember anything about the previous night. In this case, the child is not telling the truth; he is just saying what he thinks his parents want him to say, and there can be no reference. We can assume, however, that the child has some kind of semantic cognition, some vague memory of his encounter with Tom, which could justify his saying that Tom is nice. In this case, there is indeed a convergent semantic-cognitive element, which allows us to conclude that the child is able to introduce the word into the dialogical situation, referring to a person. However, this would be a case of unqualified parasitical reference. As everyone knows which person the child means, the example can create the mistaken impression that he is able to make a complete identifying reference to Tom. But this is an illusion. He actually does not know who Tom is and could not recognize him on the street. If he said 'Tom is a nice person' to strangers who were unaware of the circumstances, the memory of the testimony being lost, they would not be able to say who Tom is. Therefore, the utterance does not refer effectively to Tom for the child who is speaking, but rather to Tom for the only interpreters able to complete the reference, in this case, the child's parents. After all, they not only remember that the child was introduced to Tom and assume that is why he now says Tom is nice; they are also the ones who know Tom and are able to identify him as the person their child means. Indeed, the child's parents are privileged speakers who

know in a self-sufficient way the identification rule for the name ‘Tom’, which can be descriptive of his appearance, his psychological traits, what he does for a living, where he lives, his origins... They also know relevant auxiliary descriptions concerning Tom’s family relationships. As the child’s speech takes place in a public space where these privileged interpreters are present, the child’s intention to refer to a sympathetic person with whom he was in contact is complemented by the referential identification of this person by others. This identification by other participants in the conversational situation misleads us to think the child has made something more than a mere gesture towards the reference.

3 A note on Pierre’s puzzle

In 1979, Kripke presented a problem that according to him seemed to call into question both the descriptivist and the referentialist answers to the problem of reference (1979: 239–283). Pierre is a Frenchman who as a child believed in the truth of the sentence “*Londres est jolie*” (London is pretty) because he had seen beautiful drawings of the city. As an adult, due to an unfortunate set of circumstances, he went to England to live in a quite unattractive part of London, where he stayed without visiting any other part of the city. After he saw his surroundings and made the acquaintance of his uneducated neighbors, he came to believe the sentence “London isn’t pretty”. Because he learned English only through direct contact with his neighbors, he continued to hold both beliefs about London without realizing their contradiction. According to Kripke, Pierre is not satisfying a *disquotational principle*, which states that *to give one’s assent to a sentence “p” one needs to believe in the truth of the proposition p*. But Pierre agrees with the sentence “London is not pretty” without giving up his belief in the proposition expressed by “*Londres est jolie*”. And this is understandably puzzling.

There are also background worries. If you are an externalist/referentialist and think the meaning of a proper name is its reference, then Pierre must beforehand know that either London is not pretty or *Londres est jolie*, since ‘London’ and ‘*Londres*’ have the same reference. Moreover, considering that the causal-historical origins of ‘*Londres*’ and ‘London’ seem to be the same, it is difficult for philosophers like Kripke to figure out why Pierre is unable to realize that he is attributing contradictory predicates to the same reference.

The metadescriptive explanation of the proper name’s reference mechanism easily solves the “Pierre puzzle”. He is very far from being a privileged speaker. He somehow does not know that ‘*Londres*’ refers to the same city as ‘London’. Of ‘*Londres*’, he has only the vague identifying description (i-a) “*Londres est une ville*” (London is a city), and the auxiliary description inscribed in (i-b) “*Londres*

est jolie”, which allows a rather *unqualified* reference to the city of London. But regarding the word ‘London’, we might suppose, he knows something of the localizing description (ii-a) ‘the city located on the banks of the River Thames in England’ and something of the characterizing description (ii-b) ‘[London is] the capital of the United Kingdom’ in addition to knowledge of the questionable auxiliary description, (ii-c) ‘[London is] an ugly city’. However, it is clear that the overly vague identifying description (i-a), together with the auxiliary description inscribed in (i-b), and the identifying descriptions constituting a group (ii), do not have enough in common to identify the same city among many others. Pierre cannot associate the two description clusters, remaining unable to realize that descriptions of group (i) and descriptions of group (ii) refer to the same city. Frege, as we learned from his comments on Dr. Gustav Lauben in Chapter I, would already have known the right path to the solution of this puzzle in 1918.

Finally, regarding the disquotational principle, ‘Londres’ is associated with descriptions (i-a) and (i-b), while ‘London’ is associated with the descriptions (ii-a), (ii-b), and (ii-c), which makes the propositional contents “*Londres est jolie*” and “London is pretty” as expressed by Pierre different in their constituents, justifying non-contradictory differences in his beliefs-assents.¹⁴⁵

Kripke also conceives a situation in which Pierre associates the same descriptions with ‘Londres’ and ‘London’. Thus, he could associate ‘Londres’ with ‘la ville où réside la reine d’Angleterre’, and ‘London’ with ‘the city where the Queen of England lives’, which mean the same thing. But such an objection would be unproblematic for us insofar as Pierre does not know the identification rule for Londres well enough to see that it is the same as the identification rule for London, in order for him to make these two heterophonic words the same rigid designator. But if he could see the identity between the two sentences, then the question arises: Why is the Kripkian Pierre not smart enough to see that these two cities must be the same?!

145 For the referentialist, the worries grow when Kripke gives a second example concerning an identical problem in using a single proper name, ‘Paderewski’. The speaker believes there are two Paderewskis, the first a pianist, the second a Polish statesman, though the name in fact refers to a single person, who had two different careers. Indeed, Ignacy Jan Paderewski was a real Polish pianist and composer who was also a statesman who supported Polish independence. This is an obvious problem for the referentialist, since by knowing the name, the speaker should also know the meaning-object, and it is also a problem for metalinguistic theorists. But it would obviously be no problem for a metadescriptivist, since the speaker, motivated by background beliefs about the lack of compatibility between artists and politicians, associated the two different descriptions to the name Paderewski, correspondingly linking each with a different name’s bearer, without believing that these descriptions could be parts of the same characterizing description belonging to the same identification rule.

A further problem is how we treat the concept of proposition regarding the disquotational principle. If the proposition is seen from an externalist viewpoint, as a singular Russellian proposition, I have nothing to say about Pierre's puzzle. But if the proposition, the cognitive meaning, is treated in a neofregean way, as an internal cognitive content of thought to be equated with a kind of Wittgensteinian verifiability tropical rule,¹⁴⁶ requiring the satisfaction of a variety of differently weighted criteria to make it true, then we can say that for Pierre "*Londres est jolie*" and "London is pretty" express different propositions, since they express different verification procedures depending upon different criterial conditions. Only our own understanding of these two propositions enables us to apply a unifying criterion able to show that they belong to the same wider cluster of descriptions attached to an identification rule referring to the same city, simultaneously beautiful and ugly when viewed from different places and perspectives also included in the cluster. In this way we join both propositions in a common one.

4 Devitt's objection of epistemic magic

There is a generic objection raised by externalist philosophers such as Michael Devitt, according to which there is something magical in descriptivism. According to this objection, descriptivism attributes an extraordinary property to the mind, which is the ability to allow its contents to relate as if by magic to things in the outside world. As Devitt writes in his criticism of Searle:

How could something inside the head determine the reference, which is a relationship with particular things outside of the head? ... to assume that one's thought can reach particular objects outside the mind is to sustain magical theories of reference and intentionality. (Devitt 1990: 83) (...) How can something inside the head refer to something outside the head? Searle sees no problem: it just happens. That's the real magic. (Devitt 1990: 91)

Certainly, commonsense cognitivists like Searle will insist that the thesis is perfectly natural and intuitive: words are bound to objects by means of intentions, ideas, and representations or, we would say, by means of instantiated cognitive semantic-criterial rules. However, as philosophers, we are here almost inevitably led to the traditional and seemingly intractable problem of perception, that is, the problem of knowing how the mind can have access to something in the external world, heterogeneous to it. In other words: how can we cross through the veil of sensations, since all that is immediately given to experience are sensory impressions (sense-

¹⁴⁶ See Chapter I, § 4; Chapter II, §§ 3 and 6; and Chapter VI, § 2.

data) (cf. Searle 2015). Here there is for many a mystery that requires magic to be solved. But the magic with which we can gain access to an outside physical world through sensory impressions, we have reason to believe, is merely apparent. Today, it is very difficult to deny that internal sense impressions are at least indispensable vehicles of all perception. Consider, for instance, that animated visual images can be reconstructed computationally from brain activity by means of BOLD fMRI; we can indirectly “see” the visual sense-data images forming and moving in the subject’s living brain.¹⁴⁷ And there is no reason not to extend the conclusion to other senses.

The upshot seems to be that sensory content has a Janus face. It can be psychologically-internally interpreted as sense-data; but it can also be physically-externally interpreted when situated within a context of external objects and properties. For instance, compare the content of experience A with experience B in the following statements (Costa 2017):

- A1 [I feel that] I am holding a tennis ball in my hand.
- B1 I am holding a tennis ball in my hand.

- A2 [I have the auditory impression that] I hear thunder.
- B2 I hear thunder.

- A3 [I have the visual impression that] I am seeing a fishing boat entering the mouth of Pirangi River.
- B3 I am seeing a fishing boat entering the mouth of Pirangi River.

As you can see, the contents of the descriptions outside the brackets are the same, but in the A cases, I speak of internal sensory contents occurring in my head as sense-data, while in the B cases, I speak of independent external factual contents pre-existing in the external world.¹⁴⁸ It is very important to see that the contents are identified as belonging to case B when they are accompanied by the *joint satisfaction* of all-important *criteria for external reality* traditionally identified by different philosophers such as:

¹⁴⁷ Gallant, Huth, Lee, Nishimoto, Bilenko, and Vu (2016). Research has reproduced moving images by means of injected contrast showing areas of vase dilation where the neuronal activation is more intense. The reconstructed images are obviously of visual sense-data corresponding to changes in brain activity in response to external sensory stimulation.

¹⁴⁸ More generally, the word ‘content’ has an internal-external ambiguity. Externalists, as we will see, tend to confuse the internal *semantic* content with the external, merely *referential* content.

*maximum sensory intensity,
independence of the will,
interpersonal accessibility,
conformity to natural laws,
insertion in a coherent context...*

I propose that by jointly satisfying such criteria of external reality, sensory contents are naturally reinterpreted as constituted by concrete t-properties belonging to external reality, and are even considered to be the causes of our experience of them as sensory contents (sense-data) belonging to case A. This happens simply because external reality can in an important sense be *defined* as all that conjunctively and coherently (and often very indirectly) is able to satisfy criteria like these.¹⁴⁹

This condensed presentation of a kind of “non-naïve” direct realism can be disputed, of course. But it seems to me more credible than the referentialist sorcery of causal-externalism, according to which in some strange way words themselves, independently of their psychological interpreters, should have the power to reach objects in the external world in order to refer to them. It is true that Devitt (1981) advocated a nuanced form of causalism, according to which partially cognitive causal networks are responsible for references. Yet if he does not want to contradict himself, falling into cognitivism and hence into descriptivism, he will need to ignore the explanatory force arising from the contents of these cognitions. Nonetheless, such an admission makes the objection return with all its force: how could external causal chains and the derived spelling of words, independently of their relationship with cognitive content (in the form of ideas, representations, intentions, etc), be able to explain our reference to the external objects that originated them? This makes us suspect that Devitt’s considerations can be explained as an unconscious projection of a denial of the very problem created by causalism in the enemy field of cognitivism.¹⁵⁰

¹⁴⁹ See, for instance, G. E. Moore (1953). For a development of this view, including the important exception of skeptical contexts, see Costa 2014, Chapter 6, and 2018, 227–233.

¹⁵⁰ Another mentionable objection from Devitt is that description theories are essentially incomplete because they explain a word’s reference by appealing to the application of descriptions associated with the word, without explaining the reference of later words, and so forth... By doing this, they only pass the buck forward (Devitt 1996: 159). However, this objection fails to consider that there is no other way to speak about the world except by using words; it overlooks the explanatory function of descriptions. If taken seriously, Devitt’s argument should be applied to any theory of reference, since such theories will always use words to explain reference, in this way passing the buck, even if these words are called ‘multiple groundings’ or ‘informational chains’, as was the case of his own theory.

5 Recanati's argument from perception

One indirect objection that could be applied against descriptivism is that we can perceive things without the help of descriptions. I say this objection is indirect because all I wrote about clusters can be sustained insofar as perception without description does not exclude the possibility of perception with descriptions. The objection was recently brought to the fore by François Recanati in his theory of mental files (2012 and 2016). This externalist theory was proposed as an attempt to retain the advantages of the Fregean concept of sense or mode of presentation without losing the supposed advantages of his referentialism.¹⁵¹

Influenced by suggestions from Zenon Psylshyn (2007) and Fred Dretske (1988: 73), Recanati argues as follows:

In perception we are directly acquainted with objects: we perceive them, for example, and that enables us to refer to them directly, without having to think of them as bearers of such and such properties. Indeed, when we perceive an object and have a thought about it, *the object the thought is about is the object the perception is about*; and that, arguably, is not determined by *the properties the subject takes the referent to have...* In some cases, we are simply unable to properly describe the object that is given to us in experience; we don't know what it is, and yet that does not prevent us to refer to it directly (without) conceptual mediation, yet wondering what it can be (Recanati 2012: 32).

These remarks, if correct, would confirm Kripke's view of baptism without the ontological resource of properties. However, the objection fails to consider not only that properties can be seen as tropes, but the possibility of non-linguistic and non-conscious concepts and thoughts. The fact that a person can have the perception of an object without having a linguistically-conceptual thought does not mean that the person does not need some kind of *non-linguistic* conceptual apprehension of the object. Our ordinary concept of concept is sufficiently broad to allow this extension. It is true that some prefer to speak of "non-conceptual representation" instead of a non-linguistic concept (Nes 2022), but this is only a terminological point: insofar as the representation can be used to *reidentify* its referent, it works as a concept, since the *recognition of something as belonging to the same kind is the essential mark of a conceptual function*. Moreover, the criteria for the application of concepts are behavioral, not linguistic. Animals without language are surely able to think and apply thoughts, and thoughts are inherently conceptual. A goose that by

¹⁵¹ There is also what Recanati calls the argument from indexicals: "indexicals are essentially perspectival and cannot be captured by means of objective, non-indexical descriptions" (2002: 538). I have answered this objection in Chapter VI, § 2 of this book. (For a more detailed answer, see Costa 2014, Chapter 4.)

a process of *imprinting* learns to identify the first moving object nearby as its “mother”, following it as consequence, has a changeless conceptual identification rule that it is able to reapply. Since ravens can count, they can have some rough concepts of at least some applied numbers. And the same can be said about primitive thoughts as compositions of concepts in the brains of great apes (cf. Andrews 2021). If such rough perceptual concepts and thoughts are applied, they are surely applied to their referred tropical properties. Even if we are unaware of perceptual thoughts, they are cognitive t-entities working as ascriptive rules that can, at least in principle, be made conscious by means of the human capacity to rescue them in the form of linguistic descriptions.

Recanati believes that *in perception an object can be thought of without having properties* (2022: 537). But this is simply not true. Thought is conceptual, and concepts are all about properties. Of course, we can think of some object of perception *without having awareness* of the t-properties we are attributing to the object; but we can never perceptually think of some object without at least implicitly attributing t-properties to it. We often lack sufficient awareness, mainly linguistic awareness, of what we are seeing, but this does not mean we are not conceptualizing its constituents. Even a very simple object, like a round blue ball, is thought of as having the t-properties of being round, blue, and spherical. Without some representational apprehension of any t-property we could not perceive anything.¹⁵² And the objects of perception are always apt to be conceptually described, even if we do not know what these objects are, even if we are unable to make the content of our thought linguistically explicit or are unable to think our own thoughts reflexively.¹⁵³

6 Russellian reformulation

Identification rules can be paraphrased using the methods of Russell’s description theory (1905; 1919, Chapter 9), which can help us reach the goal of displaying the logical structure of the identification rule. Consider, for example, the sentence

152 See my defense of sense-data (Costa 2017). See also Frank Jackson’s defense of descriptivism (1998); representationalists like Jackson have a main reason to reject referentialism.

153 Here, I have in mind higher-order theories of consciousness such as those of D. M. Armstrong (1981 and 1999) and D. M. Rosenthal (2005), according to which consciousness of a mental state, even of a perceptual thought, demands a kind of *metacognition* of the thought in question. It is noteworthy to say that, at least in principle, first- and second-order theories of consciousness could be shown to be complementary (see Gulick 2014 and Baars 1997).

(i) “Aristotle had to leave Athens”.

Bearing in mind the application of MIR in formulating the identification rule for the name ‘Aristotle’, we can paraphrase statement (i) using the method proposed by Russell in his theory of descriptions as:

1. There is at least one human being x who sufficiently satisfies the condition of having been born in Stagira in 384 BC, lived in Athens, and died in Chalkis in 322 BC and/or the condition of having been the philosopher who created the great doctrines explained in the *Corpus Aristotelicum*,
2. There is precisely one human being x who satisfies (1),
3. This x is called ‘Aristotle’, and
4. He had to leave Athens.

