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## ANALYTIC TRUTHS AND KRIPKE'S SEMANTIC TURN

ZSÓFIA ZVOLENSZKY

zz207@nyu.edu

*MTA–ELTE Philosophy of Language Research Group, Budapest  
New York University*

“Like everything metaphysical  
the harmony between thought and  
reality is to be found in the grammar  
of language.”

Wittgenstein, Zettel 55

I. Behold analytic truths; for they can throw new light on demarcating issues metaphysical and semantic. With this way of putting the moral of my paper, the reader may easily get the impression that I am trying to revive some tenet of ‘the linguistic turn’. The moral is impeccably described—still, what I am after is a different revolution.

My aim is to get a better handle on the most prominent turn in the philosophy of language over the past half century, a contribution that continues to be widely misunderstood: Saul Kripke’s *Naming and Necessity* lectures in 1970. By ushering in rigid designation and metaphysical necessity, Kripke opened the floor for drawing metaphysical consequences from semantic theory. But things went doubly wrong from there. One presumed metaphysical consequence, essentialism—the doctrine (roughly) that objects can have essential properties independently of how they are described—turned out to be illusory (SALMON 1981, FINE 2005a). Worse, with all the attention misdirected on essentialism, one crucial metaphysical result (which I consider the prime innovation of Kripke’s) went unnoticed: that natural language semantics includes a fundamental expectation about the nature—metaphysics—of individuals, that they are modal complexes rather than world-time-bound. This latter result in turn yields hitherto neglected metaphysical consequences, albeit non-essentialist ones. To bring them out, the notion of analyticity turns out to be a useful heuristic.

II. Distinguishing between analytic and synthetic truths has a considerable history in the work of Leibniz, Locke, and Hume. But let our story begin in 1783 with Kant’s definitions: a synthetic judgment adds something new relative to what is already contained in the concept given by the subject, whereas an analytic judgment merely analyzes what is already included in the subject concept.<sup>1</sup> For example, it is a synthetic truth that bachelors have a lesser tendency for obesity than males in general, whereas it is an analytic truth that bachelors are unmarried. Occupying subject position in both examples is the concept for ‘bachelor’, which contains unmarriedness but says nothing about tendencies towards obesity.

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<sup>1</sup> Kant discusses analytic and synthetic *judgments* in both the *Critique of Pure Reason* and the *Prolegomena*. By contrast, the definitions given by Frege and subsequent representatives of the analytic tradition are about analytic *truths*, that is, *statements* that are analytically true.

A century later, in *The Foundations of Arithmetic* first published in 1884, Frege suggested that we base the notion of analytic truth on the more exact notion of logical truth (FREGE 1984):

$P$  is an analytic truth =<sub>df</sub>  
substituting synonyms for synonyms,  $P$  can be converted into a logical truth.

For example, starting from the statement ‘every bachelor is unmarried’, we can use the pair of synonyms ‘bachelor’–‘unmarried adult male’ to arrive at the logical truth that ‘every unmarried adult male is unmarried’. This way, the Fregean definition concurs with Kant’s in making ‘every bachelor is unmarried’ an analytic truth.

Twentieth century analytic philosophy adopted the Fregean definition (under Carnap’s guidance), subsequently criticized it (under Quine’s direction), and also refined it in the process (see for example CARNAP 1947; QUINE 1951). The definition under attack was one then considered commonplace:

$P$  is an analytic truth =<sub>df</sub>  $P$  is true by virtue of the meanings of its words alone.

Besides this non-epistemic variant, Quine also took to task a more plausible epistemic, understanding-based definition that was closer to Frege’s (see QUINE 1951 and BOGHOSSIAN 1996):

$P$  is an analytic truth =<sub>df</sub>  
understanding  $P$  is sufficient for recognizing that it is true.

The latter definition has it in common with its Fregean counterpart that both set up analytic truths as plausible objects of a priori knowledge—knowledge that is justified without appeal to empirical experience.<sup>2</sup> For logical truths and conceptual truths are prime instances of a priori knowledge; and the Fregean definition reduces knowledge of analytic truths to knowledge of logical truths and that of synonym pairs, while the epistemic definition turns knowledge of analytic truths into conceptual knowledge about meaning. So in both cases, all it takes to recognize the truth of an analytic statement is knowledge of meaning together with some a priori means of justification. Indeed, the notion of a priori will play a prominent supporting role in what follows.

III. The reader might be puzzled over the fact that analytic truths occupy center stage in this essay. On the one hand, ‘analytic’ has acquired a bad reputation in the wake of Quine’s convincing arguments against the analytic-synthetic distinction (QUINE 1951): what role is left for analytic truths when they cannot be separated from synthetic ones? On the other hand, in Kripke’s writings, ‘analytic’ is hardly ever mentioned. Within his “Identity and Necessity” lecture, he notes that besides the categories of ‘a priori’ and ‘necessary’, that of ‘analytic’ should also be distinguished, immediately adding that he wants to focus on the first two (KRIPKE 1971, 149–50). ‘Analytic’ is likewise pushed into

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<sup>2</sup> See Boghossian (1996, p. 302), and Harman’s more general definition (1996, 392): “A priori knowledge [is] knowledge that is not directly knowledge of experience and does not depend for its justification on knowledge of experience.” It is the second criterion about justification on which the metaphysical definition of analyticity above founders.

the background in the longer lecture volume *Naming and Necessity*. The word appears less than ten times, mostly mentioned in passing, in footnotes. Then how much could it be illuminating with respect to Kripke's work?

