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NAMING WITH NECESSITY

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I. INTRODUCTION

Despite all the attention philosophers have been paying to *Naming and Necessity*, they have not realized just how apt the title is: naming and necessity are intimately connected, even more intimately then Saul Kripke has led us to believe. The conception of necessity clarified by Kripke—metaphysical or counterfactual necessity—helps us understand what our ordinary practice of using proper names is about; and proper-name usage in turn helps us understand what counterfactual situations (possible worlds) are about. My aim is to propose yet another picture: (i) inherent in proper-name usage is the expectation that names refer to *modally robust individuals*:[1] individuals that can sustain modal predications like 'is necessarily human', or 'might have discovered Goldbach's conjecture'; (ii) these modally robust individuals are the fundamental building blocks on the basis of which possible worlds should be conceived in a modal semantics intended to mirror the conceptual apparatus behind ordinary modal talk.

In Part II, I describe (i) and (ii), what I call the individual-driven picture. In Part III, I relate this picture to others. The pre-Kripkean pictures of individuals and modality were markedly different. First, there was the conception of modality as logical or analytic necessity. Second, there was the conception of possible worlds needed for physical necessity, giving rise to issues about the transworld identification of individuals. Third came Kripke's proposal that proper names are rigid designators. Fourth, in the wake of Kripke's *Naming and Necessity* lectures, David Kaplan suggested that proper names were directly referential expressions whose propositional contribution was their referent. Sections 1–4 summarize each of these four milestones. Kripke's view was close to the individual-driven picture. Kaplan's was even closer—when he was *not* talking about propositions and what proper names contribute to them. But subsequent proponents of direct reference theory and the related view of Millianism picked up on the propositions framework. They felt that the semantics of proper names could and should steer clear of metaphysical considerations about modality. Section 5 describes one striking example of this: Joseph Almog found the connections between naming and necessity developed by Kripke "much too intimate", and proceeded to develop a "different, substantively different, picture of naming"—naming without necessity, as he called it (Almog 1986, 210). I will argue that we should put the necessity back into naming. By rediscovering the individual-driven picture, we can glean crucial insights about both naming and necessity.

[1] This paper has benefited from Kit Fine`s incisive comments. Thanks are due to him as well as to Stephen Schiffer, both of whom gave extensive comments on an ancestor of this paper 'Analyticity and Kripke's Semantic Turn'. They gently convinced me to take an altogether different tack and frame things in terms of what I now call modally robust individuals and the individual-driven picture. But these aren't my terms, at least not the first one—it is Shamik Dasgupta's label, suggested to me by Kit Fine.

II. THE INDIVIDUAL-DRIVEN PICTURE

That we interpret modal claims like 'Goldbach might have eschewed mathematics altogether' in a breeze is a fact that goes largely unnoticed. We should notice it though, for the ease of interpretation allows us to home in on the conceptual building blocks associated with proper name use (and more generally, with so called de re modal claims): modally robust individuals (Section 1). This thesis of modally robust individuals *does* mean we can construe possible worlds—counterfactual situations—in terms of modally robust individuals, yielding a hitherto unrecognized conception of possible worlds; this is explored in Section 5. But before getting there, it is well to clarify a couple of things the thesis does *not* mean. It does not mean that every proper name refers to a modally robust individual. Instead only what I will call *anchored* proper names do—for example, 'Jack the Ripper', despite being part of the English vocabulary, is not anchored because it has not been figured out who Jack was (Section 2). Nor does the thesis mean that every individual is modally robust: an unspecified counterfactual sister of mine, for example, is not (Section 3). Indeed, an attempt to introduce a proper name for such an individual would be thwarted; this situation is worse than the fate of 'Jack the Ripper', which has been introduced into English (and has become a *common currency name*, in Kaplan's terminology) but is awaiting anchoring. In addition, the thesis does not mean that taking modal talk at face value would require us to give up on *actualism*—according to which only actual individuals exist, merely possible ones, like my unspecified, merely possible sister, do not (Section 4).

1. *Interpreting modal claims: de dicto and de re*

Goldbach's conjecture was discovered by a man. But the course of history could have gone otherwise: the discovery might have been made by a woman instead. Modal discourse concerns what *might* or *must* be the case (represented by the sentence operators ◊ and □, respectively) as opposed to what *is* the case. We have just encountered a modal claim ('GC' is short for 'Goldbach's conjecture'):

(1) It might have been that: a woman discovered GC.
Possibly: a woman discovered GC
◊ the discoverer of GC is a woman

(1) is readily interpreted: it concerns a counterfactual situation, an unrealized circumstance in which a woman was the discoverer of the hypothesis that every even number greater than 2 is the sum of two primes; for example, we could envision a scenario in which Madam du Châtelet beat Goldbach to the discovery. We do not *know* if this really is possible, but we have a hunch it is. This way of thinking about (1) is easy and overwhelmingly natural.

Interpreting the following is equally straightforward:

(2) Goldbach is such that *he himself* might have eschewed mathematics.
Goldbach is such that possibly: *he himself* eschews mathematics
Goldbach is such that ◊ *he himself* eschews mathematics

(3) The person to discover GC is such that *he himself* might have eschewed math.
The discoverer of GC is such that possibly: *he himself* eschews mathematics
The discoverer of GC is such that ◊ *he himself* eschews mathematics

Both (2) and (3) invoke a counterfactual situation in which Christian Goldbach, the Prussian mathematician from Königsberg, the *man himself*, chooses a profession different from the one

he actually had; for example, we could envision a scenario in which Goldbach trains to become a doctor. We do not *know* if this really is possible, but we have a hunch it is. This way of thinking about (2) and (3) is also easy and overwhelmingly natural.

Considering counterfactual situations, as we just did, involves the *counterfactual conception* of necessity and possibility—which Saul Kripke called the *metaphysical* conception. It is about how things might or must have been had things gone differently with respect to details of the actual course of history: had Goldbach chosen a different career, or had Madam du Châtelet lived past her forties. This conception is about different ways the *world* might have been; it is *not* about linguistic matters like the following: 'Christian Goldbach' introduced as a name for someone else, or the Goldbach conjecture bearing a different name.

(1) is not about anyone in particular—it is no more about Goldbach than it is about Madam du Châtelet, or a counterfactual sister Goldbach might have had. Really, (1) is not *about* anyone specific, instead describing a situation in which *some woman or other* discovers the conjecture. General modal claims of this sort are said to involve *modality de dicto*. By contrast, (2) and (3) are about someone specific: Goldbach. Both describe what might have happened to *him*, had his life gone differently. This way of ascribing modal properties to individuals directly involves what is called *modality de re*. For various reasons, de re modality had, in the past gained notoriety, while its de dicto sibling has been considered relatively harmless. Sections III.1 and III.2 will give some of the reasons.

A crucial point worth stressing: we are at times undecided, baffled, or doubtful about the *truth* of certain modal claims: the hunch is absent, is weaker, conflicts with other hunches, or points in the opposite direction. But issues about hunch-strength and hunch-clarity are completely irrelevant to both of the following: the diverging reputations of de dicto modality (the tame one) and de re modality (the notorious one); and *the ease with which the counterfactual conception of modality allows us to interpret* de re *and* de dicto *modal claims alike*, as illustrated above. Here are two examples where our hunches forsake us:

a baffling de dicto modal claim:

(4) ◊ the discoverer of GC eschews mathematics,

and a baffling de re modal claim:

(5) Goldbach / The discoverer of GC is such that ◊ (s)he is a woman.

Our bafflement is over whether (4) and (5) are *true*, and what it would be for them to be true. (4) invites us to envision a scenario in which someone discovers Goldbach's conjecture *and* avoids mathematics. (Serially accomplished deeds? No problem. But simultaneously? Dubious.) (5) prompts us to imagine the man Goldbach as a woman. (Could he undergo genuine gender-transformation? Who knows. Could Goldbach have been a woman from birth, or from conception? Doubtful, if not incoherent.) Still, *interpreting* (4) and (5), *making sense* of them is straightforward, posing no more difficulty than (1)–(3): (4) describes as possible a scenario in which someone discovers the conjecture and eschews mathematics, while (5) deems possible a scenario in which Goldbach (actually a man) *himself* is a woman. The fact that we are at a loss as to whether these really are possible scenarios does not thwart the interpretive effort.

The following holds no surprises either:

(6) Goldbach might have eschewed mathematics
or: It might have been that Goldbach eschewed mathematics
Possibly: Goldbach eschews mathematics

◊ Goldbach eschews mathematics

Just like the de re (2), we have a claim about Goldbach himself—that he might have eschewed mathematics. For our purposes, what matters is a *semantic* distinction between de re and de dicto statements: interpreting the former (but not the latter) *presupposes the intelligibility of ascribing modal properties directly to individuals*.[2] Accordingly, (6) is a de re modal claim. We can make a more general observation. Consider the combination of "ingredients" in (6):

- the metaphysical or counterfactual conception of necessity and possibility (about counterfactual situations), and
- proper names.

This combination automatically yields a de re modal claim. With respect to metaphysical necessity, proper name occurrences are invariably de re. In this sense, proper names are special de re vehicles. By contrast, the "exportation" of a definite description (yielding (3) from (1)) involved a move from de dicto to de re.

2. Proper names: anchored, underway, and unanchorable

De re modal claims—with or without proper names—pose an interpretive task. And with the metaphysical conception of modality on board, we have just seen that task effortlessly accomplished. The key: the individuals such claims are about must be ones that can sustain modal predications—they must be *modally robust*. For example, the name 'Goldbach' refers to a modally robust individual of whom it makes sense to predicate that he might have become a doctor, that he must have been of mathematician, that he is necessarily human, or possibly a woman. Of course, de re modal claims about objects (tables, buildings), geographical locations, corporations are just as easy to interpret. Bafflement over *truth value* is easier to come by for modal claims involving names like 'Flatiron Building', 'Madison Square', 'Manhattan', 'Tiffany & Co.', but as before, that creates no *interpretive* obstacle. 'What is more, we can interpret de re modal claims about mathematical entities and fictional characters in a breeze. Accordingly, de re vehicles include proper names like 'π', 'Holly Golightly', all presupposing as their reference modally robust individuals.[3]

Does this mean that proper names always *purport to refer* to modally robust individuals? Yes. For with respect to metaphysical modality, proper names always yield de re modal claims. Does it mean that proper names always *refer* to modally robust individuals? No. Quite often, a proper name is introduced into the language to dub an actual individual,

[2] The distinction can be drawn differently, in syntactic terms: modality de re involves quantifying across a modal operator (quantifying in), while modality de re need not (Fine 1989, 43; Kaplan 1986, 268–72). (The syntactic distinction is the central one in the context of Section III.1, about logical or analytic necessity.)

[3] Proper names for mathematical entities and fictional characters are intriguing; I will not dwell on them here, except for noting, as I did, that a natural extension of the proposal that proper names presuppose modally robust individuals as their reference, is to treat numbers and fictional characters as modally robust. Kaplan and Kripke have made suggestions to extend their own views along these lines (Kaplan 1989b: 107–8, n101). What kind of modally robust individual might a mathematical entity or a fictional character *be*? The usual and obvious answer is: an abstract entity. Kit Fine has a more nuanced view: some existents do not enjoy a form of worldly existence (they do not exist in the world or have any worldly properties). Fine mentions mathematical entities like sets and does not mention fictional characters; but his framework can easily make room for them. Accordingly, π and Cinderella are not worldly existents; they do nonetheless enjoy a form of *unworldly* or *transcendent* existence (with unworldly properties, relations applying to them—for example, the formal relation of identity) (Fine 2005a, 341–5, 353–4). Fine's view is, I think, most naturally interpreted with modally robust individuals, some of which enjoy a worldly as well as an unworldly form of existence (Goldbach is such an individual), and some of which partake in the latter only (π, for example). See especially the suggestion (2005a: 342) that "modal facts are transcendental".

and the name is successfully anchored to the intended individual: 'Christian Goldbach', and 'Königsberg' are *anchored names*. When first introduced in 1846, the planet name 'Neptune' was not yet anchored—the existence of a planet to explain perturbations in the orbit of Uranus was inferred based on mathematical calculations; the name was introduced by description.[4] Initially, 'Neptune' was admitted into the language on "new employee probation status"—it was an *underway proper name*. Subsequent sightings, even if some were mistakenly regarded as sightings of Neptune, eventually converged on a single planet, anchoring the name 'Neptune' to the planet. But names of hypothetical objects were not always such success stories. In the wake of his success with Neptune, the French astronomer Le Verrier put forth another hypothesis about the existence of an intra-Mercurial planet (named 'Vulcan'), to explain perturbations in the orbit of Mercury. 'Vulcan' was thus admitted as an underway proper name. There were various independent sightings mistakenly believed to be of Vulcan before enthusiasm dwindled; By 1916, Einstein's general theory of relativity confirmed that the perturbations were produced by the gravitational field of the Sun; there was no intra-Mercurial planet at all; the Vulcan-hypothesis was refuted; 'Vulcan' turned out not to refer to anything; and with this, the name was deemed *unanchorable*.

What about a counterfactual situation in which the name 'Vulcan' is also a success story? Imagine a counterfactual scenario with the laws of physics slightly different, and there being an intra-Mercurial planet affecting the orbit of Mercury; Le Verrier puts forth his hypothesis; there are sightings converging on the planet, the name 'Vulcan' becomes anchored. But that is not *our* term 'Vulcan' that gets anchored in the counterfactual success story, but a different one. It is preposterous to think that in coining the name, Le Verrier managed to dub *that counterfactual object even though his dubbing attempt failed in the actual world.*[5] 'Vulcan' might have been a success story just as 'Königsberg' might have been introduced as a name for a river instead of a city; but that is irrelevant to how and whether these strings, as parts of our language, became anchored.[6] No counterfactual situation can accomplish the anchoring of *our* name 'Vulcan', given that in fact, it was not anchored. So the name lacks a referent in every counterfactual situation; it is unanchorable. Kaplan (1973) makes this point eloquently with respect to a fictional name like 'Pegasus'[7]. But what is far

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[4] See Donnellan (1979), and Kripke (1980, 79, n33).

[5] My argument here is different from Kripke's metaphysical thesis against the view that names of nonexistents refer to merely possible individuals (Kripke 1980, 156–7): regarding the various hypothetical winged horses, which one is Pegasus?—one cannot say which one. In Section II.4, this is construed as a problem that some individuals are insufficiently specific. I agree with Kaplan that this problem affects names introduced for merely possible entities, but is not the problem that empty names like 'Vulcan', or 'Pegasus' present (Kaplan 1989b: 608–9).

[6] See Kripke (1971, 145; 1980, 102–3).

[7] Kaplan (1973, 506–8) is appealing to what I call the inverse-Sinatra principle with respect to names from fiction:

> Suppose we start out by acknowledging that the Pegasus-myth is FICTION. Still it is, in a sense, possible. Should we not take 'Pegasus' to denote what it denotes in the *world of the myth?* We must be very careful now. …
>
> The myth is possible in the sense that there is a possible world in which it is truthfully *told.* Furthermore, there are such worlds in which the language, with the exception of the proper names in question, is semantically and syntactically identical with our own. Let us call such possible worlds of the myth *'M* worlds'. In each *M* world, 'Pegasus' will have originated in a dubbing of a winged horse. The Friend of Fiction, who would not have anyone believe the myth…, but yet talks of Pegasus, pretends to be in an *M* world and speaks its language.
>
> But beware the confusion of our language with theirs! If *w* is an *M* world, then their name 'Pegasus' will denote something with respect to *w*, and *our* description 'the *x* such that x is called "Pegasus"' will denote the same thing with respect to *w,* but *our* name 'Pegasus' will still denote nothing with respect to *w.* Also, in different *M* worlds, different possible individuals may have been

more interesting is that the point holds for 'Vulcan'! We can say the following about this name, as well as other proper names: *if it cannot make it here, it cannot make it anywhere.* If the name is unanchored here (in the actual world), it is unanchorable. Call this the *inverse-Sinatra principle for proper names*.[8]

Consider another hypothetical individual: Theia, featured in the so-called big whack (or giant impact) hypothesis, according to which the Moon formed as a result of a collision between Earth and the Mars-sized celestial body Theia. It is still an open question whether the hypothesis is correct, and whether Theia existed. We do not know if Theia existed. We do know the following though: 'Theia' is a name introduced into our language; given the open issues, it is currently an underway proper name; even if it refers to something, that thing no longer exists; if the big whack hypothesis is refuted, then by the inverse-Sinatra principle, the name becomes unanchorable and does not refer in any possible world (sharing the fate of 'Vulcan'); if the hypothesis is confirmed, then observed data, further findings may anchor 'Theia', in which case it would, from then on, refer to a modally robust individual (sharing the fate of 'Neptune'); alternatively, the name might remain underway forever, in which case the proper name never gets to refer to a modally robust individual.