Condition (1) includes the idea of sufficiency, condition (2) demands uniqueness, condition (3) demands that x is named ‘Aristotle’, while (4) adds the predicate that appears in (i). To formulate the sentence (i) symbolically, we establish the predicates $N = \text{‘... is the person named “Aristotle”}$, $A = \text{‘... satisfies (within a whole possibly including B) with sufficiency the condition of having been born in Stagira in 384 BC, lived in Athens and... died in Chalkis in 322 BC’}$ (localizing description-rule), $B = \text{‘... satisfies (within a whole possibly including A) with sufficiency the condition of having been the author of the great doctrines of the Aristotelian corpus’}$ (characterizing description-rule), and $T = \text{‘... had to leave Athens’}$. In this way, the statement “Aristotle had to leave Athens” can be formalized as:

$$\exists x [(Ax \vee Bx) \ \& \ (y) ((Ay \vee By) \rightarrow y = x) \ Nx \ \& \ Tx]$$

What this short comment suggests is that the ultimate work of description theory concerning proper names is to display the essential formal structure of their identification rules.¹⁵⁴

154 In § 1 of Chapter VI, a similar formalization will be adapted to MIR*.

V Metadescriptivism: Identity statements

It is almost scandalous that more than a century after Frege published “On Sense and Reference” (1892), his puzzle about the nature of informative identity statements remains insufficiently clarified. The central aim of this chapter is to show that the metadescriptive theory of proper names gives us elements for a more complete Fregean response—after all, he was the first analytic philosopher to suggest descriptivism. This response also enables us to offer some strong objections against Kripke’s invention of the necessary *a posteriori* regarding identities between proper names.

1 Frege’s puzzle and his answer

Frege’s puzzle can be stated as follows. Calling *a* and *b* different names for the same object, statements of the form $a = a$ are tautologies affirming nothing more than the law of identity. After all, the two tokens of *a* have the same reference. But statements with the form $a = b$ are *informative*, at least in cases where *a* and *b* do not differ merely in their shape. Frege’s main example is the statement “*Der Morgenstern ist der Abendstern*”, which we here restate as “Phosphorus is (the same as) Hesperus” or “Phosphorus = Hesperus”. As Frege noticed, this is an informative statement, since it says that the same planet, Venus, which appears to us in the morning as Phosphorus also appears to us in the evening as Hesperus. But how is the alleged informativeness possible, considering that both names have the same referent? Frege solved his puzzle by proposing that in cases like these, the “mode of presentation of the object” (*die Art des Gegebenseins des Gegenstandes*), called by him the *sense* (*Sinn*), is different. Statements of the form $a = b$ are informative because they refer to the same intended object in different ways (Textor: 2011: 134).

Looking for clarity, we can paraphrase Frege’s puzzle in a somewhat different way. Consider the following statement: “ $2 \cdot 4 = 12 - 4$ ”. Why are we dealing with an identity when $2 \cdot 4$ obviously does not mean the same thing as $12 - 4$? The intuitive answer is that we are not claiming that the multiplication of 2 times 4 is identical to the subtraction of 4 from 12! What we are affirming is rather that these two arithmetical operations produce the same result, namely, the number 8. Frege was offering us a similar explanation in terms of modes of presentation: the procedures of multiplication of 4 by 2 and the subtraction of 4 from 12 are different modes of presentation, different senses of the same number 8. Ultimately, from the

reconstructive viewpoint already considered by Michael Dummett,¹⁵⁵ they can be seen as different identification rules producing the same result, the same number 8. With Phosphorus and Hesperus, two different identification rules are applied to reach the same empirical referent, the planet Venus.

Frege's puzzle can be restated as a problem of *identity in difference*, namely: how is it possible that sentences of the form $a = b$ state identities when they are in fact telling us that $a \neq b$? And the answer seems to be: because although $a = b$ asserts an identity in the references (which could be shown by " $ab = ab$ "), $a = b$ also states a difference to be expressed in the different senses of a and b (which could be shown by " $a(b) = b(a)$ "), and these different senses or procedures of identification are, as we saw, different cognitive meaning-rules.

Statements with the form $a = b$, inasmuch as they are empirical, were for a philosopher like Frege and also for our commonsense intuition, *contingent a posteriori*. They are contingent because we can easily conceive them to be false (the Morning Star and the Evening Star could be different celestial bodies). They are also *a posteriori* because they require experience to be known. Frege reminded us that our knowledge that Phosphorus is Hesperus was discovered by Babylonian astronomers.

As is well-known, in opposition to Frege, Saul Kripke, based on his causal-historical view of reference, concluded that the sentence "Phosphorus is Hesperus" is *necessary a posteriori* (1980: 100–105). In what follows I will apply our metadescriptive analysis to the identity sentence "Phosphorus is Hesperus", not only to offer a more complete internalist solution to the puzzle, but also to show what seems to be an irremediable flaw in Kripke's view.

2 A metadescriptive analysis

As Frege saw, the identity statement "Phosphorus = (is the same as) Hesperus" informs us that the same object of reference can be presented as much in the sense of 'Phosphorus' as in the sense of 'Hesperus'. Now, since the identity statement implies that both names refer to the same planet Venus, it is reasonable to consider first how to state "Venus is (the same as) Venus" in our kind of neodescriptivist analysis. The sense as the essential meaning of the proper name Venus can be stated by the following one-foot identification rule:

155 See Chapter I, § 4.

IR-‘Venus’:

A referent x belonging to a class of planets is referred to (self-sufficiently) by privileged speakers with the proper name ‘Venus’_{vs}

iff

(i-a) x satisfies its localizing rule of having been named as the second planet of the solar system, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named, and probably has been doing so for billions of years,

And possibly...

(i-b) x is a planet with ca. 80 % of the earth’s mass and a hot, dense, reflective, very acidic, poisonous atmosphere.

(ii) x satisfies (i-a) to an overall sufficient extent, and

(iii) x satisfies (i-a) better than any other planet.

(...)

As we already know, an identification rule is a rigid designator that can take the form of the following definitional definite description or DD-rule, which can be concisely presented as:

DD-‘Venus’_{vs}: *the planet specified by privileged speakers as satisfying (ii) sufficiently, and (iii) more than any other the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named...*

This rule constitutes the most proper *sense* of the name ‘Venus’, which we understood as its essential meaning, its primary semantic core. Now that we have the DD-rule for the proper name ‘Venus’, we can write the tautology “Venus = (is the same as) Venus” or “Venus = Venus” as:

Venus’ self-identity description:

Venus [the planet specified by privileged speakers as satisfying (ii) sufficiently, and (iii) more than any other the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named...] *is (=)* Venus [the planet specified by privileged speakers as satisfying (ii) sufficiently, and (iii) more than any other the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named...].

What the statement says is that the *sense* of ‘Venus’ (expressed between rectangular brackets) is the same as the *sense* of ‘Venus’ (also expressed between rectangular brackets), leaving aside the fact that the statement is naturally read as an assertion, namely, as affirming the warranted applicability of these identification rules.

Of course, as explained in Chapter III, ‘Venus’ is a proper name and as such must be treated as a rigid designator in the intuitive sense of the word. Indeed, the name ‘Venus’ refers to the same object in any possible world where that object exists, otherwise referring to no object; and of course, because of this rigidity, the identity statement “Venus = Venus” turns out to be necessary. After all, both occurrences of the name are to be applied in the same possible worlds where Venus exists. This identity is *necessary a priori*, instantiating the principle of identity.

An interesting and unexpected point here is that the identity we are considering in our interpretation is manifestly not an identity of the referent with itself, but an identity between senses as identification rules! This must be so, otherwise, we could not assert this sort of identity using empty names. Statements like “Vulcan = Vulcan”, “Zeus = Zeus”, and “Urville = Urville” are identities of sense since these names have no reference and cannot be expressing the self-identity of their referents. Is this conclusion not a problem when we come to statements of the form $a = b$, stating an identity in differences of senses? Soon we will see that far from being a problem, it is part of the solution.

For the moment, however, we will go further and analyze the related example of the formula $a = b$, in the case of the statement “Phosphorus = (is the same as) Hesperus”. To do this, we need to find a descriptivist analysis of these names identical to what we have found for the name ‘Hesperus’ (as a mode of presentation of the planet Venus) in the last chapter, which was:

IR-‘Hesperus-(Venus)’_{vi}:

A referent x , belonging to the class of celestial bodies which has been specified as seen at dusk as the brightest celestial body (after the Moon) is referred to (self-sufficiently) by privileged speakers with the proper name ‘Hesperus’_{vs}

iff

(i-a) x satisfies its localizing rule of having been named the second planet of the solar system, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named, and probably has been doing so for billions of years,

And possibly...

(i-b) x is a planet with ca. 80 % of the earth’s mass and a hot, dense, reflective, very acidic, poisonous atmosphere,

- (ii) x satisfies (i-a) to an overall sufficient extent, and
- (iii) x satisfies (i-a) better than any other planet.
- (...)

To get a more manageable formulation, we need to lay down IR-‘Hesperus-(Venus)’ in the form of a DD-rule, which can be summarized as the following one-foot identification-rule:

DD-‘Hesperus-(Venus)’ = *the celestial body specified by privileged speakers as seen at dusk as the brightest celestial body (after the Moon)* and regarded by them as satisfying (ii) sufficiently, and (iii) more than any other the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named.

Concerning the DD-‘Phosphorus (Venus)’, the summarized one-foot identification-rule is also very easy to specify:

DD-‘Phosphorus-(Venus)’_{vs} = *the celestial body specified by privileged speakers as seen in the morning as the brightest celestial body (after the Moon)* and regarded by them as satisfying (ii) sufficiently, and (iii) more than any other the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth at least since some time after it was so named...

It is worth noting that DD-‘Phosphorus-(Venus)’ and DD-‘Hesperus-(Venus)’ are rigid designators. They apply in all possible worlds where the respective DD-descriptions apply. However, since the italicized parts of their DD-descriptions are different, they do *not* apply to the *same class* of possible worlds, which explains why the identity statement “Phosphorus-(Venus) = Hesperus-(Venus)” is informative.

Now, we can finally write “Phosphorus is Hesperus” as expressing the following extended formulation:

(A) *The whole formulation of “Phosphorus is Hesperus”:*

Phosphorus [as *the celestial body specified by privileged speakers as the one they see in the morning as the brightest celestial body (after the Moon)* and regarded by them as satisfying (ii) sufficiently, and (iii) more than any other, the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after its

naming] = (is the same as) *Hesperus* [the celestial body *specified by privileged speakers as the one they see at dusk as the brightest celestial body (after the Moon)* and regarded by them as satisfying (ii) sufficiently, and (iii) more than any other the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after its naming].

The partial sentences between rectangular brackets are minimally complete expressions of the essential meanings (primary semantic cores) or identification rules expressed by the names ‘Phosphorus’ and ‘Hesperus’ respectively. Each of them has two components: the first ones are the components I highlight using italics. They express how the two names Phosphorus and Hesperus *differ*. They differ in what Frege would call their senses (*Sinne*). These components are different, making the identification rules of the respective proper names different. The other two components, without italics, express what remains the same in the meanings of ‘Phosphorus’ and ‘Hesperus’. They are the components responsible for the identification of the same planet Venus. They express the senses/meanings that remain identical, which is also in this case the identifying meaning-rule and not the planet Venus itself, in consonance with our internalism. The identity in difference that produces the informativeness of the identity is entirely cognitive and here linguistically expressed.

In other words, statement (A) says that the planet we have named in a specified way is the same planet as the one we have named in a differently specified way, which creates the identity in difference. Now, since the identification rule of Phosphorus and the identification rule of Hesperus are each *complete wholes* and not two rules compressed into a single rule and since the component responsible for the difference (emphasized by the italics) is clearly derived from empirical experience, the identity statement “Phosphorus is Hesperus” must be *a posteriori* concerning its informative content. Moreover, the statement is contingent, since it could be false, which also means that the rigidity of each designator concerns a different set of possible worlds: there are worlds where Phosphorus does not appear in the evening and where Hesperus does not appear at dawn... (If these component sub-rules were disengageable, if they were independent wholes, we could say we have in fact two statements, one of identity, which would be “Venus = Venus”, which is *necessary a priori*, and the other of complete difference, which is like “Mercury ≠ Mars”, that is *contingent a posteriori*, as some would suggest, though this is not the case.¹⁵⁶)

156 One could ask about similarities between the view proposed here and two-dimensionalism. It

This kind of analysis leads, as expected, to the conclusion that “Phosphorus is Hesperus” is a *contingent a posteriori* statement. And as a reason for this conclusion, we can adduce that the view according to which these names apply to the same planet in our world, but not in all possible worlds, is in perfect agreement not only with our most natural way to react to that identity statement but also, certainly, with Frege’s “old-fashioned” way of thinking.

Consider now a somewhat different identity statement that could be considered by Frege: “Hesperus is Venus”. It explicitly means that the object needed to satisfy the DD-‘Hesperus-(Venus)’ rule is the same object as the one needed to satisfy the DD-‘Venus’ rule. A minimally complete analysis of this statement is the following:

(B) *The whole formulation of “Hesperus is Venus”:*

Hesperus [the celestial body specified by privileged speakers as the one seen at dusk as the brightest celestial body (after the Moon), and regarded by them as satisfying (ii) sufficiently, and (iii) more than any other the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named] = Venus [the celestial body regarded by privileged speakers as satisfying (ii) sufficiently, and (iii) more than any other the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named].

The curious point of this identity statement is that the common rule expressed by the proper name ‘Venus’ does not appear as essentially linked to any specifying sense, even if it is a meaning-rule that could be associated with other senses. However, this is again a *contingent a posteriori* identity statement. It is contingent because it could be denied: it is not the case that Venus has to be visible at dusk as the brightest celestial body... in all possible worlds where Venus exists. And it is *a posteriori* because the identity between a planet called Hesperus and the planet Venus is also an empirical discovery.

seems that two-dimensionalism would be unhelpful because of its roots (e.g., Carnap 1947) and roads (e.g., Stalnaker, Kaplan, Chalmers...) that are too different from mine. Unlike them, I see the reference of a sentence as a tropical fact and the reference of a conceptual word as any tropical property precisely similar to a chosen one.

3 Answering Kripke's challenge

Kripke approaches the problem of identity statements from a non-Fregean, almost Millian perspective. He does not see the names *a* and *b* as descriptively analyzable, but instead as results of a causal-historical baptism that made them rigid designators, namely, terms that pick out the same object in all possible worlds or at least in all possible worlds where the object exists. Consequently, if the names *a* and *b* are rigid designators naming the same object, then both must pick out the same referent in (at least) all possible worlds where the referent exists, having the same extension. Hence, the identity between *a* and *b* is for him necessary as a self-identity of the kind $a = a$. Thus, once it is discovered that *a* is really the same as *b*, then it is necessary that $a = b$. A statement like “Phosphorus = (is the same as) Hesperus” is, for Kripke, *a posteriori* since it understandably can only be known from experience. But it is also necessary since Phosphorus and Hesperus have (at least) the same reference in all possible worlds where the planet Venus exists. And this can be generalized to other statements of the form $a = b$, as, for instance, “Hesperus is Venus”.

Kripke's *necessary a posteriori* has, however, always been considered a bold but controversial idea. After all, how is it possible that a necessary proposition, that is, a proposition we know to be true in all possible worlds, would depend on experience to be considered true? Moreover, necessity is traditionally regarded as something that cannot be denied, something that cannot be falsified by experience. But the *a posteriori*, defined as something that can only be known by means of experience, must be something that can be falsified by experience since all (or maybe nearly all) empirical experience is in principle fallible. Hence, at least empirical statements of the form $a = b$ can be refuted by experience. Consider one example: for a long time, it was believed that ‘Antai’ and ‘Yagan’ were different names of the same mountain in the southern Chilean Andes, correspondingly named from very different perspectives by two tribes living on the prairies below. Only later was the mistake corrected by explorers who scaled and mapped the uninhabited chain of mountains: they discovered that ‘Antai’ and ‘Yagan’ were in fact the names of two different mountains. In this case, experience leads from $a = b$ to $\sim(a = b)$.

The kind of analysis presented above shows why we can accept that proper names are rigid designators without for this reason denying that informative identity statements are contingent and *a posteriori*. In a case such as “Phosphorus = Hesperus” we are stating what we have called an identity in difference. Although we are not explicitly intending to state an identity (we are not conveying that Venus = Venus), we are at least implying an identity when we leave aside the modes of presentation of ‘Phosphorus’ and ‘Hesperus’ and pay attention to what

is common among the identification rules of these names, being in this way remitted to the identity between two identification rules for Venus. We reach this identity in a simple way, by mentally eschewing what is not identical between the two identification rules for the planet Venus, as follows¹⁵⁷:

Phosphorus [*the celestial body specified by privileged speakers ~~as seen in the morning as the brightest celestial body (after the Moon), and that is named by them~~ as satisfying (ii) sufficiently, and (iii) more than any other, the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named*] = (is the same as) Hesperus [*the celestial body specified by privileged speakers ~~as seen at dusk as the brightest celestial body (after the Moon), and that is named by them~~ as satisfying (ii) sufficiently, and (iii) more than any other the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named*].

In this case, we could also say “Venus-(Phosphorus) = Venus-(Hesperus)”, accentuating what we mean, namely, the identity claim. Since they are the same identification rules, and the same rigid designators, both apply in all possible worlds where Venus exists, otherwise do not apply. Only in this way can the identity required by Kripke be explained, but not as the self-identity of the reference, assuming that such *de re* self-identity is not a philosopher’s fiction.

We can also pay attention solely to the difference between a and b, which could be expressed as $a \neq b$. In the case above, we could express the difference as “Phosphorus-(Venus) \neq Hesperus-(Venus)” in the identification rule, as follows:

Phosphorus [*the celestial body specified by privileged speakers as the brightest celestial body (after the Moon) seen in the morning, ~~and that is named by them as satisfying (ii) sufficiently, and (iii) more than any other, the condition (i-ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named~~*] \neq (is different from) Hesperus [*the celestial body specified by privileged speakers as the brightest celestial body (after the Moon) seen at dusk, ~~and that is named by them as satisfying (ii) sufficiently, and (iii) more than any other the condi-~~*

157 The lines crossing out parts of the text are inserted to show what is not considered in the identity sentence, unlike what is emphasized. Kripke emphasized the *identity* “Venus (Morning Star) = Venus (Evening Star)”, while Frege focused on the communicationally relevant *difference* “(Venus Morning Star = Evening Star (Venus))”.

