The Significance of Names

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Abstract: As a class of terms and mental representations, proper names and mental names possess an important function that outstrips their semantic and psycho-semantic functions as common, rigid devices of direct reference and singular mental representations of their referents, respectively. They also function as abstract linguistic markers that signal and underscore their referents' individuality. I promote this thesis to explain why we give proper names to certain particulars, but not others; to account for the transfer of singular thought via communication with proper names; and, more generally, to support a cognitivist, not acquaintance or instrumentalist, theory of singular thought.

Proper names exist in all languages. Though differences abound, there is broad, systematic and cross-cultural constancy to many name-giving practices. We give proper names to people, certain places (cities, countries, squares), natural bodies (mountains, rivers, planets), institutions (universities, restaurants), some animals (pets), some kinds of artifacts (works of art, books, movies), some events, some ideas and theories. Other kinds of things are rarely given proper names: most artifacts (individual cars, earrings, iPhones), most non-human animals and flora (that spider, this tomato plant), most places, most events, most ideas. Why do we give proper names to certain particulars and not to others? What is it about the semantic, cognitive, and social functions of proper names that accounts for why we name what we name?

Philosophical theorizing about proper names in the last century has largely neglected this question, focusing almost exclusively on Frege-inspired issues about proper names' semantic content, meaning, reference, rigidity, and semantic contributions to attitude attributions.[1] Yet, in 1690, three hundred plus years before

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[1] Proper names' semantic content, meaning, reference, rigidity, semantic role in attitude attributions occupied, and continues to occupy, center-stage. While all of these, and more, are immensely important and have enormously deepened our understanding of proper names in language and thought, the neglect of why we name what we name nevertheless remains striking. I suspect it indicates that the question's answer, whatever it may be, is regarded as primarily of sociological or anthropological interest, independent of the linguistic, psycholinguistic, and epistemological issues about proper names of concern to philosophers.

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the advent of Fregean semantics, John Locke addressed it in his *Essay Concerning Human Understanding*. Locke wondered 'why isn't it the case that all things have proper names?' He answered, first, that it is impossible—psychologically impossible:

> . . . it is beyond the power of human capacity to frame and retain distinct ideas of all the particular things we meet with: every bird and beast men saw; every tree and plant that affected the senses, could not find a place in the most capacious understanding (Locke, 1995, Book III, ch. 3, §2).

Second, even if it were possible to name every particular, it would be useless—for it would not serve 'the chief end of language', which, for Locke, is the communication of thoughts with others.[2] Naming particulars never communicated about with others could not serve that end, being nothing more than the vain heaping of linguistic terms, and would, therefore, be unreasonable.

The flip-side of this dialectic on why we do not name all particulars is our question of why we name the particulars that we do, in fact, name. To this question, Locke answered that particulars are named in exactly those circumstances in which men have 'an occasion to mark particularity' in communication. 'If we had reason to mention particular horses as often as we have to mention particular men, we should have proper names for the one, as familiar as for the other, and *Bucephalus* would be a word as much in use as *Alexander*'. He remarks that this is precisely the situation with jockeys, who need to distinguish and refer to particular horses when 'out of sight' (Book III, ch. 3, §5).

Locke saw the answer to these questions revealed in both the communicative functions of proper names and the cognitive limitations on our capacity to use them. Unlike concept terms, which apply to multiple particulars, proper names are singular referring terms. They refer to particulars uniquely. Yet they are a special variety of singular referring term. Unlike descriptions and indexicals, whose reference determination is highly contextually sensitive, proper names have their referents fixed. By virtue of our setting up conventions of name-bearer relations with acts of reference-fixing, proper names function in communication as long-term, interpersonally available linguistic representations of their referents. Because we not only speak, but also think in language, their broader psycho-semantic

[2] Book III, ch. 3 of *An Essay Concerning Human Understanding*, §§1–3. In §4, Locke actually offers a third answer to this question: naming all particulars would not be of use for enlarging our knowledge about the world. Only with general terms may we form generalization, and so ultimately, knowledge about the nature of the world. The problem with this part of Locke's answer (and the reason why it cannot illuminate the discussion here of names) is that giving proper names to particulars does not preclude also classifying and designating them with general terms. His point would be pertinent only if, in giving proper names to particulars, we were somehow unable to also apply general terms to them. To be sure, Locke was orienting his discussion to the importance of having general terms, and this is the right point to make about that.

function is as common singular representations of their referents for long-term trans-personal, trans-contextual thought and talk.

Proper names' psycho-semantic function comes at a cognitive cost: there are limits on the amount of proper names—the amount of singular representations—that our minds are able to use in thinking about particulars in the world. Current research in cognitive psychology supports Locke's claim.[3] While speaking and thinking of particulars with proper names is economical and efficient for a whole community of speakers, we cannot have too many of them because singular representational devices are taxing to each thinker's mind. Thus, while name-giving is *semantically* wide-open, cognitively, name-giving must be, and is, conservative.

Cognitive limits place constraints on the amount of name-giving. But what about the scope of name-giving? Is Locke's analysis of why we name the very particulars we name cogent? This rests, I think, on what he meant in saying we reasonably name those objects we do name to the extent that we wish or need to 'mark particularity'—to mark off individuals as individuals—in linguistic communication. Let's distinguish between *naming to single out an individual from all other individuals* and *naming to mark off an individual's individuality*. If Locke takes proper names' function only in the first way, he would be saying that we name the particulars we do name because we only name those particulars that we wish or have a need to frequently single out from all others and make reference to. While this is surely not a circular account, it is hardly deeply revealing of why we name those particulars that we do name. After all, we need to distinguish and designate in conversation all varieties of mundane objects—particular cars, frying pans, basketballs—and to make identifying reference to them for the long-term. Yet we designate them with pronouns, demonstratives, complex demonstratives, or definite descriptions, not proper names.

On this score, Locke might have welcomed assistance from Strawson's insightful discussion in chapter two of *Subject and Predicate in Logic and Grammar*, one of the few modern philosophical discussions on why we name what we name.[4] Strawson construes name-giving as constrained primarily and most fundamentally by the semantic utility of names. We issue names in just those circumstances in which a circle of communicators needs to make identifying reference to a certain particular, there is an interest in the continuing identity of the particular across time, and there exists no short, natural description or title available to the circle as a single means of referring to that particular. According to Strawson, the reason why we name people but not our cars, frying pans, or the rooms of our house is that, for any particular person, there is a wide circle of language users that have an interest in the continued identity of and in referring to that person, yet lack any unique, natural singular term with which to refer. Thus we introduce names for people.

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[3] Valentine, Brennen, and Brédart, 1995 give an overview of research in cognitive psychology that supports the view that thinking with mental names—singular representations—is cognitively costly.

[4] Thanks to Sam Guttenplan for reminding me of Strawson's discussion.

By contrast, for most artifacts, the circle of language users with interests in the continued identity of and in referring to the artifacts is considerably smaller and there are alternative and natural constant singular terms available—'the car', 'the frying pan', 'the kitchen'—that are identifying in the context. Names are not given to these artifacts because other singular terms take up the slack (Strawson, 1974, pp. 35–43). Strawson's conditions fill the lacuna in this reading of Locke's analysis. Let's call the view that takes name-needing as the sole fundamental reason for explaining name-giving the *Semantic Utility* account.

There is a subtly but importantly different account of the conditions for name-giving. This account acknowledges the importance of semantic utility as a basis for name-giving, but denies that it is the sole fundamental reason. Another fundamental function of proper names is to signal or mark an individual's individuality. On this account, we reserve proper names for those particulars that we construe as possessing individuality. We give proper names only to certain particulars because, given cognitive limitations, we introduce singular representation-types just for those particulars we regard as having intrinsic or relational value, beyond their value as an instance of a certain kind, and we do so because we wish to signal and underscore that individuality. I shall often capture the idea of our construing particulars as possessing individuality in the specified sense by saying that we accord or find these particulars *significant*. If this account can be extracted from Locke, we must give his 'occasions to mark particularity' a rather robust reading. I will call this the *Significance of Names* view.[5]

In this paper, I have two overarching goals. One is simply to call attention to the questions Locke raised and to stimulate discussion of whether they are philosophically vital. The way I hope to achieve this goal is by trying to convince you that there is something right, and philosophically important, in the *Significance of Names* account of why we give proper names to certain individuals and how this bears upon associated phenomena about limitations on name-giving, about the transfer of singular thought via communication with names, and, more generally, about theories of singular thought. Doing that is my second goal.

The thesis I shall promote is that, as a class of terms, proper names function as 'abstract linguistic faces' of significance. Names are not just devices of direct reference affording common, stable ways of thinking and speaking about particulars; and their associated mental names are not merely singular mental representations for long-term use. Proper names and their associated mental representations are, additionally, and by their nature, markers of their referents' significance. The thesis marks a departure from a tradition in philosophy of language to regard only the semantic properties of proper names as giving their primary linguistic function and as determining what it is to understand them.

The *Significance of Names* view incorporates a cluster of distinct principles. One concerns a causal effect of naming an individual:

[5] Note that the limits on the amount of names that we introduce due to cognition limits on using them is compatible with both *Semantic Utility* and *Significance of Names*, and favors neither.

> *Naming Underscores Significance Principle*: Naming an individual underscores or enhances the name's referent's significance for those that think of that individual through the name.