The last point—that 'Theia' does not call for reference to a modally robust individual—may well seem like a contentious one. For suppose 100 years from now, 'Theia' gets anchored; cannot we then say that throughout the 21st century, people have been referring to the individual Theia, using the name 'Theia'? Here is a more cautious (and far less problematic) stance we could take instead: prior to the anchoring, the name does not *refer* to a modally robust individual, although it does denote it—just like the definite description 'the body whose collision with Earth created the Moon' would. This stance relies on a difference that has some intuitive appeal—between reference and denotation. The underway status of 'Theia' keeps it from referring to anything; but a definite description denotes whatever uniquely satisfies it, even if we are forever barred from finding out more about whether the denotation exists, and if so, what it is.[9] *Denoting may be a coincidence, but reference is not.*[10] Those who are not prepared to accept this difference between denoting something and reference to a modally robust individual, can still accept the following: given how we use and interpret sentences involving the name 'Theia', we are under no pressure to take 'Theia' as referring to a modally robust individual, even if we think that names like 'Neptune', 'Goldbach', and other anchored proper names do refer to modally robust individuals.

The forever underway status is widely thought likely for the proper name 'Jack the Ripper'.[11] Given that the serial killings have been extensively studied, it seems increasingly

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dubbed 'Pegasus'; to put it another way, *our* description 'the *x* such that *x* is called "Pegasus"' may denote different possible individuals with respect to different *M* worlds.

I do not object to the inhabitants of one of the *M* worlds remarking that their name 'Pegasus' denotes something with respect to *our* world that does not exists in our world. But I reserve the right to retort that *our* name 'Pegasus' does not even denote with respect to their world.

[8] Frank Sinatra sang about New York City: "If I can make it there, I'll make it anywhere".

[9] This parallels Russell's (1905) theory that definite descriptions are denoting or quantified expressions. His example was: 'the center of mass of the solar system at the first instant of the twentieth century'. The description may well denote a point that satisfies the description, in accordance with Russell's theory. But my claim is that if we introduce a name for this point based on the same description, then only after the name is anchored will we beable to say that, the name refers to a certain, specified point.

[10] Kaplan quotes Harry Deutsch: "reference is no coincidence" (Kaplan 1989b: 608). This was said against the idea that 'Pegasus' refers in other possible worlds. But I think the remark is even more apt and illuminating with respect to names that are introduced with the intention to refer to something real, except that for one reason or another, they never become anchored—either because there is no object to refer to (as is the case with 'Vulcan'), or because we are destined to have insufficient information to anchor the name (as the case might be with 'Theia').

[11] Kripke discusses this example as well as that of 'Neptune' (1980, 79, 79 n33).

unlikely that we would come to possess evidence that would anchor the proper name to a given individual, or alternatively deem the name unanchorable (because, say, we find out that each of the murders that had been attributed to a single serial killer had a different perpetrator). Crucially, *our* expressions 'Theia' and 'Jack the Ripper', as long as they remain underway, are neither anchored nor anchorable with respect to other possible worlds either. Our names are introduced in the actual world, so it is here, and here only, that they can be anchored or deemed unanchorable; and their fate here determines their fate in other possible worlds—as captured by the inverse-Sinatra principle.

For an underway proper name, the introduction of the name as a full-fledged proper name is yet to be completed, the anchoring is missing. Once the missing detail is provided—as the name becomes anchored—the name does refer to a modally robust individual. This was the case with 'Neptune', for example; typically, names are introduced in such a way (by ostension) that the anchoring to complete the introduction of the name is not delayed the way the anchoring of 'Neptune' was. It is unclear what we should say about the reference of underway proper names that are yet to become anchored; in fact, this is a thorny question. The crucial point is that the claim about anchored proper names referring to modally robust individuals is independent of what we decide to say about underway proper names.

In sum, it is *anchored* proper names (whether they be anchored to a concrete or an abstract individual) that definitely refer to modally robust individuals; underway proper names (like 'Jack the Ripper') need not, and unanchorable names (like 'Vulcan') do not.

3. *Proper names in de re modal claims*

My thesis that language takes anchored proper names to refer to modally robust individuals does not imply that based on linguistic considerations, every individual we might talk about and *think* we can make de re modal claims about is modally robust. Here, again, proper names as special de re vehicles are a source of guidance: one indication that an individual is not modally robust is that in one way or another, we are prevented from anchoring any proper name we might introduce for the individual in question. This is, in turn, a symptom that such individuals are not in general proper subjects for de re modal claims (whose interpretation calls for modally robust individuals), even if they can feature in de dicto modal claims. Consider the dubbing of merely possible individuals on the one hand, and future individuals on the other. A de dicto claim like 'Possibly, Goldbach had a sister' mentions a counterfactual sister of Goldbach's, we might try to give her a name: 'Ilke'. David Kaplan considered the dubbing of a future individual "in absentia, as by solemnly declaring 'I hereby dub the first child to be born in the twenty-second century 'Newman 1'" (Kaplan 1969, 135). Our questions are: can proper names be introduced in these ways, and if so, what requirement do they have to meet for referring to modally robust individuals and featuring in de re modal claims?

Drawing a four-way distinction will help illuminate matters:

(A) *ascribing* to someone a de re *belief* about an individual,
(B) making a de re *assertion* about an individual,
(C) *using a common currency proper name* to make a de re assertion about an individual, and
(D) using an *anchored* common currency proper name to make a de re assertion about an individual.

What I want to say about de re modal claims has to do with (C) and (D). To get a better sense of them, I will relate them to Nathan Salmon's (2004) distinction between (A) and (B); I find Salmon's suggested contrast plausible, but my purpose here is not to argue for it.

About (A): Kaplan (1969, 131–38) suggests that having a de re belief about Goldbach imposes several requirements on the believer. First, her internal vocabulary must include a *vivid name* for Goldbach. "The vivid names 'represent' those persons who fill major roles in that *inner story* which consists of all those sentences that [the believer in question] believes";[12] a contemporary mathematician might have a richer role for 'Goldbach' in her inner story, but for many laypeople, including all readers of this paper, 'Goldbach' is vivid enough to count as a vivid name. Second, the name must be a name *of* the mathematician Goldbach for the believer—"analogous to the sense in which a bad photograph may be a *picture of* an object that it does not resemble, and fail to be a picture of another object to which it bears an uncanny resemblance" (Salmon 2004, 247)). 'Ilke' and 'Newman 1' are plausibly non-vivid for English speakers, but independently of that, both founder on the second requirement: they are not names *of* anyone for any of us, contemporary English speakers.[13] As Kaplan (1969, 138) says: the range of individuals with whom we are *en rapport* is restricted, and it excludes Newman 1 as well as merely possible sisters of Goldbach.

(B) stands in sharp contrast with (A). As Nathan Salmon puts it: "Saying something about Newman 1 is a piece of cake. Forming a belief about him/her, by contrast, requires some degree of cognitive connection, however sparing. De re connectedness is required for de re belief, not for de re assertion (2004, 247)."[14] He illustrates the contrast as follows:

> It is indeed dubious that Newman 1's future contemporaries could truthfully utter 'Some philosophers of the late twentieth century believed that you would not be born until the twenty-second century'. For despite Kaplan's heroic efforts, we simply are not sufficiently *en rapport* to have de re beliefs about Newman 1. The de re connection is lacking. By contrast, there is no reason why Newman 1's contemporaries could not truthfully utter 'Some philosophers of the late twentieth century had a name for you, and using that name, they said about you that you were not knowable by them (that you would

[12] Kaplan 1969, 136; emphasis in original.

[13] Kaplan lists a third condition: that the name in question must *denote* Goldbach (and not someone else, say, Voltaire). We can set this condition aside because it is based on the Fregean-Russellian idea—the received view through the 1960's—that proper names have a descriptive content that competent users of the name are aware of, and the individual denoted by the name is the one that fits the description, or fits the cluster of descriptions the best, or fits the core of the cluster. In the passages in question, Kaplan (1969) is trying to synchronize historical origin (what Kaplan calls the name's genetic character) with its descriptive content, so the name is *of* the individual denoted. It was not until 1970 that we find Kripke giving decisive arguments against Fregean-Russellian theories that hold that descriptions speakers associate with a proper name determine its reference. The criticism in a nutshell goes as follows. Euler was the first to formulate the so-called Goldbach's (strong) conjecture (in reaction to a letter in which Goldbach proposed a related, weaker conjecture, what is now called Goldbach's weak conjecture); and the description we associate with 'Goldbach' is "the man who first formulated 'Goldbach's (strong) conjecture". But descriptive fit is neither necessary for determining the reference of the name (even in the light of this little-known piece of information about Euler, 'Goldbach' continues to denote Goldbach), nor is it sufficient (Euler satisfies the description, yet 'Goldbach' does not refer to him). See Kripke (1980, 80–7); arguments along these lines probably appeared in earlier talks by Kripke, but the earliest written version dates from 1970.

[14] By contrasting (A) and (B), Salmon (2004, 247) reconciles Kaplan's comments on the name 'Newman 1'. Initially, Kaplan had wanted to block the introduction of such names (Kaplan 1969, 135), for he thought that would enable speakers to have de re *beliefs* about Newman 1, an undesirable outcome. Kaplan changed his view later on, suggesting that the name could be introduced after all, and subsequently used to make *assertions about* the first child born in the 22nd century (Kaplan 1978, 303; 1989a 560, n76).

Later on, Kaplan tried to steer midway between these two extremes (1989b: 606); expressing the need for some sort of "epistemic connection" with the person dubbed (or named), which in the case of 'Newman 1', might be supplied as the 22nd century comes around. His view is, I think close to what I discuss under (C) and (D), that 'Newman 1' and 'Theia' presently have underway, unanchored status.

> be born in the twenty-second century, etc.)'. They might add, 'of course, they did not know (or even believe) that they were talking about *you*—how could they?—but you were the one they were talking about. (2004, 251)

Indeed, along these lines, we can imagine de re *assertions* involving the name 'Theia' or 'Jack the Ripper', provided that the names will some day become anchored. Once they are, English speakers who live to witness the anchoring will be in a position to say: when people living in the 20th century were talking about a protoplanet named 'Theia' and an individual named 'Jack the Ripper', it is this protoplanet, and that individual they were making de re claims about. But 'Ilke' is still problematic; we simply cannot specify things further *about Ilke*. We could envision various specifically described individuals (identifying actual egg-sperm pairs that never met but could have, resulting in distinct baby girls that would have been sisters of Goldbach), but no amount of information about these babies would decide which one would have been *Ilke.*[15]

We could say: (A) is an internal affair (internal to the believer in question); (B) is an external affair (potentially external to our contemporary language community); (C) is in between: it is what we might call *public or community affairs*. Let me explain, echoing David Kaplan's *Words* (1990) about the common currency conception of words.

Languages change constantly, the English language is no exception:

- new words enter the vocabulary; old words undergo meaning shifts (100 years ago, 'livid with anger' meant 'pale with anger'; now it primarily means 'furiously angry');
- words undergo changes in spelling and or pronunciation ('Tiziano' turning into 'Titian');
- sometimes several alternative spellings or pronunciations survive (we encounter the names 'Occam' and 'Ockham'; we hear 'Kant' pronounced by Americans as the Brits would pronounce 'can't' , and by Brits as the Americans would pronounce 'can't'). Our linguistic community now has alternate spellings of the same word 'Occam' and 'Ockham'. Arguably, 'Carolus Linnaeus' and 'Carl von Linné' are variants of the same word.
- The name of the philosopher Neil Tennant is certainly a different word than the name of the pop singer Neil Tennant (of Pet Shop Boys fame). These two qualitatively indistinguishable yet distinct names have different histories (they were given to different people), kept separate within the linguistic community. One is a name *of* the philosopher and is passed around as such; the other is a name *of* the pop singer, and is passed around as such; the sameness of sound and spelling is no obstacle, just as photographs *of* one armadillo can be kept apart from photographs *of* another.[16]

There are names that "catch on", become established—both 'Neil Tennant'-s are like this; as are the alternate forms of Ockham's, von Linné's and Titian's names. They have become common currency words—whose identity lie in their "continuity, both interpersonal and intrapersonal" (1990, 117).[17] 'Vulcan', 'Theia', and 'Jack the Ripper' have been and will

[15] This is Kripke's metaphysical thesis (1980, 156–7), which Kaplan (1989b: 608–10) remarks is an appropriate argument with respect to names of merely possible entities: "the intended dubbee is insufficiently specific to select a unique individual" (1989b: 609). See footnote 5 above. For names from fiction, Kaplan thinks we do much better with Kripke's epistemological thesis: the existence of an individual with all features of Pegasus does not establish (by itself, without any historical connection between the fiction and individual) that it is Pegasus (Kripke 1980, 157–8). My argument in Section II.2. was that with respect to unanchorable names like 'Vulcan' (and not just names of fictional characters, the metaphysical argument does not get to the heart of the problem. Section II.4 takes up this issue.

[16] Even if the two armadillos are siblings; and that can be tricky because nine-banded armadillos always give birth to identical quadruplets.

[17] Kaplan writes about some Babylonian introducing a name for Hesperus / Venus:

continue to be common currency words, independently of the fact that 'Vulcan' turned out to be unanchorable, and with the other two, it is still wide open whether they will turn out to be anchored, unanchorable, or remain forever underway proper names.

Crucially, the mere act of introducing a name does not make it a common currency name.[18] *Introducing* a name like 'Newman 1' can be a one-man show (it was), but *turning it into a common currency word* takes more. It seems to me that 'Ilke' cannot become a common currency word at all; depending on our communal purposes, 'Newman 1' could get provisionally admitted as an underway proper name. Once further information is obtained (as time draws nearer to Newman 1's birth), the underway status may change.[19] But the general point holds: creating a new common currency word takes community coordination, and this process plausibly has a broad normalizing influence, curbing deviously coined names, or declaring them as underway, yet-to-be anchored names—hence, common currency names that are unanchored ('Newman 1', 'Theia', 'Jack the Ripper') are atypical.[20] But the requisite circumstances do have to be quite special; in general, there tends to be quite some resistance to admitting names like 'Newman 1' into the language. This results in a more robust sort of de

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> As it went through different communities, the way this word was pronounced and written changed in very dramatic ways, through whatever processes account for dialectal variation. The presupposition of these processes of change are the principles of continuity in accordance with which a changing word retains its identity. As *we* pass through various communities at various stages in our lives, we also change dramatically. (I think I am probably more different now from the way I was when I was, say, eight years old, than the word 'Hesperus' is now from the way it was when it was, say, five minutes old). (1990, 101)

Along the same lines, Kripke (1980, 91–7) argues that the reference of a proper name is determined by a chain of communication leading back to an initial baptism (which Kaplan calls dubbing), when the individual in question, the referent, was named or dubbed. As a name like 'Neptune' was admitted as a common currency word, speakers used it to refer to the intended dubbee named by means of the description 'the planet to explain such-and-such perturbations in the orbit of Uranus', even before the name becomes anchored. Speakers do this in virtue of a chain of communication linking their use of the word with the dubbor's. This is sometimes called the new theory of reference, or the causal-historical theory of reference—attributed to Kripke, Kaplan as well as Keith Donnellan (1970). It is worth noting that calling it a *causal* theory is misleading in that a causal chain need not lead back to the referent, only to the *dubbing* of the referent. The dubbor is typically in causal contact with the dubbee, but need not always be: names introduced without such contact include 'Neptune', 'Jack the Ripper', and, plausibly, names of abstract individuals (mathematical entities and perhaps even fictional entities, see footnote 3 above). See Burgess (2006) for insightful discussion on this issue and related ones.

