



## Are Cantonese-speakers really descriptivists? Revisiting cross-cultural semantics

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### ABSTRACT

In an article in *Cognition* [Machery, E., Mallon, R., Nichols, S., & Stich, S. (2004). Semantics cross-cultural style. *Cognition*, 92, B1–B12] present data which purports to show that East Asian Cantonese-speakers tend to have descriptivist intuitions about the referents of proper names, while Western English-speakers tend to have causal-historical intuitions about proper names. Machery et al. take this finding to support the view that some intuitions, the universality of which they claim is central to philosophical theories, vary according to cultural background. Machery et al. conclude from their findings that the philosophical methodology of consulting intuitions about hypothetical cases is flawed vis a vis the goal of determining truths about some philosophical domains like philosophical semantics.

In the following study, three new vignettes in English were given to Western native English-speakers, and Cantonese translations were given to native Cantonese-speaking immigrants from a Cantonese community in Southern California. For all three vignettes, questions were given to elicit intuitions about the referent of a proper name and the truth-value of an uttered sentence containing a proper name. The results from this study reveal that East Asian Cantonese-speakers do not differ from Western English-speakers in ways that support Machery et al.'s conclusions. This new data concerning the intuitions of Cantonese-speakers raises questions about whether cross-cultural variation in answers to questions on certain vignettes reveal genuine differences in intuitions, or whether such differences stem from non-intuitional differences, such as differences in linguistic competence.

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### 1. Introduction

In an article in *Cognition*, Machery, Mallon, Nichols, & Stich (2004) present data suggesting that “East Asians” tend to have descriptivist intuitions about the referents of proper names, whereas “Westerners” tend to have causal-historical, or “Kripkean” intuitions. Machery et al. take this finding to support the view that some intuitions, the universality of which they claim is central to philosophical theories, vary according to cultural background. Machery et al. hypothesize that the differences in intuitions stem from general psy-

chological differences between Eastern and Western subjects of the type noticed in cultural psychology (Nisbett, Peng, Choi, & Norenzayan, 2001; Nisbett & Miyamoto, 2005). From these findings, Machery et al. conclude that the philosophical methodology of consulting intuitions about hypothetical cases is flawed. To quote Machery et al. “our data indicate that philosophers must radically revise their methodology” because “the intuitions philosophers pronounce from their armchairs are likely to be a product of their own culture and their academic training” (Machery et al., 2004, pp. B9). “The evidence suggests that it is wrong for philosophers to assume a priori the universality of their own semantic intuitions” (Machery et al., 2004, pp. B8). More recent work develops this line of critique against philosophical

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methodology and philosophical positions that are based on semantic intuitions. (Mallon, Machery, Nichols, & Stich, 2009; Machery, Olivola, & Blanc, 2009).

In the following study, I present data incompatible with Machery et al.'s conclusions. Native Cantonese-speaking immigrants from a Cantonese immigrant community in Southern California do not have descriptivist intuitions about the referents of proper names when presented with a Cantonese story and Cantonese questions about reference and truth-value. This data raises questions about whether cross-cultural variation in answers to questions on certain vignettes reveal genuine differences in intuitions, or whether differences in answers stem from non-intuitional differences, such as differences in linguistic competence. Together with Machery et al.'s original results, my results suggest neither a vindication nor a refutation of philosophical methodology. Instead, more work must be done to investigate the differences that choice of language, vignettes, and phrasing of questions make to the intuitions elicited, and whether such differences in fact refute philosophical methodology.

### 1.1. *The original study*

Saul Kripke famously argued that the referent of a proper name is not fixed by the set of definite descriptions a speaker or community associates with it (Kripke, 1980). Kripke's argument rests on a series of hypothetical examples in which a certain speaker *S* associates a description *D* with a name *N*, the description *D* is either true of a person *p*, or is true of no one, while *N* is causally and historically taken by a community of speakers to be the name of a person *p'*. In such a case, philosophers and most English-speakers intuitively take *S*'s use of the name *N* in a sentence to be referring to someone, namely *p'*, and not *p*. Thus, it appears that the referent of a name is the thing it is causally and historically taken to name, not the thing that fits a definite description associated with the name. Kripke did not appear to many philosophers to be making essential use of the fact that he was discussing English, and consulting the intuitions of English-speakers about English names. It therefore appeared to many philosophers that Kripke's arguments about the reference of names generalized to proper names in all natural languages. Questioning the generality of Kripke's claims about reference, Machery et al. report that Western participants from Rutgers University and Chinese participants from the University of Hong Kong have different intuitions about the referent of a name when both are presented with stories and questions in English concerning uses of that name. The following is Machery et al.'s primary probe concerning the name "Gödel", which they adapt from Kripke:

Suppose that John has learned in college that Gödel is the man who proved an important mathematical theorem, called the incompleteness of arithmetic. John is quite good at mathematics and he can give an accurate statement of the incompleteness theorem, which he attributes to Gödel as the discoverer. But this is the only thing that he has heard about Gödel. Now suppose that Gödel was not the author of this theorem. A man called

"Schmidt", whose body was found in Vienna under mysterious circumstances many years ago, actually did the work in question. His friend Gödel somehow got hold of the manuscript and claimed credit for the work, which was thereafter attributed to Gödel. Thus, he has been known as the man who proved the incompleteness of arithmetic. Most people who have heard the name "Gödel" are like John; the claim that Gödel discovered the incompleteness theorem is the only thing they have ever heard about Gödel.

When John uses the name "Gödel", is he talking about:

- (A) the person who really discovered the incompleteness of arithmetic? or
- (B) the person who got hold of the manuscript and claimed credit for the work? (Machery et al., 2004, pp. B6)

Machery et al. report that Cantonese-speakers are likely to answer the question consistent with a descriptivist view about proper names, namely, answer A, whereas English-speaking "Westerners" are likely to answer the question consistent with causal-historical views about proper names, namely answer B. Thus, Machery et al. conclude that there is support for the idea that intuitions about reference differ according to culture. Therefore, a methodology for determining facts about reference which relies on intuitions about reference is dubious, since such a methodology will present culturally-relative judgments as accurate data points for a theory of reference. Machery et al. conclude that Kripke, in giving Gödel-type cases as his original motivation for his theory of reference for proper names, relied on this flawed methodology.

### 1.2. *A gap in the critique of Kripkean methodology*

Let us take for granted, following Machery et al., that ordinary speaker intuitions about Gödel-type cases are central to Kripke's argument against descriptivism. While Kripke did not appear to make essential use of the fact that he was a "Westerner" speaking and arguing about English names in English, this presumption is precisely what Machery et al. seem to be questioning in their study. The most straightforward way of questioning this presumption would be to show that such a methodology fails to successfully generalize, because suitably generalized, the methodology generates results inconsistent with Kripke's. The most natural generalization of Kripke's methodology is to test Kripke's theory of reference as a theory of Cantonese (or Mohawk or Swahili) names by asking native Cantonese (or Mohawk or Swahili) speakers in their native-languages about the referents of Cantonese (or Mohawk or Swahili) names when used by Cantonese (or Mohawk or Swahili) speakers in hypothetical cases.<sup>1</sup> There is, then, a gap in Machery et al.'s original study. Cross-cultural differences resulting from a study of intuitions wholly in English admit

<sup>1</sup> There was one case in the original Machery et al. study which used an English transcription of a Chinese name, "Thu Ch'ung Chich". The probe was still done in English.

of alternative linguistic explanations, as opposed to intuitional or psychological explanations. For instance, rather than genuine differences in intuitions, the differences in responses to the questions might result from differences in native-language and second-language competency.

The aim of the present study is to fill this gap in Machery et al.'s original study, thereby retesting the original Kripkean hypothesis and methodology. If Kripke's theory of reference for proper names is true of all such linguistic items in all natural languages, and Kripke's methodology of consulting native English-speaker intuitions about the referents of English names in hypothetical English stories is a proper methodology for arriving at such a theory for English names, then it follows that an appropriately generalized version of Kripke's methodology will yield the same intuitions as Kripke's for all languages containing proper names. These hypotheses predict that native Cantonese-speakers will tend to have causal–historical intuitions about the referents of Cantonese names in hypothetical stories told in Cantonese. Discovering such intuitions would thereby confirm the conjunction of Kripke's theory of reference and his methodology.

One issue is worth noting before proceeding. Critics of philosophical methodology have argued that variations of intuitions within the same culture and language are enough to render philosophical methodology problematic. For instance, (Nichols, Stich, & Weinberg, 2003; Weinberg, Nichols, & Stich, 2001) make this case for epistemological intuitions. These arguments raise tricky issues as to how much variation in intuitions are permitted before we are licensed to claim that philosophical methodology has been refuted. Philosophical methodology surely permits some differences in intuitions, as it cannot be that only truly categorical, universal and exception-less intuitions are required of philosophical views. It is not news to philosophers that some differences in intuitions exist, for they appear even within the philosophical community. More serious is the existence of systematically divergent intuitions between, on the one hand, educated philosophers, and on the other hand, certain sub-classes of populations who share a culture and language with such philosophers. Whether such divergent intuitions suffice to refute philosophical methodology are beyond the scope of this paper, as I aim to address only the particular cross-cultural critique of philosophical methodology present in Machery et al.'s study. The subject of the present study is only whether a particular cross-cultural critique of philosophical methodology, based on certain data, succeeds.