Another concerns a causal effect of construing a term as a name:

> *Names as Bearers of Significance Principle*: An agent's construing a term as a name causes that agent to take the name's referent as an individual accorded significance.

Without any knowledge of a particular name's referent, and just in virtue of taking a term as a name, we are cognitively attuned to take the name's referent as an individual accorded significance.

A third principle concerns our ability to name particulars. Cognition's sensitivity to our reserving proper names for individuals that are significant in their own right or relationally significant limits its own ability to introduce proper names into the language.

> *Significance Guides Naming Principle*: An agent can name an individual only if she accords intrinsic or relational significance to that individual.

According intrinsic or relational significance to the intended referent is psychologically necessary for having *bona fide* name-giving intentions.[6]

I start off (§1) by giving an overview of my assumptions about the semantics of proper names. I then (§2) discuss the scope of name-giving by examining the *Semantic Utility* view as developed by Strawson, and suggesting that the *Significance of Names* view offers an additional fundamental rationale for name-giving. This dialectic will also contribute to supporting the *Significance Guides Naming* and *Naming Underscores Significance* principles. I follow this (§3) with a sketch of some empirical findings that may lend empirical support to *Significance of Names*. I then (§4) turn to situate these issues about names and significance within philosophical theories about the conditions on generating singular thought, showing the importance of the appeal to significance as a way to both widen the scope of what we can think of singularly beyond the confines of acquaintance without falling into the excesses of theories on which we can, through semantic manipulation, generate singular thought at will. In the final section (§5), I address the question of how singular thought is transferred from person to person with the use of proper names, and offer the *Names as Bearers of Significance* principle as part of a new answer to this difficult problem, one that may have a leg up on competing theories invoking only semantical considerations.

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[6] This is a necessary, not sufficient, condition on name-introduction. I discuss other constraints in Jeshion, 2002, 2004.

1. The Semantics of Proper Names

I begin with a brief overview of assumptions that I shall make about proper names, about what they are and how they function semantically. Proper names are singular referring terms that refer rigidly to individuals (particulars),[7] where 'individuals' is to be taken in its most general way, so as to include concrete objects, persons, places, events, ideas, abstract objects (if there are any). Terms are referring terms by virtue of what they contribute to the semantic content of sentences in which they occur. Referring terms contribute only an individual to the semantic content, not a description or conception or some other mode of presentation of that individual. In this sense, proper names, like indexicals, pronouns, and demonstratives, refer, and consequently the semantic contents of sentences containing them are singular propositions. Descriptions, when not used referentially, contribute a descriptive or conceptual condition to the semantic content of sentences containing them.

Proper names are distinguished referring terms insofar as they lack semantic descriptive content. This point is two-pronged, one a thesis about the rules of language for reference determination, the other a thesis about conditions on name-understanding. On an occasion of use, proper names' reference is not determined by being routed through a sense or some other descriptive condition. Here the relevant contrast is denotation. A term that denotes secures its denotatum by virtue of the individual 'satisfying' or 'falling under' a descriptive or conceptual condition that is, by the rules of language, semantically associated with or expressed by the term. Descriptions denote. But so do indexicals. Linguistic conventions involving descriptive conditions govern the way that they determine their referents. 'I' refers to its referent by virtue of a certain individual satisfying the descriptive condition 'being the speaker' in a certain context of use. This descriptive condition plays a role in reference determination in each context of use of 'I'. The linguistic conventions governing how proper names refer to their referents fail to employ descriptive conditions in this fashion. Instead, these linguistic conventions directly assign names to their bearers. An individual name's name-bearer relation is established by the occasion of that name's reference-fixing.

Second, there is no descriptive or perceptual or representational content that a competent speaker must master to count as understanding the content of the name. Unlike descriptions which require understanding the description's meaning for linguistic competence, and unlike indexicals, which require mastery of their individual rule of reference-determination for linguistic competence, proper names do not require the association of any particular semantic content or mode of presentation with the name. Indeed, a competent user of a name may associate no semantic content at all with the name, but competence does require that the user of 'N' knows that it names the individual that is called, or named, 'N'.[8]

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[7] I use 'particulars' and 'individuals' as synonyms.

[8] So, while I deny that the semantic meaning of 'N' is 'the individual that is called, or named, "N"', I require that a competent user of names knows that for any proper name 'N', it refers

The semantic function of proper names is to serve as representational devices for long-term trans-personal, trans-contextual thought and talk about individuals. This marks a striking contrast with indexicals, demonstratives, and pronouns, which are conventionally bound to context in reference-determination. Because naming sets up conventions of name-bearer relations, names are able to function as constant, interpersonally available linguistic representations of their referents.

2. Semantic Utility and Significance of Names

Strawson maintained that the fundamental reason why we name those individuals we in fact name is tied to whether or not introducing a name will be useful for the purposes of efficient, economical communication. He laid down three conditions for when we could expect a proper name to be useful for referring to a spatiotemporally located particular (Strawson, 1974, p. 36):

> [1] A group of language users has a 'frequent need or occasion to make identifying reference to a certain particular'.
> [2] Within this group of language users, 'there is an interest in the continuing identity of the particular from occasion to occasion of reference'.
> [3] Within this group of language users, 'there is no short description or title of that particular which . . . is always available and natural as a constant means of identifying reference to that particular'.

I take *Semantic Utility* to be the view that we give a proper name to a particular just in case conditions [1]–[3] are fulfilled. In essence, *Semantic Utility* regards name-giving as rooted on the need for long-term efficient reference to particulars when no other singular term will do.[9]

[1] is straightforward. [2] is harder to get a grip on. What is it to have an interest in the continuing identity of a particular? Strawson explains [2] by offering a case in which the interest is absent yet the speakers need to refer to the particular. A group of billiard players need to refer to a particular white ball, and there is no short, constant natural description for it (the ball would have to be picked out demonstratively). So, while [3] is satisfied, the group has no interest at all in that

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to the individual that is called, or named, 'N'. An adherent to the meta-linguistic or 'indexical view' that associates the reflexive linguistic semantic content 'the individual that is called, or named, "N"' to particular proper names can probably agree with everything I am saying here, so long as this does not involve commitment to the view that mental names possess this descriptive content.

[9] Strawson carefully acknowledges the complexity of our name-giving practices and cautions that this list of the conditions on name-giving in terms of semantic name-needing is not exhaustive. However, he is firm that it is fundamental, and he defends his analysis on why artifacts and individual natural objects (trees, insects, etc) are not named but people and places are by appealing only to his three principles of semantic utility. So, while it would be a mistake to identify *Semantic Utility* with Strawson's own considered view, the position will have its appeal to many and will set into relief the *Significance of Names* view.

particular's being the same ball from occasion to occasion of reference. Thus, the ball is nameless.[10] To explain [3], Strawson again suggests instances in which it alone among the three conditions goes unfulfilled. Among a group of language users, like a family, or the wider community, there is standing interest in the continued long-term identity of certain particulars and a need to refer to them, but short, salient descriptions suffice—'the kitchen', 'the car', 'my lighter', 'Yael's room'—and so they go unnamed. The reason we name people and places is that we are interested in their continued identity, need to make identifying reference to them, and need to have a singular term that 'does not depend for its referential or identifying force upon any particular position or relation, which preserves the same referential force through its objects changes of position or relation' (1974, p. 38) when different speakers bear different relations to them.

The main problem with *Semantic Utility* is not just that we can readily think of counter-examples. Name-giving practices' complexity ensures a ready supply of special cases to almost all theories. The problem is rather that there is a large class of important counterexamples that *together* challenge the idea that the sole fundamental reason for name-giving is semantic utility and together suggest another fundamental rationale for name-giving.

There are circumstances in which we give names to individuals whose continued identity we are interested in even though there is a short natural description available within the circle of language users. Here's a simple one: families frequently give names to their pets despite the availability of a natural short description for successful identifying reference. Within the family, 'the dog' will serve fine as a way to refer to the dog. (And a whistle will serve fine as a way to call the dog.) Semantically speaking, 'the dog' is as suitable as 'the car' or 'the frying pan': adequate if there is just one dog or car or frying pan in the household, underspecified if there is more than one, in which case altering the description with a natural identifying modifier suffices for both ('the brown dog', 'the Prius', 'the large frying pan'). On occasions in which we refer to the dog to non-family members, a relational description ('our dog' or 'Wendy's dog') is adequate and natural for the purposes of efficient economical communication.

Similarly, children regularly give names to favorite dolls or stuffed animals, despite the fact that the range of individuals who need to refer to it is small, and there are short natural descriptions available to achieve identifying reference.

Couples who have a stillborn baby often name that baby before burying it. There is no semantic need for the name—other descriptions will serve.

In the other direction, there are many circumstances in which we do not give names to individuals whose continued identity we are interested in even though

[10] Strawson, 1974, p. 36. Strawson contrasts the billiard players' lack of interest in the identity of the billiard ball with his own interest in the continued identity of the cigar he's currently smoking or flowers he's currently arranging. He claims that these latter individuals go unnamed because the transiency of interest in the identity of the particulars makes reference to them with other singular terms (complex demonstratives like 'this cigar', 'that rose') quite natural and a name not needed.

there is no short natural constant description available within the circle of language users. Our garden this year has twenty-four Black Krim tomato plants. We have a long-term[11] interest in the continued identity of each one, as individuals: we tend each one, care how well each produces. Though they enjoyed a fixed location, still, no natural single non-relational description is available, and when giving instructions about which needs picking, I refer to each one demonstratively 'that one there', 'that one in the middle with the mass of fruit'. I don't name them, and feel no pull, semantic or otherwise, to do so.