Still, I maintain that 'analytic' provides a useful tool for understanding Kripke's theory of meaning.

IV. Kripke does not even present a genuine theory of meaning, not even in its bare-bones outline! So the reader might object. Indeed, Kripke's focus is elsewhere: he emphasizes that the semantics of proper names should not be specified in terms of descriptions. He criticizes two description-based proposals: that the proper name 'Anna Regina Reuter' is synonymous with some definite description, for example, '(the woman who is) Immanuel Kant's mother'; and that the description fixes or determines the reference of the name. Kripke does not offer an alternative to replace the description theory (or theories). Instead, he contents himself with making two observations:

- (A) The reference of proper names is fixed by causal-historical chains (and not by descriptions): the name 'Anna Regina Reuter' refers to a certain woman because she is at the end of the chain of communication associated with the use of 'Anna Regina Reuter'.
- (B) Names are rigid designators. That is, they refer to the same individual in every possible situation (world) in which they refer at all.

Let us start with a quick look at (B). The name 'Anna Regina Reuter' (used to) stand for a certain woman. As a rigid designator, the name refers to her even in a counterfactual situation in which she stays in Bavaria along with her family, never visits Königsberg, does not meet Johann Georg Kant, Immanuel Kant's father. In this imagined scenario, Anna *herself* is the person who stays in Bavaria, etc., leading a life altogether different from her actual life. Unquestionably, the sentence below is about Anna, describing the counterfactual situation in question:

- (1) Anna Regina Reuter could have lived her entire life in Bavaria without ever meeting Johann Georg Kant.

Kripke used this intuitive—and to my mind, revolutionary—observation to motivate the idea that names are rigid designators.

Based on the foregoing, we have learned little about the meaning of names. (A) does not even mention meanings, addressing only the issue of what fixes the reference of names. (B) tells us that names are rigid designators, holding on to their reference in counterfactual situations. What (B) does not tell us is how, through *what kind of meaning*, names achieve this feat. It seems straightforward to *identify* the meaning of a name with its reference, the meaning of 'Anna Regina Reuter' with Anna herself. This is how proponents of Direct Reference read Kripke, thereby returning to a Millian theory of the meaning of proper names.<sup>3</sup> But indirectly, Kripke was distancing himself from this

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<sup>3</sup> The theory of Direct Reference was first proposed by David Kaplan, its prominent defenders include Scott Soames and Nathan Salmon (See KAPLAN 1977, 492–497; SALMON 1986; SOAMES 2002).

alternative by choosing to maintain the following distinction (while also purposely sustaining deliberate neutrality):

- (2) Königsberg = Kaliningrad  
That is, 'Königsberg is identical to Kaliningrad.'
- (3) Königsberg = Königsberg.

According to Kripke, (2) expresses an a posteriori, empirical truth, whereas (3) expresses an a priori, trivial one (KRIPKE 1971, 152–6; 1980, 101–105). We have good reason to expect that a difference in meaning is behind the fact that one statement is a priori, while the other, a posteriori. The only way to achieve this is by distinguishing the meanings of the proper names 'Kaliningrad' and 'Königsberg'.<sup>4</sup> But this option is unavailable to Direct Reference theorists, for whom the meaning of both names is one and the same Prussian turned Russian city.<sup>5</sup>

This way, two constraints on the meaning of a proper name emerge from Kripke's work: whatever that meaning is, it must insure rigid designation; and the meanings of coreferring names *can* differ (e.g. 'Kaliningrad' and 'Königsberg').

Four brief points of clarification are in order before we proceed: first, let us think of possible worlds as counterfactual situations (like the one mentioned previously, in which Anna Regina Reuter lives her life in Bavaria). Second, counterfactually (metaphysically<sup>6</sup>) necessary truths are those that are true in every world (in which the proper names involved refer at all). In this sense, every true identity statement involving a pair of proper names is necessarily true, including (2) above. The reason: given that proper names are rigid (B above), there are no counterfactual situations in which Königsberg exists but is not identical to Kaliningrad. For it is irrelevant that the two

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These Direct Reference theorists usually talk about the *semantic content* of proper names rather than their *meaning*. This prompts the question: could not meaning include components other than semantic content? This suggestion does not change the argument in Section IV. I will briefly explain why.

If I utter 'I am sleepy', the semantic content of 'I' is me. But 'I' also has a more general sort of meaning (one natural way to think of this is as a Kaplanian character, KAPLAN 1977): the word always refers to the speaker of the utterance. The crucial question is: can we drive a wedge between the meanings of 'Königsberg' and 'Kaliningrad' based on some difference in their general meaning? According to Direct Reference theorists, we cannot: in the case of proper names, their general meaning at best adds minimal extra stuff to their semantic content, and that definitely will not be enough to draw a difference between proper names that share the same semantic content (see for example SOAMES 2002, 55–6). They therefore think that for proper names, concerns about their meaning come down to their semantic content, because semantic content is supposed to be where all the semantic action is.

<sup>4</sup> Kripke doubts that this argument is ultimately effective in establishing that the meaning of 'Königsberg' and 'Kaliningrad' should be distinguished (KRIPKE 1979, 385–388). He also adds the following thought: „»Naming and Necessity« never asserted a substitutivity principle for epistemic contexts.” (KRIPKE 1979, 404n) Why is it important to stress the absence of such a principle? For otherwise Kripke could not maintain an epistemic difference between the sentences (2) and (3). If the principle of substitution were in force within epistemic contexts, then the aposteriority of (2) would lead to the aposteriority of (3), so we could not simultaneously maintain that (2) was a posteriori and (3) a priori.