## 2. Experiment I

### 2.1. Methods

An anonymous questionnaire modeled on a Kripke “Gödel” case was given to both Cantonese- and English-speaking subjects. Cantonese versions were given to Cantonese subjects, and English translations were given to American subjects. Each questionnaire contained two questions, one eliciting an intuition about the referent of a name, the second eliciting an intuition concerning the truth-value of a declarative utterance containing that name. This two-

question format differs from Machery et al. in that they did not test for intuitions about truth-values in their original study. The story was also different from Machery et al.'s “Gödel” case, so the experiment is not a replication of the original study. Each question had two answer-choices, one choice consonant with the causal–historical theory of names, the other consonant with the descriptivist theory of names. The text of the questionnaire is given below, with the Cantonese translation given in the [Appendix A](#).

Suppose there is a group of people who do not know anything of the English author Shakespeare except the name and that he is the author of “Romeo and Juliet”. Unbeknownst to this group of people, Shakespeare did not in fact write the play “Romeo and Juliet”; in fact, a German man named “Spencer” wrote the play, but Spencer was an obscure writer who died before the play was published. Shakespeare in fact found the play and published it as his own. Nobody knows this. This group of people otherwise use the name “Shakespeare” and can use it in conversation, for instance, they may ask each other, “I wonder whether Shakespeare was English or German?”

Question 1: When these people use the name “Shakespeare” in a conversation, is their use of the name to talk about:

- A. Shakespeare
- B. Spencer

Question 2: When these people use the sentence “Shakespeare was English”, is what they say:

- A. True
- B. Not true

For both questions, the “A” answers are consonant with the causal–historical theory of names, the “B” answers are consonant with the descriptivist theory of names.

### 2.2. Subjects

Cantonese subjects were drawn from a Chinese immigrant community in the San Gabriel Valley, California, and all consisted of native Cantonese-speaking Chinese immigrants. Subjects were all adults who ranged from having no or little fluency in English, to having some formal schooling in English. Subjects were asked in workplace, home, and public settings for their participation. Subjects were asked to read the probe and respond to a series of questions, which included demographic data. Forty subjects participated but two were excluded from analysis because of multiple answers on a single question, resulting in 38 total Cantonese-speaking subjects.

English-speaking subjects were drawn from (1) a community yoga class at Vassar College, (2) a group of high-school teachers at Poughkeepsie High School, and (3) Vassar College undergraduates. All subjects were adults, in college or college-educated, and no subjects had three or more college-level courses in philosophy. Fifty subjects completed the questionnaire and only monolingual English-speakers who were not of East Asian descent were included for analysis, resulting in thirty-one English-speaking subjects.

### 2.3. Results and discussion

Results were measured by percentages of answers that were consonant with the causal–historical theory of reference. Percentages for both questions individually are given in Table 1.

A majority of both Cantonese- and English-speakers responded with causal–historical intuitions about reference and truth-value. In fact, a Fisher exact test showed a significant difference between Cantonese- and English-speakers, with Cantonese-speakers likelier to have causal–historical intuitions about reference ( $p < .05$ , two-tailed). Such a significant difference disappears, however, with regards to intuitions about truth-value, where a Fisher exact test showed no significant difference between Cantonese- and English-speakers ( $p = .21$ , two-tailed).

These results conflict with Machery et al.'s claim that Cantonese-speakers tend to have descriptivist intuitions about proper names. The results also challenge their claim that intuitions are culturally-relative, as Cantonese-speakers appear to have intuitions about their language in-line with the idiosyncratic intuitions of Western philosophers about English. While the data is incompatible with Machery et al.'s claims about the descriptivist intuitions of East Asians, this data is not technically incompatible with Machery et al.'s data, as their experiment consisted in different vignettes and elicited Cantonese-speaker intuitions about names using English stories. Rather, it is more appropriate to describe the situation as one in which native Cantonese-speakers sometimes answer questions in English about English differently than they sometimes answer questions in Cantonese about Cantonese. This phenomena requires some kind of explanation, which is the aim of the second experiment.