Chefs in large restaurants have upwards of sixty knives from which to choose, have an interest in each as particulars, in each one's efficiency and comfort for various tasks. They travel swiftly about the kitchen, and there is no natural description apart from complex demonstratives that select them by ever-altering position or relation: 'the small santoku near the oven', 'the large cleaver with the wood handle over there'.

Ditto for clothes. They too are swift travelers about the house, shuttled from closet, to hamper, to washer, to clothesline. Often, we lack natural non-relational descriptions: 'Kian's blue shorts' isn't close to being uniquely identifying; 'Kian's blue shorts that we got at Old Navy last month' is relational, and, moreover, isn't informative to those who missed the shopping trip. We manage to refer with cumbersome non-constant, relational descriptions, yet experience no instinct to name our shorts.

Collectors and traders of all varieties of stuff communicate about their prized goods—stamps and coins, fountain pens, matchbox cars, guitars—with other enthusiasts, and do so only with cumbersome relational descriptions or demonstratives. No names.

But do we really have an interest in the continued identity of particular tomato plants, knives, shorts, and matchbox cars? Perhaps [2] goes unsatisfied in these cases, preserving *Semantic Utility*. The reply is both on and off the mark because there exists context sensitivity in having an interest in the continued identity of a particular. When a particular's function alone is salient, we may well be said to lack an interest in its continued identity. The billiard players care nothing for *that* white ball's continued identity because they only desire *a* white ball: any type/functionally identical ball would meet their billiard-playing needs. And, in focusing only on the function of my garden, what I want is healthy Black Krim tomato plants, not necessary these; the chefs want a sharp santoku, not necessarily this very one. But when we focus on, say, cost and energy of replacement, or maintenance, and not just function, we are indeed interested in the continued identity of our own particular Black Krims and santokus. In our cases, interests in the particulars are more than just functional, and thus [2] is satisfied.

[11] One might think that March through December is too short-term for name-giving. I doubt this is the source of difficulty, but if intuitions diverge, switch a grove of orange trees for the tomatoes.

This set of problem-cases for *Semantic Utility* suggests another fundamental rationale operative in determining which particulars we name. We name particulars we need to refer to that we take to be intrinsically or relationally significant to us or other agents and whose significance as an individual, beyond its worth as an instance of a certain kind, we wish to underscore. This is the additional fundamental rationale of the *Significance of Names* account of why we name what we name.

We name our dogs and cats to signal their individuality, their worth beyond being *a* dog or *a* cat, despite the availability of common non-relational identifying descriptions. Common practices and wisdom involving naming supports this idea. We readily name those animals that we keep as pets; failing to do so is normally interpreted as regarding the animal as insignificant, or replaceable, or otherwise somehow valued only as an instance of its kind, not, in the first instance, as an individual. (Think goldfish.[12]) Dog breeders frequently discourage their children from naming the puppies that will eventually be sold to others as a means of containing, or not allowing for the enhancement of the emotional significance of the puppies to the children. A family that raises chickens for their own consumption had the practice of strongly discouraging the children from naming their chickens to prevent them from becoming too attached to those destined for the skillet.[13]

Children name dolls and stuffed animals to afford a way of speaking and thinking of them that signals their value, beyond that of their being an instance of a kind.

Some couples name a stillborn child as a way of dignifying and underscoring importance. Correlatively, others refrain from doing so not because they'd not think or refer to the baby. It has rather to do with somehow not enhancing its individuality to them or shielding themselves from the psychological effects of thinking of the baby by name.

In the other direction, though we lack common, constant non-relational descriptions for identifying reference to many particulars, we don't name them because we deem them insufficiently individual, valuable only as an instance of its kind. Naming one's tomato plants or santoku knives would be, well, weird, a sign that one saw them somehow as 'originals'.[14]

It is important to appreciate that *Significance of Names* does not exclude considerations of semantic utility from playing a role in determining the range of particulars we name. The communicative utility in giving names to certain places and events that large groups of speakers need to refer to, and possess no other common, non-relational singular term for, is fundamental to explaining why they are named. But even for these, considerations of significance are also relevant and

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[12] Children, great champions of goldfish, name them. Of course, this only backs the view.

[13] The two are smartly summarized in this quip by Deborah Boliver Boehm 'You should never name an animal which is not yours to keep, or which you intend to eat'. Thanks to David Manley for the chicken example.

[14] Objection: racing cars and yachts are frequently named, yet they are just instances of a kind. With yachts, there exists a societal convention to anthropomorphize, and thus to name, them. And racing cars happen to be and are appreciated by their owners to be special, souped-up, individuals.

fundamental for limiting the scope of which places and events get named.[15] Also, *Significance of Names* is not intended to explain the evolution of our name-giving practices. Perhaps *Semantic Utility* alone supplies an adequate rationale for early evolution of proper names. I don't know. (It is far from clear that descriptions are earlier evolutionarily.) Be that as it may, *Significance of Names* is needed to capture our evolutionarily-recent and -current name-giving practices.

I close this section by noting two additional reasons for thinking of proper names as bearers of significance. The first is the most obvious sign of proper names' manifesting significance: in many languages, certainly not all, proper names are explicitly linguistically, orthographically, associated with significance by capitalization. Adjectives that are capitalized are primarily those that inherit the capitalization from a derived proper name, for example 'a Roman arch', 'a Kantian system'.

The second reason is from pragmatics. When we refer to name-bearing individuals, there is usually a strong conversational preference for reference by name.[16] Consider contexts in which speakers refer to a name-bearing individual by descriptions or demonstratives, reference succeeds without a hitch and is known by all conversational participants to have succeeded, yet the mode of reference seems amiss. In the second debate of our recent presidential election between John McCain and Barack Obama, McCain famously referred to Obama as 'That one'. Though McCain *may* not have intended to manifest disrespect for or somehow belittle Obama, his remark was widely interpreted as having done just that. To be sure, 'That one' was seen as itself derogatory and so, in this instance, it was not simply the absence of reference by name that was the source of the disrespect. Still, politicians (more skillful than McCain on that occasion) regularly exploit the tie between significance and names, as expressed in the *Names as Bearers of Significance* and *Naming Underscores Significance* principles, by refraining from referring by name to their political opponent.

Think of contexts in which an individual is successfully addressed, but not called by name. Call the kids in for dinner with 'kids!' and you may receive an adamant 'We have names!' to express disgruntlement at failing to be addressed in a way that manifests the referents' individuality. Pervasive use of 'the dog' instead of 'Rover' to refer to the dog, when one knows his name, suggests insufficient valuing of him as an individual.

Of course, one could advance alternative explanations of these phenomena that do not appeal to connections between proper names and expressions of significance. Communal interest in reinforcing speakers' memories of names, as a

[15] I lack space to discuss these interesting classes of names.

[16] Obviously, for stylistic reasons and conversational naturalness, reference by name normally occurs alongside reference with pronouns or demonstratives anaphoric on the proper name. I am not saying that there is an expectation of repeated or continual reference with a name. My examples focus only on instances in which there is an absence or marked reduction in normal reference by name.

way of reinforcing the conventional means of reference, may explain some cases. This point is correct, and important, but isn't the whole story. Instances like 'That One' and 'the kids', 'the dog' in which a speaker is known to know the name go unaccounted for. And the memory-reinforcing explanation does not address the palpable sense that the referents are not being referred to in a way that accords them significance. Alternatively, one might cite conservation of cognitive energy: using names is the most direct, most cognitively and linguistically efficient way to communicate, and we strive to preserve this linguistic economy.[17] Here too, I acknowledge the importance of reinforcing conventionally established referential devices, but this explanation seems implausible when the speaker knows the name and is known to know it, as in our examples.

Plainly, I've here offered only loose connections between names and significance based on intuitive examples. These are the kind of theses and examples in which one can effortlessly punch holes. But I think that the connections are real, powerful, and philosophically under-explored.

3. Evidence from Cognitive and Developmental Psychology

If it is right that we give names to individuals we regard as significant and that names underscore and manifests significance, what could explain these ideas? Cognitive and development psychology provide a host of fascinating research that, taken together, helps make inroads in explaining and supporting these ideas. I suggest that names, as a type of referential expression, come to be aligned with significant referents because we are biologically geared to treat certain individuals, and only certain individuals, as significant in their own right. Adults and babies regard people and other animate or intentional individuals as intrinsically significant, and process information about them in a distinctive fashion, one that is cognitively privileged over processing of information about non-intentional individuals. It is rooted in our evolved biological nature. This point about the differential processing of information about intentional and non-intentional entities is independent of language use and development. But there is developmental support from proper name learning too. At a very early age, children show extremely strong tendencies to restrict the use of proper names to certain kinds of entities. People are regarded as canonical candidates for names, but person surrogates, and certain animals and non-intentional entities are regarded as candidates for names as well. When taken together, the cognitive and developmental research may suggest that our deeply rooted biologically-based distinguishing of entities according to significance, according to being recognized as individuals, is reflected linguistically in our practices of name-giving and name-use.