[18] See Evans (1973, 279–80). Evans talks about an expression being a „name for a community"—this corresponds to the notion of a common currency word.

[19] Kaplan (1989b) appears to favor this sort of view, as he revises his views about 'Newman 1' yet again (see also footnote 14):

> … all names… however introduced, carry their referent as meaning but not all names carry *knowledge of* their referent. Those names that were properly introduced, by ostension or based on some other form of knowledge of the referent, carry and transmit the requisite epistemic connection. But in a tiny fraction of cases the connection is absent—semantics (or metasemantics) does not require it—and in these cases we have direct reference, and expressibility, but not apprehension. [Footnote:] *A name may later take on the required epistemic connection when the referent appears upon the scene and is recognized as the named object*. (1989b, 606 n98, emphasis added).

The last sentence is about the subsequent anchoring of a name that had been an underway common currency name. 'Theia' and perhaps 'Newman 1' may later take on the epistemic connection that would allow them to become anchored. The crucial difference between Kaplan's view and mine is that unlike me, he thinks the *semantics* of 'Newman 1' does not require that the name be anchored *before* it gets to refer to an individual; by contrast, I think such a requirement is in place. This means that even though anchoring and reference to a modally robust individual go hand in hand, introducing a name and referring to a modally robust individual need not.

[20] Kaplan makes a similar point, though he uses it to a different end: "The introduction of a new proper name by means of a dubbing in terms of a description… constitute a form of cognitive restructuring; they broaden our range of thought. To take such a step is an action normally not performed at all, and rarely, if every, done capriciously" (1989a 560, n76).

re connectedness involved in (C)—using a common currency name to make a de re claim about an individual—than in the (B)-type de re assertion case (which, if we believe Salmon, allows de re assertions about Newman 1). The difference consists in the community's normalizing influence, which translates into an improvement on (A) and (B): according to (C) making sense of de re modal claims involving common currency names requires interpreting them as purporting to refer to modally robust individuals.[21] Given that we can readily interpret such claims, common currency proper names must purport to refer to modally robust individuals. We can say this much without worrying about 'Newman 1', 'Jack the Ripper', or 'Ilke'.

The common currency words of contemporary English are the words we expect to find in an up-to-date unabridged dictionary of the English language. With time, that dictionary becomes obsolete, as new common currency words are introduced and old ones assume new meanings. Some sort of community consensus (with weight given to expertly opinion from linguists, sociologists, scientists) drives what the new additions and changes are supposed to be (recall the case of 'livid with anger'). So an English dictionary effective *now* reflects the state of English *now*. By construing common currency words as dictionary entries, remarkably helpful guidelines emerge for what are distinct common currency words, and what are variants of a single word (these are issues having to do with word individuation, Kaplan 1989b: 599, 1990, 94):

We expect the following from our dictionary entries:

- the current entry under 'livid' is different than it was 100 years ago;
- under 'Kant' the British and American pronunciations are both listed for the one common currency word.
- under 'Occam', we find 'Ockham' as an alternative spelling of the same word; and the other way around;
- under 'Titian', 'Tiziano' is listed as a variant of the same word; and the other way around; the same goes for the pair 'Carolus Linnaeus' and 'Carl von Linné';
- two 'Neil Tennant' entries are listed, one for the philosopher, the other, for the pop singer.

Indeed, these expectations bear out. Moreover, the dictionary-entry analogy runs deep: our intuitions about individuating common currency words are exactly the intuitions that drive the structuring of dictionary entries. For example, the common currency words 'Hesperus' and 'Phosphorus' have distinct origins that are distinguishable to this day (Venus presented as the evening star, and Venus presented as the morning star, respectively). They are therefore distinct common currency words, not variants of the same word, or derived forms of one another or some third word.[22] By contrast, we cannot say the same about 'Tullius' and 'Cicero', both either variants or derived forms of a single word: 'Marcus Tullius Cicero'; or about 'John F. Kennedy', 'Jack Kennedy', and 'JFK', all either variants or derived forms of a single word: 'John Fitzgerald Kennedy'.

How does (D), about using *anchored* common currency names, fit into the picture? What does it add to (C)? Salmon's point that 22nd-century English speakers are in a position to say that we, 20th-centurians were making de re assertions about Newman 1 goes beyond the language spoken by *us now*—because unlike the 22nd-centurians, *we* cannot *now* anchor 'Newman 1' (and we know we cannot). This points towards a limitation in (C), to be handled in (D). Common currency words are objects created and modified by language users—whose

[21] Given the assumption we have taken—that the natural readings involve metaphysical modality—any proper name occurrence in a modal claim purports to be de re.

[22] I am relying on the intuitive distinction between variants and derived forms, leaving it open that it can be made (if it cannot, that just makes things simpler).

collective knowledge we might call community consensus opinion. In many ways then community consensus opinion (which is what gets reflected in the unabridged dictionary of the language spoken by the community) is the definitive authority on the common currency words of the community—what those words are, and what they mean. Community consensus opinion is therefore immune to certain sources of error about its words. ("'Livid' has always meant 'pale', but everybody now uses it improperly," a prescriptivist might lament—but her stance is absurd; the way everybody uses 'livid' in systematically different ways than before indicates that the word no longer means what it used to. The same point can be made about changes in spelling and pronunciation.)

There are, however various sources of error to which community consensus opinion is still susceptible—here are two examples: (i) keeping tabs on when and whether a proper name becomes anchored and (ii) keeping tabs on in-progress changes in meaning. An instance of (ii) is when it is recognized *in hindsight* that the referent of a common currency name has changed over time, even though the intentions of speakers had been to preserve the old referent, to use the word in accordance with its previously established history; but something misfired. Think of Gareth Evans's (1973, 276) example, the name 'Madagascar', mistakenly believed by Marco Polo to refer to the island instead of a portion of the African coast. There are two ways we might tell the story of what happened: the word 'Madagascar' was unwittingly re-anchored from the coastal region to the island; alternatively, a new word 'Madagascar' was inadvertently introduced and got anchored, replacing the original word that had been anchored to the coast. Once the transition has taken place, either story could clarify the changed use of 'Madagascar'.[23] But it is likely that as the transition is in progress, it is not part of the community consensus opinion that a once firmly anchored word is "losing its grip". The transition-period word 'Madagascar' is appropriately regarded as underway rather than anchored (whether it be a new word yet to be anchored, or the old word with its anchor weighed, awaiting reanchoring), until its use is stabilized again; but the community's consensus opinion will not converge on this until later. (That is how the pre-anchored word 'Neptune' was.) During the transition period, contrary to the community consensus opinion, the common currency name 'Madagascar' need does not feature in de re modal claims.

In other words, the consensus opinion is prone to making the mistake of carrying on with the assumption that a name is still anchored, when it fact it is not. (i) gives rise to a similar kind of mistake. Go back to 1878; the name 'Vulcan' had been a common currency word for over a decade; new, compelling observations thought to be of Vulcan come in from several reliable astronomers; there is community consensus that the sightings *have* converged on a single object (as had been the happy outcome with Neptune), and 'Vulcan' is put down as finally anchored, no longer underway. Again, it is only in hindsight that the 20th-century linguistic community is in a position to discern that the sightings had been mistakenly attributed to Vulcan, and the name was not anchored after all—it could not have been, for it has since been found unanchorable. Again, the community consensus opinion notwithstanding, 'Vulcan' cannot and never could feature in de re modal claims.

In sum, the community consensus opinion may err in regarding underway names as anchored words of the language. This can lead to mistakes about which proper names can feature in de re modal claims. Still, what we need to keep in mind is that the vast majority of the proper names we use are *indeed* anchored. The vicissitudes of 'Vulcan', 'Jack the Ripper', and 'Madagascar' are the exception. The rule: proper names—introduced for people, places, objects, events, numbers, and even fictional entities become anchored (typically upon introduction) and remain anchored. It is this vast array of unexceptional proper names—ones

[23] The story can go either way; I lean towards the alternative that a new, distinct word, a new name was inadvertently introduced along the way; Kaplan's (1990, 117–8) leanings are similar, but he thinks it is a substantive point about words that reference shifts are always accompanied by the introduction of a new word.

that are not merely *regarded as* anchored but are *indeed* anchored, as specified in (D)—that can feature in de re modal claims like the following:

(6) ◊ Goldbach eschews mathematics

Recall that proper names provide but one way to make de re modal claims. There are others; here is one from before:

(3) The discoverer of GC is such that ◊ *he himself* eschews mathematics

The foregoing discussion is also relevant to setting *general* conditions for making de re modal claims: a genuine de re modal claim of the sort that concerns us is one that singles out an individual for whom we are in a position to have an anchored common currency proper name in our language. Paralleling the case of 'Ilke', 'Newman 1', and 'Vulcan' (names which would not fit the bill) the following would thus be excluded as de re claims:

(7) A merely possible sister of Goldbach's is such that ◊ *she herself* discovers GC
(8) The first child born in the 22nd century is such that ◊ he / she is bald
(9) A merely possible intra-Mercurial planet is such that ◊ it strays off course

Again, the intended readings of possibility are still counterfactual, not epistemic (the latter would be captured with the help of a prefix "for all we know, the so-and-so is such that possibly…"). But these readings seem bogus; as easy as it had been to interpret the likes of (3), and (6), it does not give us a way with (7)–(9). What sister, child, planet are they talking about? We are stalled—and this very fact indicates we have gotten to the heart of the matter by focusing on modally robust individuals. When available, modally robust individuals make interpretation straightforward, when they are not, we are stumped.

4. *Times and worlds: presentism versus actualism*

Where are we now? We have managed to zoom in on the relevant de re modal claims—which include those with anchored proper names—whose interpretation calls for modally robust individuals. It is also overwhelmingly plausible, even platitudinous, that parallel considerations apply with respect to time. That is, these same de re modal claims call for *temporally robust individuals*[24]—individuals that can sustain temporal ascriptions like 'was born in 1690', 'wrote up a conjecture in 1742', 'never proved Goldbach's conjecture', or 'no longer exists'. Goldbach and Aristotle are both temporally robust individuals that sustain such temporal predications—these predications are true of the former individual, but not the latter.

Taking the interpretation of de re modal claims at face value makes two choices attractive: (i) assume modally-temporally robust individuals as basic units, and not as composites (assemblages) of temporal and modal stages (individual-stages); (ii) assume the standard quantificational semantics of tense and modality and accordingly quantify over all the modally-temporally robust individuals there are. (i) is about metaphysics, (ii) is about ontology. I do think there are compelling reasons to opt for (i) and (ii), but it is important to keep in mind that my thesis that anchored proper names refer to modally robust individuals is noncommittal in either direction. Instead, the thesis says that modally robust individuals are *conceptually basic*: the conceptually basic units of proper name reference. The temporal analogue of the thesis is that temporally robust individuals are conceptually basic, something

[24] Kaplan (1973, 503–4) thinks it would be bizarre *not* to think that individuals are temporally robust.

quite plausible even if one does not believe that this thesis dictates the ontology or metaphysics of individuals.

Even so, it is instructive to consider the consequences of opting for (ii)—they turn out to diverge for the temporal and modal cases. In the temporal case, we get a denial of presentism, the view that only present existents exist, there are no merely past and merely future existents.[25] The problem is with merely past existents like Goldbach and Aristotle, both modally and temporally robust individuals. ('Newman 1', a name for a merely future individual, is not anchored; so there is no need to posit a modally robust individual as its reference, as we have seen in Section II.3.)

The modal analogue of presentism is actualism, according to which only actual existents exist, there are no merely possible existents.[26] Even if we assume (ii), actualism *is* compatible with the thesis about modally robust individuals: I have given arguments against treating 'Ilke' and 'Vulcan' as names that refer to modally robust individuals. In fact, the upshot has been that only anchored proper names refer to such individuals, and anchoring guarantees that we stay within an actualist universe.

There is one further kind of merely possible individual that we have not yet mentioned—but this kind the actualist can readily admit in her universe. Imagine a lectern-kit that never gets assembled. We decide to give the name 'Woody' to the merely possible lectern that would have resulted from assembling the parts by following the instructions in the kit. It would seem unwarranted to deny the possibility of dubbing a nonexistent in this way.[27] To make things even smoother, let us imagine that no parts (not even screws) can be interchanged for others in assembling the lectern—each component has a unique intended spot, and Woody is the lectern that would result from placing all parts where they belong. Our questions are: Does 'Woody' have a shot at becoming an anchored common currency name? Can we make de re modal claims about Woody?

Recall that the chief problem with 'Ilke' was the lack of specificity of the dubbed sister. We could specify things about a counterfactual sister of Goldbach's that would have been born had a certain egg and sperm met; but there would be no way of telling that this was Ilke (see footnote 5 and 15 above). This problem does not arise for Woody: it is sufficiently specific despite the fact that it is a merely possible existent. We can then make de re modal claims as easily about Woody, as we can about Goldbach, and lecterns that are actually assembled. After all, Woody's parts are all actual, and there is just one way they can fit together to yield Woody. The furniture of the universe, as it actually is, contains all there is to Woody, apart from the specific arrangement that would have brought Woody itself into existence. This is enough to (i) specify a modally robust individual and (ii) anchor the name 'Woody'. In addition, it is *more* than what is needed for admitting Woody in an actualist universe. The actualist need only maintain that all of Woody's parts are actual; and that argument does not even rely on the fully specified assembly instructions on which (i) and (ii) crucially depend.

The requirement that the dubbed merely possible individual be sufficiently specific is tricky to keep track of (call this the specificity requirement). Had the instructions failed to provide for a unique mode of assembling Woody's parts (so some major parts of the lectern were interchangeable), we would be back to where 'Ilke' had foundered. Here is why. If our intuition were that the various specific modes of assembly would yield *distinct* lecterns (just as a plate molded from a chunk of clay would have been a distinct object from a vase molded

[25] See for example Prior (1970).
[26] See for example Adams (1974), Fine (1977), and Plantinga (1976).
[27] See Kaplan (1989b: 607–8; 1973, 517, n19). Also, Salmon (1981, 39, n41) reports Kaplan's and Kripke's willingness (in lectures and conversation) to allow the introduction of the name 'Noman' to name "the person who *would have* developed from the union of *this* sperm and *that* egg, had they been united."

from the same chunk), then we would have no way of deciding which of the variously assembled counterfactual lecterns is Woody. Things become even less transparent if we consider specifying merely possible *organisms* (is the dubbed merely possible person sufficiently specific if we pinpoint the zygote from which she might have been born? This is very much an open question given that the zygote might split into several embryos that could develop into distinct identical twins). How do we know if we have given enough details to meet the specificity requirement? Often we will have no clear answer, for further details about biology and physics might alter our judgments concerning (i) when the individual is sufficiently specific (a pertinent question might be: when is a human zygote past the stage of splitting into several embryos?), and (ii) what is essential to being that lectern or that organism (is initial material constitution essential to a lectern? And is his/her sex essential to a person?). Still, *if* we fulfill the specificity requirement, the individual *is* modally robust (and a name for it can become anchored).

Just how tricky it is to determine what counts as sufficiently specific should make us appreciate the fact that with respect to individuals that *actually* exist or existed in the past, the specificity requirement is automatically fulfilled: the actual or past existent is there to stand in with all its specific details, most of which we need know nothing about when dubbing or making reference to the individual. Name-anchoring and reference to modally robust individuals that can thus "represent themselves" is not subject to the vicissitudes of the specificity requirement.