## 3. Experiment II

### 3.1. Methods

Whereas Experiment I utilized a straightforward adaptation of Kripke's "Gödel" case to test for Kripkean and descriptivist intuitions, two more questionnaires were given to test for the conditions under which Cantonese-speakers might have intuitions that falsely appear to be descriptivist. These questionnaires are adaptations of a certain kind of philosophical thought–experiment found in the literature on theories of reference (Evans, 1979). Following the philosophical literature, we will call these thought–experiments "Julius"-type cases. In a "Julius"-type case, a community stipulates that an introduced name N will refer to the satisfier of a description D. For instance, a community may stipulate that they will use the name "Julius" to refer to the satisfier of the description "the inventor of

the zipper." In "Julius"-type cases, philosophers tend to have the intuition that the name N refers to the satisfier of D in various circumstances of use. For instance, in a community that introduced "Julius" in the aforementioned way, imagine that the actual inventor of the zipper was named "Antony," and this Antony was very tall. Moreover, imagine that there was another person in the story actually named "Julius" who invented nothing, and was very short. The philosophical intuition is that when this community uses "Julius", they are referring to the tall person named "Antony", not the short person named "Julius." Furthermore, if the community were to say "Julius was tall", they would intuitively be speaking truly.

Philosophical intuitions in these "Julius"-type cases cannot properly be said to be either descriptivist or causal–historical, as both theories have explanations of the intuition. For some Kripkeans, "Julius"-type cases are cases in which an expression, "Julius" is an "abbreviated definite description", an expression which satisfies the syntactic conditions of being a proper name, but are in fact merely definite description pronounced in a different way (Soames, 2002). In other words, such constructions are not genuine proper names. A hypothetical descriptivist might consider "Julius"-type intuitions to be an instance of the general case in which a proper name refers to whoever satisfies the definite description a speaker associates with it. Either way, "Julius"-type intuitions are not descriptivist intuitions. Yet, they can superficially appear to be, as both descriptivist and "Julius"-type intuitions take a name to refer to whoever it is that satisfies a certain definite description.

Questionnaire II asked subjects for intuitions about two novel names, "Big Fu" and "Little Kwei" in Cantonese, and "Richard Rich" and "Pauly Poor" in English. According to the vignette, the linguistic community introduces such names by way of a definite description, precisely as is required by "Julius"-type cases. The text of the questionnaire in English is given below, with the Cantonese version in the Appendix A.

#### 3.1.1. Questionnaire II

Suppose a group of villagers have a landlord who they have never seen and whose name they do not know. All the villagers know is that their landlord is the richest landlord in the province. After a while, the villagers made up a name for their landlord, calling him "Richard Rich." They converse with each other using the name, saying things like "Next week it will be time to pay rent to Richard Rich". In actuality, their landlord, the richest one in the province, is named "Pauly Poor". Coincidentally, there also happens to be a man named "Richard Rich" who is a landlord, only he happens to be the poorest landlord in the province. The villagers do not know any of these facts, however.

Question 1: When the villagers converse and use the name "Richard Rich", they are using the name to refer to

- A. Pauly Poor
- B. Richard Rich

**Table 1**  
Percentages for Experiment 1.

	Cantonese (%)	English (%)
Question 1: reference	87	65
Question 2: truth-value	87	97

Question 2: When the villagers converse and say “Richard Rich is our landlord”, what they say is

- A. True
- B. Not true

In both questions, answer A reveals the intuition that the name refers to the actual satisfier of a definite description, and answer B reveals the intuition that the name refers to the person who in fact historically possesses that name in the story.

Questionnaire III below takes the exact story about Shakespeare in Questionnaire I but revises it just enough to render it a “Julius”-type case rather than a “Gödel”-type case. The purpose is to see if Cantonese subjects can have intuitions that the name “Shakespeare” refers to whoever it is that satisfies the definite description a speaker associates with it.

### 3.1.2. Questionnaire III

Suppose there is a group of villagers who accidentally stumble upon the play “Romeo and Juliet”. They do not know the author of the play. After a while, the villagers make up a name for the author, calling the author “Shakespeare”. As a matter of fact, this play was written by a German man named “Spencer”. But before the play was published, Spencer died, and an English man coincidentally named “Shakespeare” found the play and published it under his own name. The villagers know nothing about this. The villagers otherwise use the name “Shakespeare” in conversation, and will ask questions like “What country was Shakespeare from?”

Question 1: When these villagers use the name “Shakespeare” is their use of the name to refer to:

- A. The real author of Romeo and Juliet, Spencer.
- B. The false author of Romeo and Juliet, Shakespeare.

Question 2: When these villagers say “Shakespeare was English”<sup>2</sup> is the sentence they say

- A. True
- B. Not true

In Question 1, answer A reveals the intuition that the name refers to the actual satisfier of a definite description, and answer B reveals the intuition that the name refers to the person who in fact historically possesses that name. In Question 2 on the “Shakespeare was German” version, the answer-intuition mapping is the same as in Question 1. In Question 2 on the “Shakespeare was English” version, the answer-intuition mapping is reversed.