<sup>5</sup> More precisely, Königsberg is a Prussian turned Polish turned Prussian turned German turned Soviet turned Russian city.

<sup>6</sup> Following Kripke, this is usually dubbed 'metaphysical necessity'. I prefer Burgess' more neutral term 'counterfactual necessity' in his remarkably keen interpretation of Kripke (BURGESS in press; see also BURGESS 1998). It is due to the detour into essentialism (discussed in Section VIII) that I opt for this latter terminology and find 'metaphysical necessity' a misleading label.

names could have been assigned so ‘Kaliningrad’ and ‘Königsberg’ became names of two distinct cities. This is still not a situation in which Kaliningrad (as we actually use the name) is distinct from Königsberg (as we actually use that name). Provided we fix the actual usage, in *every* counterfactual situation in which either name refer at all, they corefer, (given (B) so (2) is true (see KRIPKE 1971, 150–157; 1980, 102–4).

Notice that I have been qualifying the claim that (2) is true in every counterfactual situation—in *which either ‘Königsberg’ or ‘Kaliningrad’ refers at all*. This secures neutrality with respect to two choices concerning Königsberg-less situations (surely, there are counterfactual situations in which the city does not exist). This brings us to the third point of clarification: do the rigidly designating names ‘Königsberg’ and ‘Kaliningrad’ refer in such situations? An affirmative answer means we consider names obstinately rigid, a negative answer means we take them to be merely persistently rigid (see SALMON 1981, 32–41). Fourth, for (2) to count as a necessary truth, do we need it to be true in all situations (including Königsberg-less ones), or is it enough if (2) is never false? One may straightforwardly hold on to the first (standard) alternative if one thinks names are obstinately rigid (as does SALMON 1981; and in effect FINE 2005b). Otherwise, the second alternative allows one to maintain (along with PRIOR 1957) that (2) is a necessary truth, Königsberg-less situations notwithstanding—for it is necessary in the sense that in no counterfactual situation does it come out false. Kripke chooses to leave open the choice between obstinacy/persistence and always-true/never-false, hence the qualification restricting the definition to worlds in which the reference of names exist (KRIPKE 1963, 65–66; 1971, 145–6; 1980, 48–9).

V. Because Kripke does not offer a full-fledged theory of meaning, it is well to check what kinds of commitments arise from his semantic observations. This is where we can gain clarity by examining what count as analytic truths given the little that Kripke does say about meaning (that it insures rigid designation and the meanings of coreferring names *can* differ). Accordingly, I will call Kripke-analytic, or for short, *analytik* those statements whose truth can be recognized solely on analytic grounds taken together with Kripke’s considerations about meaning.

Is this not a dubious extension of the notion of analyticity? – might the reader object. Recall (From Section II) that on an epistemic construal, analytic truths were supposed to be instances of a priori knowledge. But *analytik* truths seem like shaky candidates for priori knowledge, because opponents of rigid designation do not even recognize them as true, let alone a priori knowable. This is no objection as long as we recognize that Kripke’s semantic observations, if true at all, are backed by a priori justification, being products of a priori philosophical analysis and not of scientific investigation.<sup>7</sup> This is precisely the sense of apriority based on which Peano’s fifth postulate about parallels is a priori true/false, even though it is affirmed by Euclidean

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<sup>7</sup> For a parallel discussion about the principles of essentialism being a priori knowable, see SALMON (1981, 253–64). Essentialism and rigid designation share an important feature: both yield consequences about what is necessarily the case (one about necessary coreference, the other about essential properties—which are possessed necessarily). Since Kant, philosophers (including Salmon) tended to hold that we cannot get knowledge concerning necessity based on empirical grounds, making it “arguable that the source of metaphysical necessity is always fundamentally a priori” (PEACOCKE 2005, 742, see also his 1999).

geometry but denied by its non-Euclidean counterparts.<sup>8</sup> Nonetheless, if true at all, its truth is a priori knowable, and if false at all, its falsity is likewise a priori knowable. In addition to being a priori knowable, analytik truths are also a stripe of analytic truth in that they concern meaning-related considerations.

Based on some remarks Kripke made on the side in *Naming and Necessity*, we can already effectively delineate the range of analytik truths. Kripke discusses at length the categories of ‘a priori’ and ‘necessary’, but treats ‘analytic’ as a third fiddler, relating it to the other two notions by means of a stipulation:

... let’s just make it a matter of stipulation that an analytic statement is, in some sense, true by virtue of its meaning and true in all possible worlds by virtue of its meaning. Then something which is analytically true will be both necessary and a priori. (KRIPKE 1980, 39.)<sup>9</sup>

Kripke therefore commits himself to the following:

(K) If a statement *P* is analytik, then it is necessary and a priori.

We can reword (K) in terms of two clauses:

(K1) If *P* is not necessary, then *P* is not analytik.

(K2) If *P* is not a priori, then *P* is not analytik.

Both are examined in turn.

According to (K1), statements that are only contingently true (they happen to be true without being necessarily true) turn out to be non-analytik. (4)–(6) lists some examples of contingent truths:

(4) The standard kilogram in Sèvres (let us call it ‘Kyle’) weighs one kilogram.<sup>10</sup>

(5) I am here.