In sum, merely possible objects that are sufficiently specific are modally robust individuals—they can be dubbed, and names for them can become anchored. By satisfying the specificity requirement, a proper name is guaranteed to refer to an individual that has a place in an actualist universe. It is therefore clear that actualism remains an available option, no matter what metaphysical and ontological assumptions we might make in addition to the conceptual claim that proper names refer to modally robust individuals. Even more important is the insight that with actual existents, the otherwise thorny specificity requirement is automatically fulfilled.

5. *Possible worlds with modally robust individuals*

In the preceding sections I argued that the way we understand proper names featured in (counterfactual / metaphysical) modal claims tells us something important about their reference: that they purport to refer to modally robust individuals. Moreover, when the names are anchored, they are thereby guaranteed to refer to modally robust individuals. It is in the light of the metaphysical conception of modality that this crucial aspect of proper names is revealed. The link works the other way around as well: having revealed modally robust individuals as conceptually fundamental, the picture of (metaphysically) possible worlds is radically transformed—in the following way. Modally robust individuals are specified actually as well as counterfactually; they are the starting points, the building blocks for what we can call metaphysically possible worlds. Things do not work the other way around (as had been thought since the advent of modal logic): namely, that there are the possible worlds (or world states) and certain bits of them are what make up individuals across worlds. In other words: it is based on our conception of individuals that a picture of metaphysically possible worlds emerges; not the other way around. The way we interpret certain parts of language reveals a conception of individuals (as modally robust); and it is based on those individuals that we construe possible worlds. *This* is the *individual-driven picture*.

Throughout the paper, by 'possible worlds' I will mean metaphysically possible worlds. When it comes to the metaphysical conception, the just mentioned realization—that individuals are the basis for defining possible worlds rather than possible worlds being the

basis for defining individuals across worlds—effectively *excludes two forms of skepticism about de re modality*. One of them is a combination of what Kit Fine (2005b: 30–9) calls:

- *metaphysical Haecceitism*: the identity of individuals in the actual world is simply given, and is not in need of further explanation (2005b: 32); and
- *modal anti-Haecceitism*: "possible worlds must ultimately be given in purely qualitative terms" (2005b: 31).

Fine (2005b: 35) continues with an insightful illustration of the combination in question:

> … our modal anti-Haecceitist does not regard his individuals as having a genuine transworld identity. He takes the identity of individuals to be given and then thinks of the identificatory paths as mere artificial devices, designed to secure a meaning for cross-world attributions. *It is not as if the objects had a modal underside, a fifth dimension, and that he was attempting to explain their identity in this dimension, just as other philosophers attempt to explain the identity of objects in space and time. Rather the objects come first, and the modal dimension is something tacked on later.* The identificatory paths that emanate from the object are not parts of the object, so to speak, but appendages…
>
> The point becomes especially vivid if we compare the modal anti-Haecceitist with his doxastic counterpart. The doxastic anti-Haecceitist … is certainly not going to suppose that individuals are extended in doxastic space and that, in constructing identificatory paths across the doxastic alternatives, he is somehow explaining what they are. (emphasis added)

Let us examine the combination described here before moving on to the other combination excluded by the individual-driven picture: a theory combining metaphysical and modal anti-Haecceitism.

Along the lines quoted, we can bring out a crucial contrast between doxastic and metaphysical modalities. The combination described above turns out to be untenable, because of a key difference between doxastic and metaphysical modalities. Let us see how. We may well opt for a combination of metaphysical Haecceitism and doxastic (or epistemic) anti-Haecceitism. And this is reflected in the fact that interpreting belief and knowledge ascriptions involving proper names is problematic in ways in which interpreting (counterfactual) modal claims is not. Contrast (10) and (11) with (12) and (13):

(10) DOXASTIC MODALITY
a. The actress who played Lois Lane[28] *believes* that Goldbach's birthplace is Königsberg. true
b. The actress who played Lois Lane *believes* that Goldbach's birthplace is Kaliningrad. false

(11) EPISTEMIC MODALITY
a. It is *apriori* that Königsberg is Königsberg. true
b. It is *apriori* that Kaliningrad is Königsberg. false

(12) METAPHYSICAL MODALITY: POSSIBILITY, both true
a. It is *metaphysically possible* that Goldbach's birthplace is Königsberg.
b. It is *metaphysically possible* that Goldbach's birthplace is Kaliningrad.

(13) METAPHYSICAL MODALITY: NECESSITY, both false

[28] Lois of 'Lois and Clark: The New Adventures of Superman' is played by Teri Hatcher, a math major in college. Let us assume that she is therefore somewhat knowledgeable about the history of mathematics but ignorant about geography: she knows that Goldbach was born in Königsberg, but is unaware that Königsberg and Kaliningrad are one and the same city.

a. It is *metaphysically necessary* that Goldbach's birthplace is Königsberg.
b. It is *metaphysically necessary* that Goldbach's birthplace is Kaliningrad.

It is plausible to assume that (10) through (13) bear the truth values listed above. In the case of (10) and (11), the truth values of (a) and (b) come apart. By contrast, for (12) and (13), the truth values of (a) and (b) do not come apart; what is more, they *cannot* come apart; it is in the nature of metaphysical necessity that they cannot. This is needed if we want to maintain (as I do) that (12)–(13) are de re modal claims about Kaliningrad, a modally robust individual. (Goldbach is likewise assumed to be modally robust, but the culprit here is the city variously known as 'Königsberg' and 'Kaliningrad'.) By contrast, when considering the intuitive (non-de re) readings in doxastic and epistemic contexts, we see the truth values diverging with respect to 'Kaliningrad' and 'Königsberg' in (10a) and (10b); and likewise in (11a) and (11b). This symptom alone prevents us from interpreting these specific readings of (10) and (11) as de re modal claims about the city. (10) and (11) thus fail to motivate the proposal that anchored proper names refer to doxastically or epistemically robust individuals; on the contrary, (10) and (11) are *evidence against* such a proposal.

Moreover, a proposal of doxastically and epistemically robust individuals is genuinely bizarre. We do think of the doxastic and the epistemic dimensions not as dimensions of individuals, but as something tacked on later. This brings out just how interesting it is that the situation is markedly different for metaphysical modality: inherent in our interpretive practices is the assumption that *the modal dimension is one of the dimensions of individuals* in addition to their temporal (and spatial) dimension; it is not something tacked on later. Based on our ways of interpreting de re modal claims (with or without proper names), modally robust individuals are conceptually basic units of reference.

But does not this way of blocking modal anti-Haecceitism rely on assuming metaphysical Haecceitism? It does. The latter view is very plausible in its own right. For it seems overwhelmingly natural to take individuals to be *temporally robust*, as described in Section II.4, Goldbach (the temporally robust individual) is the one born in 1690, writing up a conjecture in 1742, never proving Goldbach's conjecture. When our talk of such temporally robust individuals is taken at face value, we get metaphysical Haecceitism.

When modal talk is not taken at face value, we still need to account for the fact that modally robust individuals are conceptually basic. This is something that would have to be accounted for, even by a *metaphysical anti-Haecceitist*, who holds that "the identity of individuals—or, at least, of certain individuals—is to be explained in terms of their purely qualitative features or in terms of their qualitative relationships to other individuals" (Fine 2005b: 31). But it is here that the task that the *metaphysical* anti-Haecceitist is up against is manageable, and markedly unlike the daunting task that the *modal* anti-Haecceitist is up against. The former can rely on the independent availability of temporal stages for individuals (time slices, non-modally specified), and by claiming them to be basic, construct temporally robust individuals (the conceptual units needed for proper name reference) in terms of them. The proposal might be: the non-modally specified individual stages form a supervenience base on which "our" conceptually basic individuals supervene. There is nothing farfetched about appeal to these basic units. By contrast, a parallel move for the *modal* anti-Haecceitist involves farfetched basic units: for she would have to take for granted certain features that form a supervenience basis on which the conceptually required modally robust individuals are supposed to supervene. But the elements of this latter supervenience base (unlike moments of time and stages of individuals) are not ones that we can plausibly take for granted or consider available. They are, after all, qualitative descriptions of (metaphysically) possible worlds! Surely our handle on, access to, and grasp of modally robust individuals (supposedly supervenient) is far more immediate and unproblematic than our handle on, access to, and

grasp of qualitative descriptions of possible worlds (supposedly providing the supervenience base).

This objection points to what we are missing out on when we assume (along with David Lewis 1968, 1986) the combination of metaphysical and modal anti-Haecceitism: that individuals are in need of no further explanation once we recognize what de re modal claims are supposed to mean. To keep this in perspective, we need to remind ourselves that things do not always resolve themselves automatically like that—recall the intractable specification requirement associated with a merely possible individual like Woody, and the interpretative obstacle associated with doxastic and epistemic modalities (in 10 and 11). We will see more of the latter sort of problem with conceptions of necessity other than the metaphysical one in III.1.

The foregoing might prompt someone to ask: why not construe the individual-driven picture as the denial of modal anti-Haecceitism? The individual-driven picture would then amount to modal Haecceitism—according to which possible worlds and the crossworld identities of individuals are simply given. This latter view captures the modal robustness of individuals—that the subjects of de re modal claims are crossworld individuals. But the individual-driven picture makes a further commitment: not only does it take modally robust individuals as basic, but it also takes possible worlds to be non-basic, construing the worlds in terms of the individuals. The ease with which we conceive of counterfactual scenarios and interpret claims about counterfactual situations is explained in two steps: first certain expressions of our language purport to refer to modally robust individuals; second, and implicit in our understanding of such individuals is an understanding of how these individuals might have been otherwise—an understanding of possible worlds apart from the actual one. It is the second step that remains unappreciated.

In sum, with modally robust individuals on board as conceptually basic, two innovations follow: first, modal anti-Haecceitism becomes a non-starter; second, a new, individual-driven picture of possible worlds emerges. That picture has it *that possible worlds are alternative ways modally robust individuals are*. It is not that modally robust individuals are individuals whose fates vary from one possible world to the next. Our starting point is the modally robust individual, a conceptually basic unit that provides us an easy way of conceiving of what possible worlds are. We get the individuals first and thereby the possible worlds; not the other way around.

III. Modality, Possible Worlds, and Individuals: Various Conceptions

The individual-driven picture takes on board a specific conception of individuals and a specific conception of modality. Individuals are modally robust—de re modal claims inform us that proper names purport to refer to such individuals. This gives us more than the metaphysical conception of modality; we also get to construe possible worlds as ways modally robust individuals might have been. The individual-driven picture concerns a conceptual point: what is reflected in our ways of understanding of language about which notions are conceptually basic (modally robust individuals), and which ones are not (possible worlds).

The significance of this new picture can be better appreciated in the light of the distance we have had to cover to get here. Previous work in logic and philosophy has been dominated by radically different outlooks on conceptions of modality, possible worlds, and individuals. With C. I. Lewis's system of modal logic (1918)[29] began a half-century-long era

[29] It was not until later—Lewis and Langford (1932)—that (logical) necessity and possibility were treated as sentence operators. Thus began the career of □ and ◊.

of necessity understood as logical (and analytic) necessity. It was this conception that W. V. Quine attacked from the 1940's onward (Section 1): he argued that its de re modal claims were unintelligible. Quine's criticism has shaped expectations and qualms about other conceptions of modality as well—doxastic, epistemic, and physical conceptions. In particular, for each stripe of modality, an account was needed for how (if at all) its de re modal claims were rendered intelligible. It was increasingly recognized that scientific claims call for necessity understood not as logical or analytic necessity, but as physical necessity (a precursor to metaphysical modality). But the attendant conception of possible worlds and individuals confronted philosophers with the arduous task of setting criteria to identify individuals across possible worlds (Section 2). Transworld identity was an issue in the context of de re modal claims, but not de dicto ones, contributing to the notorious reputation of the former.

With such preliminaries, Saul Kripke's 1970 proposal about rigid designation—laid out in Section 3—was revolutionary indeed. He drew attention to the metaphysical conception of modality and distinguished it from others. In addition, he came extremely close to recognizing that proper names refer to modally robust individuals, though certain details about nonexistence—what, if anything does the name 'Nixon' refer to in a Nixonless world?—steered him off-course. Still, he realized that on an overwhelmingly natural interpretation of modal talk, transworld identity is a non-issue: on an alternative conception of possible worlds and individuals, transworld identity is *given*, in no need of explanation.

In the wake of Kripke's arguments, David Kaplan put forth a similar idea: proper names are directly referential (Section 4). He criticized Kripke for going off-course on the nonexistence issue—which was exactly what had kept Kripke from making the point that proper names purport to refer to modally robust individuals. Meanwhile, Kaplan construed direct reference in terms of structured propositions: directly referential expressions contribute their referent to propositional content—what is expressed on a certain occasion by the utterance of a declarative sentence. Yet again, with talk of propositions, the point that these referents were modally robust individuals, became blurred. And subsequently, this point disappeared altogether in Millianism—a view inspired by direct reference theory—according to which the sole semantic contribution of a proper name is its referent (Section 5). It is therefore a timely endeavor to regain the lost point, clarify it, and in addition, recognize that modally robust individuals provide a basis for construing possible worlds—in all, discover the individual-driven picture.

1. *Analytic modality and Quine's critique*

For Quine, the interpretive task was very different: necessity (and possibility) were not about counterfactual scenarios, but about constraints induced by logic and by meaning—logical and analytic necessity (and possibility).[30] The analytic conception can be defined as follows:

- $\boxdot p$ is true just in case the meanings of the expressions in *p guarantee* that *p* is true; and
- $\diamondsuit p$ is true just in case the meanings of the expressions in *p leave open* that *p* is true.

On Quine's analytic construal, both of the following are true:

(14) $\boxdot$ Kaliningrad = Kaliningrad
(15) ~ $\boxdot$ Kaliningrad = Königsberg, equivalently, $\diamondsuit$ Kaliningrad ≠ Königsberg

[30] See especially Quine's early papers (1943) and (1947).

'Kaliningrad = Kaliningrad' is true in virtue of meaning alone, hence (7). But 'Kaliningrad = Königsberg', though true, is not verified by the meanings of the expressions involved, hence (8). To discern that Kaliningrad is Königsberg, we cannot just check meanings; we need to check the world.

Introducing quantifiers into modal logic worried Quine. He did not think cases similar to the de dicto modal claim (1)—involving a quantificational treatment of the definite description 'the discoverer of GC' along the lines of Russell's theory of descriptions—meant trouble though.

(1') ◈ ∃! x (GC-discoverer(x) & woman(x))
'It is (analytically) possible that exactly one person discovered GC and she is a woman'[31]

(1') is readily interpreted: it concerns meaning-induced constraints, whether such constraints leave open that the discoverer of the conjecture be a woman. They do. So (1') is naturally read as true.Here, '◈' attaches to a closed formula, one in which all occurrences of variables have already been bound by a quantifier.

Quine worried about the following sorts of de re modal claims though:

(16) Kaliningrad is such that *it* is necessarily identical with Kaliningrad.
∃ x (x = Kaliningrad & ⊡ Kaliningrad = x)

(17) Something is such that *it* is necessarily identical with Kaliningrad.
∃ x ⊡ Kaliningrad = x

(18) Königsberg is such that *it* is possibly distinct from Kaliningrad.
∃ x (x = Königsberg & ~ ⊡ Kaliningrad = x)

(19) Something is such that *it* is possibly distinct from Kaliningrad.
∃ x ~ ⊡ Kaliningrad = x

Quine thought (16) through (19) were unintelligible: *what does it mean* for it to be *analytically necessary for an object*, an individual, to be identical to Kaliningrad? (16)–(19) pose this interpretive challenge. Analytic necessity is about truth in virtue of meaning alone; And how we specify the individual in question—the city of Kaliningrad—affects whether the result is or is not analytically necessary. Specify it as 'Kaliningrad', and you get 'Kaliningrad = Kaliningrad', which is analytically necessary. But specify it as 'Königsberg', and you get 'Kaliningrad = Königsberg' which is not analytically necessary. Quine's diagnosis: we cannot ascribe analytic properties (like 'being necessarily identical with Kaliningrad') to individuals directly; only to individuals under a certain specification.[32]

Quine's initial (1943) line against quantified modal logic is similar; by doing no more than changing the examples and numbering, we get the following:

[31] ∃!x(GC-discoverer(x) & woman(x)) abbreviates ∃x(∀y(GC-discoverer(y) ↔ y = x) & woman(x)).