### 3.2. Subjects

Thirty-three Cantonese-speaking subjects were chosen from the same population group as indicated in Experiment I, but were not the same subjects as those in Experiment 1. Thirty-four monolingual English-speaking

<sup>2</sup> Alternate versions of Question 2 substituted “German” for “English” to test for any difference in judgments of truth versus falsity. There was no difference. Results are below.

**Table 2**

Percentages for Questionnaire II.

	Cantonese (%)	English (%)
Question 1: reference	91	100
Question 2: truth-value	61	24

subjects who were not of East Asian descent were drawn from the same population as Experiment 1, but were not the same subjects as those in Experiment I. As in Experiment I, no English-speaking subjects had three or more college-level courses in philosophy.

### 3.3. Results and discussion

The percentages of people who had intuitions that names in these “Julius”-type cases referred to the person who actually satisfied the definite description are reported below in Tables 2 and 3 below.

For Questionnaire II, a Fisher exact test yielded no significant difference between Cantonese- and English-speakers on answers regarding reference ( $p = .11$ , two-tailed). Both groups overwhelmingly had intuitions that speakers used the names to refer to the satisfier of the definite description. However there was a significant difference on answers regarding truth-value, with significantly more Cantonese-speakers having intuitions that sentences containing a proper name used by speakers in “Julius”-type cases are true or false of the person who satisfies the definite description ( $p < .003$ , two-tailed). Cantonese-speakers appear to be more consistent than English-speakers across the two questions. English subjects generally appear to believe that names in “Julius”-type cases like “Richard Rich” are used to refer to one person, the satisfier of the definite description  $p$ , while also believing that sentences in which these names occur are not true or false of  $p$ , but the person who in fact is historically named “Richard Rich” in the story. This is an interesting cross-cultural difference, but one that does not admit of an obvious explanation. One hypothesis consistent with Machery et al.’s results is that English subjects tend to have more causal-historical intuitions about truth-value than Cantonese subjects. However, this hypothesis faces three problems: (1) subjects know that speakers of the name in the vignette are not causally related whatsoever to the actual bearer of the name “Richard Rich,” and do not acquire this name causally, so these intuitions about truth-value cannot be properly said to be causal-historical<sup>3</sup> (2) even if such intuitions can be argued to be causal-historical, this explanation renders mysterious why English subjects’ intuitions about reference are not at all “causal-historical” in this case, if indeed it is generally true that their intuitions are causal-historical, and (3) this explanation cannot account for why these intuitions are unstable once we change the names from “Richard Rich” to a more familiar name like “Shakespeare”, as the results for Questionnaire III show below. Identifying the correct explanation for this cross-cultural data should be the subject of further study.

<sup>3</sup> Thanks to an anonymous referee for pointing this out.

**Table 3**  
Percentages for Questionnaire III.

	Cantonese (%)	English (%)
Question 1: reference	73	76
Question 2: truth-value	67	53

Unlike in the case of Questionnaire II, a Fisher exact test yielded no significant difference between Cantonese- and English-speakers on answers regarding reference ( $p = .78$ , two-tailed) or truth-value ( $p = .32$ , two-tailed) for Questionnaire III. It is worth noting that with respect to judgments of truth-value, there is still a trend where Cantonese subjects have intuitions about truth-value consistent with their intuitions about reference. English subjects, on the other hand, are evenly split in intuitions about truth-value.

#### 4. Discussion

On the basis of these studies conducted in Cantonese about the referents of Cantonese names, we can conclude that, at a minimum, the original Machery et al. study did not control for an apparent difference-making factor; namely, the fact that they presented stories in English to native Cantonese-speakers to draw conclusions about Cantonese-speaker intuitions about the reference of proper names. Thus, Machery et al.'s have not provided decisive data that refutes the conjunction of Kripke's theory of reference and his methodology. Cantonese-speakers can indeed have causal-historical intuitions about the referents of Cantonese names perfectly in-line with Kripke's original theory. Where Cantonese intuitions did differ significantly from English-speaker intuitions in Experiment I, Cantonese intuitions turned out to be more causal-historical than descriptivist, and thus more in-line with Western philosophers. Where Cantonese intuitions differed significantly from English-speakers in Questionnaire II, the difference is likely not to be explained in terms of Cantonese-speakers being more descriptivist, or equivalently, English-speakers being more causal-historical. The actual explanation is unknown, and more study is needed.