The following survey of these two lines of research is only intended as the barest sketch of a possible line of empirical support for the *Significance of Names*

[17] This variety of explanation is familiar from Relevance Theory, as given in Sperber and Wilson, 1996.

position and of our corresponding principles. A much more detailed account of empirical research and various additional philosophical steps are needed to forge an adequate justification. I hope only that this review of some empirical research makes tantalizing the idea that the *Significance of Names* position may have evolutionarily-developed origins in cognition, and contrasts it sharply from the Strawsonian position according to which only the utility of names' semantic properties justify their introduction.

I begin with research on the perception and processing of non-intentional objects and agents. During the past twenty years, a mass of cross-cultural research on human infants, children, adults, primates and other animals has shown that we readily distinguish non-intentional physical objects from intentional entities, and process information about them in very different ways. Some researchers interpreted these findings as evidence that there are separate systems for the representation of non-intentional objects and the representation of action and intentionality. Be that as it may, this differential treatment is evident from a very early age, and shows up in other animals, strongly suggesting that its roots lie deep in human phylogeny.

The perception, representation, and processing of information about non-intentional objects is guided by certain principles that are evident from expectations that subjects exhibit upon encountering physical objects. Human infants expect that non-intentional physical objects possess cohesiveness (objects move as connected, bounded wholes), continuity (objects move through space without disruptions of continuity) and contact (objects require contact for motion—they are not self-movers) (Spelke, 1994; Xu, Carey, and Welch, 1999; Spelke, Phillips, and Woodward, 1995; Baillargeon, Spelke, and Wasserman, 1985). Adults' attentional perceptual systems are, as well, governed by these principles, which have been studied most extensively in object-tracking. Scholl and Pylyshyn (1999) show that our ability to track objects is severely compromised with breaks in cohesion and continuity. Non-human animals, too, appear to obey the same principles of object perception and representation. Monkeys' perceptual object representations exhibit reliance on assumptions about continuity and contact (Santos, 2004).

By contrast, the perception and representation of intentional objects—agents—is governed by markedly different principles. Continuity and cohesiveness assumptions are overshadowed by other assumptions in characterizing the representation of agents; the contact assumption is suspended entirely (Spelke, Phillips, and Woodward, 1995). In this domain, as Murray and Trevarthen, 1985 argue, infants have expectations of self-movement and of the goal-directness of motion. They also expect the responses of agents to be coordinated to, i.e. reciprocal with, their own actions, an assumption that is never made about non-intentional objects (Meltzoff and Moore, 1983). The differential treatment that has been observed (Legerstee, 1992) is arresting: infants as young as 5 weeks old imitate tongue protrusions by adults, but not by an object matching the adult experimenter in size, color, and movement. Furthermore, as Slater and Quinn, 2001 show, infants demonstrate strong affect in interactions with agents and have much more sustained, directed

attention to faces and other objects perceived as intentional. The fascinating growing research on 'mirror neurons' that has been observed in primates, and that many believe also exist in humans, may demonstrate in an even more dramatic way the specificity and importance to cognition of our mind-reading and other-agent processing abilities.

The upshot of this impressive set of well-known research strongly suggests not just that humans readily distinguish between non-intentional physical objects and intentional agents, and not just that human infants have these basic concepts sufficiently early to be able to draw on them during language learning. It shows as well how deeply rooted this differential treatment is in human phylogeny, and how basic it is for the earliest learners to treat other agents as special.

I turn now to the research on proper names. John Macnamara (1982) advanced a striking view for which, at that time, there was little empirical backing. He wrote '[b]y the time the child comes to learn language, he has already learned that objects in certain categories are important as individuals, those in other categories are merely exemplars of the category. Person is the pre-eminent category of the first sort, and when he is introduced to one, he will take the word applied to that person as a proper name. Words applied to objects in most other categories he will take as [count nouns]' (Macnamara, 1982). He claimed that people give proper names to those individuals that they take to be deserving of reference as an individual in their own right. In the twenty-five years since this statement, research on proper name learning has clarified, enriched, and largely borne out Macnamara's hypothesis.

In studying how children learn the names of things, developmental psychologists have attempted to identify the resources that children draw upon to determine the linguistic category of a term. When they hear a novel word, what guides a child in determining that that word is a proper name? From a very early age, children effectively draw on syntax to help them interpret words as proper names. Knowledge of syntax helps guide children in identifying novel words as proper names as opposed to common nouns. While common nouns taking determiners provides a basis for distinguishing them from proper names, syntax is insufficient for proper name identification. Pronouns, adjectives and mass nouns are possible interpretations for many candidate sentences containing the novel word (e.g. 'this is Zav'). Moreover, in order for a child to be able to acquire syntactic knowledge, she must be able to already possess some knowledge of the linguistic category of some words.

Researchers have found that very young children employ certain non-syntactic and non-semantic assumptions in word-learning.[18] One such assumption is that only some kinds of individuals are regarded as candidates for a proper name. Children exhibit a strong tendency to interpret a novel word as a proper name if it

[18] The experiments discussed in this paragraph are largely done with 17–36 month olds. I have glossed over these details (which are of utmost importance to developmental psycho-linguists). It is enough for my goals here to have research showing that very early on in the word learning process children make clear assumptions about what is proper-namable.

is applied to a person or person surrogate (a doll), but withhold the proper name interpretation for artifacts—blocks, shoes, toy cars and planes (Gelman and Taylor, 1984; Hall, 1994). They treat a novel word as a proper name if it is applied to animals that are familiar as pets (dogs, cats, rabbits). A natural inference to make from this research is that children regard people and animals, and thus animacy, as demarking the acceptable range of candidates for proper names. And one might suggest that they acquire the reluctance to name inanimate objects (not presented as an animate surrogate) because their overwhelming experience with proper names has been in application to animate objects. The restriction would merely be a typical children's overgeneralization. But this account seems unlikely. Hall (1994) has found that children do not regard all animals as candidates for proper names; they were reluctant to interpret novel words as proper names if applied to animals that would be nonstandard as pets—bees, caterpillars, snails. One might defend the account by construing the children as regarding those animals as not quite animate and so unworthy of the name. Yet Hall (1994, 1999) has neatly shown that children altered their judgment if the bees, caterpillars, snails were introduced as belonging to the experimenter. Animacy itself, whether real or surrogate, also appears to be unnecessary. Experiments by Sorrentino (1999) reveal that children readily allowed the application of a proper name to foam geometrical objects so long as they were merely described in intentional terms—as having certain mental states.[19]

Limits on what is proper-nameable show up not only in children but in adults as well. Adults are strongly inclined to interpret novel words as proper names if they are applied to persons, certain animals, and animal surrogates. They are largely disinclined, indeed, unwilling, to give proper name interpretations if the word is applied to simple artifacts. Sorrentino (1999) suggests that as the artifacts get more complex, and it seems, more individual, adults are less reluctant to apply proper names.

Clearly, in non-experimental settings, adults apply proper names to a broader range of types of individuals than young children do. Does this reveal that adults and children use different principles upon which they base what is an acceptable candidate for a proper name? Hall, Veltkamp and Turkel (2004) conducted a comparative listing experiment on adults and (five-year-old) children, asking them each to detail those types of individuals that they could name and those that they could not name. The results confirmed what we know of non-experimental settings: adults listed a much broader range of types of individuals as proper namable than the children, including institutions, events, companies, and so on. Both consistently included all varieties of artifacts most heavily as entities not proper nameable. A second task, however, revealed that while the range of objects

[19] Sorrentino's research did not depend upon eliciting pretence on the part of the 2-year-olds she studied. As is well known (Wimmer and Perner, 1987; Perner *et. al.*, 1987; Nichols and Stich, 2003), this comes later developmentally. Sorrentino's experiments simply used the intentional verbs 'want' and 'hope' to describe the 'states' of the foam blocks. Their success is backed by the fact that by their mid-twos, children use the intentional verbs 'want' and 'hope' and hear adults using these terms to attribute mental states to people and other intentional entities.

listed as proper namable varied widely between adults and children, their rationales governing what is and is not proper namable appears to be quite close. The subjects were asked to list reasons for giving a proper name to an object. Responses by adults and children were remarkably similar, with one answer dominating: 80% of children and 87% of adults cited the need for individuation, the need to be singled out from others as individuals in their own right. No other variety of reason, including being animate or being human or human-like, received nearly as much support.[20]

There is as yet no obvious or uncontroversial way to interpret these results to pinpoint an overarching principle according to which children or adults operate in determining the types of objects that are proper namable. Research programs are in full swing and many outstanding questions remain. But it is apparent that adult and children's referential actions are governed by sensitivity to the extra-syntactic and extra-semantic properties of proper names. The research appears to be converging on the idea that people reserve proper names for those they regard as 'worthy of being referred to as an individual'. As Hall put it, the entities we view as proper namable are those that we construe 'as an individual, as opposed to a (mere) instance of its kind', where construing an entity as an individual involves 'conceptualizing the entity as having worth or value in and of itself—beyond the worth or value it possesses in virtue of its being an instance of its kind' Hall (personal communication, 2006).