(6) Bucephalus had a sizable head (when the horse got his name).

Let us consider why these are contingent. It could have easily happened that a piece broke off from Kyle, leaving it with a weight of 95 dekagrams. I happen to be in downtown Budapest when I utter (5), but I could have been in Vienna at that very moment.<sup>11</sup> In the absence of adequate nutrition, Bucaphalus—whose head was like an ox’s, as his name suggests—could have grown up to be a frail horse with a diminutive head.

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<sup>8</sup> Playfair’s axiom provides a simpler formulation of Euclid’s fifth postulate: For arbitrary line *L*, exactly one line parallel to *L* can be drawn through any point outside *L*.

<sup>9</sup> Kripke returns to this stipulative definition twice (KRIPKE 1980, 56n; 122), hardly saying anything more about ‘analytic’.

<sup>10</sup> The standard kilogram in Sèvres is special: to this day, this platinum-iridium cylinder continues to determine the unit mass for the kilogram. By contrast, the unit length for the meter is no longer tied to a certain rod. (‘Cylinder’ in Greek is ‘kylindros’, hence the name ‘Kyle’.)

<sup>11</sup> Kaplan (1977) does not agree with this. Nonetheless, it is clear that maintaining (K) prevents Kripke from regarding (5) as an analytic truth, even though it is quite plausible to think that the truth of (2) follows from, or can be understood based on the meaning of its words alone.

According to (K2), every a posteriori (that is, empirical) statement is non-analytik; cases in point are (2), (7) and (8):

- (2) Königsberg = Kaliningrad.
- (7) Kant's mother was Anna Regina Reuter.
- (8) Gold is a yellow metal.

(2) and (7) are clearly a posteriori; for their truth may allude competent speakers of English. (8) is more controversial. It shows how much Kripke's conception of 'analytic' and 'a priori' has diverged from Kant's: in the *Prolegomena*,<sup>12</sup> (8) is mentioned as an example of an *a priori analytic* truth, whereas for Kripke, it is an *a posteriori synthetic* truth. Why a posteriori? For him, the finding that gold is a yellow metal constitutes empirical discovery. We can discern this if we point out: (8) is empirically *verifiable* and *falsifiable*. To see this, we need only recognize the following hypothetical possibility: studies could have shown that the gold surrounding us has thus far seemed yellow to us because of the emission of specific gases. Due to changes in atmospheric conditions, however, after a while, gold samples would appear blue to us, say. In this scenario, we would, without a doubt discover something surprising *about gold*: that under certain circumstances, it is not yellow, or does not appear to be yellow (for present purposes, this makes no difference). It would not occur to us to conclude that what we had thought was gold is not gold after all (for more details, see KRIPKE 1980, 117–19). In this hypothetical situation, empirical findings would falsify (8). It is likewise an empirical result when we ascertain its opposite, that gold is in fact yellow.

(K1) and (K2) can be applied in tandem to any statement that is simultaneously contingent *and* a posteriori. Perhaps some of the above statements are like that. For the sake of simplicity, let us consider an uncontroversial example:

- (9) Kant was a bachelor.

Each of (K1) and (K2) individually yield the verdict that (9) is synthetic.

Having illustrated the definitions, let us return to (2), which is not only a posteriori, but is also necessary based on the arguments at the end of Section III. Using the customary '□' notation for counterfactual (metaphysical) necessity, we can say that (2□) is an a posteriori truth:

- (2□) □ Königsberg = Kaliningrad.

VI. The sight of an a posteriori necessary truth seems baffling at first glance: an a posteriori truth constitutes empirical discovery, but how could we discern necessities of any sort based on experience? And how do we get from considerations about meaning to an a posteriori outcome?

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<sup>12</sup> In the *Prolegomena*, Kant writes that "... to know that gold is a yellow metal [...] all I need is to analyse my concept of gold, which contains the concept of being a yellow metal." (KANT 2005, 8; Preamble 2b.) KRIPKE objects to this: (8) is empirically falsifiable—we can discover about gold that under certain circumstances it is not yellow after all—so yellowness cannot be included within the concept because what would be the status of that yellowness part, should gold fail to be yellow? Chalmers (1997) has tried to capture the Kantian as well as the Kripkean intuitions within his two dimensional framework.

On second glance, we realize just how obvious  $(2\Box)$  is once we bring in a statement that is an analytic truth as well as an a priori and necessary one:<sup>13</sup>

$(2\rightarrow)$  Königsberg = Kaliningrad  $\rightarrow$ <sup>14</sup>  $\Box$  Königsberg = Kaliningrad  
That is: ‘If Königsberg and Kaliningrad are identical, then they are necessarily identical.’

$(2\rightarrow)$  is analytic: based on Kripkean considerations about the meanings of proper names, we can recognize that  $(2\rightarrow)$  is true. It is, after all, part of what names mean that they are rigid designators; and an analogue of  $(2\rightarrow)$  would hold for any pair of rigid designators.<sup>15</sup> Put differently, we could ascertain the truth of  $(2\rightarrow)$  even if all we knew about the names ‘Königsberg’ and ‘Kaliningrad’ was that they purported to refer to individuals. (We would have to know, however, that the names in question were *not* brand names.)<sup>16</sup> For we would be in a position to recognize that whatever these names purported to pick out—be it a city, a statue or a person—once we fix the actual usage,  $(2\rightarrow)$  is guaranteed to be true.