~~tion (i ab) of being the second planet of the Solar System, which has orbited the Sun between Mercury and the Earth since at least some time after it was so named].~~

Accentuating the difference, we get a clearly *contingent a posteriori* statement, which brings to mind the primitive or archaic senses of Hesperus and Phosphorus considered in Chapter IV. As we saw in Chapter III, a designator is only accidental if it contrasts with a rigid designator. When it does not contrast with anything, a designator will be understood as rigid. Since the definite descriptions emphasized in the names 'Phosphorus-(Venus)' and 'Hesperus-(Venus)' are accidental in contrast with the name Venus (by themselves they do not refer to the same object referred to by the proper name 'Venus' in any possible world where this object exists), the statement "Phosphorus-(Venus) \neq Hesperus-(Venus)" is contingent and *a posteriori*, as expected.

Now, consider again the whole informative statement "Phosphorus is Hesperus" the way it is intended to be read, expressing an informative identity in difference. There is a difference in the senses, namely, in the two identification rules expressed by them; but they contain an identity in the components of their rules that enables us to identify the same reference as the planet Venus. The Fregean identity sentence as a whole, with the senses-sub-rules made explicit, as we considered above, must consequently be the unpacked formulation expressed by (A). Since the whole statement (A) has a component that is contingent *a posteriori*, the statement "Phosphorus is Hesperus" inherits this characteristic, which means that the whole statement represented here—following our best intuitions—*must be contingent a posteriori*, as Frege would maintain.

We now have the means to make a complete diagnosis of Kripke's mistake about statements like "Phosphorus is Hesperus". He conflated the *contingency* of the informative contingent *a posteriori* Fregean statement (i) "Phosphorus-(Venus) \neq Hesperus-(Venus)" with the *a priori* of the tautological necessary *a priori* statement (ii) "Venus-(Phosphorus) = (is the same as) Venus-(Hesperus)" or "Venus = Venus", which is at least implied by (A): "Phosphorus is Hesperus". A similar kind of conflation can be extended to the analysis of a contingent *a posteriori* statement like "Hesperus is Venus". One can conflate the *contingency* of the informative contingent *a posteriori* statement of a difference (i) "Hesperus-(Venus) \neq Venus-(Venus)" with the derived non-informative necessity of (ii) "Venus-(Hesperus) = Venus-(Venus)" or "Venus = Venus", implied by (B): "Hesperus is Venus". These implications create the illusion of a necessary *a posteriori* identity between proper names. It is easy to conflate the *a posteriori* character of statements of the kind (i) with the necessity of statements of the kind (ii), since the second kind of statement can be derived from the first one.

From this perspective, it seems that the metaphysically necessary *a posteriori* identity between proper names first conceived by Kripke is a typical case of philosophical insight incremented by an illusion demanding the kind of natural language therapy once conceived by Wittgenstein. His innovation is insightful because it shows that statements of identity between different proper names always imply identity, but it is also illusory in the claim that such statements must be *a priori*. (I am here assuming that we are not able to affirm the existence of metaphysical necessity, since this kind of necessity seems to be beyond cognition and, consequently, beyond the domain of experience.)¹⁵⁸

4 It's not all about that bass

There are other examples of identity between names showing that these things cannot be so easily unified in a single model of analysis, demanding a piecemeal pragmatic approach. To begin with, consider the statement “Cicero is Tullius” discussed by Kripke (1980: 101 and 107). ‘Cicero’ and ‘Tullius’ are name marks constitutive of the complete proper name ‘Marcus Tullius Cicero’, which was conventionally established to be so by means of some kind of baptism. The identification rule for the proper name ‘Marcus Tullius Cicero’ can be abbreviated as:

DD-‘Marcus Tullius Cicero’_{vs}: *the person named by privileged speakers as satisfying (ii) sufficiently and (iii) more than any other candidate the condition that he (i-a) was born in Arpino in 106 BC, lived in Rome, and died in Formia in 43 BC and/or (i-b) was a Roman skeptic philosopher, orator, lawyer, and politician, the senator who wrote the *Catilinarian Orations*.*

Considered in view of this intended sense, the statement “Tullius is Cicero” is obviously *necessary and a priori* because it is analytical in the sense of stating a con-

158 Another kindred concept introduced by Kripke is the so-called *contingent a priori*. Consider the statement (i) “The bar S is one meter long at t_0 ” regarding the old standard meter in Paris. Although established *a priori*, it is for him contingent, since ‘one meter’ is a rigid designator, while the definite description ‘the length of S at t_0 ’ is not, for we can imagine possible worlds where S is more or less than one meter long at t_0 (1980: 54–56). Thus, although *a priori*, (i) is contingent, since the bar S could be longer or shorter than S at t_0 . But for a metadescriptivist, ‘one-meter’ simply gains its sense (and reference) through the definite description ‘the length of S at t_0 ’ as a rigid designator. This is because the length of S at t_0 must *by definition* be one meter in any factual or counterfactual circumstance insofar as it is used as the standard of measurement, which by itself excludes transworld comparisons regarding itself. Due to this exclusion, the bar S must be seen as always having the same size, since all other sizes are established by comparisons with it.

ventional identity among a proper name (considered as a phonetic and orthographic symbol) and any part of it or among parts of it, always regarding the same referent. So, in this sense “‘Marcus Tullius Cicero’ = ‘Marcus Tullius’ = ‘Tullius Cicero’ = ‘Tullius’ = ‘Cicero’...”. Omitting supposedly small variations of coloration between the different name marks, a person who does not know that Tullius is Cicero is like a person who does not know that in German, “ß is ss”. That is: her ignorance is like that of not knowing the conventional identities between equivalent phonetic and orthographic symbols in a name spelled or written in an adequate context.¹⁵⁹ We do not need to consider the bulk of the identification rule in order to realize that such an identity is essentially like ‘Cicero is Cicero’, a tautological identity statement. The only difference is that in the case of the name ‘Marcus Tullius Cicero’, we have to deal with a convention that is not generally known, which can give the impression that “Cicero = (is the same as) Tullius” is an *a posteriori* statement in the sense of being derived from experience. But since the experience of learning a convention has nothing to do with the experience that makes something *a posteriori*, “Cicero is Tullius” remains an *a priori* statement with the merely linguistic necessity of a convention. We can make clear the necessary *a priori* character of the statement “Cicero is Tullius” for a privileged speaker by saying that for that speaker this statement will essentially mean nothing beyond the following tedious identity:

Cicero-(Marcus Tullius Cicero) [the person named by privileged speakers as satisfying (ii) sufficiently and (iii) more than any other candidate, the condition that he (i-a) was born in Arpino in 106 BC, lived in Rome and died in Formia in 43 BC and/or (i-b) was a Roman skeptic philosopher, orator, lawyer and politician, the senator who wrote the *Catilinarian Orations*] = (is the same as) Tullius-(Marcus Tullius Cicero) [the person named by privileged speakers as satisfying (ii) sufficiently and (iii) more than any other candidate, the condition that he (i-a) was born in Arpino in 106 BC, lived in Rome and died in Formia in 43 BC, and/or (i-b) was a Roman skeptic philosopher, orator, lawyer and politician, the senator who wrote the *Catilinarian Orations*].

159 Here about the importance of ‘vs.’ (or synonymous; see Chapter III, § 3). We can imagine a possible world where Cicero is called by a totally different proper name. But assuming he satisfies the same identification rule, we should call him our Marcus Tullius Cicero of that world. Moreover, in a possible world where there is no Cicero, but where there is still someone with the name ‘Marcus Tullius Cicero’, we would say there is a homonymous but obviously not a synonymous person of that name, so the person in question is not our Cicero.

Moreover, a non-privileged speaker, knowing that he is dealing with proper names, will easily learn that Cicero-(Marcus Tullius Cicero) = Tullius-(Marcus Tullius Cicero) without needing to know the identification rule for this name, its essential meaning, simply by learning the convention that these are different names of the same person—a necessary *a priori* identity (in the mentioned paragraphs Kripke was careful enough not to say that “Cicero is Tullius” is a necessary *a posteriori* statement).

A somewhat more complicated case can be that of pseudonyms. Consider the identity sentence “Mary Ann Evans is George Eliot”. Since George Eliot was a literary pseudonym of the writer Mary Ann Evans, we can state the following general identification rule for the second name:

DD-‘Mary Ann Evans (pseudonym ‘George Eliot’): *the* person named by privileged speakers as satisfying (ii) sufficiently and (iii) more than any other candidate, the condition that she (i-a) was a woman born in Nuneaton in 1819, lived much of her life in London and died in Chelsea in 1880, and/or (i-b) was one of the greatest female English novelists, author of classics such as *Adam Bede* and *Middlemarch*, married twice and possessed such and such personality traits.

Here we can consider three groups of speakers:

- (i) the group of those who knew the young Mary Ann Evans, such as her relatives and childhood friends before her career as a novelist,
- (ii) the group of those who knew only ‘George Eliot’, such as people who read *Adam Bede* at the time of its publication, when the author’s real name was not yet public knowledge,
- (iii) those (privileged users) who not only knew Mary Ann Evans but also always knew that George Eliot was a pseudonym of Mary Ann Evans.

Privileged users of (iii) knew the general rule IR-‘Mary Ann Evans’ very well. In this intentional sense, well known by Mary Ann Evans’ two husbands, some family members, and herself, “George Eliot = Mary Ann Evans” will be seen, as in the case above, as a necessary *a priori* identity statement. Consider, for instance, Mary Ann Evans’ awareness that she was George Eliot: she did not learn that by means of experience in the sense we use to classify the *a posteriori*, since she herself invented the pseudonym, which once publicly fixed became a linguistically necessary convention not deniable without contradiction.

A spurious problem could arise from the fact that what the people in group (ii) have in mind with the identification rule for George Eliot could be the description

‘the author of *Adam Bede*, *Middlemarch*, and other classics of English literature’ added to some vague indications about the time and place in which that author lived. Furthermore, some people in group (i) have in mind the identification rule of Mary Ann Evans, such as ‘the young woman with such and such personality traits, daughter of Robert Evans, born in Nuneaton in 1819...’ The localizing and characterizing description-rules used by the three groups of speakers cannot contradict each other, since speakers from groups (i) and (ii) know only part of a larger identification rule known by the privileged speakers of (iii), though the former groups can learn that rule by acquiring more information. Because of this, the identity statement “Mary Ann Evans = George Eliot” can be mistakenly taken as contingent and *a posteriori*: it could be mistakenly seen as *a posteriori* in the sense that it depends on learning information concerning the contingent fact that Mary Ann Evans decided to use a certain literary pseudonym. However, this information is the result of a linguistic convention, and learning a linguistic convention should certainly not be confused with learning by experience (if this were the case, analytic conventions would be *a posteriori*). Because of this, although the statement “George Eliot = Mary Ann Evans” is necessary *a priori*, one could be confused by the experiential learning of its conventional status, which could once more give rise to the Kripkian conception of the necessary *a posteriori*.

Against the *a priori* necessity of the last two examples, one could object that there are possible worlds where Marcus Cicero was not also called Tullius, which means that in these worlds “Cicero is Tullius” would be false... In a similar way, we can imagine a possible world where Mary Ann Evans chose a different pseudonym, say, ‘Dugald Stewart’, and because of this, the statement “Mary Ann Evans is George Eliot” is false in that world. The answer is that here our concepts of necessity and the *a priori* must be *restricted* to the possible worlds where these linguistic conventions exist. When we speak of the *apriority* and subsequent necessity of a linguistic convention, our Archimedean support, we are excluding counterfactual circumstances where this convention is absent.

5 “This lectern is not made of ice”

Although not an identity sentence, there is still another well-known example of a necessary *a posteriori* statement given by Kripke that deserves closer examination if we wish to argue against the necessary *a posteriori* in a more general way. In his first paper on the matter, he started questioning whether the wooden lectern in front of him could be made from the ice of the Thames. Certainly not, he argued. It seems to be made of wood, and it is not cold... Even if this were a hallucinatory

experience and the lectern were indeed made from the ice of the Thames, he continues, this is not the point. The point is that “given the fact that the lectern is not made of ice, it is necessary that it cannot be made of ice” (Kripke 1971: 173). More precisely, by symbolizing “This lectern is not made of ice” by P , he constructed the following argument:

1. $P \rightarrow \Box P$
2. \underline{P}
3. $\Box P$

According to Kripke, P is a necessary *a posteriori* truth, since although derived from experience, it is necessary.

There is, however, a serious problem with this argument: the P of the first premise is not exactly the same as the P of the second premise, and this makes the argument equivocal. This can be made clear when we present the premises of the argument more explicitly:

1. If this lectern is actually not made of ice, then it is necessarily not made of ice.
2. It is practically certain that this lectern is actually not made of ice.
3. Necessarily this lectern is not made of ice.

Indeed, we can know with *practical certainty* (a probability that is sufficiently high to generate full assent) that Kripke’s lectern is not made of ice. However, due to the fallible nature of our empirical knowledge, we cannot know with absolute certainty that the lectern is not made of ice; consequently, we cannot know that it *must actually be so* in order to derive logical necessity from this awareness. (Only an omniscient God could know in that way.) Because of this, Kripke’s argument is *equivocal*, and his conclusion that “Necessarily this lectern is not made of ice” is false. All we can infer is the contingent *a posteriori* truth that it is very highly probable that Kripke’s lectern was not made of ice; and this, of course, is not a metaphysical truth, but an epistemically committed conclusion.

6 Addendum: Some general conclusions

It is common in philosophy that whenever we believe we have solved a problem, new ones are waiting to surprise us just around the next corner. However, a little reflection on the arguments discussed in this and the preceding chapters suggests that the proposed path is by far the most feasible. Suppose, for example, that MIR*

(and variations) were implemented in a computer program, and that proper names were introduced into it along with the necessary information about its fundamental descriptions, associated auxiliary descriptions, causal records, etc. In this case, it seems quite conceivable that the computer will be able to tell us with a reasonable margin of error whether a proper name is applicable, provided we feed in with the right information. But the same is far from conceivable to us when we think of the causal-historical view and even traditional descriptivist theories.

One could object that the proposed theory, although possessing greater explanatory power, is unexpectedly complex. However, one needs to differentiate the complexity of foundations from the complexity of development. General relativity is based on an amazingly simple principle of equivalence, though it is exceptionally complex in its mathematical developments. As in natural science, complexity of developments and applications is what one should expect from more mature theories. It is not our fault that reality—including the reality of our conceptual mechanisms of reference—is unexpectedly more complex and sophisticated than it appears at first glance.

Finally, the tragedy of philosophy, as is popularly said, is that when it reaches a really feasible result, it inevitably loses its place to science. Indeed, though aware that there must be inadequacies and unforeseen difficulties in the theory presented here, my hope is that it outlines the beginnings of its end as speculative research, progressing to a better, more properly scientific understanding of how proper names referentially work and, beyond this, in its extension to other terms, to the development of a broader form of semantic cognitivism.¹⁶⁰

160 I am assuming here the non-reductive definition of science as basically *an inquiry in principle able to achieve public consensus among specialists (scientists) concerning its results* (Ziman 1968). This definition unavoidably contrasts science with our common view of philosophy as unable to achieve any public consensus among specialists (in this case, the philosophical community). Due to its breadth, this definition does not hinder the replacement of philosophical speculation by science (Costa 2002: 47–48).

VI Consequences for other terms

The issues to be addressed in this last chapter concern some possible consequences of our “old-style”, almost ordinary-language neodescriptivist-cognitivist-internalist account of the semantic function of proper names for other terms of our language. The proper name is a singular term. In the logic of our language, we can clearly distinguish between *singular* and *general* terms. Singular terms are those with which we identify only one object, distinguishing it from a plurality of others, while general terms are those that can be applied to more than one *designatum*, allowing us “to say one over many”. Singular terms are of three kinds: *indexicals*, *definite descriptions*, and *proper names*. Theories of proper names have always had substantial consequences for the ways we understand other terms’ reference mechanisms. Hence, it is to be expected that the adoption of a metadescriptive theory of proper names will have consequences for our analysis of them. In what follows, it will not be possible to develop any orderly or detailed explanation of these consequences, but I can at least offer reasonable suggestions for later consideration, reinforcing the overall plausibility of our views. After all, philosophy is by definition a “work in progress”.

1 Russellian descriptions

We begin by examining the case of definite descriptions. By definite descriptions, I do not mean here referential but rather *attributive* ones. Referential definite descriptions are those that are used indexically, to call attention to a person or thing, irrespective of their content (e. g., ‘the man over there drinking a martini...’ pointing to a man holding a glass of water), while definite attributive descriptions are used to assert something about whatever or whoever fits the proper meaning of that description (like ‘the man in the iron mask...’, referring to a prisoner forced to wear an iron mask) (see Donnellan 1966, § 3).

There are also two conflicting influential analyses of attributive definite descriptions, which vary particularly in the way they treat statements in which attributive descriptions have empty subjects. The first was suggested by P. F. Strawson (1950). For him, a statement like

(a) The present king of France is wise,

is faulty in meaning, lacking truth-value, since to be true or false it must presuppose the truth of the existential statement (b) “There is a present king of France”, which is

false (1952: 185). The second, alternative method of analysis, was given much earlier by Russell's theory of descriptions (1905; 1916, Chapter 16). He would analyze a sentence like (a) as the conjunction of three sentences: (i) there is at least one king of France, (ii) there is at most one king of France, and (iii) he is wise. Using \exists as the operator of existence, F for the predicate '...king of France', and 'W' for the predicate '...is wise', Russell would symbolize (a) as $\exists x [Fx \ \& \ (y) (Fy \rightarrow y = x) \ \& \ Wx]$. Since $\exists x (Fx)$ is false, the whole set of conjunctions is made false and, consequently, any sentence with an empty definite description will be false. This result contrasts strongly with Strawson's view, according to which empty existential statements have no truth-value.