The thrust of this section has been to offer empirical research underwriting the connection between names and significance. One pool of research reveals that children and adults reserve proper names for individuals that they regard as significant as individuals. Another pool of research on our differential treatment of intentional objects and merely physical objects reveals that there are some kinds of objects that we do, by *nature*, regard as special. These are intentional objects, and, among them, especially people. The rest we do not. It is a step but hardly a stretch to suppose that we perceive agents, and not non-intentional objects, as significant as individuals. To be sure, social and cultural conventions afford numerous dimensions along which to expand what we regard as significant. It seems plausible that given the right conditions, for any entity, we could regard that entity as significant—as having individuality and value in its own right. But according certain individuals and not others intrinsic significance is deeply ingrained in our biology, carried in our common biological history. It is impressive, but perhaps no great surprise, that this shows up in our name-giving and name-using practices.

[20] The second most frequent answer is also pertinent here: children (53%) and adults (60%) cited reasons categorized as Social/Affective, flagging the need to interact with the individual socially or to signal feeling for it. Children rarely offered any other explanations, not even an appeal to animacy. The third most frequently cited type of reason for adults—the beauty or value of the object—secured 33%.

4. Proper Names and Three Theories of Singular Thought

I turn now to begin showing the theoretical work that can be done with these views about proper names and significance within philosophical accounts of singular thought.

A lemon hangs on the tree, perfectly ripe and I am looking at it. I perceive its distinctive shape and sunny color. Perception affords me a direct means of thinking of it. Though I perceive its properties, I do not think about it exclusively *via* these properties. I don't think of it as, say, 'the last yellow lemon on my tree'. This descriptive condition does not constitute the content of my thought, and what individual it is that I am thinking about is not determined by that particular lemon satisfying any conceptual or descriptive condition that is the content of my thought. My thought about the lemon is, instead, somehow more intimate and direct: my thought content is about—contains—that very lemon. And that I am thinking about this lemon in particular is determined relationally, by the fact that I am directly perceiving it. Direct perceptually based thought, like this one, is a canonical instance of singular thought.

Let's distinguish three questions that arise about singular thought. One is about the nature of singular thought: What is it for an individual to think a singular thought? Another is about the constraints on thinking a singular thought: What are the conditions on individual's thinking a singular thought about a particular entity? Can we think singularly about individuals even if we are not currently or have never directly perceived them, in that way that I do the lemon? The last is about mechanisms of singular thought generation: What are the perceptual, cognitive, linguistic, or social mechanisms by means of which an individual generates a singular thought about a particular entity? Comprehensive theories of singular thought attempt to offer answers to all of these questions.

One of the greatest challenges confronting theories of singular thought involves understanding what role singular terms play in sustaining, enabling, and possibly forming singular thoughts. Proper names have a distinguished role and present distinctive problems in our theorizing. To many, proper names play a role in thought that corresponds to their role in language. As discussed above, semantically, proper names directly refer to their bearers; sentences containing proper names express singular propositions that contain the name's bearer as a constituent. They afford long-term, context-independent[21] reference to the name's bearer. As used in thought, proper names serve as non-conceptual representations of their referents that are, as well, long-term and context-independent. Thus, when I encounter a name-bearing individual, and think of it by name, it seems that I am able to think singularly about the name's bearer, even when I am not in the presence of that individual. But we need to explain exactly why this is. Problems are compounded

[21] 'Context-independent' is too strong. I mean here only to flag that reference with a proper name does not require the tight contextual dependence had by indexicals, demonstratives and pronouns.

by the fact that proper names' interpersonal availability means we can receive them from interlocutors in linguistic communication. Thus we must confront the question of whether our thought involving 'received' names counts as singular. If so, why? And what are the conditions on securing such thoughts? Furthermore, we must confront the question of whether our thought with descriptive names, names whose reference is fixed with a definite description, rather than ostension, is singular as well.

In exploring proper names' role in singular thought, I will focus here on issues about the conditions and mechanisms of singular thought generation. Two theories about the conditions on having singular thoughts have dominated discussion in the last thirty or so years. The Acquaintance Theory, which has by far the most adherents, delimits the range of individuals about which one can think singularly by requiring epistemological, or informational, connections between thinker and objects.[22] We can think singularly about those individuals and only those individuals to which we are acquainted. Various versions of this theory abound, differing in their standards on acquaintance. Some limit the range of individuals available to think of singularly to those currently directly perceived. Most, however, embrace a more permissive epistemic condition, allowing for acquaintance by direct current perception or by having had direct perception that is currently stored as an episodic memory, or merely codified in semantic memory. Some allow that even if one lacks direct perceptual contact, indirect contact with the individual—either telescopically or audiographically, etc.—serves as well. Broadening out still further, many hold that one may be acquainted with an individual by standing at the receiving end of a channel of linguistic communication that was initiated by someone who had direct perception with that individual. But that's it. However these evidential relations are delimited, acquaintance theorists agree that the range of individuals about which one may think singularly is delimited by one's evidential and informational connections.

The opposing view, which I call Semantic Instrumentalism, introduces no substantive conditions on singular thought at all. To think singularly about an individual that we know exists yet know only by description, no acquaintance with it (of any variety) is needed for thinking about it singularly. According to Semantic Instrumentalism, we can freely generate singular thoughts at will about any individual that we can single out uniquely with a description. What we must do is simply alter the means by which we refer to that individual. The formula for doing so is this: introduce a directly referential term—a proper name, a deferred demonstrative or pronoun, or a Kaplanian *dthat* expression, fix its reference with the definite description 'the F', and use that directly referential term in cognition and in communication to refer to the individual that satisfies 'the F'. Then, because of this overt, controlled semantic manipulation, we can think singularly

[22] Acquaintance theorists include Bach, 1987; Boer and Lycan, 1986; Brewer, 1999; Burge, 1977; Donnellan, 1979; Evans, 1982; Recanati, 1993; Lewis, 1979; Kaplan, 1989b; Pryor, 2007; Reimer, 2004; Russell, 1911; Salmon, 1988; Soames, 2003, 2005.

about the individual that is the F. Kaplan, once the foremost proponent of the view, neatly summarized the essence of the theory thus: 'What allows us to take various propositional attitudes toward singular propositions is not the form of our acquaintance with the object but is rather *our ability to manipulate the conceptual apparatus of direct reference*'.[23]

In my view, both theories are riddled with serious, insurmountable problems. Here I address only those pertinent to proper names.[24] Serious difficulties arise with acquaintance theories' treatment of the semantics and psychological role of descriptive names. I argue for these claims at length elsewhere.[25] Here I'll simply review them. Consider 'Unabomber', a name brought into the language in the late 1980s by FBI agents to refer to the individual responsible for the series of mail bombings targeting university and airline personnel. Acquaintance theorists typically regard this and other such cases as involving no acquaintance relation, and thus as precluding singular thought about the Unabomber.[26] The problem they face is what semantics to assign to 'Unabomber' while maintaining that one cannot think singularly with that name. One option allows that descriptive names are not genuine proper names at all (here, the acquaintance constraint is brought in early, on name introduction). Absent an acquaintance relation, 'Unabomber' must be synonymous with its reference-fixing description. But this seems counterintuitive. Descriptive names seem to behave in language as *bona fide* proper names; moreover, the same tests for referentiality of ostensive names can be applied and used to demonstrate that descriptive names, too, are referential, and thus genuine names. The other option is to accept them as referential, and thus as genuine proper names, while denying our ability to grasp the singular propositions expressed by sentences containing them. Yet this poses an instability: descriptive names are regarded as *bona fide* names, yet individuals are said to be unable to understand them, and so can, indeed must, treat them in cognition as possessing descriptive content. This makes the initial introduction of the descriptive name into the language puzzling, even irrational. If the name can't be used to think with, there is no reason to bring it into the language in the first place for its reference-fixing definite description would perform all its cognitive and communicative functions.

Another problem for acquaintance theories also involves the handling of descriptive names, but does not shame them for instabilities between their semantics and psychological function. Instead, the problem is simply that our thought with descriptive names for which there is no acquaintance relation to their referent seems

[23] Kaplan 1989a, p. 536, my emphasis. Kaplan (1989b) has since retreated to an acquaintance position. Semantic Instrumentalists are few: Harman, 1977; Kaplan, 1979, 1989a; Borg, 2004; and, *possibly*, Crimmins, 1992, who may, rather, be a Cognitivist.

[24] Acquaintance theories notoriously face difficulties explicating exactly what acquaintance is, even for instances of 'direct' visual perception of the object. I regard these difficulties as inadequate to shun acquaintance, or to regard it as too poorly understood to stand as a constraint on singular thought.

[25] Jeshion, 2002, 2004, 2006.

[26] That is, precluding singular thought until the identification of Kaczynski as the bomber.

to be used in cognition non-descriptively, and with the same direct intentionality, aboutness, as ostensive names. Here again, a full analysis is given elsewhere, so I'll just quickly review.[27] In addition to 'Unabomber', standard examples include 'Jack-the-Ripper', 'Neptune', 'Vulcan'. In all of these cases, there is, at best, an indirect evidential relation (or apparent evidential relation, as in the case of 'Vulcan') between thinker and object of thought, and, all agree, the isolation of the intended object requires the thinker to rely upon a definite description for the reference-fixing of the descriptive name. Acquaintance theorists typically deny the possibility of singular thought in these cases, but this seems intuitively incorrect. It seems that FBI investigators, and the rest of society, were thinking singularly about the Unabomber, and that Leverrier was thinking singularly about Neptune.