Even more important it is that we recognize: there is absolutely nothing unexpected about the a posteriori  $(2\Box)$ . It is the consequent of the a priori  $(2\rightarrow)$  and we arrive at it by a simple application of *modus ponens*. Because the antecedent of  $(2\rightarrow)$  is synthetic a posteriori (recall that the identity of Königsberg and Kaliningrad is an empirical, discoverable fact),  $(2\Box)$  “inherits” both features. This is how, based on Kripke’s semantic considerations together with the truth of the antecedent,  $(2\rightarrow)$  serves up an a posteriori, synthetic and necessary truth (see SALMON 1981, 80).

VII. The foregoing has not yet shown us much. Just because some necessary truths like  $(2\Box)$  turn out to be metaphysically meager, does not mean necessary truths—more generally, claims about what is necessary or possible, that is, *modal claims*—of a beefier sort cannot be gotten from grounds analytic. Maybe we can pull some metaphysics more spectacular than  $(2\Box)$  out of a semantic hat after all. My response is: indeed, we can; because *Kripke’s semantic considerations build in a bit of metaphysics. It is that bit we can pull out, no more. And that bit does not include essentialism. What it does include, however, is a key Kripkean detail whose impact has gone unappreciated.*

The remainder of this essay will outline the modal claims we *do not* get based on analytic truths: essentialism (Section VIII); distill an analyticity-based criterion to set apart modal truths that we *do* get (Sections IX), mention some modal claims whose truth

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<sup>13</sup> Of course, based on (K),  $(2\rightarrow)$  as an analytic statement cannot but be a priori and necessary.

<sup>14</sup> To keep the notation transparent, for ‘if... then...’, I use the connective ‘...  $\rightarrow$  ...’, understood as the common material implication.

<sup>15</sup> Even though Kripke is in complete agreement with this, he is hardly ever explicit. (But see KRIPKE 1971, 140–1; 1980, 109.) Contra Salmon (1981, 80), neither is Donnellan (1973) explicit on this point.

<sup>16</sup> I have purposely excluded brand names (like ‘water’, ‘tiger’, and ‘gold’). These do not pick out individuals but resemble natural kind terms (like ‘water’, ‘tiger’, and ‘gold’). With respect to Kripke’s remarks about proper names, natural kind terms raise very interesting issues and parallels. But the proposals Kripke put forth for natural kind terms and theoretical terms are much too hasty, and clearing them up would take a separate paper. I think that Kripke was right with respect to proper names and did not realize that many of his points do not generalize to other terms, natural kind terms in particular (for a similar view, see SOAMES 2002).

is not and perhaps cannot be decided in the first place (Section X); highlight on this basis a crucial lesson from Kripke: that modally complex individuals are presupposed as the “measurement units” of proper name reference, and close with some remarks about the impact of these unit individuals on the semantics of modal discourse and the associated possible worlds framework (Sections XI and XII).

VIII. Essentialism, a doctrine against which Quine (1951, among others) warned has been variously defined; our focus will be on this formulation: some objects possess essential (modal) properties independently of how they are described. In this sense, however, (2□) is committed to essentialism (albeit of a trivial sort), because according to it, the city variously called Königsberg and Kaliningrad has some modal properties (SALMON 1981, 82–3): being necessarily self-identical, being necessarily identical to Königsberg, and being necessarily identical of Kaliningrad. In addition, the fact that the latter two (unlike the first) cannot be known a posteriori, makes these modal properties seem striking, substantive. We can derive both modal properties directly from Kripkean semantic considerations (together with the non-modal empirical fact that that Kaliningrad and Königsberg are identical). Further, rigid designation also commits us to modal properties of another sort: being possibly so-and-so (SALMON 1981 84n). But none of these properties have committed us yet to a non-trivial form of essentialism.

Consider however (7□), based on (7):

(7□) □ (Kant’s mother was Anna Regina Reuter)<sup>17</sup>

This claims that Immanuel Kant could not have failed to have the (biological) mother he in fact had—something Kripke finds exceedingly plausible (1980, 110–113). The resemblance between (2□) and (7□)—both a posteriori and non-analytik—has created the impression that maybe the latter, substantive kind of essentialism also arose from rigid designation—a metaphysical commitment magically materializing based on analytik grounds.<sup>18</sup> It is very easy to see why that impression is false if we home in on (7→):

(7→) Kant’s mother was ARR → □ Kant’s mother was ARR

That is: ‘If Kant’s mother was ARR, then no-one other than her could have been his mother.’

As (2→) was recognized to be in the background of the a posteriori (2□), (7→) is behind the a posteriori (7□). But there is one crucial difference: even if one thinks (as Kripke does) that (7□) is a priori, it would be bizarre and implausible to the extreme to consider

<sup>17</sup> Let ‘Kant’s mother’ be short for ‘Kant’s biological mother’ (to exclude the possibility of gestational surrogate mothers and adoptive mothers counting as mothers here). We have at hand a definite description, which could suggest an analysis of (7) and (7□) in terms of an identity sign flanked by a definite description and a proper name. My arguments are independent of how we handle definite descriptions and arise far more generally—even with an awkward-sounding wording of (7□) as ‘Anna Regina Reuter mothered Kant’. A more natural-sounding version without definite descriptions would serve just as well: ‘ARR provided half of Kant’s genetic material including his X chromosome.’