The difference between my data for Experiment I and Machery et al.'s "Gödel" data cannot be attributed solely to the fact that the "Shakespeare" probe involves a popularly known name in many cultures, unlike the name "Gödel." This explanation might be a small part of the story. For instance, a comparison of results from Questionnaire II and III reveals that speakers of both languages intuit that the name "Shakespeare" refers to the actual person who bears such a name more often than artificial names like "Richard Rich." This suggests that a proportion of English- and Cantonese-speakers will intuit that "Shakespeare" will refer to the actual Shakespeare whatever story we tell about the conditions under which a community acquires and uses a name with that phonetic form. However, the numbers suggest that this proportion is not high enough to be the crucial difference-making factor, as a majority of speakers of both languages intuit that "Shakespeare"

refers to whoever it is that satisfies a certain definite description in Julius but not Gödel-type cases. For most speakers, intuitions about the referent of a name genuinely depended on the type of story told, and not on the native-language of the subject nor the popularity of the name and person mentioned.

In the case that matters to Machery et al.'s conclusions, Experiment I, the significant differences in intuitions between English- and Cantonese-speakers do not support Machery et al.'s claims of the cultural relativity of intuitions. Rather, the conclusion is that Cantonese-speakers in some conditions give answers revealing descriptivist intuitions, while in other conditions give answers revealing causal-historical intuitions. If we are to take Machery et al.'s interpretation of their data together with mine, we might conclude that Cantonese-speakers have intuitions that English is a language with a descriptivist reference for proper names, whereas they have intuitions that Cantonese has a causal-historical reference for proper names. Such a conclusion is already incompatible with Machery et al.'s hypothesis that the reason behind East Asian descriptivist intuitions is the finding in cultural psychology that East Asians appear to disfavor "causation-based" judgments and favor "categorical-based judgments based on similarity" (Machery et al., 2004, pp. B5. For the relevant findings in cultural psychology, see Nisbett & Miyamoto, 2005; Nisbett et al., 2001). To accommodate this new data consistent with their hypothesis, Machery et al. would need to postulate that East Asians favor causation-based judgments when asked about reference in their own language, and categorical-based judgments when asked about reference in Western languages. However, this is not a hypothesis that seems to be consonant with the findings in cultural psychology that Machery et al. cite.

An alternative hypothesis is that we are seeing effects of differences between primary and secondary language competence. From Questionnaires II and III, it is clear that there are conditions under which both English- and Cantonese-speakers will have intuitions that a name used in a certain context will refer to whoever it is that satisfies a certain definite description. If there were some way in which a group of speakers mistakenly interpreted genuine "Gödel"-type cases to be "Julius"-type cases, then there would be an appearance of descriptivist intuitions where in fact there are none. Perhaps in Machery et al.'s original study, the non-native but still fluent speakers of English for some reason or other (a) exhibited an incomplete grasp of how English names were working in the story, or (b) interpreted English probes of the "Gödel"-type as probes of the "Julius"-type. A possible explanation along the lines of option (b) is that Cantonese non-native speakers of English interpreted the original probes to contain names that were acquired by way of a definite description and which had tied to them nothing but a definite description. Telling a complicated story and asking questions in a subject's native-language might allow speakers to better distinguish between stories of the "Gödel"-type and stories of the "Julius"-type, when the differences between these stories can be very subtle. However, since my data only shows consistency between Cantonese intuitions in Cantonese

“Julius”-type cases and Cantonese intuitions in Machery et al.’s English “Gödel”-cases, whether this explanation in terms of linguistic competence is true requires more study.

Experiment II also shows that judgments about truth-values in “Julius”-type cases are quite messy. Both English- and Cantonese-speakers seem to have variable and inconsistent judgments about truth-values in relation to their judgments about reference. To my knowledge, no hypotheses about why this is the case have been tested. A possible explanation lies in the fact that ordinary subjects may simply not be very good at distinguishing between various non-identical notions, for instance: (1) the truth or falsity of a sentence in a language, (2) the truth or falsity of a particular utterance, (3) what is uttered by the use of a sentence, (4) what a speaker intends to utter by using a sentence, and various other possible objects of truth-value judgments.<sup>4</sup> Therefore, subjects may not be particularly good at distinguishing between certain kinds of homophonic but distinct sentences in a language. For instance, a subject may interpret the question “When these villagers say “Shakespeare was English”, is the sentence they say true or not true?” in two ways. The first interpretation asks whether the sentence “Shakespeare was English” is true or false. The second interpretation asks whether the homophonic sentence “Shakespeare was English” as spoken by a villager is true or false. The first interpretation of the question will elicit a “true” response; the second will elicit a “not true” response. Half of the subjects may simply be opting to understand the question one way, while the other half opting to understand the question the other way, for reasons of which further study might uncover. This is not to say that the question as stated is ambiguous between these two understandings. Rather, precisely what the question asks is whether a sentence as spoken by a villager is true or false, where the villager employs a term “Shakespeare” which is homophonic but non-identical to the term “Shakespeare” in the language of the subject of the study. The existence of homophonic but distinct names in a language is widely known. To see that the question in the probe is this precise requires attention to a series of distinctions that subjects may or may not be accustomed in deploying consistently in judgment and understanding.

