## THE INDETERMINACY THESIS REFORMULATED*

I N *Word and Object,* W. O. Quine[1] presents the following for-
mulation of his thesis of the indeterminacy of translation:

> There can be no doubt that rival systems of analytical hypotheses can fit
> the totality of speech behavior to perfection, and can fit the totality of
> dispositions to speech behavior as well, and still specify mutually incom-
> patible translations of countless sentences insusceptible of independent
> control (*ibid.,* p. 72).

I. INDETERMINACY, ANALYTICAL HYPOTHESES, AND DICTIONARIES

To simplify matters, I shall here assume that systems of analytical
hypotheses contain only analytical hypotheses in their simple form,[2]
that is, hypotheses that equate a word of one language (the language
being translated) with a word or open sentence of another language
(the home language). I shall also assume that analytical hypotheses
are designed to translate one individual's idiom, or speech, into
another's. Thus, for my purposes, a system of analytical hypotheses is
a dictionary, or translation manual, correlating the words of one
individual's idiom with the words of another's. What exactly is in-
volved in systems of analytical hypotheses fitting an individual's
speech behavior and his dispositions to behavior will not concern me
here. For my purposes, it is sufficient to note that any two systems
that equally fit an individual's speech behavior and his dispositions to
behavior will, by Quine's lights, be empirically equivalent manuals.

Hereafter I shall speak simply of empirically equivalent rival sys-
tems of analytical hypotheses, or empirically equivalent rival diction-
aries fitting a person's speech, or, more simply still, of rival (empiri-
cally equivalent) manuals. The indeterminacy thesis is then, or at
least entails, the following claim:

> (C.I.T.) There can be rival (empirically equivalent) manuals fitting a
> person's speech.

I say 'at least entails' because, although it is clear that every case of
indeterminacy of translation involves a case of rival dictionaries, it is
not clear that every case of rival dictionaries constitutes a case of

indeterminacy of translation. For instance, there may be a pair of rival dictionaries which give different translations for some words of an individual's speech but which give logically equivalent translations for all full sentences of the individual's speech. (For an example of such manuals cf. section IV below.) Such a pair of rival manuals may, by Quine's lights, constitute an example of the inscrutability of reference but not an example of the indeterminacy of translation. For indeterminacy, one needs incompatible translations of whole sentences.

The above formulation of the indeterminacy thesis, or, at least, of a Consequence of the Indeterminacy Thesis [hence the label (C.I.T.)], is very close to the following formulation in Quine's *Word and Object:*

> The thesis is then this: manuals for translating one language into another can be set up in divergent ways, all compatible with the totality of speech dispositions, yet incompatible with one another (*ibid.,* p. 27).

## II. RIVAL DICTIONARIES VERSUS DIFFERENT DICTIONARIES

The claim that there can be merely different dictionaries that fit an individual's speech is surely uncontroversial. Thus, a dictionary that fits my speech behavior, constructed by an Italian, will, presumably, include the entry: book/libro; whereas a dictionary constructed to the same effect by a German will include the entry: book/Buch (hereafter case 1). Now, if we were to count such *merely different* dictionaries as *rival* dictionaries then (C.I.T.) would be trivially true and not the least bit controversial. Of course, (C.I.T.) is far from trivially true and uncontroversial. If this is so, there must be some interesting distinction between genuine rival dictionaries and merely different dictionaries. Indeed, if (C.I.T.) is not trivially true, then there must be some interesting distinction between empirically equivalent rival dictionaries and merely empirically equivalent different dictionaries. The rest of this paper will be largely devoted to showing that Quine's own philosophy of language is incompatible with the claim that such a distinction exists.

Before considering a Quinean attempt to separate the notions of rival and different empirically equivalent dictionaries, let us consider some intuitive ways of separating these two notions.

In the above mentioned case of the Italian and German dictionaries, the dictionaries are intuitively not genuine rival dictionaries, because the terms 'libro' and 'Buch' respectively equated by the two dictionaries with my term 'book' are terms of different languages, and are themselves most plausibly equated with each other. This consideration suggests the following criterion for rival dictionaries:

(C)  Two empirically equivalent dictionaries fitting an individual's speech
     are rival dictionaries, if and only if they can be translated into one
     and the same language yielding at least one conflict over the inter-
     pretation of some word of the individual's speech.