[32] Notice the parallel with doxastic and epistemic modality, in (10) and (11), discussed in Section II.5 above. There, following Fine (2005b), I emphasized how bizarre it was to think that individuals had a doxastic or epistemic dimension. Instead, both are plausibly tacked on later. Here, it is likewise bizarre to think *individuals* have an analytic dimension. By contrast, it is exceedingly plausible to think that individuals have a temporal and a modal dimension; it is this that the individual-driven picture aims to capture.

> "'There is something which is necessarily identical to Kaliningrad' is meaningless. For, would Kaliningrad, that is, Königsberg be one of the cities necessarily identical to Kaliningrad? But such an affirmation would be at once true in the form of (14) and false in the form negated in (23). … This resistance to quantification, observed in relation to the context 'necessarily…', is encountered equally in connection with the derivative contexts 'possibly…' etc." (1943, 124).

Cases of quantifying in—with outside quantifiers binding variables "trapped" inside the scope of modal operators—require us to ascribe modal properties (being analytically identical to Kaliningrad) to individuals directly. This is analytic necessity de re.[33] Recall the way we had drawn the de re–de dicto distinction in Section II: the former but not the latter presupposes the intelligibility of ascribing modal properties directly to individuals. Based on this, (1') counts as de dicto. But so do (14) and (15), the metaphysical-necessity siblings of which would have been de re (like 6)—about the city variously known as Kaliningrad and Königsberg. Neither (14) nor (15) imposes the intelligibility requirement; after all, they merely amount to: "'Kaliningrad is Kaliningrad' is analytic"; "'Kaliningrad is Königsberg' is not analytic". For analytic necessity, proper names do not pose a special interpretive problem.[34] Quine's charge arises specifically in cases of quantifying in, as in (16)–(19): the *x*-s (corresponding to 'it') are bound from the outside. This means that in each case, there comes a point when the open formula '⊡ Kaliningrad = x' has to be interpreted, and this Quine takes to be problematic.

> QUINE'S UNINTELLIGIBILITY CHARGE
> We cannot interpret, make sense of the open formula ⊡ Kaliningrad = x, given that the following are true:
> - Kaliningrad = Königsberg
> - ⊡ Kaliningrad = Kaliningrad
> - ~ ⊡ Kaliningrad = Königsberg

The upshot has been: given the analytic conception of modality assumed by Quine, quantification in de dicto (1')—with the modal operator attaching to a *closed* formula—is readily interpreted. But de re modal claims involving quantifying in—such as (16)–(19), with the modal operator attaching to an *open* formula—are unruly, bringing on Quine's unintelligibility charge. Thus began de re notoriety—with a problem specific to analytic modality.

2. *Transworld identity*

As early as 1943, Quine was noting that he was concerned about the so-called strict modalities: analytic and logical necessity. He recognized, however, that there was a *practical* need to clarify other conceptions of necessity that would make quantifying in intelligible:

[33] This is the syntactic de re. See footnote 2.

[34] In fact, proper names circumvent an issue related to definite descriptions that is irrelevant to Quine's charge of unintelligibility, and has sidetracked responses. When the intelligibility charge was formulated with definite descriptions ('9 = the number of planets'; see Quine 1947, 123–4), one influential response—first suggested by Smullyan (1947)—was that such phenomena with *definite descriptions* can be handled if we treat definite descriptions as Russellian quantified expressions (see footnote 9 above). Further confusion resulted from the fact that in 1943, Quine was focusing on *deducing* (16) from (14) by existential generalization. That Quine was raising an interpretive issue becomes clearer in his 1947 follow-up (1947, 46). Two illuminating commentaries on the history of the debate between Quine and his contemporaries stand out (Burgess 1998, and Neale 2000), along with Kaplan (1986) and Fine (1989, 1990), both of whom lay out the interpretive charge with great clarity and suggest ways to resolve it for analytic and logical necessity.

> In discussions of physics, naturally, we need quantifications containing the clause '*x* is soluble in water', or the equivalent in words; but… we should then have to admit within quantifications the expression … 'necessarily if *x* is in water then *x* dissolves'. Yet we do not know whether there is a suitable sense of "necessity" that admits pronouns referring thus to exterior quantifiers [that is, whether we can have a conception of necessity that allows quantifying in] (1947, 124).

We need to envision a water-deprived object in a counterfactual situation in which *it* is placed in water (and dissolves).[35] How are we to track this object from the water-free situation to the watery one? This is the thorny issue of the transworld identity of individuals.

Notice that de dicto claims like (1) are easy:

(1) ◊ the discoverer of GC is a woman

The counterfactual situation in question is described in general terms, so the issue of identifying the counterfactual woman in question with anyone in the actual world or in another counterfactual situation does not even arise. The need to specify criteria for the transworld identity of individuals arises specifically in connection with de re modal claims. But now that we are again considering counterfactual modal claims rather than analytic necessity, proper names become de re vehicles again, raising the transworld identity issue (see footnote 2):

(6) ◊ Goldbach eschews mathematics

How is the counterfactual man (who becomes a doctor, say) related to our mathematician Goldbach?

Transworld identity is not a problem on the individual-driven picture, which posits modally robust individuals and takes possible worlds to be defined in terms of such individuals. But not until Kripke's *Naming and Necessity* did philosophers begin thinking along the lines of the first half, whereas the second half remains largely unappreciated to this day. Two early passages from Kaplan—both from the late sixties—illustrate the pre-Kripkean way of thinking about possible worlds:

> Numerals are reliable; they always pick out the same number. But to suppose a standard name[36] for Quine would presuppose a solution to the more puzzling problem of what features to take into account in determining that an individual of one possible world is 'the same person' as that of another. Often when the worlds have a common part, as when we consider alternative futures to the present, the

[35] We should pause for a moment to notice that this approach is a straightforward extension of Quine's point raised in the context of the unintelligibility charge in the previous section: "what is this *object* that is necessarily such that…"; but the suggestion that we locate that very object in a counterfactual situation already gives up on modal anti-Haecceitism. See Section II.5 above.

[36] Kaplan thought numbers can be given standard names—the numerals—in terms of which quantifying in could then be interpreted. The proposal: only the standard names could be considered substitution instances for variables in certain modal contexts—specifically, analytic, and doxastic—where the modal operator attaches to an open formula. For proper names of individuals like people and objects, Kaplan considered belief ascriptions only; his solution there involves vivid names—discussed in Section II.3 above.

Incidentally, Ruth Barcan Marcus's (1961) proposal that proper names are mere tags construes proper names on the model of standard names like the numerals for numbers. This has a contentious consequence Quine explicitly (1943, 1947, 1962) rejects: coreferring proper names like 'Kaliningrad' and 'Königsberg' are *synonymous* (if they are in fact genuine proper names). Without motivating this outcome in any way, Marcus (1961) simply accepts it (as did Smullyan 1947 and Fitch 1949 before her). For discussion, see Neale (2000), especially Part II, Section 20. By talking about names as tags, Marcus is simply repeating Russell's (1918) claim that genuine (or logically proper) names—what Marcus calls proper names, which "simply tag" and have "no meaning"—give rise to identity statements which, if true, "must be tautologically true or analytically true" (Marcus 1961, 11–2, 13). In other words, there are no informative identity statements involving *genuine* names.

> individuals(s) can be traced back to the common part by the usual continuity conditions and there compared. But for individuals not extant during an overlap such techniques are unavailing. It seems that such radically disjoint worlds are sometimes contemplated by modal logicians.[37] I am not here passing final judgment but only remarking the relevance of a second difference between Quine and Nine: namely, that he presents a very real problem of transworld identification while it does not. (Kaplan 1969, 130–1).

Implicit in this passage is the following: tracking individuals through time is manageable, because we can rely on continuity over time. This may well be behind Kaplan's thinking—apparent in another paper he wrote in the late sixties—that temporally robust individuals are basic (more basic than temporal stages of individuals), but modally robust individuals are not (because individuals specific to a world are the more basic units):

> "I find on introspection that in most cases (though not all) *it is the superentity that I think of as basic when considering temporal stages… (and similarly for spatial stages), and the slices, the entities specific to a stage, that I think of as somehow artificial. But when I think about different possible worlds proper (i.e., what might be but is not), the entities specific to a stage seem to be basic and naturally determined and the superentities (the transworld heir lines as I earlier called them) seem to me somehow artificial* and determined only relative to certain interests. And I am not sure that further consideration of these intuitions would not lead to the discovery of a logical difference between the two kinds of frame of reference. (Kaplan 1979, 104; emphasis added).

We will soon see that by the early 1970's, Kaplan no longer thinks that transworld identification is a problem and that individuals across worlds (what he calls superentities above and I call modally robust individuals) are less basic than world-specific stages of individuals.

Taking stock: difficulties with identifying individuals across worlds provided yet another reason to regard de dicto modal claims as harmless, and de re ones as tricky. These considerations are very different from Quine's though: we are no longer dealing with the analytic conception of necessity; and the issue is not that de re modal claims are unintelligible; on the contrary, they *seem* intelligible; but interpreting them embroils us in the difficult task of specifying transworld identification criteria.

3. *Rigid designation*

Saul Kripke revealed three key insights about the interaction between proper names and modality. First, he clarified the metaphysical conception of modality (concerning ways things can or must *be*), sharply distinguishing it from epistemic notions like apriori and aposteriori (concerning ways things can or must be *known*). Second, he argued that with this conception, transworld identity is not a problem. Third, he explained that we have a "direct intuition", or an "intuitive idea"[38] that proper names are rigid designators. He also offered a battery of arguments and tests for the thesis that proper names are rigid designators, but the appeal to direct intuitions was the most compelling detail in the argument for rigid designation (though it did not turn out to be the most influential one).[39] I will summarize these three points in turn.

Kripke famously argued that being necessary and being apriori can come apart (as can being contingent and being aposteriori). Examples of the necessary aposteriori include: (i)

[37] For example, we might need to consider a situation in which Quine is born a day earlier and nothing goes exactly the same from then on. This is a counterfactual situation involving Quine with no perfect overlap with the actual course of Quine's life.

[38] Emphasized in the *Preface* subsequently added (Kripke 1980, 4, 5, 14), and to a lesser extent, earlier as well (1980, 48–9).

[39] It was over eight years ago that David Barnett had tried to convince me of this—and I did not get what he was after back then. See also Burgess (2006, Section 7).

identity statements with proper names—'Kaliningrad is Königsberg'; and (ii) claims about the essences of individuals—'Goldbach is human'. The following is supposed to hold for each type of claim: given that the claim is true, it could not have been otherwise, and is therefore necessary; but we cannot know that the claim is true independently of experience, and so it is aposteriori. A great deal of emphasis was placed on the necessary aposteriori in Kripke's lectures as well as in subsequent work by others.[40]

It is well to note, however, that the distinction between metaphysical necessity and epistemic notions does not require *appeal to claims that are at once necessary and a posteriori*. A lesser result will suffice: on the one hand, appeal to a posteriori claims for which it is *open* whether they are necessary or contingent; on the other hand, appeal to necessary claims for which it is *open* whether they are a priori or aposteriori. For the former, (ii)-type claims will do: we need not appeal to essences in any way to point out that 'Goldbach is human' is a posteriori, yet it is open issue whether it is necessary.[41] For the latter, Kripke gives the example of Goldbach's conjecture, for which no proof exists yet, and it is unclear if a proof can be had. This means that the following is wide open (1980, 36–7; 1971, 150–1):

(20) It is apriori that Goldbach's conjecture is true, or it is apriori that the conjecture is false.

Yet we do know now, without any prospect for obtaining a proof, that the following holds—given that mathematical truths are necessarily true and mathematical falsehoods, necessarily false:

(21) It is necessary that Goldbach's conjecture is true, or it is necessary that the conjecture is false.

Unlike many commentators, Kripke did not lose sight of the lesser result about what is open and what is not:[42]

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[40] Not only is the necessary aposteriori a central theme in *Naming and Necessity* (1980, 97–134), it is also *the* defining theme in Kripke's *Identity and Necessity* lecture delivered less than a month later (1971, 135–44, 151–61). (Incidentally, in that lecture, what I call the three insights from Kripke are presented in reverse order.) The necessary aposteriori has set the basis for the vast, rapidly growing literature on two-dimensional semantics (for example, Chalmers 1997).

The necessary aposteriori is also central elsewhere, I will mention two notable examples. First, see Scott Soames's extensive work intended to develop the unfinished agenda of *Naming and Necessity* (see especially Soames (2002) and Soames (forthcoming), where he argues that Kripke's classification was right about (ii) but not about (i)). Second, see Nathan Salmon's (1981) influential book showing that (ii)-type claims, which amount to essentialism, rely on *essentialist premises in addition to* Kripke's theory of names. Kripke never claimed essentialism could be derived from his theory of reference, but others thought it could be (Kripke 1980, 1, n2). In fact, Kripke's strategy was to bring in examples about essences for the purpose of illustrating how the necessary and the apriori may come apart. (The next two footnotes are relevant to this point of Kripke's and misunderstandings about his view.)

[41] "One might very well discover essence empirically," he says (1980, 110). There is a caveat: the example works as long as we think, as Kripke does, that there can be necessary statements involving contingently existing individuals. We will take up this point shortly in the discussion of rigid designation.

[42] Two further passages from Kripke: "The main point is that it is not trivial that just because … a statement is necessary it can be known a priori. … And so this shows that even if everything necessary is a priori in some sense, it should not be taken as a trivial matter of definition" (Kripke 1971, 151). "At any rate, and this is the important thing, the question is not trivial; even though someone said that it's necessary, if true at all, that every even number is the sum of two primes, it doesn't follow that anyone knows anything a priori about it" (Kripke 1980, 37). See also Kripke (1980, 39, n11; 110–5). Had commentators not lost sight of the lesser result, Salmon's (1981) book would not have been needed to straighten things out (see footnote 40 above).

> More important than any particular example of something which is alleged to be necessary and not *a priori* or *a priori* and not necessary, is to see that the notions are different, that it's not trivial to argue on the basis of something's being something which maybe we can only know *a posteriori*, that it's not a necessary truth. It's not trivial, just because something is known in some sense *a priori*, that what is known is a necessary truth. (1980, 39)

With the metaphysical conception of modality thus clarified, the road was paved for construing possible worlds as counterfactual situations, as ways the world might have been. It is at this stage that we are confronted with the issue of identifying individuals across worlds. Recall that this issue arose for de re modal claims (about, say, how Goldbach might have been), but not their de dicto siblings (about, say, the possibility of a woman discovering Goldbach's conjecture). Kripke's second major insight was that thinking about possible worlds in the right way reveals transworld identity as a pseudo-problem.

Kripke thinks criteria for transworld identification are not needed to interpret de re modal claims like the following:[43]

(22) Nixon might have lost the 1968 presidential election.
◊ Nixon lost the 1968 presidential election

> Why can't it be part of the *description* of a possible world that it contains *Nixon* and that in that world *Nixon* didn't win the election? It might be a question, of course, whether such a world *is* possible. But, once we see that such a situation is possible, then we are given that the man who might have lost the election or did lose the election in this possible world is Nixon, because that's part of the description of the world. … There is no reason why we cannot *stipulate* that, in talking about what would have happened to Nixon in a certain counterfactual situation, we are talking about what would have happened to *him.*(1980, 44, emphasis in original)

This suggests that given how we understand (22), an individual like Nixon is modally robust—able to sustain predications like 'might have lost the 1968 election'. Identifying him in a counterfactual situation is a non-issue. A possible world *w* in which someone who resembles Nixon but is not him (but, is, say, the comedian Dick Frye), and loses the election, is a world in which someone other than the modally robust individual Nixon loses the election; a possible world *v* in which Nixon loses the election is one in which the modally robust individual Nixon loses the election. No more can or needs to be said. Here is an analogy; imagine someone inquiring: "If I encounter a bear, how do I know it is a mammal?" No assurances and advice can or needs to be given—a bear, if it really is a bear, cannot not be a mammal; if a non-mammal is encountered (a koala, say), it cannot have been a bear to begin with, even if it looked bearlike.