Russell's view was in my judgement successfully defended by Stephen Neale (1990), though the issue remains controversial. Although we are unable to see sentence (a) as false, other sentences of the kind do seem to be false. For instance:

- (b) The present king of France is an old decrepit man suffering from dementia.
- (c) The present king of France decided to forbid tourists to visit the Versailles Palace.
- (d) The present king of France is sitting on that chair.

On the other hand, the statement

- (e) The present king of France is not wise because there is no present king of France.

seems to be true, which would make (a) false.

The usual defense of Russellian analysis is pragmatic (Sainsbury 1979: 120–121; Blackburn 1984: 309–310; see also Russell 1957). It can be presented as follows: We are used to saying that a statement is false when the predicate does not apply but not when the subject does not apply. Thus, we immediately see as false the statement "The Earth is flat". But with empty statements like "The king of France is wise", the predicate cannot apply, because the subject term does not apply, which sounds strange and confusing. Our language does not provide a clear intuition to call empty statements either false or without truth-value. Now, where linguistic intuition fails, logic can be a worthy substitute. And from a logical point of view, it is more reasonable to conclude that *in the same way that a sentence is false when the predicate cannot be applied to the object that the subject refers to, it will also be false when the predicate cannot be applied, because the subject term cannot be applied to the object it refers to*. After all, what counts is whether or not these terms apply, whether or not their application rules are satisfied, which

determines the applicability/non-applicability of the statements compounded by them. Perhaps this could explain why statements (b) to (e) are intuitively seen as having truth-values. Their predicative or relational complements have more “semantic weight” than the predicate ‘...is wise’ in statement (a), which leads us to focus our attention on the non-applicability of the complements presented in the statements.

Another influential objection made by Strawson against Russellian analysis concerns the problem of *unicity* (1950: 332). A statement like “The round table is covered with books” receives the Russellian paraphrase (a) “There is *precisely* one (at least one and no more than one) round table, and it is covered with books”. Since there are many round tables covered with books in the world, Russell’s analysis seems wrong. Probably the best strategy to solve this problem consists in contextually limiting the domain of quantifiers (cf. Ostertag 1998). Thus, in statement (a) the domain of the quantifier can be restricted to objects found in the sitting room of apartment 408 of the Villagio di Milano... Calling a domain D , the predication included in the definite description F (ex: ‘...a round table’), and the additional predication G (ex: ‘...is covered with books’), we can analyze the description (a) as having the form:

There is precisely one x belonging to the domain D , so that x is F , and for any y belonging to D , if y is F , then $y = x$, and x is G .

I have found no convincing objection to this kind of answer.

Assuming for argumentative reasons the correctness of Russell’s analysis of definite descriptions, my aim here is to show that a metadescriptive view of attributive autonomous definite descriptions can be presented in a Russellian form, as was already shown in Chapter IV concerning proper names. Indeed, a natural way of extending this idea to autonomous attributive definite descriptions would be to say that they must be analyzed as expressing IR-descriptions (derived from MDR*s) able to refer to their object of reference—a description that, as much as it expresses the core meaning of a proper name, should here express the essential meaning of the attributive definite description. Assuming this, Russellian analysis can be understood as a way of decomposing essential aspects of an IR-description and affirming its warranted application. This can be shown, inasmuch as we reinterpret the conditions (i), (ii), and (iii) as saying that the ascription rule of the predicate ‘... is the present king of France’, when in a warranted way applied to precisely one object of reference, is transformed into an IR-description. Calling $A =$ ‘...satisfies the property of being a present king of France’ (the characterizing description), $B =$ ‘...satisfies the property of now living in Versailles’ (the localizing description), $S =$ ‘the satisfaction of $Ax \vee Bx$ is sufficient’ (condition of sufficiency), $P = (Ax \vee Bx)$

satisfies x better than anything else” (condition of predominance), and $W = \text{‘...is wise’}$, the empty statement “The present king of France is wise” can be symbolized as:

$$\exists x [(Ax \vee Bx) \& (Sx \& Px) \& (y) ((Ay \vee By) \& (Sy \& Py) \rightarrow y = x) \& Wx]$$

This means that the same kind of Russellian analysis we gave to “Aristotle had to leave Athens” can be applied to empty autonomous descriptions like “The present king of France is wise”.

What about a definite description clearly associated with a proper name? For instance, (a) “The author of the *Nicomachean Ethics* had to leave Athens”. It seems plausible to think that we are speaking about precisely one x , who was the author of the *Nicomachean Ethics*, who was Aristotle, and who had to leave Athens. This is contextually implicit. I believe that Kripke would make the mistake of treating (a) as containing an *autonomous* description by supposing that when we now analyze its application in different possible worlds, we should abstract the information that the philosopher called ‘Aristotle’ was the only person we are sure wrote that book. In this case, the description (a) should rather be presented as having the form of the following identification rule: ‘There is only one person x who sufficiently and predominantly satisfies the characterizing description of being the author of the *Nicomachean Ethics* and other works and also satisfies some unknown localizing description, and this x had to leave Athens’. This would be a one-foot autonomous identification rule, which should be analyzed in the same way that we analyze the autonomous definite description ‘the 52nd Regiment of Foot’, that is, as a proper name. However, it is equivocal to treat (a) as if it were an autonomous description since it is literally meant as a piece of information loosely associated with the proper name ‘Aristotle’ and its identification rule.¹⁶¹

2 Lexical function and semantic content

Now, I would like to consider some consequences for indexicals, which can be defined as those singular terms that allow us to identify different particulars through the different utterances in which they appear. Examples of indexicals are demonstrative pronouns like ‘that’ and ‘those’, possessive pronouns like ‘mine’ and ‘yours’, personal pronouns like ‘I’, ‘you’, ‘he’, ‘she’, ‘they’, adverbs like

¹⁶¹ See Chapter III, §§ 14 and 15.

‘now’ and ‘tomorrow’... They are epistemologically relevant because it is through indexicals that language, so to speak, touches the world.

Indexicals admittedly have two kinds of meaning: the *lexical function* (also called ‘character’ and ‘role’) and the *semantic content*. The lexical function is something that does *not* change when utterances change. Because of this, we can easily define them, at least in their *standard uses*—understanding by standard uses those that are typical and genetically primary. Here are some examples:

1. The demonstrative ‘that’ has the lexical function of indicating a material object physically near the speaker (often accompanied by a gesture of ostension).
2. The personal pronoun ‘I’ has the lexical function of indicating who is uttering something at the moment of the utterance.
3. The adverb ‘here’ has the lexical function of indicating the place of the utterance.
4. The adverb ‘now’ has the lexical function of indicating the time of the utterance.
5. The adverb ‘tomorrow’ has the lexical function of indicating the day after the utterance.

Indexicals also have secondary, non-standard uses. Consider, for instance, the message recorded on a telephone answering machine. When you call someone on the phone and no one answers, there is often a recorded message like: “Thank you for calling, I am not here now; please leave a message after the signal”. In this case, the indexicals ‘I’, ‘here’, and ‘now’, have displaced functions: the personal pronoun ‘I’ refers to the person who recorded the message days or weeks before, not to a recording played back when the caller reaches the desired telephone number; the ‘now’ refers to the time of the call, not the time when the message was recorded; and the ‘here’ refers to the place where the telephone of the person called is located, not to where the caller or the person called is located when the call is made. Because of such unpredictable cases, I find it highly advisable to distinguish standard usage from secondary ones. Without this restriction, no workable definition of lexical function seems possible.

The question concerning the nature of semantic content is more difficult. According to externalist theorists, the semantic content of an indexical is what Frege would call its reference (*Bedeutung*), while the lexical function would be what Frege would call its sense (*Sinn*) (Kaplan 1989: 520). But this seems too far from the truth, leaving empty indexical statements unexplained as in the case of hallucinations, which for Frege have sense without reference—even without reference the content seems to go beyond the lexical function. If this is so, then the semantic

content must belong to the level of sense. Moreover, since the sense is *the way the object of reference is presented to us*,¹⁶² it does not belong to the realm of reference, but to what Frege called the realm of thought (*Gedanke*). Now, according to Frege, if we change the sense of a component of the thought but not the reference, the thought must change. Now, the utterances “I am tired” made by John regarding his feeling, and “Yes, you are tired” made by Mary after looking at John’s exhausted face, must have the same reference, but surely they express different thoughts or propositions (one utterance can be false and the other true). This seems to be because the way the referent is presented by the indexical ‘I’ is different from the way the same referent is presented by the indexical ‘you’. But the different “ways of presentation” do not seem to be reducible here to the different lexical functions of ‘I’ and ‘you’: John can look at himself in the mirror and confirm: “Yes, *I* am tired”. To the sense belongs the presentation of an *aspect* of the referent. So, “There is the Moon” can present the Moon aspectually as the Last Quarter Moon instead of the Full Moon. And to the sense belongs as well the presentation of the referent’s context, like Venus as the Morning Star instead of the Evening Star. Likewise, there are cases like “that person over there” (seen through the rear window of a car) and “that person there” (seen in the car’s rear-view mirror), leading to the mistaken identification of two different persons when there is only one (cf. Braun 2001). Hence, I agree here with Arthur Burks (1948), who identified the sense essentially with the (internal) content of the indexical understood as a “*direction*” given by the spatiotemporal location of the referent supplemented by its identifying descriptions, both internally understood and able to be made explicit. Contrastingly, the lexical function is merely a linguistic marker common to all indexicals of some kind in their standard uses, being consequently unable to gain the more particularizing function of a truly Fregean sense. To some limited extent, we can compare the lexical function of an indexical with the standard function of a definite description of being a nominal complex connoting a reference, or with the standard function of a proper name of referring to only one object and distinguishing it from a multiplicity of others. But these are not what we more properly mean as the contextually more variable senses of definite descriptions or of proper names.

162 This translation fares better than the literal phrase ‘the referent’s way of being given’ (“*die Art des Gegebenseins des Gegenstandes*”) (Frege 1892: 26) since it preserves the intentional aspect of the concept of sense as *Sinn*. Max Textor suggested ‘a mode of *purported* representation’ to warrant the senses of empty names (2011: 134).

3 Eternal indexical thoughts

The above-suggested change in viewpoint leads us to reconsider Frege's brief analysis of indexicals. According to him, an indexical utterance has as its sense a *proposition* (a *thought*, a *Gedanke*, in Frege's nomenclature), which will be atemporally true or false since part of its expression is its spatiotemporal evaluative context. Consider Frege's example:

(1) This tree is covered with green leaves.

According to Frege, in this case, "the time of the utterance is part of the expression of the thought", along with things like "the gesture of pointing" (1918: 66). That is, for Frege contextual elements like the time of the indexical utterance and, although he does not say this, also the place, are non-linguistic components of the complete sentence *expressing* the indexical thought. A consequence of this is that the thought or proposition expressed by (1) cannot be true in May and false in January, since in January the time will be a different one, and thus likewise the proposition or thought. This is a profoundly insightful suggestion since it would be able to do justice to the fundamental idea that what is true remains true, and that our grasp of the truth-value is what may change. He reaches this result by freezing the concept of a proposition in any context as the proper truth-bearer, placing indexical propositions on a par with propositions expressed by eternal sentences—ones that are forever true or forever false, independently of our fallible grasp of these values.

Before continuing, it is important to remember that, unlike Frege, we do not need to regard a proposition or thought as an abstract (platonic) state of affairs. Once we have accepted Donald Williams' radical trope ontology, a proposition must be seen as something like a set or class of tropical mental contents (i.e., semantic-cognitive rules), which are precisely like one another. Still better, we can understand an abstract proposition as any mental t-thought (tropical thought-content) chosen as a model *or* any other t-thought precisely (qualitatively) identical to the first one—a *spreadable disjunctive t-thought*.¹⁶³

Moreover, if we reject the straw man of a verifiability principle that positivist philosophers and their heirs conceived as a way to argue against metaphysics, and later rejected, the way will be open to a nuanced and contextually variable semantic verificationism, as originally suggested by its first and real discoverer, Wittgenstein. Considering his own intuitive examples, the thought-proposition could be

¹⁶³ Chapter II, § 6. Thoughts can be in this way spatio-temporally expanded.

plausibly identified with the verifiability rule of a declarative sentence.¹⁶⁴ The identities would then be the following:

proposition (spreadable disjunctive t-thought)
 =
cognitive sense of the declarative sentence
 =
*its verifiability rule.*¹⁶⁵

With this in mind, we can figure out more plausible ways to replace the utterance (1) with an eternal sentence, that is, a sentence containing the Fregean thought expressed by (1), but with a truth-value totally independent of the context of its utterance. My suggestion is the following:

(2) The speaker S at the moment T points to the place L in front of him and says *that the tree in front of him is covered with green leaves* (or: ...and says: “*This tree is covered with green leaves*”) because place L in fact (truly) contains a tree covered with green leaves.¹⁶⁶

I regard sentence (2) as an eternal sentence since it has frozen the contextual dependence of the indexicals that appear in it. Sentence (2) obviously has more (internal) content than (1). But it also contains proposition (1) in the form of a *that-sentence* belonging to the eternal sentence (2) and, because of this, it does not depend on indexically given circumstances. Indeed, in accordance with Frege’s analysis of subordinate clauses, ‘*that the tree in front of him is a tree covered with green leaves*’ refers *only to its own sense (or thought or proposition)* (1892: 37f.). This means that, although (1) contains ‘is’ in the present, and contains the indexical ‘him’, these terms appear in (2) within a subordinate clause referring to their own senses and not to something in the outside world. This suspension of indexicality is clearer when we read (2) as having the whole sentence (1) enclosed by commas, as it also appears in (2). Presented in this way, (1) turns out to be the object of a se-

¹⁶⁴ See Chapter I, § 4; Chapter II, § 6; and Costa 2018, Chapter 5.

¹⁶⁵ In order to replace the contentious ontological status of the Fregean platonic thought, a proposition (thought) p expressed by sentence S should be here replaceable by “the thought-proposition p = the t-cognitive sense of sentence S = the t-conceived verifiability rule for S taken as a model or any t-thought = t-cognitive sense of S = t-conceived verifiability rule for S that could be seen as precisely similar to p”.

¹⁶⁶ One could also write: “...because it is true that place L contains a tree covered with green leaves” in order to circumvent a possible objection against the correspondence theory of truth.

mantic-metalinguistic sentence. In semantic-metalinguistic sentences, we speak primarily only about the content of the sentence, even if we can infer its reference. Treating (1) in a semantic-metalinguistic way, we are using the indexical ‘this’ not just to refer to the real tree, but also to refer internally to its own sense in the proposition to which it belongs. Finally, the truth-claim of (2) also confirms the truth of (1): this claim is satisfied insofar as (1) should be made true by the final clause of (2), according to which place L must in fact (truly) contain a tree covered with green leaves, that is, if (2) is true, then (1) is also true.

The same paraphrase suggested above can be applied against John Perry’s very influential externalist objections to Frege’s view of indexical sentences (1977; 1979). Although I do not have space here to argue against Perry’s multiple counterexamples, I will rebut the best-known one (1979: 3).¹⁶⁷ Perry recalls that once while shopping in a supermarket, he noticed a sugar trail on the floor. His first thought was (1) “Someone is making a mess”. Then, he decided to follow the trail, looking for the responsible person. After steering his shopping cart through a maze of supermarket aisles, he came back to the spot he started from, only to notice that the sugar was leaking from his own shopping cart. His thought then changed from (1) to (2):

(2) I am making a mess.

After thinking (2), he immediately changed his behavior. The thought or utterance of (2), Perry argues, cannot be replaced by any utterance that eschews the indexical ‘I’, building something like an eternal sentence. If he replaces ‘I’ with ‘Perry’, this cannot be done in all contexts since Perry could, for instance, be suffering from dementia, having forgotten his name... The indexical utterance cannot be replaced by a sentence that preserves its truth-value in any context. Hence, he concludes, the indexical cannot be replaced by any contextually independent eternal sentence. The indexical is *essential*.

Nonetheless, sentence (2) is fully replaceable by an eternal sentence since it can be treated in the same way we treated Frege’s example. This means that sentence (2) can be paraphrased by an eternal sentence like the following:

(3) At 10 a.m. on March 26, 1968, in the confectionery supplies section of the Fleury supermarket, in the city of Berkeley, Perry notices a sugar trail stretching outward from his shopping cart and thinks *that he is making a mess* (or: ...

¹⁶⁷ For a detailed critical discussion in which all of Perry’s relevant counterexamples are refuted, see Costa 2014, Chapter 4.

and thinks: “I am making a mess”) and in fact, he is (truly) making a mess by leaving a sugar trail behind his cart.

Sentence (3) contains (2). Although containing the pronouns ‘he’ and ‘I’, (3) is an eternal sentence for the same reasons that apply to Frege’s indexical example. After all, as Frege noticed regarding subordinate clauses, the pronoun ‘he’ refers to its own sense, in the same way as does the ‘I’ in the sentence enclosed by commas, which can be seen as referring to a sense. It can be said to be referring to a thought-component by means of a semantic metalanguage, the direct relations with their original indexical contexts being suppressed. Other counterexamples given by Perry can be paraphrased in similar ways (Costa 2014: Chapter 4). Even the truth-claim of (2) is preserved in (3) since a match between the indexical proposition and the fact is linguistically affirmed.