<sup>18</sup> Salmon’s (1981) book’s central aim is to dispel this impression. According to him, even though Kripke did not think non-trivial essentialism could be *derived* from rigid designation, many philosophers, including Donnellan, and Putnam thought otherwise.

it analytik. By contrast, it was the analytik nature of  $(2 \rightarrow)$  that had explained how we get from rigid designation and no further metaphysical assumptions to a posteriori necessary claims like  $(2 \square)$ . By contrast,  $(7 \rightarrow)$  involves a further metaphysical assumption. The foregoing highlights what crucially sets apart the case of  $(2 \square)$  and  $(7 \square)$ , and why (non-trivial) essentialism cannot be derived from rigid designation, a point convincingly argued by Salmon (1981) and Fine (2005a, 22–8).

IX. We thus have a diagnostic procedure in the making—one that promises to set apart modal claims that follow from analytik grounds from others that do not: only when we have available an analytik conditional linking uncontroversial empirical claims (if any) as antecedents with the modal claim in question as consequent, can we derive the modal claim on analytik grounds. Let us follow this lead and see what it shows about proper names.

Consider the following five modal claims and the conditionals associated with them:

(4 $\diamond$ )  $\diamond$  Kyle weighs 99 dekagrams<sup>19</sup>

(4 $\rightarrow$ ) Kyle weighs 1 kilogram  $\rightarrow$   $\diamond$  Kyle weighs 99 dekagrams

That is, ‘Given that Kyle (the standard kilogram) weighs exactly one kilogram, it (still) could have been one dekagram lighter’

(6 $\diamond$ )  $\diamond$  Bucephalus had a head the size of a sheep’s

(6 $\rightarrow$ ) Bucephalus had a head the size of an ox’s  $\rightarrow$   $\diamond$  Bucephalus had a head the size of a sheep’s

That is, ‘Given that Bucephalus had an ox-scale head, he (still) could have had a sheep-scale head’

(9 $\diamond$ )  $\diamond$  Kant was married

(9 $\rightarrow$ ) Kant was a bachelor  $\rightarrow$   $\diamond$  Kant got married

That is, ‘Given that Kant was in fact a bachelor, he might (still) have gotten married.’

(10 $\diamond$ )  $\diamond$  Kaliningrad is Lithuanian

(10 $\rightarrow$ ) Kaliningrad is a Russian  $\rightarrow$   $\diamond$  Kaliningrad is Lithuanian

That is, ‘Given that Kaliningrad is a Russian city, it still could have been another nationality: (annexed by) Lithuania’

(11 $\square$ )  $\square$  Kant is human

(10 $\rightarrow$ ) Kant is human  $\rightarrow$   $\square$  Kant is human

That is, ‘If Kant is (was) human, then he is (was) necessarily human.’

(4 $\diamond$ ), (6 $\diamond$ ), (9 $\diamond$ ), (10 $\diamond$ ) and (11 $\square$ ) are quite clearly true.<sup>20</sup> But that is not the issue that concerns us here. Instead, we need to ask: are the corresponding conditionals analytik or not? Here, besides considerations about how proper names work according to Kripke, other

<sup>19</sup> ‘ $\diamond$ ’ is the common operator ‘it is possible that ...’, which can be defined in terms of ‘ $\square$ ’ as ‘ $\sim \square \sim$ ’.

<sup>20</sup> Van Inwagen (1998) provides insightful considerations about modal claims concerning what is possible.

considerations about meaning—among other things, the meaning of ‘weigh’, ‘head’, ‘sheep’, ‘bachelor’, ‘married’, ‘Russian’, ‘Lithuanian’, ‘human’—has to be taken into account to discern if the combined semantic considerations provide ground for recognizing the conditionals as true.

My take is as follows: we get a negative answer in the case of (4→) and (6→), just as we did in the case of (7→), about Anna Regina Reuter necessarily being Kant’s mother. Considerations about meaning just won’t tell us that an object could carry on existing with a weight slightly less than its actual weight. They will likewise withhold a verdict on the possibility of head size variation in the case of Bucephalus.

By contrast, sufficient conceptual detail is provided by the meanings of ‘married’ versus ‘bachelor’, ‘Russian’ versus ‘Lithuanian’ (and indeed, for any pair of nationalities, even ‘Russian’ versus ‘Thai’), and a sortal predicate like ‘human’,<sup>21</sup> for us to discern—based on considerations about meaning only—that (9→), (10→) and (11→) are true. They are therefore not only a priori knowable but also analytik. They can therefore be derived based solely on (Kripkean) semantic considerations. These analytik conditionals and their respective consequents tell us something quite interesting and substantive about the workings of proper names. Before turning to that point, let us briefly consider cases in which the truth values of modal claims elude us.