Others examples pertinent here are cases for which the name is introduced to serve in cognition to organize one's construction of an entity not yet in existence, to orient one's specific future plans, or life aims and structure:

> ['Psycho'] We have plans to make a movie from a certain script, with certain actors, yet which does not yet exist.
>
> ['Dessert Sensations'] My father named his to-be-constructed cake-delivering business many months prior to making his first investment, or securing any suppliers or restaurant customers.
>
> ['God'] Imagine an individual who prays to God, orients her life to please God, yet doesn't believe in an interventionist God or an afterlife, and has an absolutely firm conviction that she will never gain any evidence or information about God.

These names, too, seem to function in cognition like ostensive names—singularly. Yet none of them naturally 'passes' an acquaintance condition.[28]

Some acquaintance theorists have attempted to retain their acquaintance condition on singular thought while swallowing these examples too. They do so by maintaining that these examples actually mark off cases of acquaintance, for there exists evidence (or apparent evidence) of these individuals, at least in the 'Unabomber', 'Neptune', 'Vulcan' type of cases. Yet this seems highly implausible and perilously close to collapsing the acquaintance theory into a limited form of Semantic Instrumentalism. If the notion of acquaintance is *this* indirect, we are acquainted with virtually all objects that have thus far existed, for we stand in

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[27] Some of these examples are in Jeshion, 2004. The intuitive argument from descriptive names is in Jeshion, 2009.

[28] The case for thinking that the descriptive names ought to be regarded as functioning in cognition as *bona fide* names consists not only in recognizing the intuitive implausibility of regarding them as functioning descriptively, since we have no infallible insight into that, but rather by evaluating the overall plausibility of the various competing theories in explaining all the phenomena (Jeshion, 2009).

evidential relations to them. Just by finding a unique description of a past existent, we are thereby in position to think singularly about it. On this analysis, I can think singular thoughts about George Bush's mother's mother's mother's mother's mother's mother's mother just by coining a name for her—despite a total lack of interest in who this individual is. Evan's 'Julius' counts as singular and acquaintance-based on this account too. Yet these seem exceptionally dim prospects as candidates for singular thought. The floodgates have been ruptured; the more we widen the purview of acquaintance the less it is able to convincingly mark off what delimits the range of singular thought.

Unlike Acquaintance theories, Semantic Instrumentalism is widely regarded as untenable. The standard line for rejecting the theory harkens back to Evans's comment that our beliefs are individuated only by the evidence that gives rise to them. We do not create singular thoughts 'by the stroke of a pen'—by substituting the use of a name or other referential device for a description. There is something that is right and something that is wrong with this response to Semantic Instrumentalism. What is right is that there does seem to be something mysterious about the alleged production of singular thought with overt semantic manipulation. What is wrong is its misdiagnosis of exactly why the semantic manipulation cannot generate singular thought.

Understanding these points, and indeed the whole Semantic Instrumentalist view, is complex, and I will only be able to undertake a partial analysis here. As I see it, the theory is best viewed as a conglomerate of individual theses, some concerning the interaction of semantics with cognition and some concerning our ability and freedom to manipulate the way that semantics impacts cognition. At the heart of Semantic Instrumentalism are four ideas. One is that there are virtually no restrictions at all on our ability to introduce into the language a directly referential term—either a *dthat*-expression, a deferred demonstrative or pronoun, or a descriptive name. No acquaintance or other informational constraints are in place. But, neither are there any constraints associated with the subject's interests, goals, plans, and affective states. All that is required is for the subject to possess a unique description for an individual and to introduce a proper name, or other directly referential term, for that individual.

Although on numerous characterizations of Semantic Instrumentalism, agents introduce names freely, just by sayings, the two prominent proponents of Semantic Instrumentalism, Kaplan and Harman, both always conceived of naming as determined by what goes on in cognition. For them, to introduce a name for an individual into the language, one must have a corresponding mental name for that individual. This cognitive requirement on possessing a mental name prior or coincident to introducing a public name rules out identifying Semantic Instrumentalism with the view that public names and other directly referential terms are brought into language independent of all cognitive constraints, simply by a stipulator merely saying, 'Let ''N'' refer to the F'. Consequently, Evans's

pinpointing 'a stroke of a pen' as the root problem with Semantic Instrumentalism is a red herring.

This brings me to Semantic Instrumentalism's second key idea, which concerns the production of mental names. For Kaplan and Harman, we can generate semantic intentions, i.e., mental names, at will: if you want to think singularly about the first born in the next century, or the next president of Brazil, or the inventor of the zipper, you can freely and directly introduce into cognition the relevant mental name by simply choosing to do so (Kaplan, 1989a, p. 560). An agent's choice is unbound, and thus the range of individuals about which we can think singularly is, as well, unbound.

A third idea is that for Semantic Instrumentalism, our controlled manipulation of the semantics is ultimately rooted exclusively in our knowledge of the semantic properties of referential terms. So long as I possess knowledge of the semantic properties of names, deferred demonstratives, and *dthat* operators—recognize these types of linguistic terms as referential, I can use them to extend the range of my singular thinking. Beyond this knowledge, nothing more is needed for one to be in position to manipulate the semantics for successful singular thought generation. In particular, it makes no difference which referential device—name, demonstrative, or *dthat*—one employs.

A fourth idea, rarely discussed, but part of Kaplan's theory, is that not only can we freely manufacture singular thoughts in the absence of an acquaintance relation; in such circumstances, we can, as well, by sheer will suppress the production of thinking singularly about an individual. The idea arises in the course of Kaplan's attempt to remove the sting of Semantic Instrumentalism's ability to freely generate singular thought: 'Normally one would not introduce a proper name or a *dthat*-term to correspond to each definite description one uses. But we have the means to do so if we wish. Should we do so, we are enabled to apprehend singular propositions concerning remote individuals (those formerly known only by description). Recognizing this, we refrain. What purpose—other than to confound the skeptics—is served by direct reference to whosoever may be the next president of the Brazil?' Kaplan (1989a, p. 560). If we want to hold back on singular thinking about an individual with which we are unacquainted, we can do so—just by our choice. We decide not to use semantic mechanisms for extending the range of singular thought, and thereby withhold mental name production. An obvious corollary of this idea is that, for Semantic Instrumentalism, beyond the semantic manipulation, no other mechanisms are available to us for the production of singular thought in the absence of acquaintance.

Semantic Instrumentalism confronts various serious problems. I highlight three. First, can we really introduce a mental name into cognition just by freely choosing to do so? This seems doubtful. This doesn't seem to be the kind of change of mind that is under agential control. Without having any affective states, any plans, or projects, or knowledge associated with, say, George Bush's mother's mother's mother's mother's mother's mother's mother, it is highly doubtful that I can simply

summon at will a mental name for that woman. Yet the impoverishment of my evidential relation to her is an inadequate explanation for why I cannot do so, for my evidential relation is equally impoverished, in cases like the Jack-the-Ripper and Unabomber. The striking difference is not epistemological, but rather the significance of the referent to us. Another example: can I truly name 'Cookie' the seventh cookie that David Kaplan ate in 2009? To introduce the public name I need to produce a mental name for that individual. Yet, in the absence of any plans to think or theorize or track or care about that individual, that cognitive achievement is beyond me. The generation of mental names is not unconstrained and is not secured by free agential choice. Cognition authorizes the production of mental names, not the will.

Second, just as we cannot produce singular thoughts at will, we cannot, at will, inhibit their production. When an individual is significant to us, cognition produces a mental file on that individual. FBI agents in the pursuit of the mail bomber were surely thinking singularly about that individual even prior to their coining the name 'Unabomber'. Fear and the goal to capture him create significance. The most sophisticated, committed acquaintance theorist would think singularly about the Unabomber too. Try as one may to reserve singular thought for objects of acquaintance, in this domain cognition is the authority; it does not rein in the scope of singular thinking to correspond to one's desires or epistemological convictions.

Third, insofar as proper names, deferred demonstrative, and *dthat* expressions are all referential devices, Semantic Instrumentalism treats them all as playing the same role in singular thought generation. Since the agent only needs knowledge of the semantic properties of the type of linguistic term involved in semantic manipulation, and since they are all referential devices, Semantic Instrumentalism regards them as cognitively on a par. One problem with this is that however instructive Kaplan's *dthat* operator is in systematizing the semantics of direct reference, our minds will not be altered by an artificial *dthat* operator that it never in fact uses. A subject's *knowledge* of the semantic properties of an operator is not what (or not all that) enables cognition to form singular thoughts with it. *What makes cognition responsive to proper names such that it can use them in creating singular thoughts is that cognition has, in fact, been using proper names.*

The problems inherent in both Acquaintance theories and Semantic Instrumentalism suggest natural ways to reconstruct a more promising theory. The view I have been developing, which I call Cognitive Authority, or simply Cognitivism, regards cognition—not epistemology, not agency—as ultimately in control of the production of singular thought.[29] Cognitivism dispenses with an acquaintance condition on singular thought, supplanting it with a significance condition. It rejects agential authority in the formation of mental names, supplanting it with cognition's authority.

[29] For a more extensive development of Cognitivism, see Jeshion, 2009. Sainsbury (2005) holds a view that can probably be classified as Cognitivist. Certainly he rejects acquaintance theories.