Now, we need not, thankfully, bother attempting to explicate the
difficult notion of "conflict of interpretation over some word,"
for there are at least three reasons why (C) is not acceptable to a
Quinean.

First, (C) relies on the intuitive notion of "same language." This
notion, like its sister notion of "analyticity," is rejected by Quine.
This alone is enough to make (C), unsupplemented by a Quinean
notion of "same language," unacceptable to Quineans. Later we
shall see that, even given a Quinean notion of same language, we
cannot construct an adequate Quinean notion of rival manuals (cf.
section V below).

Second, (C) makes use of the notion of "translation." Since this
notion is, in its normal usage, closely related to the notion of "pres-
ervation of meaning" (where meaning is not simply a matter
of Quinean stimulus meaning), it cannot be uncritically used by
Quineans.

Third, (C), combined with Quine's claims about the indeterminacy
of translation, has the consequence that any two dictionaries fitting
an individual's speech count as rival dictionaries. Thus, consider the
following scenario (hereafter case 2).

A German and French linguist, Moritz and Pierre, are attempting
radical translation with regard to the speech of some native. Pierre's
dictionary contains the entry: (1) gavagai/lapin; and Moritz's con-
tains the entry: (2) gavagai/Kaninchen. Now, if the indeterminacy
thesis is correct, the following may be an adequate translation of
Pierre's (1) into my idiom: gavagai/undetached rabbit part. After all,
if there is no fact of the matter as to whether the native's term
'gavagai' means 'rabbit' rather than 'undetached rabbit part', then,
by the same token, there is no fact of the matter as to whether
Pierre's term 'lapin' means 'rabbit' rather than 'undetached rabbit
part'. At the same time, an adequate translation of Moritz's (2) into
my idiom may be: gavagai/rabbit. In other words, by (C), Moritz and
Pierre have rival manuals for the native's speech!

The same point may be made more starkly, albeit more confus-
ingly, by considering a case involving two speakers of the same lan-
guage (hereafter case 3). Suppose two German linguists, Karl and
Otto, are attempting radical translation with regard to the speech of
our native. Karl's dictionary contains the entry: (3) gavagai/Kanin-
chen; and Otto's dictionary contains the entry: (4) gavagai/Kanin-

chen. Now, if the indeterminacy thesis is correct, the following may be an adequate translation of Karl's (3) into my idiom: gavagai/undetached rabbit part. After all, if there is no fact of the matter as to whether the native's term 'gavagai' means 'rabbit' rather than 'undetached rabbit part', then, by the same token, there is no fact of the matter as to whether Karl's term 'Kaninchen' means 'rabbit' rather than 'undetached rabbit part'. At the same time, an adequate translation of Otto's (4) into my idiom may be: gavagai/rabbit. In other words, by (C), the two Germans have rival manuals for the native's speech, even though they have identical manuals!

More generally, suppose that both $A$'s term $X$ and $B$'s homophonically equivalent term $X$ may, by Quine's lights, be translated into either of terms $Y$ or $Z$ of $C$'s idiom. Then in any case where $A$ translates some individual $D$'s term $W$ into his term $X$ and $B$ likewise translates $W$ into his term $X$, then, if (C) is correct and $A$ and $B$'s manual both fit $D$'s speech, this constitutes a case of rival dictionaries for $D$'s speech!

In other words, (C), combined with Quine's claims about the indeterminacy of translation, entails the claim that any pair of (empirically equivalent) translation manuals, including a pair of identical manuals, constitutes a case of rival manuals!

Clearly, (C) is unacceptable, or, at least, unacceptable to any Quinean.

III. RIVAL DICTIONARIES: A QUINEAN ACCOUNT AND ITS PROBLEMS

No doubt, if we put our minds to it, we could concoct other suggestions for explicating the notion of rival (empirically equivalent) translation manuals. We need not bother putting our minds to it, however, since Quine himself provides material from which such a suggestion may be drawn.

In his article "On Empirically Equivalent Systems of the World,"[3] Quine says:

> So I propose to individuate theories thus: Two formulations express the same theory if they are empirically equivalent and there is a reconstrual of predicates that transforms one theory into a logical equivalent of the other (*ibid.*, p. 320).