Some objections could be made against the suggested paraphrase. The first one is that the content of (3), although containing the content of (2), gives more than what is contained in (2): it is almost certain that Perry did not know that he was in the confectionery supplies section of the Fleury supermarket at 10 a.m. on March 26, 1968... But is that a problem? One can even answer that this sort of paraphrase is part of our common dialogical speech, for instance, when someone tells the story of Perry’s amusing behavior in the confectionery supplies section of the Fleury supermarket, one might give a paraphrase similar to (3). Even Perry, if sufficiently well informed, would tend to agree that the additional information is complementary and that the truth of (3) implies the truth of (2). A further objection would be that (3) does not describe Perry’s phenomenal experience when he thinks or utters sentence (2). The answer is that this does not matter. The personal phenomenal experience is in itself private and does not belong to our conventionally-based public language, which is the only thing that really matters, due to its communicative function.

4 Indexical identification rules

A further point concerns Ernst Tugendhat’s (and Michael Dummett’s) thesis that singular terms must have identification rules (Chapter 1, § 4). If so, then, considering that indexicals are singular terms, they should also have identification rules. Moreover, if they have identification rules, we can ask if they also have localizing and characterizing conditions similar to what we have found with proper names and autonomous definite descriptions. I think the answer must be in the affirmative, inasmuch as we take into consideration the temporary nature of such rules. The reasons are all too obvious. A very simple example shows this clearly. Say, for

example, that I go to a French bakery, see a delicious loaf of bread stuffed with goat cheese and tomatoes in a display case, point to it, and ask: “Could you please give me that loaf?” The clerk takes the loaf, wraps it, gives it to me, and I pay. Of course, when I pointed to the bread, I created an identification rule for that object. The clerk, on her side, recognizes the same object and identifies it from a different perspective as occupying the same place on the shelf and from other t-properties, in a way that is similar and complementary to the way I identified it. She uses essentially the same identification rule, learned from my gesture and words. Localizing and characterizing conditions belong to that identification rule. They could be summarized by a definite description: “the loaf of bread stuffed with goat cheese and tomatoes that was located at place L and time T when it was purchased”. They belong conjunctively since without this rule it would not be pretty difficult to localize and characterize such a referent.

This simple example shows something about the indexical ‘that’, namely, that it must indicate the time and location of the referent, together with characterizing t-properties or sets of compresent t-properties (an individual). It could also be the case that I decide to bring the loaf of bread home and put it on the kitchen shelf so that the story of buying the loaf of bread and bringing it home is also incorporated in my localizing identification rule as the career of the referent.

Anyway, the main point is that the utterance of the demonstrative ‘that’ followed by the sortal ‘loaf’ creates an identification rule that can be understood by the clerk and can be expressed by fundamental definite descriptions. This shows us something about the genesis of definite descriptions: they arise when we decide to fix indexicals linguistically in order to communicate the same reference without the need to show the object of reference to the hearer.

Indexicals allow us to identify a referent within ego-centered interpersonal contexts. But only definite descriptions allow us to refer to the object even when it is not given in the ego-centered space anymore. Descriptions endow singular terms with the property of *constancy*, although this constancy is inflexible. Only proper names can give us, beyond constancy, *flexibility*.

5 Classifying general terms

We can now go a step further to the case of general terms, those applicable to an indeterminate number of objects allowing us to say the same of many. This is the case of natural species terms like ‘gold’, ‘planet’, and ‘tiger’, the case of mass terms (non-countable ones) like ‘water’ and ‘air’, and the case of artifact terms like ‘chair’ and ‘house’. There is no systematic classification of general terms. However, I think it is at least possible to suggest a classification, which is symmetrical to that of sin-

gular terms. This means that instead of indexicals, descriptions, and proper names, we would have three corresponding classes of general terms. We could call them, respectively:

- (a) *indexicators*,
- (b) *descriptivators*,
- (c) *nominators*.

Before giving a rationale for these distinctions, I will explain them separately.

Indexicators are the simplest general terms; they must be introduced by means of indexicals in a way that does not allow further analysis in our natural language.¹⁶⁸ This is the case of terms like red, hot, hard, round, and square insofar as they are phenomenally given to our senses. These terms can be further analyzed when they are used in additional domains of language, but not with the sensory meanings they have in the natural language in which they were originally introduced. Consider, for instance, the word ‘red’. This term can be analyzed in the language of physics, as it designates electromagnetic wavelengths that range between 630 and 740 nm. But the language of physics is in itself an elaboration that goes far beyond the original natural language domain. The same can be said about a term like ‘round’, which can be defined in the more refined language of geometry as a quality of something with a circular perimeter. However, these languages are inevitably appended to ordinary perceptual language about colors and forms, even if they go much further.

In their original natural language meanings, indexicators gain their sense through *acquaintance*, a term famously introduced by Bertrand Russell. As he insightfully observed, a blind man cannot learn the meaning of the word ‘red’, at least not in its original sense. And this is because learning this word requires some form of perceptual acquaintance. In accepting this, I am obviously not agreeing with Russell’s metaphysics of logical atomism, according to which the meaning

168 The argument that follows is influenced by Ernst Tugendhat’s views on the tacit learning of conceptual knowledge, along with Wittgenstein’s considerations about the interpersonal character of language and his broad conception of language as something similar to a massive nebula with our natural language in its center and the (for their understanding and application) dependent scientific and technical languages on its borders. For him this nebula can be subdivided in multiple ways into different regions, and the regions into multiple practices (games). Moreover, the same expressions can gain different aspectual meanings when used in different practices, which can easily confuse philosophers. Pragmatic-contextual variations in meaning were more recently investigated by François Recanati. (See Tugendhat 1976; Wittgenstein 1984b, Part I, 1984a, 1984c; and Recanati 2009 and 2010; see also Costa 2018: 115–153.)

of 'red' is a *sense-datum* (1994: 194–195 and 201–202).¹⁶⁹ What I wish to defend is that the original meaning of 'red' must be given by an ascription rule satisfied by external visually given tropes of red, like the red of a certain carpet, seen as a criterion for the referential application of the word 'red'. This ascription rule must be learned through positive and negative examples of its application, in interpersonal acts of identification, allowing the possibility of reapplication, which also means the possibility of error and interpersonal correction. This is how we first learn the ascription rule for a word like 'red', namely, as a tacit public convention. According to this understanding, the ascription criterial rule of a general term with the form of an indexicator is its semantic content or cognitive meaning.¹⁷⁰

Indexicators can also be understood through their application to individuals, as in the sentence "This couch is red" when a speaker points to tropes of redness belonging to a couch. In this case, the ascription rule should associate some remembered t-representation of red with what the person is observing in her ego-centered space. But it can also be understood as the naturalistic kind of universal prescribed by trope ontology. When I say, "Red is a color", what I intend to say, according to Donald Williams, is that the universal consisting in the class of all precisely similar tropes of red belongs to the class of all precisely similar tropes of color. Or, in order to avoid problems with the term 'class', what I intend to say is that any arbitrarily chosen model trope of red or any other trope of red qualitatively identical to it is also an arbitrarily chosen model trope of color, or of any other trope of color qualitatively identical to it.

We consider now the descriptivators. They are general terms analogous to definite descriptions, though with a classificatory instead of identifying function. Consequently, they must be descriptive general terms provided with semantic complexity and therefore able to be analyzed. We can learn them without needing direct acquaintance with their reference, and they easily take the form of *indefinite* descriptions. Examples are easy to find: 'a fortune hunter', 'a coastal city', 'a meeting of two kindred souls'. Thus, 'a fortune hunter' could be predicated to both

¹⁶⁹ Indexicators are subrogated from what Russell called logical proper names. However, unlike Russell, I do not see their meanings as their references, but as tropical *rules* linking references with terms, which means they can also be learned and used incorrectly, so that statements using them can be false.

¹⁷⁰ *Cognitive* implies *internal*. Here one could object: how could a rule based on an internal occurrence be interpersonally corrected? The most reasonable answer (*pace* Wittgenstein) would be: we learn the rule by *exclusion*. A child suffers a minor injury, is wounded, bleeds, cries... Since what adults call 'pain' is not referred to by any of these words, the child concludes by eliminative induction that 'pain' must be his internal "painful feeling". The same with visual impressions. If we exclude the intersubjectively visible red as not what we mean, what is left must be the subjective sense-datum.

David Sebastian and Zsa Zsa Gabor, who were seemingly more intent on marrying for money than for love. Since descriptivators do not depend directly on acquaintance, they are linguistically more stable than indexicators: we do not need an indexical situation to learn what a fortune hunter is.

There are, finally, nominators, which are also called general names, such as ‘water’ and ‘religion’. Like proper names, their symbolic expression is not descriptive. However, unlike indexicators, they do not need to be learned in indexical situations, even if this might be the case. Nonetheless, as I intend to show, they are completely different from indexicators, since we must be able to analyze them in a way that retains similarities with the way we have analyzed proper names; moreover, unlike descriptivators, their meanings do not come from their syntactical articulation, even if they may have one.

They can be natural species terms like ‘tiger’, mass terms like ‘water’, artifact terms like ‘chair’, social terms like ‘professor’, cultural terms like ‘art’, philosophical terms like ‘personal identity’... Although these terms often seem semantically simple, they are in fact abbreviations of indefinite descriptions or even clusters of indefinite descriptions expressing complex ascription rules. To begin with, take the nominator ‘cathedral’; its meaning can be given by the indefinite description:

a church that contains the official seat of a bishop, thus serving as the central church of a diocese, conference or bishopric.

Here, we have a descriptivator term; and it is easy to guess (though difficult to prove) that if we analyzed the elements of this indefinite description in increasing depth, we would eventually end up speaking of indexicators.

We can justify the distinctions, among three kinds of general terms as analogous to the distinctions among three kinds of singular terms, appealing to a genetic progression. From a descriptivist viewpoint, it seems very plausible to think that in a general way, the use of indexicals genetically precedes the generation of descriptions, which genetically precedes the generation of proper names. It is through indexicals that we are presented with objects of reference for the first time. But the cognitive contents of the indexicals must be attached to the spatiotemporal situations in which they are used, which means that they are not permanent (e.g., “What is that tourist over there doing?”). Referential terms only gain the property of *permanence* insofar as users make them context-independent by explicitly giving them the form of definite descriptions (e.g., “What is that tourist with an Australian cap doing over there?”). Finally, referential terms can gain *flexibility* insofar as they are made independent of this or that specific definite description by users giving them the form of proper names (e.g., “The tourist over there with the Australian cap is John. What is he doing?”).

So, my proposal is that a similar genetic progression can be found regarding the references of t-properties in the emergence of the three kinds of general terms suggested above. The semantic-cognitive contents of indexicators are contextually and interpersonally given, differing from indexicals in their applicability to many things without a change in content: although learned in indexical circumstances, the term ‘red’ can be identically applied to any tropical red property.¹⁷¹ Indexicators lack permanence and flexibility insofar as they are genetically dependent on ego-centered contexts of use. The semantic contents of descriptivators gain permanence; they are applied to tropes independently of being genetically originated by the indexical context in which they were learned (I can use the descriptivator ‘a white bear’ independently of having seen one, but I cannot do the same with the word ‘white’). Finally, the semantic content of a nominator has not only permanence but also flexibility since, as we will see, it can be replaced by different indefinite descriptions in many cases.

Furthermore, we can speculate as to whether both singular and general terms do not have a common, undifferentiated semantic origin, while limiting restrictions intended to specify particular individuals or specific properties are conceived only later. Consider, for instance, the alarm calls of birds. Without distinctions, they mean the same as “here” (an indexical) and “danger” (a general term), though without distinctions between subject and predicate. I think that these undifferentiated terms were also what Ernst Tugendhat had in mind with his concept of *quasi-predicates* (*Quasiprädikate*). As he wrote:

Probably one can say that the expressions of characterization of babies in the first stages of their language learning have this form of application. The baby learns to say “uau-uau” by seeing a dog, “mama” by seeing its mother when the perception pattern of the mother appears... (Tugendhat 1976: 208)¹⁷²

These undifferentiated terms work like singular terms because they distinguish some object of reference from all others, but they also work like general terms, because they can be reapplied again and again to a multiplicity of different referents.

171 In conformity with our acceptance of trope theory, we can imagine physical models that are interpersonally introduced to fix the semantic rule for some indexicator. This would eschew the problematic appeal to abstract entities. Possible worlds could contain or not contain exemplars corresponding to the model, having in the first case the t-property.

172 I think the line of thought that led to his conclusions was, however, different. For him, the characteristic of such words is that the situations of their application and of their explanation are the same (Tugendhat 1976: 208–209).

6 Nominators: Complex ascription rules

It is particularly interesting to consider the case of nominators, since, somewhat like proper names, they are only apparently simple. Consider, to begin with, the relatively simple artifact term ‘chair’. This term can be analyzed as an abbreviation, as shown by the following definition:

‘Chair’ (*Df*): a non-vehicular seat with a backrest designed for use by only one person at a time.

A chair must be non-vehicular, since similar objects in cars, trains, and airplanes are called seats, not chairs. Moreover, to be a chair, a seat needs to have a backrest because without one it is only a seat or a stool. It must also have some designer since something that only by chance has the form of a chair (like a chair accidentally carved by nature out of a large rock) cannot be properly called a chair. And it must be made for use by only one person at a time since otherwise, a couch would be a chair (we can imagine a region inhabited by very large people, where the chairs looked like sofas and more than one average person could sit on them, but in this imaginary region, chairs would still be artifacts made to seat only one person at a time...). The above-given description expresses the criterial rule for applying the word ‘chair’, which constitutes the semantic-cognitive content of this general term. The word ‘chair’ is only an abbreviation of this implicit *definiens*. It is a practical abbreviation without much flexibility, but sufficient to allow us the identification of armchairs, easy chairs, beach chairs, rocking chairs, highchairs, folding chairs, wheelchairs... and even electric chairs and thrones as kinds of chair. Beyond this, some symptoms help us to identify chairs, like the fact that many chairs have four legs, most are made of wood, many have armrests... Words like ‘cathedral’ and ‘chair’ exemplify the simplest case of a nominator, where the word is the abbreviation of a complex description.¹⁷³

¹⁷³ Cognitive psychologists, beginning with Eleanor Rosh, have noted the importance of the degrees of similarity of an exemplar with prototypical cases, when the intention is to make a conceptual categorization (Rosh 1973; 1999). We can more easily identify what concept we should apply to an object insofar as we find it has more features in common with the stereotypical case (for instance, we can identify a falcon as a bird much more easily than a penguin since penguins have fewer features similar to common stereotypes of birds, and we can identify a chair used in a dining room as a chair more easily than an electric chair). All that is well-justified regarding *performance*. But it would be a mistake to believe that performance can replace convention. It would be confusing the attempt to sustain the prototype theory without preserving underlying *tacit definitional conventions*, since, without the criteria offered by them, we will get lost trying to find the right similarity features and warranting stereotypical cases. Any concept is in one

Cases of natural species are more complicated. Some natural species concepts have nothing to do with micro-structural essences, at least in the ways they have been used until now. This is the case of the biological concept of *species* since the genetic structure is not taken as a definitory element of them. Here is, for instance, how the nominator concept of *tiger* could be analyzed by means of an attributive rule:

AR-‘tiger’:

The concept of a tiger is (self-sufficiently) ascribed by privileged speakers to an exemplar x of the genus *Panthera*

Iff

- (i) x belongs to the largest living cat species, being a predator able to interbreed with others belonging to the same Asiatic ascendance and most recognizable by its dark vertical stripes and orange fur with a white underside.
- (ii) x satisfies (i) sufficiently
- (iii) x satisfies (i) better than any other species of the genus *Panthera*.

At least for the present, this is roughly what zoologists understand under the countable term ‘tiger’, differently, for instance, from the term ‘water’, for which microstructure is important. Worth noticing is the structural similarity between this attributive rule and identification rules for proper names, with two main differences. The first is that we are restricted to a characterizing condition (i) that eschews a disjunction with a proper spatiotemporal condition, since general terms can apply to many different spatio-temporally located individuals (a tiger transported to Mars will remain a tiger). The second main difference is that condition (iii), of predominance, makes us choose the best candidate among kinds (or classes) and not individuals.

A more complicated example is the conceptual word *religion*—a candidate for what Wittgenstein called *family resemblance*. The philosopher P. W. Alston (1964, Chapter 6) once proposed the following standard descriptive conditions for calling something a religion:

way or another like any other (even a needle can be seen as in some way resembling the Eiffel Tower), and in the end, only tacit definitional conventions can adequately rescue their vague boundaries. Otherwise, how could we justify the intuitive adequacy of the above definition of a chair, which includes wheelchairs, electric chairs, and thrones but excludes a “chair” carved in the rocks by the ocean waves and a giant chair made for fun? Concerning intuitive adequacy, a prototype does not do much more than exemplify a case in which most if not all definitory criteria are satisfied.

1. Belief in supernatural beings (gods)
2. Religious feelings (reverence, adoration, sense of mystery, and guilt)
3. A moral code sanctioned by God or gods
4. Sermons and other forms of communication with God or gods.
5. A distinction between the sacred and the profane; ritual acts related to sacred objects or persons.
6. A wide organization of personal and social life based on such characteristics.
7. A worldview: an explanation of the world and man's place in it.

Alston observed that Catholicism, Judaism, and Islam paradigmatically satisfy all these conditions.¹⁷⁴ Protestantism, however, de-emphasizes rituals devoted to sacred objects, while Quakers reject them, concentrating on the mystical experience. Hinayana Buddhism, he noted, dispenses with supernatural beings, emphasizing a moral and spiritual discipline that aims to eliminate desires.

We can go further, asking what we should say about Comte's religion of humanity, which deifies human society, adopting as devotional figures such as Shakespeare and Clotilde de Vaux. What about immanent views of the divine, like Spinoza's and Einstein's religious attitudes toward the universe? What about social organizations like the Rosicrucians, fanatical ideological movements like the Khmer Rouge, or the mathematical mysticism of the Pythagorean philosophers? To gain more clarity about all these cases, I propose to invoke a higher-order condition, measuring the indefinite descriptions presented in Alston's model. It is what we could call the ascription rule for the concept word 'religion':

AR-'religion':

Any t-property x belonging to the genus of socio-cultural practices is ascribed (self-sufficiently) by privileged speakers with the nominator 'religion'_{vs}

Iff

- (i) x satisfies at least one or two of the 7 standard indefinite description-rules.
- (ii) x satisfies them to a sufficient degree.
- (iii) x satisfies them better than any other concept belonging to the same genus.