At this juncture, de dicto claims, which had been thought innocuous, actually prove distracting. For consider the possible world *u* envisioned here:

(23) It might have been that a cocker spaniel owner lost the 1968 presidential election.
◊ a cocker spaniel owner lost the 1968 presidential election

We cannot answer the following question: is *u* the same world as *w*, *v*, or neither? But that is because for the purpose of specifying, "getting at" possible worlds, de dicto claims like (23) provide inferior means relative to the means afforded by de re modal claims like (22). That we cannot answer this question reflects badly on de dicto claims, not de re ones.

[43] See also Kripke (1971, 146–9; 1980, 39–47).

The upshot: not only are de re modal claims—interpreted in accordance with the metaphysical conception of modality rather than Quine's—*intelligible*, but making sense of them is *simple*.

What is missing from Kripke's account then? First, he fails to recognize the individual-driven picture. Second, not only did his account of rigid designation steal the limelight; it also blurred the suggestion that proper names refer to modally robust individuals. The individual-driven picture has it that possible worlds are alternative ways modally robust individuals are; the individuals are the starting point, the worlds are based on them. Kripke comes very close to offering this picture by suggesting that we begin with individuals: [44]

> We can refer to the object and ask what might have happened to *it.* So, we do not begin with worlds (which are supposed somehow to be real, and whose qualities, but not whose objects, are perceptible to us), and then ask about criteria of transworld identification; on the contrary, we begin with the objects, which we *have,* and can identify, in the actual world. We can then ask whether certain things might have been true of the objects (1980, 53).

Here, there are still remnants of the old picture of independently specified possible worlds: Kripke says that individuals identified in the actual world come *first*, and the other worlds are considered *later*; but he does not say that the former are the conceptual building blocks in terms of which to construct the latter. He may have thought that this is a point on which he can remain neutral, because his proposal about possible worlds and individuals does not rely on such an assumption about possible worlds. That he stops short of making the point that modally robust individuals are the building blocks of possible worlds is also apparent from his discussion of rigid designation, shortly before the quoted passage.

Kripke explains that a proper name like 'Nixon' is a *rigid designator*:

> RIGID DESIGNATOR: THE NEUTRAL DEFINITION
> A rigid designator designates the same individual *i* in every world in which *i* exist; and designates no-one other than *i* in worlds in which *i* does not exist.

This definition remains neutral between two options, distinguished by Salmon (1981, 33–4):

> PERSISTENTLY RIGID DESIGNATOR
> A rigid designator designates the same individual *i* in every world in which *i* exist; and designates no-one in worlds in which *i* does not exist.

> OBSTINATELY RIGID DESIGNATOR
> A rigid designator designates the same individual *i* in every world.

Kripke's aim was to maintain neutrality and avoid choosing between persistence and obstinacy (1980, 20, n21; 48); there is one passage where he gives the definition for persistent rigidity (1971, 146). He later clarified that it was the neutral definition he had in mind (Kaplan 1989b: 569–70). The second clause in the neutral definition—'designates no-one other than *i* in worlds in which *i* does not exist'—is intended to sidestep certain questions Kripke takes to be independent of his enterprise. He wants to claim that proper names of contingent existents are rigid designators; to say this much, he thinks nothing needs to be said about how and whether to assign truth values to claims like 'Nixon is human' and 'Kaliningrad is Königsberg' in possible worlds in which Nixon is never born, and the city of

[44] Following this passage, Kripke immediately moves on to another issue: fixing the reference of a proper name versus giving a synonym (1980, 53–60).

Kaliningrad is never founded.[45] But the very fact that he appears to think it might be regarded as *more puzzling* to talk about the reference of 'Nixon' in a world in which Nixon is never born (or conceived), than in a world in which he owns no cocker spaniel, reflects that at times, he is not quite thinking of Nixon as a modally robust individual. Perhaps on occasion he is still in the grip of the old picture of independently specified possible worlds, and thinks that in a world where Nixon does not exist, we find a void where the referent should be. That is because on those occasions, he is not thinking of the referent of 'Nixon' as a modally robust individual. Instead, there is supposed to be the actual Nixon—who won in 1968, owned a cocker spaniel, resigned the presidency in 1974—and his name comes with a special transworld fishing rod that has its catch assigned for every possible world; except in the worlds where Nixon does not exist; there, the fishing line dangles without a catch (a referent). By contrast, on the individual-driven picture, 'Nixon' refers to Nixon, the modally robust individual, regardless of which world we are at. The relevant notion of rigidity is that of obstinate rigidity then, with nonexistence no barrier to reference. On this picture, the worlds are, after all, ways modally robust individuals might have been—and that includes worlds in which they do not exist, as much as worlds in which they own no cocker spaniel. Had Kripke realized this much, he would not have thought Nixon's contingent existence posed any special problem when thinking about how and to what 'Nixon' refers in such a world. We are about to see Kaplan (1989a, 1989b) criticizing Kripke on the same point.

The proposal that proper names are rigid designators paints a false picture: proper names like 'Nixon' are thought special because they come equipped with the special transworld fishing rod, with the same man assigned as its "catch" in each possible world. By contrast, definite descriptions like 'the person who won the 1968 presidential election' do not come with such equipment and are therefore non-rigid. This is misleading: what is special about proper names is that they refer to modally robust individuals; they do that once, and no more fishing is needed as counterfactual situations come under consideration; the possible worlds are just alternative ways those individuals are. Considering a counterfactual situation involving Nixon does not involve leaving one Nixon behind and homing in on another (however automatically); there is no leaving him behind, so there is no repeated homing in on him either.

In the 1980 *Preface*, to *Naming and Necessity*, Kripke defines rigid designators as expressions that play a distinctive role in actual and counterfactual truth conditions (1980, 6–7). Consider:

(24) Nixon lost the 1960 presidential election.
(25) The 37th U.S. President lost the 1960 presidential election.

As a description of the actual world, (24), a (non-modal) claim featuring the rigid designator 'Nixon' is true just in case Nixon (our Nixon) loses in 1960; and as a description of a counterfactual situation, the claim is true just in case that same individual loses in 1960. By contrast, the truth-conditions of (25), with the non-rigid description 'the 37th U.S. President', do not involve a fixed individual from one world to the next, but different people, whoever happens to be the 37th U.S. President (Nixon in the actual world, Hubert Humphrey in one counterfactual situation, George Wallace in a third, and so on). Kripke considers his "main remark [to be] that we have direct intuition of the rigidity of names, exhibited in our understanding of the truth conditions of particular sentences (1980, 14)." Thinking in terms of the distinctive truth-conditional contribution of proper names is closely related to ideas Kaplan (1978, 1989a) developed in the 1970's, to these we will now turn.

[45] Kripke addressed this issue briefly in his earlier work on the model-theoretic treatment of modal logic (1963, 65–6).

4. *Direct reference*

The focus of Kaplan's influential monograph *Demonstratives* (1989a), written in 1977, was on the semantics of indexical expressions: such as 'now', 'I', and demonstratives like 'that', 'she'. Kaplan argued that these expressions are *directly referential* in that they contribute their objects—individuals—to the propositions expressed, to propositional *content*. For example, when I point to a portrait of Laika and say 'She died in space', the demonstrative 'she' contributes *Laika herself*, the first dog in space, to the proposition I expressed—to propositional content. The proposition thus consists of Laika, the dog, and the property of dying in space. This is a *singular proposition* about Laika. By contrast, the proposition expressed by 'The most famous astronaut dog died in space', is a *general proposition*; it is not about Laika in particular, but general conditions that fit Laika, and her only: namely, being the most famous astronaut dog. Both the singular and the general proposition has an internal structure—is a *structured proposition*[46]—but only the former has Laika as a propositional constituent, due to the fact that indexicals (including the demonstrative 'she') are devices of direct reference whereas definite descriptions are not.

But the meaning of indexicals is not *exhausted by* their content—the individual they contribute to the proposition expressed. 'I' also had a "second kind of meaning… which determines the content in varying contexts. The rule, '"I" refers to the speaker or writer' is a meaning rule of the second kind" (Kaplan 1989a: 505). Kaplan calls this kind of rule the *character* of 'I', a function from contexts of utterance to contents.

Like indexicals, proper names are directly referential: the content (propositional contribution) of 'Laika' is Laika, the dog. 'Laika died in space' expresses a singular proposition, indeed, the same singular proposition that we have associated with an utterance of 'She died in space'. Unlike indexicals, proper names lack a *semantic* rule that determines their content, a rule of which competent English speakers are aware. Recall our discussion of common currency words[47]: the name 'Laika' was introduced into the language for a certain dog, became a common currency word, got anchored to that dog, and has been anchored to her ever since.[48] But Kaplan thinks the history of introduction and use of the name 'Laika' is a *presemantic* matter. For example, the context of utterance plays a presemantic role in helping us decide *which word* 'hot' was used by a speaker in a particular context of uttering 'I'm hot' (was she talking about heat or about looks?).[49] Like 'hot', 'Neil Tennant' is ambiguous between (at least) two distinct common currency words, one for the pop singer, and one for the philosopher (see Section II.3 above). If we believe this (it is hard not to), then each 'Neil Tennant' has a fixed character: no matter what the context of utterance, 'Neil Tennant$_1$' refers to the pop singer, and 'Neil Tennant$_2$' to the philosopher. The history of introduction and use of each name plays a presemantic role then, allowing us to decide which 'Neil Tennant' was

[46] Fine (2005b: 22–3) points out that direct reference theory does not require the structured-propositions framework; the theory need only claim that certain propositions are *singular*, but it need not go so far as claiming that they are *structurally singular*. On structured propositions, see Kaplan (1975, 1978, 1989a, 1989b).

[47] Section II.3, especially footnote 17.

[48] In fact, there was some confusion surrounding the introduction of the name, because 'laika' in Russian is a label for a certain breed of dog. News reporters thought they were adopting the common currency proper name 'Laika' from Russian, but in fact, they inadvertently introduced a new name for the dog. This highlights yet another source of error to which community consensus opinion is susceptible (see Section II.3 above): the linguistic community as a whole might mistake the introduction of a new word for carrying on with the use of an already established common currency word. If we think (plausibly enough) that a new word 'Madagascar' for the island was inadvertently introduced by westerners, then that provides a further example of this sort of error. This is not so important for my previous discussion of 'Madagascar', because the mistakes relevant involve thinking that a word is anchored when in fact it is not; for the name 'Laika' anchoring was never an issue.

[49] See Kaplan (1989a: 559–62; 1989b 573–77) as well as Stanley and Szabó (2000, 220–8).

used on a given occasion. But fixed characters also mean that coreferring proper names (like 'Kaliningrad' and 'Königsberg') *cannot* have distinct characters: they refer to the same city and they *therefore* have the same fixed character and the same content.[50] In this way, for proper names, we see character, content, and referent collapse, so "it is not unnatural to say of proper names that they have no meaning other than their referent" (Kaplan 1989a: 562). This outcome has inspired Millianism, the view according to which the sole semantic function of proper names is to pick out their referents *because* they connect to their referents directly, without the mediation of any semantic rules. This view, also advocated by Kaplan (1989a), will be discussed in the next section. But beforehand, it is well to explore Kaplan's criticism of Kripke's proposal that Nixon has no referent in a world in which Nixon does not exist.

Kripke deliberately avoided talk of propositions—singular or general (1980, 21).[51] But propositions are not essential to the direct reference view either. We can set apart directly referential expressions from others by pointing out that they contribute to truth conditions in a special way—the truth conditions involve the actual referent, a specific individual, even when the utterance is evaluated in counterfactual circumstances (Martí 2000). This is the familiar point we have already seen Kripke make about rigid designators: they are distinctive in that the individual actually singled out is what is relevant to actual as well as counterfactual truth conditions (this holds for (24), with a proper name but not (25), which involves a non-rigid description). Indeed, the two theses—that proper names are directly referential and that they are rigid designators—are both theses about what names "contribute to the determination of truth and falsity" (Martí 2000). And the theses agree: the contribution is the referent of the name—the individual. But Kaplan thinks direct reference is "supposed to provide the deep structure for rigid designation, to underlie rigid designation, to explain it" (Kaplan 1989b: 571). This brings us to Kaplan's criticism and reformulation of the rigid designator definition.

Kaplan's argument goes as follows. The important sense of rigid designation, the one Kripke should have intended, is this: a proper name refers to the same individual in every possible world. Period. 'Nixon' refers to Nixon even in worlds in which Nixon does not exist. This is the definition of an *obstinately rigid designator*.[52] It is one thing to recognize the insight that proper names refer to the same individual in every possible world; but it is something else to recognize that they do so *because of a special semantic feature: that they refer to their objects directly*. There are expressions that *happen to* designate the same individual in every world: for example, 'the square root of 64' rigidly designates the number eight. But this is not due to semantics at all. Also, 'the man who actually proved Goldbach's conjecture' rigidly designates Goldbach. But this is not due to the *semantics of definite descriptions in general*, but to the semantics of 'actually'.[53] That proper names refer directly to an individual is a profound fact about their semantics; that they rigidly designate that individual is a superficial consequence of the profound fact; instead, what gets at the heart of

[50] Kaplan (1990, especially 114–7) argues for a conception of words according to which coreferring proper names *can* be distinct common currency words: 'Hesperus' and 'Phosphorus' are plausible examples. But then their distinctness is not something *semantics* would capture. On this point, see also Kripke (1979, 408, n43).

[51] One of the most prominent followers of Kripke, Scott Soames, does not. See for example Soames (2002).

[52] See the three definitions of rigidity in Section III.3. See also the discussion in Kaplan (1989a: 493–97, especially n16; 1989b: 568–71), as well as in Salmon (1981, 32–40). Salmon coined the label 'obstinately rigid designator', also suggesting (1981, 34, n37) that obstinate rigidity is anticipated in Kaplan (1969, 128), in the passage "we should restrict our attention to a smaller class of names; names which are so intimately connected with what they name that they could not but name it. I shall say that such a name *necessarily denotes* its object…". I do not think Kaplan is anticipating obstinate rigidity here; Salmon is quoting him out of context: the previous sentence is about "ways of specifying the number nine". Necessary existents like the number nine do not allow us to decide among the neutral, obstinate and persistent stripes of rigidity, because no situation in which the name for nine is without a designated object arises in the first place.

[53] For interesting discussion on these issues, see Kripke (1980, 21, n21), McGinn (1982), Kaplan (1989b: 576–7). Salmon (1981, 32–41), and Almog (1986, 211–14, 223–5).

the matter is that proper names are obstinately rigidly designators. Kaplan thinks that had Kripke seen this, he would have recognized that the reference of 'Nixon' in a Nixonless world is not a problem at all. Kaplan's statement of this is clearest when he does not mention propositions:

> Some have claimed that though a proper name might denote the same individual with respect to any possible world (or, more generally, possible circumstance) in which he exists, it certainly cannot denote him with respect to a possible world in which he does not exist. With respect tot such a world there must be a gap in the name's designation, it designates nothing. This is a mistake. There are worlds in which Quine does not exist. It does not follow that there are worlds with respect to which 'Quine' does not denote. What follows is that with respect to such a world 'Quine' denotes something which does not exist in that world. Indeed, Aristotle no longer exists, but 'Aristotle' continues to denote (him). (Kaplan 1973, 503)

Notice Kaplan's appeal to the temporal analogy: 'Aristotle' refers to an individual: Aristotle, who no longer exists. Note, moreover, that we are talking about a temporally robust individual, one that can sustain temporal predications. Likewise, 'Quine' refers to an individual, a modally robust individual, no less, and does so even in a possible world in which Quine does not exist. Kaplan is making the conceptual point that as devices of direct reference, proper names purport to refer to temporally and modally robust individuals; and given this, the issue of referring to individuals at a time when they no longer exist, or in a possible world in which they do not exist, is no problem at all. Indeed, we have the wrong picture if we think there is an issue here. Kripke went wrong in construing the referents of proper names as individuals with the special transworld fishing rod. On this false picture, in each world, there is still some fishing to do, however automated that might be in the case of proper names; and failing to find the target catch leaves us with a dangling fishing line. In fact, no fishing is involved; we need only home in on the individual—a modally robust individual—once, in the actual world, and from then on, we *have* the individual. Had Kaplan argued along these lines, he would have had half of the individual-driven picture, about modally robust individuals, though not the other half, about possible worlds. But putting things in terms of structured propositions served to cover up the issue about *what sort of individuals* were the referents of proper names. It is not surprising then that in adopting the structured-propositions framework, proponents of Millianism completely lost sight of Kaplan's almost-articulated insight about modally robust individuals. Before taking a closer look at Kaplan's Millian legacy, it is well to explore the structured-propositions framework a bit further.