Presumably, Quine is also here committing himself to the claim that, if two theories are either not empirically equivalent or cannot be transformed into logical equivalents of each other through the reconstrual of predicates, then they are not the same theory.

Now, dictionaries or systems of analytical hypotheses are just theories about what the terms of a given individual's (the translatee's)

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[3] *Erkenntnis*, IX (1975): 313–328.

idiom mean. And, as assumed earlier, any two dictionaries that fit to perfection an individual's speech and his dispositions to speech are, at least by Quine's lights, empirically equivalent. Thus, we have the following Quinean criterion for individuating dictionaries:

(Q.C.1)  Two dictionaries, both of which fit an individual's speech, are rival dictionaries if and only if there is no reconstrual of words which transforms one into a logical equivalent of the other.

As regards case 1 above, the case of the Italian's and German's different dictionaries for my speech, (Q.C.1) yields the intuitively correct result that this is not a case of genuine rival dictionaries. By reconstruing the German's term 'Buch' as the Italian's term 'libro' and analogously reconstruing all the German words in the German's dictionary, we end up with two identical, hence logically equivalent, dictionaries.

Similarly, by (Q.C.1), the German linguists Karl and Otto, in case 3 above, do not have rival dictionaries for the native's speech. By "reconstruing" Karl's term 'Kaninchen' as Otto's term 'Kaninchen' and similarly "reconstruing" the words of Karl's dictionary, we arrive at two identical, and hence logically equivalent dictionaries.

Unfortunately, (Q.C.1) is not consistent with Quine's own examples of indeterminacy of translation.

Let us consider a typical Quinean case (hereafter case 4). Linguists Bob and Barry are attempting radical translation of some native's speech. Bob's dictionary includes the entry: gavagai/rabbit; whereas Barry's dictionary includes the entry: gavagai/undetached rabbit part. By reconstruing Bob's term 'rabbit' as Barry's term 'undetached rabbit part', and likewise reconstruing other terms where necessary, we arrive at two identical, hence logically equivalent, dictionaries. Thus, by (Q.C.1), Bob and Barry do not have rival dictionaries for the native's speech!

### IV. (Q.C.1): SOME FURTHER CONSEQUENCES

We have seen that, judged by the standard of our Quinean account (Q.C.1) of the notion of rival dictionaries, Quine's famous gavagai-rabbit-undetached-rabbit-part example collapses to a case of merely different, and not rival, dictionaries. Yet what of other purported examples of rival dictionaries?

Consider the following variant of a case presented by Gerald Massey[4] (hereafter case 5). Native $N$ speaks a first-order quantificational, "English-type" language (without singular terms). Further, $N$ always

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[4] Cf. "Indeterminacy, Inscrutability, and Ontological Relativity," in *Studies in Ontology*, N. Rescher, ed., *American Philosophical Quarterly*, Monograph Series, XII (1978).

prefaces his utterances with either the term 'Yeg' or 'Neg'. Two
linguists, Joe and John, are engaged in the project of translating $N$'s
speech. Joe treats $N$'s term 'Yeg' as the affirmative modifier 'It is the
case that' and $N$'s term 'Neg' as the negative modifier 'It is not the
case that'. Otherwise, Joe maps the terms of $N$'s speech homophon-
ically. Thus, Joe maps $N$'s term 'rabbit' onto his own term 'rabbit',
and maps $N$'s term 'or' onto his own term 'or', etc. John, however,
treats $N$'s term 'Yeg' as the negative modifier 'It is not the case that'
and $N$'s term 'Neg' as the affirmative modifier 'It is the case that'.
Further, John maps $N$'s general terms onto their "homophonic
complements." For instance, he maps $N$'s term 'rabbit' onto his
(John's) term 'nonrabbit'. Further, John maps the logical particles of
$N$'s speech onto their duals, 'v' onto '.', etc., and he maps $N$'s quan-
tifier '$(Ex)$' onto his (John's) quantifier '$(x)$' and $N$'s quantifier '$(x)$'
onto his (John's) quantifier '$(Ex)$'. Thus, where $N$ utters the sentence
'Yeg; $(Ex)$ (Rabbit $x$)', Joe translates it as 'It is the case that; $(Ex)$
(Rabbit $x$)', while John translates it as 'It is not the case that; $(x)$
(nonrabbit $x$)'.