These various distinctions have taken philosophers themselves more than a century to discover, argue about, and apply in making their own judgments. Even trained philosophers often catch themselves making mistakes in deploying these distinctions in judgment, as any instructor of graduate-level courses in philosophy can attest. Ordinary speakers may be deploying a variety of more imprecise notions in making their judgments of truth-value, ending up with rather variable and inconsistent intuitions in these rather unfamiliar, arcane thought-experiments. This fact raises questions about just how much weight philosopher’s actually place, or ought to place, on ordinary speakers’ intuitions in thought-experiments.

#### 4.1. On the refutation of philosophical methodology

I have so far been operating on the assumption, shared by Machery et al. that the intuitions about reference of ordinary, philosophically unsophisticated, native speakers of a language bear on the soundness of Kripke’s, and in general, philosophical methodology. This assumption has many detractors, for instance, (Williamson, 2007; Deutsch, 2009; Ludwig, 2007; Devitt, *in press*). Such detractors point out that intuitive responses to sophisticated hypothetical cases in philosophy often require knowledge and experience with subtle distinctions that the philosophically unsophisticated may be unfamiliar or inexperienced in applying. The intuitions of ordinary speakers may not be particularly probative for some kinds of philosophical theories, and the fact that an intuition arises from a philosopher’s idiosyncratic academic training might make it particularly probative. Such a position regarding philosophical intuitions seems eminently plausible and should be taken seriously.

However, setting aside this general critique, I believe that even if Machery et al. could find a culture of people who have intuitions different from English- and Cantonese-speakers, the critique of Kripke’s methodology would still not necessarily succeed. It is conceivable that there is a language, even a natural language, whose speakers fail to have causal–historical intuitions about the referents of any of its noun phrases. This could be due to the fact that no noun phrases have a causal–historical semantics in that language. Alternatively, speaker intuitions in such communities might be poor guides to the referential semantics of this language. If we were to discover such a language and community, it would not follow that we have discovered a failure in Kripke’s methodology for uncovering the referential semantics of names. Instead, a range of hypotheses seem to be open, none of which seem to be decisively confirmed in light of the existence of such a language. One alternative is that there simply are no proper names in such a language, while another alternative is that there are. With respect to the relationship between intuitions about reference and facts about reference, one alternative is that monolingual speakers’ intuitions about reference are good guides to the referential semantics of this language, and the other is that they are not. These hypotheses conjoined make up a range of alternatives in logical space consistent with the data. The first hypothesis is that (1) there are no proper names in the language, and monolingual speakers have accurate intuitions that their noun phrases have descriptivist semantics. This hypothesis requires denying the claim that everything which looks syntactically like a proper name is in fact a proper name.<sup>5</sup> Such a hypothesis is consistent with both the universalizability and accuracy of Western philosopher intuitions about names. Alternatively, another hypothesis is: (2) there are in fact proper names in the language, but monolingual speakers have inaccurate intuitions about them. This hypothesis requires acceptance of the Kripkean referential semantics, but denies the universalizability of Western philosopher intuitions. Yet, this

<sup>4</sup> Here I am repeating some points made by Ludwig (2007). See his work for a more developed discussion.

<sup>5</sup> This is something we may already have reason to deny in order to explain “Julius”-type intuitions.

hypothesis saves the accuracy of philosophical intuitions, for they in fact match the correct semantics of names even in this novel language. A final hypothesis is (3) there are in fact proper names in the language, and monolingual speakers have accurate intuitions about them. This requires the denial of both Kripke's referential semantics and methodology, for it denies both the universalizability and accuracy of Western philosopher intuitions about names. Settling upon one of these hypotheses involves a range of considerations, including considerations about the nature of proper names, the variety of sources of intuitive judgments, and the proper characterization of Kripkean methodology. It seems to me that there is much room for a Kripkean to make a case for her methodology even in light of a community with no causal–historical intuitions.