Kaplan's (1989a) primary concern were sentences containing indexicals. He developed an elegant two-stage interpretation for them. Imagine Goldbach saying:

(26) I might have become a doctor.

The interpretation of his utterance proceeds in two stages: first, we *generate* a structured proposition based on the *context of utterance*: a proposition whose constituents include Goldbach (who is the speaker— 🕴 below), and the property of being a doctor. These form the singular proposition also expressed by (an utterance of) 'Goldbach is a doctor': ⟨ 🕴 , Being-a-doctor⟩. This singular proposition is the first half of the proposition expressed by (26):

(26') ⟨⟨ 🕴 , Being-a-doctor⟩, Being-possibly-true⟩

Second, we *evaluate* (26') relative to a *circumstance*: in this case, the modal auxiliary 'might have' instructs us to evaluate the proposition with respect circumstances other than the

context of the utterance—counterfactual circumstances; the proposition is true just in case there is a counterfactual circumstance in which the singular proposition ⟨ 🧍 , Being-a-doctor⟩ is true—in which Goldbach went into medicine. The fact that he was not *actually* a doctor, is irrelevant to the evaluation, just as it is irrelevant who else have actually uttered (26) on other occasions, and whether they are doctors actually, or counterfactually. With indexicals like 'I', the two steps have to be distinguished, because contexts of utterance for the likes of (26) (may and do) vary. If Goldbach utters (26), we are supposed to generate a proposition about Goldbach, and go on to evaluate it with respect to counterfactual circumstances; if Madam du Châtelet utters (26), we generate a different proposition, to be subsequently evaluated.

Notice one crucial detail about the evaluation stage: for the utterances we make, the circumstance of evaluation is typically the actual world. Usually we are not interested in whether what we said would have been true in a counterfactual circumstance. Counterfactual circumstances of evaluation matter to us in so far as they are relevant to the *actual* circumstance of evaluation. This is in fact what we saw happening with Goldbach's utterance of (26): whether it is true in the actual circumstance of evaluation (in the actual world), depends on whether there is a counterfactual world in which the singular proposition ⟨ 🧍 , Being-a-doctor⟩ is true. The typical case thus involves *an actual context of utterance* generating a proposition, the *actual world as the circumstance of evaluation*, but the latter in turn involves *evaluating some proposition in non-actual possible worlds*.

This set-up has an adverse side effect: we get a misleading, flattened picture of the content of propositions. When we proceed to evaluate utterances, the propositions that matter to the evaluation are *non-modal*. For example, evaluating (at the actual world) what is expressed by 'Goldbach *might have been* a doctor' (26' above), is computed based on evaluating the non-modal proposition expressed by 'Goldbach *is* a doctor'—⟨ 🧍 , Being-a-doctor⟩—in various other circumstances; call these *subordinated circumstances of evaluation*. Indeed, this is exactly what possible worlds (as circumstances of evaluation) were supposed to accomplish: capture what modal expressions contribute to truth conditions, and do this in terms of quantification over whatever the relevant possible worlds are.[54] (In the case of metaphysical modality, the worlds are supposed to be the metaphysically possible ones.) *In the actual circumstance of evaluation, the modal expression calls for taking into account subordinated circumstances.* The next section will show how this two-stage evaluation picture—the division of labor between propositions and possible worlds outlined above—proved misleading by (i) completely covering up the conceptual point that proper names purport to refer to modally robust individuals (a claim we have almost seen Kaplan reach), and as a result, (ii) provided a false, non-modal picture of the reference relation.

5. *Millianism*

A further line of thought about direct reference (alongside Kaplan's claims that indexicals and proper names are devices of direct reference) identifies the variable under an assignment as the paradigm of direct reference: "A variable's first and only meaning is its value" (Kaplan 1989a, 484). [55] Recall that in the case of proper names, character, content and referent

[54] Elsewhere I argue that for certain conceptions of modality—for example, deontic modality, about obligations and permissions—this basic framework of interpreting modality in terms of quantification over possible worlds produces unintuitive truth conditions for a certain class of sentences: conditional obligations ('If you spot an accident on the highway, you must stop to help' is a conditional obligation). (Zvolenszky 2002, 2006). There, the framework lands us in truth conditional trouble; here, it lands us in conceptual trouble (described in Section III.5).

[55] After Mill's *System of Logic*, to which Kripke (1980, 26–8) appeals. For the paradigm of a variable, see Kaplan (1989a 483–8; 1989b 571–3, 591–3). Martí (1995) notes that in Kaplan's work, the "Millian intuition

collapse. Proper names are therefore closer to variables than indexical expressions like ('I') are, which come with a meaning rule, a character, for determining their content relative to context. Proper names and variables under an assignment do no more than represent their referents, stand in for them. The *Millian theory of proper names* (*Millianism* for short) consists in the claim that a proper name's first and only meaning is its value. This suggests that there is a special way, unmediated by semantics, in which proper names latch on to individuals—their referents. In this, they are unlike definite descriptions as well as indexicals.

The variable paradigm motivates further the two-stage evaluation described in the previous section. Kaplan remarks that the assignment of a value to a variable "is not 'evaluating' the variable at a world, rather it is *generating* an element of content, and it is the content which is then *evaluated* at a world (1989b: 591; emphasis added)."

It is precisely this line that Joseph Almog, who proposes a Millian reinterpretation of Kripke's insights about proper names, follows in his *Naming without Necessity* (1986), arguing for what he calls a two-stage picture.[56] Recall the interpretation of (26), a modal claim by Goldbach ('I might have become a doctor'): its modal aspect was captured only *after* a non-modal proposition has been generated. This is exactly what Almog has in mind: "On the two-stage alternative, naming comes up at the generation stage, necessity is considered only later, at the evaluation stage" (1986, 225). Almog takes this to set things right with Kripke's proposal, which does not separate a pre-modal stage:

> The traditional question … Are there genuine naming devices? is a *semantical* question. Kripke's distinctive strategy is to tackle it by attending first to a *metaphysical* question. We focus on objects, the *designata,* and their modal properties. We do not begin our semantical investigation by looking at the *designators* and their purely linguistic features. Not at all. The intuitive test for rigidity that Kripke devises (1980, 48–9) reflects this point. We start with an individual (Nixon), and we observe that *that* individual couln't have failed to be Nixon. Thus, the property *being Nixon* applies to him necessarily (or at least essentially…)
>
> This observation is an observation in "metaphysics"; it is surely not an observation in "linguistics." However, there emerges from it a linguistic thesis: 'Nixon', the singular term used in expressing the property, is a rigid designator. On the other hand, that same individual could have failed to be the president of the United States in 1970 (again, a metaphysical judgment). Hence, the singular term 'the president of the United States in 1970' is a nonrigid designator. And so it goes; 'the square root of 81' is rigid; 'the number of planets' is not. How so? Consult your metaphysical intuitions.
>
> …
>
> [Kripke] didn't focus on the *way* the designator designates; he focused on the designatum and *its* modal properties. (Almog 1986, 211)

One version of the intuitive test[57] Almog discusses is this: take the schema 'no-one other than *x* might have been *x*'; substitute a term *t* for *x*; if the result is true, then *t* is a rigid designator; if the result is false, *t* is non-rigid. We can put this in a more compact form:

> KRIPKE'S INTUITIVE TEST FOR RIGIDITY
> A term *t* is a rigid designator if and only if
> 'no-one other than *t* might have been *t*' is true.

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remains backstage when the discussion is couched in terms of propositional constituents." It nonetheless "surfaces in the paradigm of a variable."

[56] See Almog (1986), especially 219–21.

[57] This is one of the tests associated with Kripke's *modal argument* against one version of the description theory of proper names: that a proper name is synonymous with some definite description(s) speakers commonly associate with it. For a couple of definitive formulations of the modal argument, see Salmon (1981, 24–27), and Soames (2002, 22–4). For discussion that various tests Kripke mentions are non-equivalent, see (Almog 1986, 222–3, n9).

Almog objects that for various terms, answers to whether or not it passes the rigidity test are based on considerations having to do with metaphysics, not semantics. Our intuition that 'No-one other than Nixon might have been Nixon' is true, but 'No-one other than the U.S. President in 1970 might have been the U.S. President in 1970' is false. But what sort of intuition is responsible for these judgments? Intuitions about the metaphysics of individuals—and those intuitions are not supposed to play a role in answering questions semantic.

My assessment of Almog's position is as follows: he is right on one count, and wrong on two others. On the one hand, he is right to point out that (i) certain intuitions about metaphysics play a role in Kripke's argument about the semantics of proper names. On the other hand, Almog fails to (ii) differentiate which intuitions about metaphysics are relevant, and which are not, and (iii) once we separate out the relevant intuitions, we see that the sort of metaphysics Kripke injects into his semantics is very much called for; omitting the metaphysics (as Almog does) misses something crucial about the linguistic function of proper names. I will discuss these three points in turn.

Let us begin with (i). Indeed, Kripke talks about ascribing modal properties to individuals—the referents of proper names—and more generally about the ease with which we interpret de re modal claims. These observations got him within arm's reach of the discovery that proper names purport to refer to modally robust individuals. Had he claimed that proper names were obstinately rigid, rather than just rigid according to his own definition, he would have nailed the first half of the individual-driven picture:

> When you ask whether it is necessary or contingent that *Nixon* won the election, you are asking the intuitive question whether in some counterfactual situation, *this man* would in fact have lost the election. If someone thinks that the notion of a necessary o contingent property (forget whether there *are* any nontrivial necessary properties [and consider] just the *meaningfulness* of the notion) is a philosopher's notion with no intuitive content, he is wrong. Of course, some philosophers think that something's having intuitive content is very inconclusive evidence in favor of it. I think it is very heavy evidence in favor of anything, myself. I really don't know, in a way, what more conclusive evidence one can have about anything, ultimately speaking…(Kripke 1980, 41–2; italics in original, underlining added)

We see that Kripke embraces what Almog calls "*modal individualism*, the doctrine that it is meaningful to attribute to individuals, by themselves, modal properties".[58] The modal individualism he charges Kripke with amounts to the same thing as the following: de re modal claims designate[59] modally robust individuals. Rigid designation is not alone in its commitment to modally robust individuals; direct reference is no different:

> …the mere attempt to show that an expression is directly referential requires that it be meaningful to ask of an individual in one circumstance whether and with what properties it exists in another circumstance. If such questions cannot be raised because they are regarded as metaphysically meaningless, the question of whether a particular expression is directly referential (or even, a rigid designator) cannot be raised.[60] (Kaplan 1989a: 504).

By contrast, a Millian like Almog expressly disavows any commitment to modal individualism; he does not think a theory of naming should bring on board a commitment of

[58] Almog (1986, 226; emphasis in original). The passage continues: "in the possible-worlds framework, modal individualism emerges as the doctrine that the transworld identity of individuals is given".

[59] I follow the common usage here: 'designate' is the broader term—both proper names and definite descriptions may *designate* individuals; but only the former may *refer* to them.

[60] Kaplan continues: "I have elsewhere referred to the view that such questions are meaningful as *haecceitism*." (1989a: 504). Recall Fine's (2005b) distinction between *modal* and *metaphysical* haecceitism. Kaplan means the former, not the latter. See Section II.5 above.

this sort.[61] This is because he thinks a theory of naming is about the generation stage: that proper names are Millian referential devices means that they contribute their referent to the proposition *generated*. Modal considerations arise at the subsequent evaluation stage and there only.[62]

In sum, Almog is right with respect to (i): Kripke is committed to the modal robustness of the individuals de re modal claims are about; this is about what our ways of interpreting natural language (specifically de re modal claims) assume about the metaphysics of individuals.

Let us move on to (ii). Almog argues that Kripke's metaphysical commitments go beyond modal individualism. Is the offspring born from a certain gamete N necessarily Nixon? Our intuitions (according to Kripke) say 'yes'; the intuitive test above makes 'No-one other than the offspring born from gamete N might have been the offspring born from gamete N' come out true, showing that 'the offspring born from gamete N' is a rigid designator. Is it necessary that the number eight is the number eight? Our intuitions (according to Kripke) say 'yes' again; the intuitive test makes 'Nothing other than the number eight might have been the number eight' come out true; 'eight' is a rigid designator then. In the first case, the intuition is about the nature of living things; in the second, about the nature of mathematical objects. There is some justification for Almog's charge of excessive metaphysical commitment. First Kripke's discussion of essences and essential properties is on occasion misleading. Second, the fact that Kripke did *not* define rigidity as obstinate rigidity, muddles things. But once we set things straight on these two counts, Kripke's metaphysical commitments do not go beyond modal individualism. It is time to set things straight then.

On the first count, consider again the underlined clause in the passage I quoted from Kripke: "forget whether there are any nontrivial necessary properties [and consider] just the *meaningfulness* of the notion". Here, Kripke makes clear that he is interested in whether it *makes sense* to attribute necessary properties (like being born from gamete N) to individuals (like Nixon); he is *not* interested in uncovering what *are* necessary properties of living things or inanimate objects; even less is he suggesting that non-trivial necessary properties of individuals can be *derived* from the thesis that proper names are rigid designators.[63] We have already encountered a similar sort of misinterpretation: in Section III.3, I argued that as he was giving various illustrations for how necessity and apriority can come apart, Kripke did not lose sight of the fact that his arguments did not rely on there *being* aposteriori necessities; all he needed was the lesser point that there are (among others) aposteriori truths for which it is *open* whether they are necessary. One example we have already considered is 'Nixon is human'. 'Nixon is born from gamete N' is another example of this sort: it *is* an aposteriori truth (assume N is the Nixon-gamete); but it is *open* whether or not it is necessary—*we can say this much independently of what we think about the metaphysics of living things*.

Kripke's focus is on the designatum and that it *can* have modal properties (because it is a modally robust individual); but that does not mean he is focusing on the modal properties the designatum *has*—which of its properties it has necessarily and which only contingently. In the light of this, the critical question is not *whether* an expression passes the rigid designator test, or fulfills the rigid designator definition; instead, what matters is *the basis* on which it passes if it does. If Kripke had been more careful, he would have said: 'Nixon' is guaranteed

[61] Martí (1995, see especially n17) concurs. She points out three key differences between direct reference theory and Millianism. First, indexicals are directly referential but not Millian referential devices. Second, direct reference is about the truth-conditional contribution of expressions, whereas Millianism is about the nature of the link between Millian referential devices and individuals. Third, because of this last point, direct reference theory is committed to modal individualism but Millianism is not.

[62] See Almog 1986, 228–9.