I will outline key tenets of the theory, giving it just enough shape so that I can highlight the way that proper name's significance functions within this theory of singular thought. With respect to the nature of singular thought, Cognitivism adopts a 'bare file view': we think singular thoughts about individuals if and only if we think of them through either an object file or a mental file. Object files, a notion invoked in vision science, are files on individuals that we directly perceive. When we directly perceive an object, cognition forms an object file on that individual to represent and bind together and organize information about it (Kahneman, Treisman, and Gibbs, 1992; Scholl and Pylyshyn, 1999; Carey and Xu, 2001; Pylyshyn, 2003). The past twenty years of vision science research has established that the perceived objects that we represent cognitively in object files is singular (Scholl and Pylyshyn, 1999; Pylyshyn, 2003).[30]

Mental files are files on individuals that we may or may not have directly perceived, though they serve many of the same structural and organizational roles in cognition as object files. A single mental file is a repository of information that an agent takes to be about a particular individual. An agent's set of mental files partly constitutes her perspective on the world insofar as the individual mental files capture the agent's way of individuating and identifying objects, and the objects she has mental files on are the objects that are available for her to think about.

Unlike object files, mental files are typically labeled with mental names that serve as long-term representations of the individual that the file is about. We think about the individual that the file is about by thinking with the mental name, and we use mental names as our mode of accessing the file contents.[31] Mental names are the cognitive counterpart to the singular terms that are used in language to refer to objects. They are the prime representations that we use to think about objects that our mental files are about. However, insofar as they serve as longstanding labels on mental files, used for adding, sorting, and merging of information on an individual, and the identification of individuals, mental names cannot be cognitive correlates of pure demonstratives or indexicals, which are contextually based determiners of their object. In their representational properties, they correlate more closely with proper names.

For Cognitivism, the mechanisms of and principles governing mental file generation have their roots in our individual perceptual systems, our common evolutionarily-developed neurobiological history, including its social sides, and our understanding and use of language. Because cognition is largely shaped by its perceptual system containing dual systems for identification/recognition and motor activity (Milner and Goodale, 1995), and because it is sensitive to semantic properties of linguistic devices and is shaped by its use of them, cognition is able

[30] The key findings are that object, as opposed to property, individuation is the norm of visual attending. Visual processing is allocated to objects in the sense that it tracks and attends to them deictically, without requiring the identification of their properties.

[31] Perry, 1980 contains an initial substantial account of mental files, though the idea has roots in Grice (1969). Note also Perry, 2001. Bach (1987) and Recanati (1993) also embrace mental files in their analyses of singular thought.

to, and does, generate mental files on individuals that are epistemically remote. Important individuals that our goals are directed toward, whether for tracking, discovering, or constructing, will be individuals for which cognition creates mental files. Because mental files use mental names as prime representations of their object, mental files are easily initiated for those unperceived or not yet existent individuals. A mental name is created as a file label and the process of information collection or activity planning is organized through the newly introduced file. The mental name may be newly coined or, as is typically the case, may be received from another through communicative channels. The overarching principle guiding the initiation of mental files for individuals with which we are not acquainted expresses cognition's conservation of its singular representations and its sensitivity to its biologically evolved functions, not epistemological strictures:

> *Significance Condition*: a mental file is initiated on an individual if and only if that individual is significant to the agent with respect to her plans, projects, affective states, and motivations.

Obviously, and especially in connection to the foregoing discussion about proper names and significance, this condition cries out for a full, general analysis of what makes something significant in the relevant way for mental file initiation. I leave this fuller project for another day.[32]

Let's review the path we've taken in this section. Proper names play a key role as a mechanism for the generation of singular thought and thus as determining conditions on singular thought. Cognitivism's Significance Principle, together with our principle that Significance Guides Naming, codifies how proper names function to both extend the range of our singular thinking to individuals beyond our epistemological grasp, and to rein in the scope of our singular thinking to individuals that matter. Because Cognitivism locates the authority of singular thought generation in cognition, not agency, the way in which proper names function in generating singular thought is embedded in how cognition in fact operates with proper names. An agent's knowledge of semantics is not sufficient for singular thought generation because cognition is not, in the first instance, sensitive primarily to this knowledge. It is, rather, sensitive to its own past use of proper names as labels on mental files, and it is this past usage that allows for production of new singular thoughts in the absence of acquaintance. Proper names function at a considerably deeper level in cognition than our two old theories have appreciated.

In the rest of this paper, I will further develop the Cognitivist perspective by explicating one fundamental way in which significance functions in transferring

[32] For now, notice an important difference between Cognitivism's *Significance Principle* and the *Significance of Names* analysis of why we name what we name. The latter upholds finding individuals as having value beyond being instances of a kind as a fundamental rationale for name-giving. It does not itself provide a condition on mental file initiation, which is what Cognitivism's *Significance Principle* does.

singular thought through communicative channels—by proper names serving as the 'linguistic face' of significance.

5. The Role of Names in the Communication of Singular Thought

Can one have singular thoughts about individuals one has never previously encountered exclusively by means of linguistic communication with others that are acquainted with that individual? There are reasons to be doubtful. If I am informed about an individual O by someone who has encountered and been acquainted with O, how can I possibly think singularly about O? My informant can describe O to me, and can refer to O, but through her communication alone, she cannot transfer to me a perceptual representation of O that would suffice to afford me the non-descriptive variety of representation that I'd receive from singular thought underwriting perceptual acquaintance with O. I can know that my interlocutor possesses a perceptual representation of O, but this alone does not afford me any such representation. My knowledge of her perceptual representation is merely a description of it as *her perceptual representation of O*. It seems, then that I could only secure a descriptive thought about the unencountered individual O.

While this line for skepticism about the possibility of singular thought through communication may seem compelling, many have strongly denied it. Testimonial instrumentalism is the view that affirms the communicative transfer of singular thought, maintaining that through linguistic communication, we are able to think singular thoughts that would otherwise be unavailable to us because we lack direct perceptual acquaintance with the object of thought. Testimonial instrumentalism enjoys widespread support, and I count myself as an adherent. But saying exactly how it transpires that speakers transfer singular thoughts to hearers is a vexed subject. Most think that the use of proper names plays a special, though not unique, role in singular thought's downstream transfer along channels of linguistic communication. Proper names themselves or our use of proper names or our use of other singular terms as proper names enables communicatively generated transfer of singular thought. The trick is to say exactly how and why this occurs.[33]

Extant accounts explain singular thought transfer entirely through the semantic and representational functions of proper names. Hearers themselves form singular thoughts upon hearing a name in an utterance because they recognize the name as

[33] It is worth highlighting that the problem here is about the communicative use of proper names to *initiate* in the hearer new singular thinking about a referent. Contrast this with the hearer's *identification* of the speaker-communicated name's referent with an individual the hearer already thinks of singularly.
Also, it is imperative to distinguish between what role names play in the *transfer of reference* and what role names play in the *transfer of singular thought*. Our problem is the latter one. Some analyses explain transfer of singular thought by appealing to conditions on the transfer of reference, but this is a substantive claim, and we cannot assume at the outset how they are related.

a device of direct reference or as itself a singular representation. On these views, it is *exclusively* the semantic features of proper names that underwrite their special role in the initiation of singular thought through communication chains.

My analysis is different. As I see it, the semantic features of proper names play a role, but not the only role, in the transfer of singular thought. I believe that a hearer's recognition of a speaker's utterance as containing a proper name causes her to accord significance, *prima facie*, to the referent, or the supposed referent, of the proper name. Taking the referent, or supposed referent, to have significance, *prima facie*, causes the hearer to form a mental file on that individual.[34] On this analysis, the explanation of the initiation of singular thought through the use and recognition of proper names as proper names is routed cognitively, and has two stages. The *Names as Bearers of Significance* principle codifies what happens at the first stage. Cognitivism's *Significance Principle* codifies what happens at the second. The distinctive aspect of this account is that while cognition is highly sensitive to semantic facts, it is also highly sensitive to social facts about how we use certain linguistic term-types and this plays a key role in securing singular thoughts from interlocutors.[35]

I do not have an argument to establish the correctness of this view, but I wish to compare it with competing views. In what follows, I discuss two prominent semantical accounts of the mechanisms of testimonial instrumentalism, one in Bach, 1987, one in Recanati, 1993, and articulate problems they encounter. I then fashion an alternative promising semantically based view, and compare it to my account incorporating proper names' significance.

Bach (1987, pp. 32–33) offers a three-stage story of how a hearer inherits singular thought from a speaker: (1) a speaker displays a physical token of the name-type she is mentally entertaining, and, in doing so, displays her singular way of thinking of the name's referent. (2) The hearer perceives this singular representational feature of the speaker's name-token. And then, (3) the hearer in turn mentally tokens the same name and creates a mental file so-labeled.[36]

There are interesting challenges that could be raised to the first two stages of this account. Does a speaker, in uttering a sentence with a proper name-token,

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[34] On this analysis of the communicative transfer of singular thought, the significance of names can be overturned. On hearing a speaker's utterance of a name, the hearer recognizes 'N' as a proper name, and takes 'N''s referent to be an individual accorded significance, unless she has a specific, contextually bound reason not to. But the default (*sans* any positive internal reasons on the part of the hearer) is to take 'N''s referent as an individual accorded significance.

[35] The purely semantically-guided account of singular thought transfer obviously parallels *Semantic Utility* in its explanatory roots, and my two-stage account obviously parallels and builds upon *Significance of Names*.