If we accept this ascription rule, we will include Comte's religion of humanity under the concept of religion, since it satisfies 2, 4, 5, 6, and 7 to varying degrees. We would have doubts concerning Spinoza's and Einstein's religions, since they

174 They are what Rosh would call prototypical cases.

satisfy only condition 2 entirely, but just barely satisfy other conditions, like 5, 6, and 7. Rosicrucians, Freemasons, radical political groups, and Pythagorean mysticism would sufficiently satisfy some basic descriptions, but they would not satisfy condition (iii) of the ascription rule since it applies more to other socio-cultural movements that are respectively secret organizations, radical political groups, and philosophical mysticism.

It is important to note that this kind of ascription rule is often and in the same proposed way explicitly used in science. Examples are the criterial conditions for the diagnosis of Asperger's syndrome in neurology (see Gillberg 2002, Chapter 2) and the revised forms of the Jones' criteria for diagnosing acute rheumatic fever in internal medicine (see Jones 1944).

7 The concept of *water*: A neodescriptive analysis

A more complex, possibly the most discussed nominator in recent analytic philosophy is the conceptual word 'water'. From our neodescriptivist point of view, the conceptual content, the semantic-cognitive meaning of the concept word 'water' has evolved over time. Humans have surely used this concept since the stone age. It was the transparent, colorless, and tasteless liquid found in rivers, lakes, and oceans, which fell to earth as rain, quenched thirst, irrigated crops, and was used to bathe in, wash clothes, and to put out fires. Around 1750, still before the birth of modern chemistry, one could also add to these properties those of being a liquid able to cause rust and conduct electricity. These were easily described dispositional properties.

Concerning that time, a descriptivist would say that at least some central properties of this group, like (in a pure state) being transparent, colorless, and tasteless... and the dispositional properties of quenching thirst and extinguishing fires would be essential meaning constituents of the word 'water'. But from 1780 to 1830, there was a scientific revolution. In 1781, Lavoisier ignited a combination of hydrogen and oxygen, causing a chemical reaction that bonded the two elements to form water molecules, and in 1786, he reversed the process to break water molecules into the two component elements. In 1801, Nicholson and Carlisle obtained the same results by means of electrolysis. In 1811, Avogadro concluded that the composition of water was $\text{HO}_{1/2}$. And in 1821, Berzelius corrected that result, showing that the chemical structure of water was H_2O , which we now accept.¹⁷⁵

¹⁷⁵ The history is even more complicated; for a short account, see Philip Ball (2001, Chapter 5).

Philosophers like Hilary Putnam would argue that these discoveries put an end to descriptivism: the essence of water is given by its microstructure as H_2O , and this must be its real meaning. Nonetheless, this argument would only impress a naïve descriptivist. A more sophisticated descriptivist would see it as the result of prejudice, retorting that a description does not need to be restricted to what one sees with the naked eye. The word ‘description’ has a much broader use, allowing its application to invisible things, like microstructures visible only with the aid of a microscope... As Avrum Stroll noted (1998: 71), all good modern dictionaries include, along with superficial properties like being a transparent liquid..., the chemical structure of H_2O , as well as other chemical properties like the percentages of hydrogen and oxygen by weight.

The obvious conclusion is that a sophisticated descriptivist should not reject chemical properties in the case of water, but rather *incorporate* them into descriptions expressing the meaning of the word. From this perspective, in its present sense the word ‘water’ should have *both a superficial and a deep nucleus of meaning*. The superficial nucleus of meaning is the *popular meaning*, already known in 1750, including superficial dispositional properties. The deep nucleus of meaning is the *scientific meaning*, which could be summarized by the formula H_2O , but well-considered it should also include what privileged users, namely chemists, know about this compound (e. g., $2H_2 + O_2 = 2H_2O$). And it should be additionally extend to the inferential relations between the superficial and the deep nuclei of meaning (e. g., the high surface tension caused by cohesive interaction between molecules).¹⁷⁶ Now, how could the ascription rule for the concept of water be formulated? My suggestion is that *in its widest sense* the concept of water could be formulated using the following ascription rule:

AR-‘water’:

Any sample of t-properties x belonging to the genus of an inorganic chemical compound is used to be ascribed (self-sufficiently) by privileged speakers with the nominator ‘water’_{vs}

iff

- (i) x satisfies the characterizing rules constitutive of its popular nucleus of meaning and/or satisfies the characterizing rules constitutive of the scientific nucleus of meaning
- (ii) x satisfies (i) to an on the whole sufficient degree.

¹⁷⁶ I think this touches the link between descriptivist and *inferentialist* views of meaning (for the latter, see Brandon 2000).

- (iii) x satisfies (i) better than any other inorganic chemical composite.
 (...)

This ascription rule for the concept word ‘water’ in the widest sense is to some extent structurally analogous to the MIR* for proper names, though with the same changes that were made in the concepts of tiger and religion. It eschews a proper requirement of spatiotemporal location and exchanges the requirement of individuation for one of classification.

Furthermore, the characterizing inclusive disjunction creates space for the acceptance of compounds that lack either the popular or the scientific nucleus of meaning as belonging to the concept of water’s extension. In this way, the inclusive disjunction gives due place to our broadest intuitions about all we can mean with the word ‘water’. Imagine a cup of a watery liquid with all the superficial phenomenal and dispositional properties of water, but different microphysical properties, for instance, with molecules constructed according to some complex formula that could be abbreviated as XYZ instead of H₂O. We could still decide that this liquid was in some way water. On the other hand, it seems that if we had a liquid with no superficial property of water, but with the deep property of being constituted by H₂O, we could also in some way call it water.

It is appropriate to introduce here an important pragmatic consideration. When speaking of water, we can have in mind the exclusive satisfaction of superficial or deep properties, according to what could be called the *context of interest* involved. Imagine a scientific context of students who know some chemistry and are experimenting with electrolysis in the laboratory. In this context, what counts is the scientific nucleus of meaning of the compound, not the popular meaning since they are interested in using electricity to split water into oxygen and hydrogen. The word ‘water’ is used here essentially in the sense of ‘dihydrogen monoxide’, which is a chemical name for water, and this is what they contextually emphasize as the word’s meaning. Suppose, on the other hand, that the context is one of simple fishermen on a remote island who intend to dig a well to obtain water for drinking and washing. In this case, the context of interest will elevate the value of the superficial properties of water, since it is of no interest what chemical structure the aqueous liquid has insofar as it fully satisfies their expectations (we can even imagine that they have no idea of the chemical constitution of water). What they mean by water is simply the aqueous liquid essential for life. We see that what we mean with the word ‘water’ can remain general, satisfying AR-water, but can also receive a more restrictive use, varying from ‘dihydrogen monoxide’ to ‘aqueous liquid’ according to the contextual requirements.

The above considerations enable us to deal with a dilemma left unsolved by descriptivists like A. J. Ayer (1983: 270) and Avrum Stroll (1999), on the one hand,

and causal-referentialists like Kripke (1980: 128–129) and Putnam (1975: 215–271), on the other hand. Let us suppose the following two imaginary situations:

- (i) A sample is found that has all the superficial characteristics of water: it is transparent, odorless, tasteless, quenches thirst, sustains life, puts out fire, etc. However, it has been discovered that the chemical structure of this liquid is not H_2O but XYZ.
- (ii) A sample is found that has no superficial characteristics of water. It is black like pitch, does not quench thirst, does not put out fire... but (very surprisingly!) has the chemical composition of H_2O .

The question is: which substance is really water: the substance of sample (i) or that of sample (ii)?

Old-style descriptivists like Ayer and Stroll would say that (i) must be water and not (ii) since what defines water for them are only the superficial properties perceptible by our senses, not its chemical composition. Causal-referentialists like Kripke and Putnam would say that substance (ii) must still be water, but not (i), since only (ii) has the essential property of water, which is that of being a compound with the microstructure of H_2O . This is a dilemma because both alternatives seem to have some appeal.

The assumption of AR-‘water’, along with our pragmatic considerations on contexts of interest, provides a solution for the dilemma. Both (i) and (ii) are, in the wide sense of the word, samples of water. We can call the sample (i) a water-XYZ, satisfying the popular nucleus of meaning of the first disjunct of AR-‘water’, and the sample (ii) a water- H_2O , satisfying the scientific nucleus of meaning of the second disjunct of AR-‘water’. Kripke and Putnam have in mind the meaning of water privileged in a scientific context of interest. In that context, one can say that only the XYZ liquid is not water, understanding by water the same thing as dihydrogen monoxide or H_2O . Ayer and Stroll, on their side, have in mind the meaning privileged in the popular context of interest, and because of this, they can insist that XYZ is really water, since it still maintains all its superficial properties, including those of satisfying our needs. Both sides can be right and wrong when we have in mind meanings privileged by different contexts, which causes the impression of a conceptual conflict. Besides this, the IR-‘water’ is sufficiently general to allow the application of the concept-word ‘water’ to both samples.

Another application of the proposed descriptivist analysis of the meaning of water concerns the epistemic status of the statement “Water is H_2O ”. According to philosophers such as Kripke and Putnam, this is a *necessary a posteriori* statement, since it is based on experience, but it is also necessary since for them the rigid des-

ignator ‘water’ picks out the same natural kind as the rigid designator ‘ H_2O ’ in all possible worlds... Avrum Stroll has noted something interesting about that statement (1998: 73): the ‘is’ in “Water is H_2O ” is not the ‘is’ of identity, as Kripke suggested, but the ‘is’ of *constitution*. “Water is H_2O ” does not mean “Water = H_2O ”, but rather “Water is made of H_2O ”. This is essentially true. However, it still seems possible to save the identity by changing the identity sentence into “Water is the same thing as quantities of H_2O molecules” or something of the kind. Moreover, it seems that even if the ‘is’ were one of constitution, “Water is H_2O ” would for Kripke be a necessary *a posteriori* statement (see Burgess 2013: 65).

The difficulty I have with the *necessary a posteriori* is well known: what is necessarily true is what is true in all possible worlds, and it seems that what is true in all possible worlds, if known, *must* be known *a priori* (Stalnaker 1999). It seems that even if we arrive *a posteriori* at some truth, it would be accepted as being *a priori* as soon as we see that it is true in all possible worlds.¹⁷⁷

Anyway, for us what really matters now is to consider the statement “Water is H_2O ” in the light of our suggested analysis of the meaning of H_2O , since it allows an explanation that circumvents the problems posed above. Accordingly, there must be three possible meanings for “Water is (the same as) H_2O ” and also “Water is (made of) H_2O ”:

- (i) If by ‘water’ we mean the general ascription rule AR-‘water’, the statement “Water is H_2O ” must be seen as *contingent a posteriori* since contrary to expectations, the inclusive disjunction belonging to AR-‘water’ allows the empirical possibility that water is not the same as (or made of) H_2O , but even so, remains water. It is seen as remaining water insofar as it still satisfies the superficial properties of being an aqueous liquid. In this general sense, the liquid would remain water even if it had the composition of XYZ.
- (ii) However, in a scientific context of interest in which ‘water’ means dihydrogen monoxide, the statement “Water is H_2O ” could be seen as a *necessary a priori statement* since it is meant as expressing a numerical identity: “Dihydrogen monoxide = H_2O ”.
- (iii) On the other hand, within a popular context of interest, ‘water’ will mean ‘aqueous liquid’ independently of its chemical composition, which means that the statement “Water is H_2O ” will, again, be *contingent a posteriori*.

177 See Chapter V, §§ 3 and 5.

After this analysis, the pressure for the acceptance of the necessary *a posteriori* diminishes considerably, at least regarding the statement “Water is H_2O ”.¹⁷⁸ Unaware of the given distinctions, defenders of the *a posteriori* necessity that water is H_2O are in this case only unduly joining the necessity of sense (ii) with the *a posteriori* character of senses (iii) and, maybe, of sense (i).

8 The concept of *water*: Putnam's mistake

The above-discussed internalist understanding of the meaning of ‘water’ is obviously opposed to Putnam’s well-known externalist view, according to which “meanings just ain’t in the head” (1975: 227 and 1988: 28). Here, we must dwell on his famous Twin-Earth fantasy. He imagines that in some part of the cosmos there is a Twin-Earth in all its details identical to ours, with one exception: the transparent, tasteless, odorless liquid that quenches thirst, puts out fires, falls to earth in the form of rain, fills rivers and oceans... has a complex chemical structure that can be abbreviated as XYZ, which has nothing to do with H_2O . Suppose a person called Oscar on the Earth in 1750 sees rain and says: “That is water”. At the same time, on the Twin-Earth the Twin-Oscar does the same thing. He looks at the rain and says: “That is water”. Since in 1750, the chemical structure of water was not yet known, all that Oscar and Twin-Oscar can have in their heads when they say “That is water” is that they are looking at the same transparent, tasteless, odorless liquid called ‘water’. However, writes Putnam, as chemists sometime later discovered, what Oscar *meant* by pointing at the rain was a liquid whose microstructure was H_2O , while Twin-Oscar *meant* a liquid with the microstructure XYZ. Since for Putnam the essence of water lies in its microstructure, XYZ cannot really be water (he calls XYZ ‘twin-water’). Consequently, Oscar and Twin-Oscar *mean—they refer to—different things with the word ‘water’ although they have the same contents in their heads* (i. e., the same idea of a transparent, tasteless, odorless liquid, since in 1750 the chemical microstructure of water was still unknown). Putnam’s conclusion was that *if they have the same thing in mind, but what they mean are different*

¹⁷⁸ Other supposed examples require not very dissimilar analyses. In the past gold was seen as a substance that can be dissolved in *aqua regia* (Locke). But today the statement “Gold is the element with the atomic number 79” (understood by Kripke as necessary *a posteriori*) can be considered as a simple definition resulting from the scientific discovery that an atom of gold has 79 protons, which gives it, in this sense, a necessary *a priori* status. The sentence “Cats are mammals” (another Kripkean necessary *a posteriori*) could be seen as contingent *a posteriori* by a primitive tribe that believes these creatures must incarnate gods, but it can be seen by a zoologist as an *a priori* necessary convention.

things with different extensional meanings, then the meaning of 'water' cannot be in their heads! It must be something external to their heads, namely, the samples of liquid with the same microstructure that they are pointing at. His mind-blowing conclusion was that the meaning of 'water' must be essentially external¹⁷⁹ to our minds, which can be generalized to other terms. It was not long before someone came to the conclusion that even our minds must be outside our heads since the *locus* of meaning is the mind (McDowell 1992).

There was considerable controversy about whether Putnam is right in his externalism of meanings (Pessin and Goldberg 1996). I would like to add here a short but, in my view, the proper and fatal counterargument. It begins with an observation regarding the ambiguity of the word 'mean' as used by Putnam. The word English word 'mean' has a twofold sense: it can be understood as:

- (i) 'meaning' (e.g., "What do you mean with the word 'ulotrichous?'); but it can also stand for
- (ii) 'what one is pointing at' (e.g., "I mean that chair and not this table").

It is easy to *confuse* the second with the first use of the word, concluding that the Oscars really *meant*—in the sense (i) of 'meaning'—*different referents*. Nonetheless, the sense (i) of 'mean', namely, the *real meaning* they gave to the word 'water' in 1750 *was precisely the same*, namely, that of a transparent, tasteless, odorless... aqueous liquid, and nothing more. Even regarding the *cause* of their cognition, if questioned, the Oscars would identify it as the aqueous liquid they see falling from the sky... and not some subjacent microstructure still unknown to them, even if its existence could at the time already be surmised. We can say that they meant *different* referents in the sense (ii), of course: the water Oscar was pointing at as falling on Earth was not the water Twin-Oscar was pointing at as falling on Twin-Earth. But concerning the crucial sense (i) they could not be seen as different, except much later, when it was discovered they were pointing at liquids *that were very different in their microstructures*.

Applied to Putnam's fantasy, the considerations above help us to show exactly how the trick works. When he writes that in 1750, Oscar and Twin-Oscar *meant* two different things with the word 'water', he is simply *inducing us to unconsciously use Oscar and Twin-Oscar as indexical instruments for what we ourselves presently mean (in the sense (i) of 'meaning') with the word 'water' in each case*. However, it is obvious that *we, with our present knowledge of the chemistry of water, mean by*

¹⁷⁹ I mean *essentially external* since Putnam admits that some secondary aspects of meaning, the semantic markers (kinds), and stereotypes (phenomenal properties) remain mental.

'water' a liquid with the composition of H_2O when we consider what our Oscar is pointing at. And, having in mind what Putnam has told us, we mean by 'water' some XYZ (whatever it might be) when we consider the liquid Twin-Oscar is pointing at. Since our mental states are obviously different when we think of H_2O and XYZ, Putnam's thought experiment produces in us a skilled illusion that the Oscars mean (in the sense (i)) different things.¹⁸⁰

What was and must remain different are the references and the extensions of these two compounds, which always were, are, and will be external. Putnam's argument is nothing more than a sophisticated piece of linguistic sorcery asking for a more careful natural language therapy.¹⁸¹

Putnam has also developed two examples to defend the view that meaning can be external *within society*. In the first argument, he supposes that aluminum and molybdenum can only be distinguished by metallurgists and that the Twin-Earth is full of molybdenum, a rare metal on Earth. Moreover, he supposes that the inhabitants of Twin-Earth call molybdenum aluminum and aluminum molybdenum. In this case, the word 'aluminum' said by Oscar will have a different extension from 'aluminum' said by Twin-Oscar. But since they are not metallurgists, they have the same psychological states. Hence, once again, "the psychological state of the speaker does not determine the extension of the word" (Putnam 1975: 226).