[63] But several commentators of Kripke's lectures did think his position was that essentialism could be derived from Kripke's thesis. See footnotes 40 and 42 about Salmon (1981) clearing this up.

to pass the rigidity test--conceptually guaranteed, no less; being a proper name, 'Nixon' works in a way that guarantees passing the rigidity test: it refers to a modally robust individual. For 'the U.S. President in 1970', *there is no such guarantee either way*. There was no need to go so far as claiming that 'No-one other than the U.S. President in 1970 might have been the U.S. President in 1970' is *false*. Indeed, even if this is false, *its falsity is not conceptually guaranteed*. The fact that it seems so overwhelmingly plausible that it *is* false provided Kripke with a handy demonstration of the contrast between the rigid designator 'Nixon' and the (plausibly) non-rigid designator 'the U.S. President in 1970'. But we should not lose sight of the metaphysical commitments Kripke *needs* to take on board—a detail he did not lose sight of in ways in which commentators, including Almog, did.

The second count is about straightening the definition of rigidity. In Section III.3 above, we have already noted that Kripke could have provided a definition that was more revealing than the deliberately cautious *neutral definition* he gave (in a Nixonless world, 'Nixon' either refers to Nixon, or has no referent), and the evasive *definition of a persistently rigid designator* ('Nixon' has no referent in a Nixonless world) which he did give on one occasion (Kripke 1971, 146). Salmon (1981) and Kaplan (1989a, 1989b) argued that Kripke should have given the *definition of an obstinately rigid designator* ('Nixon' refers to Nixon. Period.) Recall Kaplan's point: the thesis that proper names are obstinately rigid captures a deeper fact than the claim that they are persistently rigid, or rigid based on the neutral definition. Moreover, obstinate rigidity becomes especially interesting in the case of proper names of contingent existents: when there *is* a possible world in which the actual referent does not exist, but the proper name still refers to him or her. This is because it is not just any individual we are talking about, but a modally robust one, to whom ascribing the property of possibly not existing is just as straightforward as ascribing a possible election loss. A name for a necessary existent like the number nine never gets to show off its obstinate nature in the way names of contingent existents do.[64] So *the paradigm of rigid designation that is truly revealing is that of obstinately rigid designators of contingent existents.* Had Kripke realized this, he would have nailed the first half of the individual-driven picture: proper names are obstinately rigid—and that means they purport to refer to modally robust individuals; whenever they *are* anchored, they do refer to modally robust individuals.

In sum, Kripke could have given a better definition of rigidity—and defined obstinate rigidity. But that does not give rise to additional metaphysical commitments. His commitments still do not extend beyond modally robust individuals, beyond modal individualism.

Moving on to (iii): what, if anything, is the Millian missing about the semantics of proper names? Recall Almog's two-stage picture: "In generating the propositional constituent corresponding to the name 'Quine', we have correlated the name with an individual *and an individual only.* When I say 'Quine is a philosopher', a particular individual, Quine becomes the subject constituent of the proposition I express" (1986, 220). Necessity is considered only later, at the evaluation stage. But *what sort of individual* is it that 'Quine' refers to? In the Millian framework, this question is not asked. There are two reasons for it, one of them is obvious, the other is far more interesting. The obvious reason: Millianism is only about the generation stage—it is the view that 'Quine' contributes an individual to the proposition expressed, so 'Quine is human' expresses a singular proposition. We have already seen that this view is neutral about the nature of individuals: they could be modally robust, they could be individuals whose identification across worlds requires non-trivial identifying criteria, or they could be individuals for whom transworld identity does not make sense.[65]

[64] See footnote 52.

[65] Almog remarks that "David Lewis could have been a Millian without altering his metaphysics of worldbound individuals" (1986, 229).

The more interesting reason why a Millian does not ask what sort of individual 'Quine' refers to, is because his framework of propositions makes it impossible for him to ask this question. This is because propositions are, at bottom, construed as non-modal (extensional), and so are their constituents, including the individuals that Millian referential devices "place into" the propositions being generated. On the two-stage picture, the modal dimension gets "ironed out of" a singular proposition, and out of its constituent individual: both become what we might call *modally flat*. Here is why. At the end of the previous section, I discussed a modal claim similar to this one:

(27) Goldbach might have become a doctor.

First, we generate a proposition: it is not the proposition about Goldbach possibly becoming a doctor though; instead, it is the possible truth of the singular proposition expressed by 'Goldbach is a doctor' (involving Goldbach himself). We could render it thus:[66]

(27') ⟨⟨ 🧍 , Being-a-doctor⟩, Being-possibly-true⟩

The evaluation is with respect to the actual world; but the last bit, the modal component, instructs us to consider other evaluation circumstances: counterfactual possible worlds. In those counterfactual scenarios (which I have called subordinated circumstances), what matters is whether the singular proposition, ⟨ 🧍 , Being-a-doctor⟩, is true. The modal dimension of (27') is captured by shifts in evaluation circumstance; the presence of a modal expression instructs us to consider subordinated circumstances with respect to which the singular proposition is evaluated. The basic propositions are never modal then—they are modally flat. A modal component, if there is one, is accounted for through the shifts in the circumstances with respect to which simpler, non-modal propositions are evaluated. In this picture, individuals are featured as propositional constituents introduced by Millian referential devices like proper names. They, too, are therefore modally flat: the individual is singled out (as modally flat), "inserted" into the proposition, so the evaluation and circumstance shifting may begin.

We see the two-stage picture depicting a division of labor between evaluation circumstances (possible worlds) and modally flat propositions that completely reshuffles a function we had thought natural to assign to proper names: that they purport to refer to modally robust individuals. In the two-stage picture, nothing performs this function; moreover, nothing *could* perform it. One half of the function is packed into the generation stage (getting the modally flat individual into the proposition), the other half is taken care of elsewhere: at the evaluation stage, when we find—with a sigh of relief—that the transworld identification of modally flat individuals (which could have caused trouble) is automatically accomplished. But *why* and *how* it is automatically accomplished remains a mystery. Nowhere in the two-stage picture are we able to locate what accounts for the fact that transworld identification is given, it needs no explanation.

The conceptually basic units of proper name reference—modally robust individuals—cannot be located within the two-stage picture. Their function has been dispersed among other units—the building blocks of the two-stage picture: modally flat propositions, modally flat individuals, and possible worlds as evaluation circumstances. We are further than ever from recognizing the conceptually basic building blocks of the individual-driven picture: modally robust individuals, which in turn can provide a basis for a conception of possible worlds as non-basic: as ways modally robust individuals might have been.

[66] See Almog (1986, 237–8). Note that (26') and (27') are identical propositions.

Moreover, the building blocks that the two-stage picture does include are a source of confusion. We might be puzzled over the following, deliberately casual description from Kaplan:

> If the individual is loaded into the proposition (to serve as the propositional component) before *the proposition begins its round-the-worlds journey*, it is hardly surprising that *the proposition manages to find that same individual at all of its stops, even those in which the individual had no prior, native presence*. The proposition conducted no search for a native who meets propositional specifications; it simply 'discovered' what it had carried in. In this way we achieve rigid designation. Indeed, we achieve the characteristic, direct reference, form of rigid designation, in which it is irrelevant whether the individual exists in the world at which the proposition is evaluated. (Kaplan 1989b: 569; emphasis added)

What does it mean that the proposition is taking a journey, and that the individual is carried in and is discovered even in a world in which it has no native presence? What is the 'it'? What does it mean for a modally flat proposition to be moved in and out of worlds? And for a modally flat individual to be carried into a world?[67] The only way this can be made coherent is if we think that there are modally robust individuals as the reference of 'it'. We could retain the modally flat individuals as propositional constituents and the in-world "embodiments" of modally robust individuals; but we will definitely need the modally robust individuals, in which case it becomes unclear why we still want the modally flat individuals, too. With modally robust individuals admitted, modally flat propositions will prove "too tight": because some (if not all) singular propositions will have modally robust individuals "in them". This would actually make the round-the-worlds journey more coherent. But we also find that the journey is no longer called for. We *have* the individuals; they are modally robust; and when interpreting de re modal claims, we are considering ways these individuals might have been. As far as we are concerned, this is all there is to possible worlds. This is the second half of the individual-driven picture.

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[67] In a recent volume on direct reference, Matthew Davidson (2007) charges that proponents of direct reference theory and Millianism are in the grip of a false picture of possible worlds—what he calls "bad metaphysical picture-thinking"—which generates conceptual confusion of the sort exposed in the questions just listed. He argues that for a Millian as well as a direct reference theorist, 'Nixon does not exist' cannot be true with respect to a possible world. He thinks any attempt along the lines given by Kaplan above is bound to rely on a distinction between 'being true in a world' (which concerns what is *inside* a world) and 'being true at a world' (which concerns matters *outside* the world). 'Nixon does not exist' is not true in any world, but is true at some worlds—the Nixonless ones. (The distinction and the terminology are Adams's (1981, 22).) But the distinction, and in particular *truth at* cannot be maintained according to Davidson:

> Truth at looks to be based on an incoherent metaphysical picture. Indeed, it is based on the same sort of picture on which the problem of transworld identity is based. Again, we think of worlds as objects with insides and outsides. However, again, worlds are abstract, and it is incoherent to think of a world as having an "inside" and an "outside." Also, propositions are abstract objects, and can't be "carried" anywhere. Nor can they sit outside (nor inside) possible worlds. (2007)

I disagree with Davidson's assessment. *Truth at* is perfectly coherent; it makes perfect sense on the individual-driven picture as well as in Fine's framework (1985, 194; see also his 2005a). We need *truth at*; we need it to capture the way in which de re modal claims are interpreted. The fact that *truth at* is incoherent on the two-stage picture with modally flat propositions, modally flat individuals, and possible worlds as our basic building blocks, means we should abandon the two-stage picture, not *truth at*. In the end, Davidson himself ends up in the grip of the two-stage picture, losing sight of alternative ways of construing individuals, propositions, and possible worlds. It is incoherent for worlds to have insides and outsides only insofar as we fail to recognize that *individuals (modally robust individuals) definitely can have insides and outsides with respect to a possible world or circumstance*: that I exist and am a brunette are inside affairs with respect to the actual world; that I am possibly blond and possibly non-existent are outside affairs, perhaps more aptly called world-independent or unworldly affairs (see footnote 3 on Fine 2005a).

In sum, the Millian two-stage picture is conceptually misleading: it suggests that the non-modal stage of generating a proposition—a modally flat proposition with a modally flat individual in it—is separate from the second, evaluation stage where possibility and necessity are captured through *shifting* between worlds as evaluation circumstances. Nowhere do we find here modally robust individuals; for the Millian, reference to an individual is reference to a modally flat individual. We lose sight of the insight that natural language comes with expressions—proper names—that make modal talk about individuals straightforward.

IV. Conclusion

My aim in this paper has been twofold. My first goal was to lay out and motivate the individual-driven picture as a framework to explain some of the most basic facts about how we interpret modal discourse. My second goal was to show how conceptions of necessity "evolved" over time to bring the individual-driven picture within arm's reach, only to have it disappear again. We had been so close: Saul Kripke arrived at the metaphysical conception of modality, and formulated the notion of a rigid designator. David Kaplan cleared up a conceptual confusion about rigid designation, thus homing in on modally robust individuals as the units of proper name reference; but his preferred framework of structured proposition had several adverse consequences. Straightaway, it blurred Kaplan's insight about the modal robustness of individuals. Subsequently, it inspired a mistaken picture of reference: Millianism, in the context of which the insight that had been gained vanished entirely. We saw it dissolve completely within Almog's Millian two-stage picture.

In closing, I would like to relate some lessons about proper names to the distinction between de re and de dicto modal claims. The starting point for developing the individual-driven picture was the interpretive task with which de re modal claims—about specific individuals—presented speakers. Proper names were one type of de re vehicle, but not the only type:

(3) The discoverer of GC is such that ◊ *he himself* eschews mathematics

The task of interpreting (3) is similar to that of (6):

(6) ◊ Goldbach eschews mathematics

For both (3) and (6), the meaningfulness of attributing modal properties to individuals is presupposed; that is to say, both (3) and (6) purport to be about modally robust individuals. Proper names therefore do not add to the expressive power of language in the sense that we do not *need* them to make de re modal claims. We could have arrived at the individual-driven picture by concentrating on (3) only, and the conceptual requirements imposed on us by the task of interpreting it. The way to capture (3) would be through quantifying in: the modal operator attaches to a formula with free variables in it, which are then bound from outside the modal operator. The fact that in this way we land a de re modal claim underscores Kaplan's remark that for the special way of designating an individual characteristic of directly referential expressions, the variable under an assignment serves as a paradigm. Variables in the open formula need to do something special to be made sense of: they have to be assigned modally robust individuals as their values. No wonder then that the accomplishments of (6) and (3) are so similar: both involve the designation of a modally robust individual—one uses a proper name to this end, the other, a variable.

That variables normally function otherwise—designating individuals that are not modally robust—is a false impression created by de dicto modal claims, traditionally thought innocuous:

(1) ◊ the discoverer of GC is a woman

Here, we have the fleeting luxury of focusing just on what goes on *inside* a counterfactual circumstance—intraworld affairs in a possible world whose population need not be related to the actual world, and its population. We are talking about there being someone in the counterfactual population who is a woman, discovering Goldbach's conjecture. We can simply assign as values to our variables individuals that are not modally robust. But just because we can get away with this here, and because individuals that are not modally robust just seem simpler than their modally robust siblings, does *not* mean any of the following:

- assigning the non-robust individuals as values is *conceptually* simpler;
- de dicto modal claims provide a simple model, in need of no special explanation; in comparison, de re modal claims serve up a complication;
- we should accept a conception of possible worlds suggested by non-robust individuals: possible worlds construed as complete situations with their inhabitants and goings-on, where the crossworld identity of individuals is an extra, outside affair.

The model of de dicto modal claims has systematically mislead philosophers, logicians and linguists about conceptions of individuals, of modality, and of possible worlds. De dicto modal claims are in fact quite unusual in that they, and they alone enable us to talk about merely possible individuals that are non-robust.[68] By contrast, de re modal claims—be they formulated on the model of (3) or (6)—are firmly grounded in the actual world; they can be about actual individuals only. And those individuals are modally robust. Moreover, the ease with which de re modal claims are commonly interpreted makes obvious that modally robust individuals are conceptually basic. We can recognize this fact by considering cases in which modally robust individuals cannot be relied upon: when we are talking about an unspecified counterfactual sister of Goldbach's; when we are using a name like 'Vulcan' that is unanchorable; when a proper name is not yet anchored and still underway, for example, 'Jack the Ripper' and 'Newman 1'. These examples are discussed in Sections II.2–3, where I suggested that the dynamics of introducing and maintaining proper names within the vocabulary of a linguistic community involves an implicit aim: of attaching names to modally robust individuals and those only.

Modally robust individuals also turn the previous, de-dicto-inspired conception of possible worlds upside down. Indeed we no longer have any reason to retain the old conception of possible worlds; all modal talk involves beyond the modally robust individuals is ways those individuals might have been. It becomes natural to take the individuals as conceptually basic, and the worlds, as non-basic; not the other way around.

Almog closes his paper *Naming Without Necessity* thus: "I have discussed some issues concerning the connection between naming and necessity. If any lesson can be drawn from the discussion, it is yet again in Bishop Butler's sense: naming is naming, and necessity is necessity" (Almog 1986, 242). This passage helps highlight our differences. Millianism does not get us closer to the individual-driven picture; quite the opposite: it reverses crucial steps

[68] But see II.4 about Woody, the merely possible lectern that can be construed as modally robust and the subject of de re modal claims. What look like de re modal claims about *non*-robust individuals (see 7–9 at the end of II.3 above) are problematic: we are at a loss as to what transworld identity these individuals are supposed to have.

Kripke and Kaplan have taken towards that picture. Both of them came very close to recognizing that the individual to whom a proper name refers is not just any individual: it is a modally robust one. What Millianism does is make naming and necessity independent of each other; as a result, crucial details about the nature of both are left unexplained, including the modal robustness point. By contrast, the individual-driven picture affords insights—some old, and some new—about interconnections between naming and necessity, thus revealing what the two notions really are about. I therefore propose to draw the opposite lesson: without (metaphysical) necessity, naming is not naming; and without naming, necessity is not necessity.

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