[36] Bach's maintains that the hearer's thought is singular because its object is determined relationally (his standard for being singular). The object is determined relationally because the name's meaning does not enter into the content of the hearer's thought, which is in turn explained by the fact that 'it is of a certain form (sound or shape), generally the same as the one to which it is linked' and by being a name or used as a name 'only its form matters'. There are problems with this analysis of conditions on singularity, but I ignore them here.

display her own singular way of thinking of the name's referent? And, granting this, does a hearer perceive the singular representational features of the speaker's name-token? Both components of the account strike me as rather intellectualist or somehow too rich if Bach is assuming (as he seems to be) that the speaker's display of her singular way of thinking of the name's referent and the hearer's perception of it is something above and beyond the speaker's physically tokening a name and the hearer's recognizing that token as a name, respectively. Utterances of sentences containing name-tokens display that the speaker is thinking (because speaking) of the name's referent with a name, but this hardly shows that the speaker's personal singular way of thinking of its referent is somehow on display. And it seems that all a hearer perceives is the name the speaker uses to refer.

The most important problem, though, is that (3) is unmotivated. Bach's analysis doesn't really explain *why*, upon perceiving the speaker's name-token, the hearer herself tokens the name and then uses it as a mental name. He says she does, but doesn't account for why. Other psychological states that preserve co-reference are available to the hearer. She could have formed the descriptive thought given by 'the one that S is speaking about with ''N'''.

The lessons I take from Bach's account are these: what speakers express and what hearers perceive or take speakers as expressing are just tokens of names (not speakers' own singular modes of presentation of the referent). And what at the deepest level needs explaining is precisely why hearers, upon recognizing speakers as using names, form singular mental representations themselves as their own way of thinking of the name's referent.

Recanati, 1993 advances a different account of testimonial instrumentalism. His fundamental idea is that the inheritance of singular thought by hearers occurs by their conforming to a normative requirement that thought with referential expressions be singular. By recognizing that a speaker's utterance contains a token of a proper name 'N', a hearer in turn thinks with a proper name by herself physically or mentally tokening 'N'. In tokening 'N', the hearer, like all other thinkers, is bound by a principle, what Recanati calls the *Congruence Principle*, requiring that there be congruence between the semantical and psychological content of an expression. As directly referring expressions, proper names require that their referents be thought of non-descriptively, hence singularly. Since this requirement is signaled, expressed, on occasions of use of proper names, the hearer forms a thought that is singular.[37]

[37] I have slightly modified Recanati's account to keep it more neutral on the semantics of proper names. Recanati holds that proper names have the semantic descriptive content 'the bearer of ''N''' but that this content is truth conditionally irrelevant. Indeed, this is what makes proper names referential devices. The requirement that proper names be thought of singularly, and not descriptively, results from proper names signaling the truth conditional irrelevance of their semantic descriptive content (Recanati, 1993, pp. 297–298). On the more neutral interpretation I offered, the requirement that proper names be thought of singularly, and not descriptively, results from proper names signaling their being devices of direct reference. So this line is available to both Millians and neo-Fregeans about proper names.

It is important to recognize that Recanati's requirement that proper names be thought of singularly is a normative requirement; it does not describe how we think with names, only how we ought to think with names. The *correct* use of proper names and other referential devices requires that they be referential and express singular thoughts. Consequently, the normative analysis allows that we can, and sometimes do, think of the referent of a proper name by means of a description. In such an instance, one's thought with the name constitutes breaking the normative requirement on how thought with that name ought to be thought.[38]

A first concern pertains to the normativity in the *Congruence Principle*, that a proper name *qua* proper name 'demands that its referent be thought of non-descriptively' (1993, p. 180).[39] Now, I do not deny that there are linguistic norms governing use. Language, and categories of linguistic terms, contains semantic normative requirements. Meanings of concept-terms are semantic norms. Ditto for the (Kaplanian) characters of indexicals, pronouns, and demonstratives. And there is a semantic normative requirement that proper names be used referentially. What I question is whether there is any reason to think that there exists, *in addition*, a psycholinguistic normative requirement on how we ought to think with names. It is far from apparent that semantic norms give rise to any such psycholinguistic norms. Perhaps (and I speculate this is the case) semantic norms only give rise to psycholinguistic *regularities* about how we think with names.[40]

Consider Schiffer's (1987, p. 49) example in which 'He must be a giant' is uttered in deferred reference to enormous footprints on the beach. Many are inclined to maintain that the speaker thinks a descriptive thought, *the footprint maker, whoever he may be, must be a giant*. Yet with the normative psycholinguistic principle in place, we must maintain that the speaker's thought ought to have been singular. This seems off-base. The speaker's thought (as they say these days) 'is what it is': it isn't somehow not up to snuff or in any way nonkosher. To be sure, such deferred uses

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[38] Recanati regards the possibility of breaking the *Congruence Principle* as a plus because then he is able to retain his acquaintance condition on singular thought, while allowing that descriptive names count as *bona fide* proper names.

[39] In noting that proper names signal the congruence requirement, Recanati (1993, p. 297) does not say whether particular tokens of a proper name signal their referential standing and hearers understand this in particular contexts of use, or whether proper names, taken as a type of linguistic term, are recognized by competent speakers as referential.

[40] As Recanati notices, his own normative analysis on thought is reminiscent of the normativity implicit in Russell's memorable remark about the name 'Bismarck' when used by Bismarck to make a statement about himself: 'Here the proper name has the direct use which it always wishes to have, as simply standing for a certain object' (Russell, 1911). Russell believed failure to fulfill his strict acquaintance condition issues in an altered status of the apparent name. By contrast, Recanati holds that when speakers fail his own more lax epistemic requirements, the names they use, descriptive names, can still be genuine proper names, functioning referentially. This seems borne out by semantic intuitions. Yet, for Recanati, speaker's failing to satisfy an acquaintance condition explains why they do not fulfill the normative requirement on thought with names. As I see it, Russell and Recanati make essentially the same error: allowing an antecedently embraced epistemic condition to explain the semantic or the cognitive facts, respectively.

of demonstratives and pronouns, and their associated thoughts, are atypical, insofar as the speaker uses a device of direct reference to express a non-singular thought. But the thought is not—or at least is not obviously—thereby not as it ought to be. In any case, we need some positive reason to think that the speaker's thought is governed by such a normative principle.

An equally important concern is that the normative principle explains too little. Granting that proper names, as used in a context, signal that they should be thought of singularly, what is it about a hearer's recognition of a proper name signaling that it ought to be thought of singularly that inclines the hearer to follow suit? Why do hearers sometimes follow this norm, and sometimes break it? The psychological questions about the transfer of singular thought remain unanswered.

A more promising alternative to Recanati's view excises the normativity of the principle and provides a corresponding, but still semantically-driven, psychological analysis of the transfer of singular thought. Here, singular thought is inherited by hearers' recognition of proper names as being referential terms (or, stronger, as having bearers) and the psychological association of such expressions with singular thought. In recognizing that a speaker has used a proper name 'N', a hearer knows that 'N' is a referring expression (that 'N' has a bearer). So, because being a referring expression (having a bearer) is psychologically associated with singular thinking about those bearers, the hearer forms a singular thought about the name's bearer.[41]

So far as I know, there is no such developed account in the philosophical literature, but this one, call it the Pure Semantic View, seems to me natural and formidable.[42] One advantage of it is its relative simplicity. A hearer recognizes a name as functioning referentially (and as having a bearer) and proceeds from there directly to the formation of a singular thought. On my own view, the hearer's advance to forming a singular thought from the name is routed through taking the name as a marker of significance. And the Pure Semantic View does explain why utterances containing names seem to automatically and as a default generate the formation of singular thoughts in hearers. By using proper names for individuals that I have perceived and so think of singularly with the name, proper names are psychologically associated with singular thought. However, it seems that on this account, we could make the same case for thinking that just upon hearing a definite description or an indefinite noun phrase the normal default is to form a singular thought. After all, in numerous instances we connect up individuals that we form singular thoughts about with the definite and indefinite descriptions by which we refer to them: 'This is a small bird nest', 'Meet the chancellor of the University of California', 'Look, an airplane flying overhead', and so on. True, these descriptions

[41] The stronger version, including knowledge that names have bearers, is inspired by views that maintain that linguistic competence with a name includes knowing that names have bearers.

[42] Psychological processing interpretations of discourse representation theory and file change semantics initiated by Hans Kamp (1981) and Irene Heim (1982) are close cousins but still quite distinct theories from the account I have just articulated. I discuss discourse representation theory and its relation to singular thought in Jeshion (ms.).

have semantic content, and our understanding of them involves understanding that content. But the point here is that there appears to be the same association between the use of definite and indefinite descriptions (in a context) with the individual who satisfies them and about whom we form singular thoughts as there is between the use of a proper name (in a context) and our singular thoughts about the name's referent. Yet many believe, and I am with them, that there is something special about proper names that makes the transfer of singular thought with them more automatic or privileged than the transfer with descriptions. This view seems to undermine that.

My account may offer an advantage. On it, the transfer of singular thought with proper names is privileged: upon perceiving proper names, we automatically form singular thoughts by mentally tokening the name ourselves. We do not need to know whom the name names. We do not need contextual supplementation. We form a singular thought because utterances with proper names straightaway cause us to accord significance, *prima facie*, to the referent (or supposed referent) of the proper name, and taking that individual to have significance causes us to form a name-labeled mental file. This distinguishes proper names from other singular terms. While we do form singular thoughts about what individual interlocutors refer to by description, we do so only with supplementary information from the context.

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