In his second example, Putnam considers the difference between an elm tree and a beech tree (1975: 226–227). Most of us do *not* know how to distinguish elm trees from beech trees. Even so, we can use these words, knowing that they have different extensions, that elms are not beeches and vice-versa. Hence, what we intend to say with these words, the meanings we attribute to them, are differ-

180 The trick is not so easily replicated in other languages. In German, we would say that Oscar "*meint Wasser*", and it is clear that what counts is Oscar's intention to pick out water referentially and not primarily the meaning (*Sinn* or *Bedeutung*) of the word. In some Romance languages, we would say that Oscar "*veut dire eau*" or "*quiere decir agua*", which literally means "wishes to say", also in the sense of having the intention to pick out the referent water. What counts here is the reference, not the sense or meaning.

181 Putnam's approach has a scientific bias in the belief that we can make counterintuitive moves regarding natural language meanings in the same way as physicists discovered that "electrons do not exist quite in the way Bohr thought they did" (Putnam 1975: 216). This seems to be the main reason why much of the present scientifically oriented metaphysical philosophy tends to ostracize the kind of normal-language critic or therapeutic philosophy recommended by the later Wittgenstein. He was acutely aware that constructive and critical forms of analytic philosophy of language are dialectically interdependent. As he wrote: "The problems arising through the misinterpretation of our language have a character of *deepness*. They are deep disquietudes; they are as deeply rooted in us as the forms of our language, and their significance is as great as the importance of our language" (Wittgenstein 1984b, § 111).

ent, even if the difference is not in our heads. Putnam notes that all we usually know is that an elm is a tree different from a beech tree, and vice-versa, but since this difference is *totally symmetrical*, the representations cannot be distinguished from one another (1991: 29¹⁸²). We need the linguistic social corpus to distinguish them for us.

Putnam's conclusion from these examples is that "only the sociolinguistic state of the collective linguistic corpus" to which the speaker belongs will be able to fix its extension (1975: 228). Meaning is not only external, but also social: "reference is socially fixed and not determined by conditions or objects in individual brains/minds" (Putnam 1991: 25).

Concerning what is positive in Putnam's view, we already said enough when we made an internalist reconstruction of a linguistic division of labor applied to proper names in Chapter III (§ 9) of this book. So, I will limit myself to answering Putnam's last two examples against internalism.

Concerning these two examples, all we need to do is to generalize what we said about unqualified versus self-sufficient references, and the two success criteria of unqualified reference (SCBs), from singular to general terms. A fisherman who says that a whale is the biggest ocean fish gives a wrong definition of a whale since it is a mammal. However, what he means already satisfies conditions of convergence (SCB-1 applied to general terms) and linguistic competence (SCB-2 applied to general terms), sufficient not only for the insertion of the word in a contextually adequate discourse (SCB-3 applied to general terms) as a successful unqualified reference but even for his identification of whales based on their appearance. However, if a child thinks that 'whale' is the name of a mountain in the Appalachians when in fact there is no such mountain, the child will fail to satisfy the condition of convergence, being unable to refer in the sense of inserting the word in discourse in a tolerable way (an unhappy, failed ascription of a C-condition).

Not so differently, we are already pretty sure that aluminum and molybdenum are metals and that they are different metals; we saw the periodic table and we have already heard these words, they sound as referring to different metals, and this is the kind of knowledge we have in the back of our heads... Even if we cannot represent the differences (due to the symmetry pointed out by Putnam), it is already useful information to know that A-metal \neq M-metal: I already know that A-metal and M-metal should have differences in their properties, even if I still know nothing about these properties. This is already, regarding the contexts,

182 See also Hilary Putnam's introduction to Andrew Pessin and Sanford Goldberg (eds.), *The Twin Earth Chronicles*, 1996.

sufficient for the referential insertion of these words into discourse, assuming an enhanced mechanism of reference-borrowing. The core meanings here will only be differentiated by privileged users, namely, chemists and metallurgists.

In order to answer the second example, we need to add that there is more to what we believe when we distinguish ‘elm’ from ‘beech’ (or ‘aluminum’ from ‘molybdenum’). If someone asks us about the difference between these two trees, we will normally answer that we *suppose* these terms refer to different kinds of trees, though we concede that we are not so sure. But what leads us to this hypothesis? A good reason would be that these words are in fact not new to us, we have sometimes heard each separately, in different circumstances, which helped us to reach this hypothesis. Hence, we have at least two pieces of information: (i) elms and beeches are kinds of trees; and (ii) we guess that they are different kinds of trees. Information (i) already allows us to insert these words into discourse convergently: we know that an elm cannot be made of molybdenum, for instance. Information (ii) makes us think that they are probably different kinds of trees. And this is all we need as a starting point. Yet we can still be misled! It is possible that elms and beeches are different names for the same kind of tree, in the same way as ‘calendula’ and ‘marigold’ are in fact the same kind of plant, although possibly they do not appear to be. Here, Putnam mistakenly takes a plausible internal bet for an externalist form of social knowledge. (Had Putnam written that very often meanings are diversely and complementarily distributed in the heads of the members of a social corpus, we would fully agree, but his externalist assumptions prevent this conclusion.)

Finally, I think that the acceptance of trope ontology gives us a way to avoid a problem that certainly bothered Putnam and many others, and helped him to adopt his amazing idea: with good reasons they reject Fregean platonic entities like concepts (*Begriffe*) or thoughts (*Gedanken*) as eternal and unchangeable abstract entities; and they also did not accept that conceptual meaning could be rendered in the form of unstable psychological states. Consequently, replacing these entities with things belonging to the outside world seemed to be a plausible alternative. However, if a conceptual meaning as a universal is a spreadable disjunction of precisely similar cognitive tropical ascription rules, we have a psychological escape hatch without the corresponding psychological burden.

9 Tharthritis and broad content

Another attempt to show that thoughts are outside our heads comes from Tyler Burge. Following John Searle, I have changed the example a bit to make it clearer. Imagine that Bill, living in the community of Allano, goes to a doctor, complaining

that he has arthritis in his thigh. The doctor explains to him that arthritis cannot occur in the thigh since it is an inflammation of the joints. So, it is false that Bill has arthritis, even if he really has a painful condition that affects his thigh. Forgetting this conversation, Bill travels to a distant region of the country, where there is a community of Bellano that uses the word ‘arthritis’ for pain in the thigh. In this community, he finds a different doctor, who diagnoses his condition as arthritis. So, it is true that Bill has arthritis (or “tharthritis”). According to Burge, such a story shows that the *content of thought cannot be in the mind* since Bill has uttered the same sentence and thought about the same thing in two different contexts with opposite truth-values. If we remember that the truth-value bearer is usually held to be a thought-content,¹⁸³ the change in the truth-value shows that these contents of thought should be different and, therefore, should not be in Bill’s mind. Hence, thought-contents are external to our minds.

The internalist answer is that what Bill has in mind when thinking he has arthritis in his thigh is more than that. As Searle insightfully wrote: “the presupposition of commonality of linguistic usage is a general background assumption, something that is prior to explicit beliefs and thoughts” (2004: 185). In other words, Bill is also, in his mind, assuming that his use of the word ‘arthritis’ is the same as the use of this word by the community of speakers surrounding him. This explains why in the first utterance his statement is true and in the second false. Together with this assumption, the thought-content in the first of Bill’s utterances can be unpacked as follows:

- (1) I believe that I have arthritis in my thigh... assuming that the word ‘arthritis’ is used by the surrounding linguistic community (of Allano) as something causing pain in the thigh.

The thought-content of the same utterance by Bill in the distant region of the country can be unpacked as having the form:

- (2) I believe that I have arthritis in my thigh... assuming that the word ‘arthritis’ is used by the surrounding linguistic community (of Bellano) as something causing pain in the thigh.

¹⁸³ The best term to express a proposition or thought (*Gedanke*) in the Fregean sense is ‘thought-content’, which is independent of a psychological individual. For a trope theoretical ontology, a thought-content will be a certain randomly chosen t-thought used as a model or any other t-thought precisely similar to the first one. This alone is sufficient to detach the thought-content from a single psychological individual, making it spreadable as a thought-content or a proposition.

Now, the assumption is false in utterance (1), and true in utterance (2). But this does not make his thought external since the thought-contents of the full statements (1) and (2) are already different, the first concerning the community of Allano and the second concerning the community of Bellano. They have different truth-values simply because their full thought-contents (our neofregean thoughts) are different: in the first statement it is false because of its false assumption, while in the second statement it is true, because of its true assumption. And there is nothing external in this.

Maybe a dissatisfied externalist could still react by arguing that the semantic content of the indexical must be external because Allano and Bellano remit to 'the actual surrounding linguistic community', which belongs to an essentially external content they would call the *broad content*. But the internalist could counter by answering that this move is gratuitous. The internalist is free to give an *internal* interpretation of the concept of broad content, suggesting that *the internal indexical assumption is what we call the broad content*, while the likewise internal thought-content that Bill has arthritis in his thigh is *what we call the narrow content*. We can guess that other examples of broad content would have a similar internalist fate.

10 Two examples from Kaplan

Descriptivism implies internalism. As already noted, for a meaning-internalist like myself externalism is the result of a *genetic fallacy*: because of its external origins, meaning is equivocally seen as having some external referential component. For this reason, I will finish these sketches by rebutting two imaginative examples of David Kaplan in defense of externalism.

Removing some rhetorical ornaments from Kaplan's first example, imagine that a person, say, Jim, points to someone on the street who looks very much like Charles. Since Jim knows that Charles has moved to Princeton, he says:

1*. He moved to Princeton.

What Jim does not know is that the person on the street is his friend Paul, who is disguised as Charles. Since Paul did not move to Princeton, the proposition is false. However, according to Kaplan (1989: IX), if the proposition were mere cognitive content, it should be true, since Jim believes that Charles has moved to Princeton. Hence, the semantic content involved must be in the world outside, in what he calls a *structured proposition*, and not in the belief content.

The answer is that what authorizes Jim to state that *he* (i. e., the person Jim is pointing to there) has moved to Princeton is a previous visual (false) identification of Charles. Hence, the statement (1*) above is the conclusion of immediate reasoning, which could be stated as follows:

- | | |
|---|---|
| 1. That person there is Charles. | F |
| 2. <u>Charles moved to Princeton.</u> | V |
| 3. He (that person there) moved to Princeton. | F |

This makes it clear that the statement (1*) does not involve in its semantic content the view that *Charles* moved to Princeton. Statement (1*) is the same as (3), which is nothing but the result of subconscious reasoning from two of Jim's other beliefs, where (1) is false and (2) is true, which makes the conclusion (3) and, consequently, (1*) also false. This shows that Jim's belief that Charles has moved to Princeton has nothing to do with the falsity of (3), which is perceived by all the persons who are aware that premise (1) is false.

Kaplan's second argument concerns two identical twins: Castor and Pollux (1989: 531–532). They are observed to have the same cognitive-psychological states. At a certain moment, both say:

My brother was born before me.

Since Pollux was born first, Castor says something true, while Pollux says something false. According to Kaplan, since the cognitive states are the same, the difference in the belief contents must be in the world outside, that is, in what he called a *structured proposition*.

This argument only works if we already assume the flawed conclusion of Putnam's externalist arguments. If not, the idea that Castor and Pollux have identical mental states but mean different things turns out to be gratuitous. After all, with the expression 'my brother', Castor must have in mind Pollux and Pollux Castor; and with the word 'me', each of them has in mind himself. Hence, only the linguistic-grammatical meaning of the two sentences is the same, and this meaning is not sufficient to constitute a proposition or a content of thought, by us understood as an internal tropical thought.

A final remark against Kaplan concerns the actual world's indexation: the idea that an applied indexical is rigid in the sense that in a different possible world, it would preserve the reference it has in the actual world (Kaplan 1989: 493). Certainly not: the applied indexical is indeed rigid, but it is so because it refers to the same object in different conceivable world-circumstances that we think *are not actual*. To see this, consider the sentence "There is no light *here*" said by S in the context

C of his home. Suppose it is true. Now, if we consider S saying “There is no light here” in the same surrounding context C, but in a different conceivable world-circumstance where the whole place is well illuminated, the statement will be false. Had the indexical ‘here’ referred to the actual world, the statement would remain true. Unreasonably mixing counterfactual with actual seems to be one of the many places to start if we are more inclined to lose ourselves in the philosophical jungle.

References

- Ahlberg, J., M. Cholbi (Eds) (2017): *Procreation, Parenthood, and Educational Rights: Ethical and Philosophical Issues*. London: Routledge.
- Andrews, Kristin and Monsó, Susana (2021): "Animal Cognition". In: Zalta, Edward N. (Ed.): *Stanford Encyclopedia of Philosophy*. <<https://plato.stanford.edu/archives/spr2021/entries/cognition-animal/>>.
- Armstrong, David M. (1981): "What is Consciousness?" In: Armstrong, David M.: *The Nature of Mind*. Brighton: Harvester Press.
- Armstrong, David M. (1999): *The Mind-Body Problem: An Opinionated Introduction*. Boulder: Westview Press.
- Austin, John L. (1961): "A Plea for Excuses". In: Austin, John L.: *Philosophical Papers*. Oxford: Oxford University Press.
- Austin, John L. (1962, 1975): *How to do Things with Words*. Marina Sbisa and James O. Urmson (Eds.). Oxford: Oxford University Press.
- Ayer, Alfred J. (1952): *Language, Truth, and Logic*. New York: Dover Publication.
- Ayer, Alfred J. (1982): *Philosophy in the Twentieth Century*. London: Weidenfeld and Nicolson.
- Baars, Bernard (1997): *In the Theater of Consciousness: The Workspace of the Mind*. New York: Oxford University Press.
- Baker, Gordon P. (1974): "Criteria: A New Foundation for Semantics". In: *Ratio* 16, 156–189.
- Ball, Philip (2001): *A Biography of Water*. Berkeley: University of California Press.
- Baudelaire, Charles (1867, 2016): *Fusées. Mon Coeur mis a nu et autres fragments posthumes*. Paris: Gallimard.
- Beckett, Samuel (2011): *Waiting for Godot*. New York: Grove Press.
- Bencivenga, Ermanno (1987): *Die Referenzproblematik: eine Einführung in die analytische Sprachphilosophie*. Frankfurt: Peter Lang.
- Borges, Jorge L. (1936): "El acercamiento de Almostásim". In: Borges, Jorge L.: *Historia de la Eternidad*. Buenos Aires: Editorial Vial y Zona.
- Brandom, Robert B. (2000): *Articulating Reasons: An Introduction to Inferentialism*. Cambridge: Harvard University Press.
- Braun, David (2001): "Indexicals". In: Zalta, Edward N. (Ed.): *Stanford Encyclopedia of Philosophy*. <<https://plato.stanford.edu/archives/sum2017/entries/indexicals/>>.
- Burge, Tyler (1973): "Reference and Proper Names". In: *Journal of Philosophy* 70. No. 14, 425–439.
- Burgess, John P. (2013): *Saul Kripke: Puzzles and Mysteries*. Cambridge: Polity Press.
- Burks, Arthur (1948): "Icon, Index, and Symbol". In: *Philosophy and Phenomenological Research*, 9. No. 4, 673–689.
- Burks, Arthur (1951): "A Theory of Proper Names". In: *Philosophical Studies* 2, 36–45.
- Campbell, Keith (1990): *Abstract Particulars*. Oxford: Blackwell.
- Caplan, Ben (2004): "Creatures of Fiction, Myth, and Imagination". In: *American Philosophical Quarterly* 41. No. 4, 331–337.
- Carnap, Rudolph (1947): *Meaning and Necessity: A Study in Semantics and Modal Logic*. Chicago: University of Chicago Press.
- Carol, John W. and Marcosian, Ned (2010): *An Introduction to Metaphysics*. Cambridge: Cambridge University Press.
- Chalmers, David J. (2006): "The Foundations of Two-Dimensional Semantics". In: Garcia-Carpintero, Manuel and Macià, Josep (Eds.): *Two-Dimensional Semantics*. Oxford: Clarendon Press.