X. At least we are fairly confident in the truth of modal claims like (4◇), (6◇), (9◇) and (10◇), even if the former two cannot be derived on grounds analytik. By contrast, in a host of cases, there is disagreement about whether a certain individual possesses a certain modal property, and sometimes we cannot even imagine that a unequivocal answer could be reached. Here are a handful of examples:

- *Extreme variation in size.* Might Bucephalus’ have had a head the size of a squirrel’s? What range of possible head sizes can we attribute to Bucephalus? A mammoth’s head size probably lies outside of that range, as does an ant’s. Is a squirrel’s head size within range?
- *Species membership.* Was Bucephalus necessarily a horse or might he have been a mule?  
The trick question is: suppose that scientists figured out a genetic manipulation technique that would turn Bucephalus’ zygote into an embryo of a mule; would the mule born from that embryo be Bucephalus?
- *Central geographic feature.* Is Königsberg necessarily a port, or might it have been landlocked?  
Imagine that due to tectonic movements millions of years ago, the Vistula Lagoon area adjacent to Königsberg became part of the mainland, closing off direct access to the Baltic Sea. Could the city that would have then been founded at the same latitude and longitude have been Königsberg? Or is it necessarily a different city, however similar it might be to the actual Königsberg in terms of its history and culture?
- *Non-minor time variation.* Could Kant have been born in the Middle Ages?  
Here, we can bring in speculations about time travel and about the necessity of origin.

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<sup>21</sup> About the special status of sortal predicates, see Almog (1991) and Fine (2005b).

The absence of unequivocal answers may prompt misgivings about the system of possible/counterfactual worlds, about the nature of individuals, and about identifying individuals across possible worlds. Do we have to confront these complex metaphysical questions in the end? No, we do not.

XI. The solution: all that needs figuring out is what certain statements about necessity and possibility *mean*. There is no need to fret if we do not know or cannot know whether those statements are true or false. We know with absolute certainty what the statements ‘Kant might have gotten married’ and ‘Kant might have been born in the Middle Ages’ say, *what their meaning consists in*: they claim about Kant himself that his life could have gone differently than it in fact did. This confidence is not in any way weakened by the fact that we are not in a position to decide about the second statement whether it is true or false.

This brings us to a truly exciting insight: proper names—‘Kant’, ‘Königsberg’—ensure that we can talk about individuals—people, places—in counterfactual situations. From the perspective of semantics, this is a simple operation.<sup>22</sup> A name presupposes the kind of reference to which/whom we can attribute complex features simply, without any metaphysical maneuvering: to Kant, the individual, we can attribute that *necessarily* his mother was Anna Regina Reuter, that he *might have* chosen to marry, that he *might have* been born ten seconds earlier. *The reason why making sense of talk about counterfactual situations is so effortless and easy is because semantics ensures the right units—modally complex individuals—to make things easy.* In this insight inheres the genuine Kripkean innovation—that proper names presuppose modally complex individuals as their referents—which Kripke himself tried to characterize imperfectly and misleadingly by saying that proper names are rigid designators.<sup>23</sup>

With modally complex individuals on board, we can also discern something important about the possible worlds framework involved in representing modal claims. Individuals enjoy a modal unity that is a given.<sup>24</sup> The framework of possible worlds conforms to these individuals. One world has Kant (himself) married; another someone who is not Kant but resembles him; and, inevitably, we are left with unanswered, often unanswerable questions: is there a possible world featuring Bucephalus as a mule, or as a horse donning a head the size of a squirrel’s? We cannot tell if there are such worlds, nor do we need to be in a position to tell. To some extent, a priori metaphysical inquiry and empirical discoveries might direct us towards an answer; but we cannot count on an

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<sup>22</sup> Cf. Salmon “... it is not a rich semantical structure that makes for the intensional monotony of a proper name, but the absence of semantical structure altogether.” (Salmon 1981, 33n)

<sup>23</sup> The case for modally complex individuals is modelled on a parallel case made for individuals being temporally complex (extended). Consider an utterance of ‘Kant was a precocious child’ uttered during Kant’s adulthood (in 1770, say), which says about the adult Kant that *he* used to be a precocious child. See Kaplan 1977 and Salmon 1981 for arguments in favor of the related point that proper names are obstinately (and not merely persistently) rigid.

<sup>24</sup> Cf. Fine’s comment about transcendental truths, which are true regardless of the circumstances. Transcendental truths include a claim that Kant is self-identical, and that his life might have gone differently than it actually did. “We might think of the possible circumstances as being what is subject to variation as we go from one possible world to another; and we might think of the transcendental facts as constituting the invariable framework within which the variation takes place (FINE 2005b, 325–6).” Individuals according to Kripke are part of an invariable framework of this sort; this is compatible (on my interpretation as well as Fine’s view) with the fact that these individuals sustain changes over time and across possible circumstances.

answer from either direction; and we do not need it to legitimate or complete Kripke's semantics of proper names. That semantics is already complete, notwithstanding the fact that it leaves us directionless as to whether there are possible worlds featuring Bucephalus as a mule.

XII. Admittedly, introducing the notion of metaphysical necessity constituted a major turn in the philosophy of language. But it was a mistake to expect that a substantive metaphysical commitment like essentialism would ensue. Meanwhile, philosophers have tended to forget that Kripkean semantics has a bit of metaphysics packed in right at the start: the semantic expectation that individuals are modally complex.