My aim is not to vindicate Kripke's theory of reference or his methodology, but to undermine a certain refutation of it. In light of the total evidence and argumentation, Kripke's methodology might in the end show only that the idiolects spoken by educated philosophers contain proper names with causal–historical semantics, whereas idiolects spoken by their low-income students contain proper names which have descriptivist semantics. Therefore, such a methodology may not have the language-wide semantic import many philosophers claim it to have. On the other hand, perhaps cross-cultural and intra-cultural variations in answers to certain questions do not reveal genuine differences in intuitions, but rather differences in linguistic competence, or differences in abilities to understand precisely formulated questions. The results of this study suggest that answers to questions on a vignette might not be definitive

of a speaker's intuition. Instead, they may serve only as a defeasible guide to a speaker's intuition, as competing vignettes may elicit different answers. This is not to say that speakers are not reporting an intuition when answering a certain question on a questionnaire. Rather, speakers may not be reporting the kind of intuition a philosopher is hoping to elicit in asking a particular question. The conflicting results with Machery et al. suggests that there must be further study to uncover which vignettes and which questions, asked in what languages, are genuinely probative of the intuitions of speakers, or genuinely supportive or refutative of philosophical methodology.

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### Appendix A

#### A.1. Questionnaire I in Cantonese

#### 問卷 1

請閱讀以下故事，回答下列問題。

假如有一班人，完全唔識英國名劇作家‘莎士比亞’係邊個，只知到佢係‘羅蜜歐與茱麗葉’嘅作者。佢哋唔知‘莎士比亞’其實有寫過呢齣戲，呢齣戲係一個名‘史賓沙’嘅德國人寫嘅，但劇本尚未出版，‘史賓沙’就死咗。‘莎士比亞’搵到個劇本就以自己嘅名出版咗。但呢班人冇人知呢件事。佢哋以‘莎士比亞’嘅名為題閒談嘅時候，甚至會問“莎士比亞究竟係英國人定係德國人？”

#### 問題1:

當呢班人用‘莎士比亞’嘅名傾偈嘅時候，佢哋講嘅係甲定乙呢？

甲：‘莎士比亞’

乙：‘史賓沙’

#### 問題2:

當呢班人講：“莎士比亞係英國人。”呢個講法係：

甲：對

乙：不對

## A.2. Questionnaire II

## 問卷 2

請閱讀以下故事，回答下列問題。

假如有一班村民，從未見過佢哋嘅地主唔知佢嘅名，對佢嘅嘢一無所知，只知到佢係全省最肥嘅地主。過咗一段時間啲村民安咗個名比個地主叫佢做‘大富’。其實呢個全省最肥嘅地主嘅真名叫‘小貴’。而‘大富’另有其人，佢係全省最瘦嘅地主。但係班村民完全唔知情。當班村民傾偈提到‘大富’嘅時候，佢哋會話“下星期要交租比大富”。

## 問題1:

當班村民傾偈提到‘大富’呢個名嘅時候，佢哋講嘅係甲定乙呢？

甲：小貴

乙：大富

## 問題2:

當班村民傾偈提到：“大富係我哋嘅地主”。呢個講法係：

甲：對

乙：不對

## A.3. English translation

Suppose there is a group of villagers who have never seen their landlord nor know his name, and know nothing else about him except that he is the fattest landlord in the province. After a while, the villagers made up a name for their landlord, calling him “Big Fu”. In actuality, the fattest landlord in the province’s name is “Little Kwei”. There is in fact a man named “Big Fu” who is the thinnest landlord in the province. But the villagers do not know any of this. When the villagers converse and use the name “Big Fu”, they will say things like “Next week it is time to pay rent to Big Fu.”

Question 1: When the villagers converse and use the name “Big Fu”, are they using it to refer to:

A. Little Kwei

B. Big Fu

Question 2: When the villagers converse and say “Big Fu is our landlord”, is what they are saying:

A. True

B. Not true

## A.4. Questionnaire III

## 問卷 3

假如有一班村民，無意中發現‘羅蜜歐與茱麗葉’嘅劇本，但佢哋唔知作者係邊個。過咗一段時間啲村民安咗個名比個作者咁穹叫佢做‘莎士比亞’。

其實呢齣戲係一個名‘史賓沙’嘅德國人寫嘅，但劇本尚未出版，‘史賓沙’就死咗。咁穹真係有一個叫做‘莎士比亞’嘅英國人搵到個劇本就自己嘅名出版咗。但呢班人冇人知呢件事。

佢哋以‘莎士比亞’嘅名為題閒談嘅時候，甚至會問“莎士比亞究竟係邊個國家嘅人？”

## 問題1:

當呢班人用‘莎士比亞’嘅名傾偈嘅時候，佢哋講嘅係甲定乙呢？

甲：劇本‘羅蜜歐與茱麗葉’嘅真正作者史賓沙

乙：劇本‘羅蜜歐與茱麗葉’嘅冒牌作者莎士比亞

## 問題2:

當呢班人講：“莎士比亞係英國人。”呢個講法係：

甲：對

乙：不對

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