- Costa, Claudio F. (1990): *Wittgenstein's Beitrag zu einer sprachphilosophischen Semantik*. Konstanz: Hartung-Gore.
- Costa, Claudio F. (2002): *The Philosophical Inquiry: Towards a Global Account*. Lanham: University Press of America.
- Costa, Claudio F. (2011): "A Meta-Descriptivist Theory of Proper Names". In: *Ratio* 24. No. 3, 259–281.
- Costa, Claudio F. (2014): *Lines of Thought: Rethinking Philosophical Assumptions*. Newcastle upon Tyne: Cambridge Scholars.
- Costa, Claudio F. (2017): "Direct Realism and Sense-Data". In: *WAB Archives* 40, 26–28.
- Costa, Claudio F. (2018a): *Philosophical Semantics: Reintegrating Theoretical Philosophy*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Costa, Claudio F. (2018b): "Natural Numbers as Tropes". In: *WAB Archives* 41, 31–33.
- Davidson, Donald (1963): "Actions, Reasons, and Causes". In: *The Journal of Philosophy* 60, 23.
- Davidson, Matthew (Ed.) (2007): *On Sense and Direct Reference: Readings in the Philosophy of Language*. New York: MacGraw-Hill.
- Devitt, Michael (1981): *Designation*. New York: Columbia University Press.
- Devitt, Michael (1990): "Meanings Just Ain't in the Head". In: Boolos, George (Ed.): *Method, Reason, and Language: Essays in Honor of Hilary Putnam*. Cambridge: Cambridge University Press, 79–104.
- Devitt, Michael and Sterelny, Kim (1999): *Language and Reality: An Introduction to the Philosophy of Language*. 2nd ed. Oxford: Blackwell Publishers.
- Donnellan, Keith (1966): "Reference and Definite Descriptions". In: *Philosophical Review* 77, 271–304.
- Donnellan, Keith (1970, 1972). "Proper Names and Identifying Descriptions". In: Davidson, Donald and Harman, Gilbert (Eds.): *Semantics of Natural Language*. Boston: D. Reidel, 373–375 (originally published in *Synthesis* 21, 335–358).
- Donnellan, Keith (1974): "Speaking of Nothing". In: *The Philosophical Review* 83. No. 1, 3–32.
- Dretske, Fred (1988): *Explaining Behavior: Reasons in a World of Causes*. Cambridge: MIT Press.
- Dummett, Michael (1973, 1981): *Frege: Philosophy of Language*. 2nd ed. London: Duckworth.
- Evans, Gareth (1973): "The Causal Theory of Names". In: *Aristotelian Society: Supplementary Volume* 47.
- Fara, Delia Graff (2015): "Names as Predicates". In: *Philosophical Review* 124, 59–117.
- Fitch, G. W. (2004): *Saul Kripke*. Ithaca: McGill-Queens University Press.
- Flanagan, Owen (2002): *The Problem of the Soul*. New York: Basic Books.
- Frankfurt, Harry (2005): *On Bullshit*. Princeton: Princeton University Press.
- Frege, Gottlob (1884, 1996): *Die Grundlagen der Arithmetik: Eine Logisch Mathematische Untersuchung über den Begriff des Zahls*. Stuttgart: Reclam.
- Frege, Gottlob (1892): "Sinn und Bedeutung". In: *Zeitschrift für Philosophie und philosophische Kritik*, NF 100, 25–50.
- Frege, Gottlob (1918): "Der Gedanke". In: *Beiträge zur Philosophie des deutschen Idealismus* I, 2, 58–77.
- Freud, Sigmund (1900, 1987): *Die Traumdeutung*. Frankfurt: Fisher.
- Freud, Sigmund (1992): *Das Ich und das Es: Metapsychologischen Schriften*. Dusseldorf: Fisher.
- Gallant, Jack, Huth, Alexander G., Lee, Tyler, Nishimoto, Shinji, Bilenko, Natalia I., and Vu, An T. (2016): "Decoding the Semantic Content of Natural Movies from Human Brain Activity". In: *Frontiers in System Neuroscience* 10. <https://doi.org/10.3389/fnsys.2016.00081>
- Gillberg, Christopher (2002): *A Guide to Asperger Syndrome*. Cambridge: Cambridge University Press.

- Glock, Hans-Johan (1996): *A Wittgenstein Dictionary*. Oxford: Willey Blackwell.
- Green, Karen (1998): "Was Searle's Descriptivism Refuted?" In: *Teorema* 17. No. 1, 109–113.
- Grice, Paul (1989): *Studies in the Ways of Words*. Harvard: Harvard University Press.
- Gulick, Robert van (2014): "Consciousness". Zalta, Edward N. (Ed.): *Stanford Encyclopedia of Philosophy*. <<https://plato.stanford.edu/archives/win2022/entries/consciousness/>>.
- Guthrie, William K. C. (1981): *A History of Greek Philosophy*. Cambridge: Cambridge University Press.
- Haack, Susan (1978): *Philosophy of Logics*. Cambridge: Cambridge University Press.
- Haack, Susan (2016): *Reintegrating Philosophy*. Julia F. Göhner and Eva-Maria Jung (Eds.). Berlin: Springer.
- Haack, Susan (2017): *Scientism and its Discontents*. Rounded Globe. <https://roundedglobe.com/books/>
- Hacker, Peter M. S. (1986): *Insight and Illusion: Wittgenstein on Philosophy and the Metaphysics of Experience*. Oxford: Oxford University Press.
- Hughes, Christopher (2004): *Kripke: Names, Necessity, and Identity*. Oxford: Clarendon Press.
- Inwagen, Peter van (1977): "Creatures of Fiction". In: *American Philosophical Quarterly* 14. No. 4, 299–308.
- Jackson, Frank (1998): "Reference and Descriptions Revisited". In: Tomberlin, James E. (Ed.): *Philosophical Perspectives 12: Language, Mind and Ontology*. Oxford: Blackwell, 201–218.
- Jones, T. Duckett (1944): "The Diagnosis of Rheumatic Fever". In: *Journal of the American Medical Association* 126, 481–484.
- Kallestrup, Jasper (2012): *Semantic Externalism*. London: Routledge.
- Kaplan, David (1989): "Demonstratives". In: Almog, Joseph, Perry, John and Wettstein, Howard (Eds.): *Themes from Kaplan*. Oxford: Oxford University Press, 271–563.
- Kirk, Geoffrey S., Raven John E., and Schofield, Malcolm (1995): *The Pre-Socratic Philosophers*. Cambridge: Cambridge University Press.
- Kripke, Saul (1970, 1980): *Naming and Necessity*. 2nd ed. Cambridge: Harvard University Press.
- Kripke, Saul (1971): "Identity and Necessity". In Munitz, Milton K. (Ed.): *Identity and Individuation*. New York: New York University Press, 135–164.
- Kripke, Saul (1973, 2013): *Reference and Existence: The John Locke Lectures*. Oxford: Oxford University Press.
- Kripke, Saul (1979): "A Puzzle about Belief". In Margalit, Avishai (Ed.): *Meaning and Use*. Dordrecht: Reidel.
- Kripke, Saul (2019): "Naming and Necessity Revised". In: *School of Advanced Studies (Lecture)*.
- Kroon, Frederick (1987): "Causal Descriptivism". In: *Australasian Journal of Philosophy* 65, 1–17.
- Lewis, David (1984): "Putnam's Paradox". In: *Australasian Journal of Philosophy* 62, 221–236.
- Loar, Brian (1976): "The Semantics of Singular Terms". In: *Philosophical Studies* 30, 353–367.
- Locke, John (1689, 1975): *An Essay Concerning Human Understanding*. Oxford: Clarendon Press.
- Loux, Michael (1998): *Metaphysics: A Contemporary Introduction*. London: Routledge.
- Lycan, William (1999): *Philosophy of Language: A Contemporary Introduction*. London: Routledge.
- Lycan, William (2003): "Some Flaws in Searle's Theory of Proper Names". In: *Philosophy* 74 (Fall). Published online.
- Lycan, William (2006): "Names". In: Davitt, Michael and Hanley, Richard (Eds.): *The Blackwell Guide to Philosophy of Language*. Oxford: Blackwell.
- Lynski, Leonard (1977): *Names and Descriptions*, Chicago: University of Chicago Press.
- Mackie, John L. (1974): *The Cement of the Universe: A Study on Causation*. Oxford: Clarendon Press.
- Marcus, Ruth B. (1993): "Modalities and Intentional Languages". In: Marcus, Ruth B.: *Modalities: Philosophical Essays*. Oxford: Oxford University Press.

- Martí, Genoveva (2022): “Reference and Theories of Reference”. In: Stalmaszczyk, Piotr (Ed.): *The Cambridge Handbook of Philosophy of Language*. Cambridge: Cambridge University Press.
- Maurin, Anna-Sofia (2018): “Tropes”. Zalta, Edward N. (Ed.): *Stanford Encyclopedia of Philosophy*. <<https://plato.stanford.edu/archives/spr2023/entries/tropes/>>.
- McDowell, John (1992): “Putnam on Mind and Meaning”. In: *Philosophical Topics* 20, 35–48.
- Mill, John S. (1891, 2009): *System of Logic: Ratiocinative and Inductive*. Project Gutenberg. Published online.
- Moore, George E. (1953): “The Meaning of Real”. In: Moore, George E.: *Some Main Problems of Philosophy*. London: George Allen & Unwin.
- Mulligan, Keith, Simons, Peter, and Smith, Barry (2006): “What is Wrong with Contemporary Philosophy?” In: *Topoi* 25, 63–67.
- Neale, Stephen R. A. (1990): *Descriptions*. Cambridge: MIT Press.
- Nes, Anders (2022): “(Non-)Conceptual Representation of Meaning in Utterance Comprehension”. In: *Inquiry: An Interdisciplinary Journal of Philosophy*. <https://doi.org/10.1080/0020174X.2022.2027269>
- Newen, Albert and Schrenk, Markus A. (2008): *Einführung in die Sprachphilosophie*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Nietzsche, Friedrich (1873, 2017): *Die Philosophie im tragischen Zeitalter der Griechen*. Berlin: Hofenberg.
- Nietzsche, Friedrich (1882, 2021): *Die fröhliche Wissenschaft*. Hamburg: Nikol.
- Noonan, Harold (2013): *Kripke and Naming and Necessity*. London: Routledge.
- Orilia, Francesco (2010): *Singular Reference: A Descriptivist Perspective*. Heidelberg: Springer.
- Ostertag, Garry (Ed.) (1998): *Definite Descriptions: A Reader*. Cambridge: MIT Press.
- Perry, John (1977): “Frege on Demonstratives”. In: *The Philosophical Review* 86. No. 4, 479–497.
- Perry, John (1979): “The Problem of the Essential Indexical”. In: *Nôus* 13. No. 1, 3–21.
- Pessin, Andrew and Goldberg, Sanford (Eds.) (1996): *The Twin Earth Chronicles: Twentieth Years of Reflection on Hilary Putnam’s “The Meaning of ‘Meaning’”*. Armonk: M. E. Sharpe.
- Plato (1996): *Republic*. In: Plato: *The Collected Dialogues of Plato*. Edith Hamilton and Huntington Cairns (Eds.). Princeton: Princeton University Press, 575–844.
- Polger, Thomas and Shapiro, Lawrence (2016): *The Multiple Realizability Book*. New York: Oxford University Press.
- Putnam, Hilary (1975): “The Meaning of ‘Meaning’”. In: Putnam, Hilary: *Mind, Language, and Reality*. Cambridge: Cambridge University Press.
- Putnam, Hilary (1988): *Representation and Reality*. Cambridge: MIT Press.
- Pylyshyn, Zenon (2007): *Things and Places: How the Mind Connects to the World*. Cambridge: MIT Press and Bradford Books.
- Quine, Willard V. O. (1948, 1953): “On What There Is”. In: Quine, Willard V. O.: *From a Logical Point of View: Logico Philosophical Essays*. Cambridge: Harvard University Press.
- Quine, Willard V. O. (1951): “Two Dogmas of Empiricism”. In: *The Philosophical Review* 60. No. 1, 20–43.
- Raatikainen, Panu (2020): “Theories of Reference: What was the Question?” In: Bianchi, Andrea (Ed.): *Language and Reality from a Naturalistic Perspective: Themes from Michael Devitt*. Cham: Springer Nature.
- Recanati, François (2009): *Literal Meaning*. Cambridge: Cambridge University Press.
- Recanati, François (2010): *Truth-Conditional Pragmatics*. Oxford: Oxford University Press.
- Recanati, François (2012): *Mental Files*. Oxford: Oxford University Press.
- Recanati, François (2016): *Mental Files in Flux*. Oxford: Oxford University Press.

- Recanati, François (2022): “Mental Files”. In: Stalmaszczyk, Piotr (Ed.): *The Cambridge Handbook of the Philosophy of Language*. Cambridge: Cambridge University Press.
- Reimer, Marga and Michaelson, Eliot (2019): “Reference”. Zalta, Edward N. (Ed.): *Stanford Encyclopedia of Philosophy*. <<https://plato.stanford.edu/archives/sum2022/entries/reference/>>.
- Rosh, Eleanor (1973): “Natural Categories”. In: *Cognitive Psychology* 4. No. 3, 328–350.
- Rosh, Eleanor (1999): “Principles of Categorization”. In: Margolis, Eric and Laurence, Stephen (Eds.): *Concepts: Core Readings*. Cambridge: The MIT Press.
- Rosenthal, David (1986): *Consciousness and Mind*. Oxford: Clarendon Press.
- Bertrand Russell (1912, 2013): “On Denoting”. In: *Mind* 14. No. 4, 479–493.
- Russell, Bertrand (1912, 2013): *The Problems of Philosophy*. Eastford: Martino Fine Books.
- Russell, Bertrand (1918, 1994): “The Philosophy of Logical Atomism”. In: Russell, Bertrand: *Logic and Knowledge: Essays 1901–1950*. Robert C. Marsh (Ed.). London: Routledge.
- Russell, Bertrand (1919): *Introduction to Mathematical Philosophy*. London: George Allen & Urwin.
- Russell, Bertrand (1957): “Mr. Strawson on Referring”. In: *Mind* 66. No. 273, 387–389.
- Sainsbury, Mark (1979): *Russell*. London: Routledge.
- Salmon, Nathan U. (1982): *Reference and Essence*. Princeton: Princeton University Press.
- Salmon, Nathan U. (1998): “Nonexistence”. In: *Noûs* 32. No. 3, 277–310.
- Saussure, Ferdinand de (2016): *Course de Linguistique Générale*. Paris: Payot.
- Schroeter, Laura (2021): “Two-Dimensional Semantics”. In Zalta, Edward N. (Ed.): *Stanford Encyclopedia of Philosophy*. <<https://plato.stanford.edu/archives/fall2021/entries/two-dimensional-semantics/>>.
- Schwartz, Stephen P. (Ed.) (1977): *Naming, Necessity, and Natural Kinds*. Ithaca: Cornell University Press.
- Searle, John R. (1958): “Proper Names”. In: *Mind* 67, 166–173.
- Searle, John R. (1967): “Proper Names and Descriptions”. In: Edwards, Paul (Ed.): *The Encyclopedia of Philosophy*. Vol. VI. London: Macmillan Publishers.
- Searle, John R. (1969): *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.
- Searle, John R. (1983): *Intentionality*. Cambridge: Cambridge University Press.
- Searle, John R. (2004): *Mind: A Brief Introduction*. Oxford: Oxford University Press.
- Searle, John R. (2015): *Seeing Things as They Are*. Oxford: Oxford University Press.
- Simons, Peter (1994): “Particulars in Particular Clothing: Three Tropes Theories of Substance”. In: *Philosophy and Phenomenological Research* 54. No. 3, 553–555.
- Smith, Arthur D. (2005): “Natural Kind Terms: A New-Lockean Theory”. In *European Journal of Philosophy* 13. No. 1, 70–88.
- Soames, Scott (2002): *Beyond Rigidity: The Unfinished Semantic Agenda of Naming and Necessity*. Oxford: Oxford University Press.
- Soames, Scott (2003): *Philosophical Analysis in the Twentieth Century*. 2 Volumes. Princeton: Princeton University Press.
- Soames, Scott (2020): *Rethinking Language, Mind, and Meaning*. Princeton: Princeton University Press.
- Stalmaszczyk, Piotr (Ed.) (2022): *The Cambridge Handbook of the Philosophy of Language*. Cambridge: Cambridge University Press.
- Stalnaker Robert (1999): *Context and Content: Essays on Intentionality in Speech and Thought*. Oxford: Oxford University Press.
- Sterelny, Kim (1983). “Natural Kind Terms”. In *Pacific Philosophical Quarterly* 64. No. 2, 110–125.
- Strawson, Peter F. (1950): “On Referring”. In: *Mind* 59, 320–344.

- Strawson, Peter F. (1952): *Introduction to Logical Theory*. London: Methuen & Co.
- Strawson, Peter F. (1959, 1963): *Individuals: An Essay on Descriptive Metaphysics*. New York: Anchor Books.
- Strawson, Peter F. (1974): *Subject and Predicate in Logic and Grammar*. London: Methuen & Co.
- Stroll, Avrum (1996): *Sketches and Landscapes*. Cambridge: MIT Press.
- Textor, Max (2011): *Frege on Sense and Reference*. New York: Routledge.
- Tréhin, Jules (2006): *Urville*. London: Jessica Kingsley.
- Tugendhat, Ernst (1976): *Vorlesungen zur Einführung in die sprachanalytische Philosophie*. Frankfurt: Suhrkamp.
- Tugendhat, Ernst (1992): "Überlegungen zur Methode der Philosophie aus analytischen Sicht". In: Tugendhat, Ernst: *Philosophische Aufsätze*. Frankfurt: Suhrkamp.
- Tugendhat, Ernst and Wolf, Ursula (1983): *Logische-Semantik Propädeutik*. Stuttgart: Reclam.
- Urmson, James O. (1956): *Philosophical Analysis: Its Developments between the Two Wars*. Oxford: Oxford University Press.
- Williams, Donald (1953): "The Elements of Being". In: *Review of Metaphysics* 7. No. 2, 3 – 18 and 171 – 192.
- Williams, Donald (2018): *The Elements and Patterns of Being*. Anthony R. J. Fischer (Ed.). Oxford: Oxford University Press.
- Wilson, Edward O. (1998): *Consilience: The Unity of Knowledge*. New York: Vintage Books USA.
- Wittgenstein, Ludwig (1958): *The Blue and the Brown Books*. Oxford: Basil Blackwell.
- Wittgenstein, Ludwig (1984a): *Über Gewissheit*. Werkausgabe, Vol. VIII. Frankfurt: Suhrkamp.
- Wittgenstein, Ludwig (1984b): *Philosophische Untersuchungen*. Werkausgabe, Vol. I. Frankfurt: Suhrkamp.
- Wittgenstein, Ludwig (1984c): *Ludwig Wittgenstein und der Wiener Kreis*. Werkausgabe, Vol. III. Frankfurt: Suhrkamp.
- Wittgenstein, Ludwig (2001): *Wittgenstein's Lectures: Cambridge 1932 – 1935*. Alice Ambrose (Ed.). New York: Prometheus Books.
- Ziff, Paul (1960): *Semantic Analysis*. Ithaca: Cornell University Press.
- Ziman, John (1968): *Public Knowledge: Essay Concerning the Social Dimension of Science*. Cambridge: Cambridge University Press.

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