Granted, there are truths about counterfactual scenarios—like 'Königsberg and Kaliningrad are necessarily identical' and 'Kant might have gotten married'—but they can be derived on analytic grounds only if they are backed by analytic truths we can discern by reflecting on how proper names work: 'If Königsberg and Kaliningrad are identical then they are necessarily identical'; 'Kant might as well have gotten married even if he was in fact a bachelor'. Is there some metaphysics built into these analytic truths? Certainly. Proper names presuppose as their reference far more complex individuals than someone's (say, Kant's) specific course of life. The reference of the name 'Immanuel Kant' is an individual who could have been different, whose life could have gone differently—an individual who is unified across possible situations.<sup>25</sup> Semantics furnishes this sort of individual as the "unit of measurement" for proper name reference. With these units, we have packed some metaphysics for the road. Nonetheless, analytic truths are there to remind us that when we look through our luggage, we will not find more than what we had put in. Fiction aside, this is the way of things, including things metaphysical.<sup>26</sup>

## REFERENCES

- ALMOG, Joseph 1986. Naming without Necessity. *Journal of Philosophy* 83, 210–42.  
ALMOG, Joseph 1991. The What and the How. *Journal of Philosophy* 88, 225–44.  
BOGHOSSIAN, Paul, 1996. Analyticity Reconsidered. *Noûs* 30:3, 360–91.  
BURGESS, John 1998. Quinus ab Omni Nævo Vindicatus. In *Meaning and Reference: Canadian Journal of Philosophy Supplement 23*, Ed.: A. A. Kazmi. 25–65.

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<sup>25</sup> Cf. Almog: "...modal individualism [is] the doctrine that it is meaningful to attribute to individuals, by themselves, modal properties (in the possible-worlds framework, modal individualism emerges as the doctrine that the transworld identity of individuals is *given*)" (ALMOG 1986, 226; emphasis in original). This gives an effective alternative terminology for formulating what I think Kripke's monumental insight was: that *the semantics of proper names presupposes modal individualism* (or de re modality, see QUINE 1953). One unfortunate aspect of Almog's intriguing paper is that he spells out the option of modal individualism with such clarity and then goes on to dismiss the emerging conception of individuals in his interpretation of Kripke.

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- BURGESS, John (in press). Saul Kripke, *Naming and Necessity*. In *Central Works of Philosophy*. Vol. 5. Ed.: John Shand. London: Acumen Publishing.
- CARNAP, Rudolf 1947, *Meaning and Necessity*. Chicago: Chicago University Press.
- CHALMERS, David J. 1997. *The Conscious Mind*. Oxford: Oxford University Press.
- DONNELLAN, Keith S. 1973. Substances as Individuals. Abstract of Donnellan. *Journal of Philosophy* 70, 711–2.
- FINE, Kit 2005a. Reference, Essence, and Identity. In *Modality and Tense*. Oxford: Oxford University Press, 2005, 19–39.
- FINE, Kit 2005b. Necessity and Non-Existence. In *Modality and Tense*. Oxford: Oxford University Press, 2005, 321–54.
- FREGE, Gottlob 1984. *The Foundations of Arithmetic*. Evanston, Illinois: Northwestern University Press.
- HARMAN, Gilbert 1996. Analyticity Regained? *Noûs* 30:3, 392–400.
- KAPLAN, David 1977. Demonstratives. In *Themes from Kaplan*. Eds.: Joseph Almog, John Perry and Howard Wettstein. Oxford: Oxford University Press, 1989, 481–563.
- KANT, Immanuel 2005. *Prolegomena to Any Future Metaphysic that can Present Itself as a Science*. translation prepared by Jonathan F. Bennett at [www.earlymoderntexts.com](http://www.earlymoderntexts.com).
- KANT, Immanuel 1965. *Critique of Pure Reason*. Trans. Norman Kemp Smith. New York: St Martin's Press.
- KRIPKE, Saul 1963. Semantical Considerations on Modal Logic. *Acta Philosophica Fennica* 16, 83–94.
- KRIPKE, Saul 1971. Identity and Necessity. In *Identity and Individuation*. Ed.: Milton K. Munitz. New York, New York University Press, 135–64.
- KRIPKE, Saul 1979. A Puzzle about Belief. In *Philosophy of Language*. 3<sup>rd</sup> Edition. Ed: A. P. Martinich. Oxford: Oxford University Press, 1996, 382–409.
- KRIPKE, Saul 1980 (1972). *Naming and Necessity*. Cambridge, Massachusetts: Harvard University Press.
- LEWIS, David 1986. *The Plurality of Worlds*. Oxford: Basil Blackwell.
- LEWIS, David 1973. *Counterfactuals*. Cambridge, Massachusetts: Harvard University Press.
- PEACOCKE, Christopher 1999. *Being Known*. Oxford: Clarendon Press.
- PEACOCKE, Christopher 2005. The A Priori. In *Oxford Handbook of Contemporary Analytic Philosophy*. Ed.: Frank Jackson and Michael Smith. Oxford: Oxford University Press, 739–763.
- PRIOR, Arthur 1957. *Time and Modality*. Oxford: Clarendon Press.
- QUINE, Willard Van Orman 1951. Reference and Modality. In *From a Logical Point of View*. 2<sup>nd</sup> Edition. New York: Harper & Row, 1961, 139–59.
- QUINE, Willard Van Orman 1953. The Two Dogmas of Empiricism. In *From a Logical Point of View*. 2<sup>nd</sup> Edition. New York: Harper & Row, 1961, 20–46.
- SALMON, Nathan 1981. *Reference and Essence*. Princeton, New Jersey: Princeton University Press.
- SALMON, Nathan 1986. *A Puzzle about Belief*. Cambridge, Massachusetts: MIT Press.
- SOAMES, Scott 2002. *Beyond Rigidity: The Unfinished Semantic Agenda of Naming and Necessity*. Oxford: Oxford University Press.
- VAN INWAGEN, Peter 1998. Modal Epistemology. *Philosophical Studies* 92, 67–84.