   By Quine's lights, this would constitute an example of the inscru-
tability of reference and not an example of the indeterminacy of
translation. Although Joe and John have rival theses about the refer-
ence of all the native's general terms, they give logically equivalent
translations for all of the native's utterances.

   Yet, according to (Q.C.1), Joe and John do not here have rival
dictionaries for $N$'s speech, since there is a simple reconstrual of
words (Joe's affirmative modifier 'It is the case that' onto John's
negative modifier 'It is not the case that', Joe's general term 'rabbit'
onto John's term 'Nonrabbit', Joe's quantifier '$(Ex)$' onto John's
quantifier '$(x)$', etc.) which renders the two manuals identical and
hence logically equivalent. So, according to (Q.C.1), this does not
constitute a case of the inscrutability of reference.

   More generally, any two dictionaries for an individual's speech
may be transformed into each other by reconstrual of words. Con-
sider any two such dictionaries $F$ and $G$, both of which fit individual
$D$'s speech. *Ex hypothesi,* there is a mapping of the words in $G$ onto
the words of $D$'s speech (by the symmetricality of the mapping func-
tion). Similarly, there is a mapping of the words in $F$ onto the terms
of words of $D$'s speech. So, by the transitivity of the mapping func-
tion, there is a mapping of the terms of dictionaries $F$ and $G$ onto
each other.

   In other words, (Q.C.1) is incompatible with (C.I.T.), since it has
the consequence that there are never two rival dictionaries fitting an
individual's speech.

## V. SUMMARY AND VARIOUS OBJECTIONS

Basically the argument so far may be summarized as follows:

(1) If the indeterminacy thesis or the inscrutability of reference thesis is true, then there are rival empirically equivalent manuals of translation.

(2) If Quine's claims about theory identity are true, then if two empirically equivalent manuals are in fact rival manuals then they must not be reconcilable by word reconstrual.

(3) Yet any two empirically equivalent manuals can be reconciled by word reconstrual.

Therefore,

(4) Either the indeterminacy thesis and the inscrutability thesis are false, or Quine's claims about the identity of theories are false.

Note, a Quinean cannot simply solve this dilemma by accepting the second disjunct of (4)—such a move would leave him in the position of owing an account of how empirically equivalent translation manuals can be rival manuals. Indeed, later (cf. section IX we shall see that the indeterminacy thesis conflicts with other tenets of Quine's philosophy, in particular, his physicalism.

Before attempting to develop the argument further, I want to consider various objections that were elicited by an earlier, unpublished version of this paper. This will, I hope, help clarify the argument.

*Objection 1:* Since, in case 4 for example, Bob and Barry are speakers of the same language, we cannot simply reconstrue Bob's words in order to make their dictionaries identical. Hence the use of (Q.C.1) to show that the above cases do not represent cases of the indeterminacy of translation and the inscrutability of reference is illegitimate.

*Answer:* Now, we may indeed balk at the above use of (Q.C.1) to "reconcile" the prima facie rival translations involved in the above mentioned cases. Yet where this intuitive balk exists it is the result of the tacit, and totally "un-Quinean" assumption that the linguists involved are speakers of the same language, *in the ordinary sense of that notion.* Given this assumption, it would be illegitimate, for instance, in case 4 above to take Bob's term 'rabbit' as being equivalent to (as having the same meaning as) Barry's term 'undetached rabbit part'. Yet this assumption cannot simply be accepted into the Quinean framework. Before Quineans could explicitly accept such an assumption they would need to give some Quinean account of the *ordinary* notion of being speakers of the same language. Yet any such account would need to steer clear of the conventional notion

that two individuals are speakers of the same language if they utilize the same terms to convey *the same meanings.*

Indeed, there is a strictly Quinean notion of being speakers of the same language, namely, that of being speakers who can converse freely, or at least without any irreparable breakdown, using only homophonic manuals of translation. This notion, unlike the ordinary notion of being speakers of the same language, does not carry with it, however, the implication that, if $X$ and $Y$ are speakers of the same language, then the only legitimate mapping of one's terms onto another's is the homophonic mapping.

For Quine, the claim that Bob and Barry are speakers of the same language does not preclude our construing Bob's term 'rabbit' as being equivalent to Barry's term 'undetached rabbit part'. Thus, Quine says that the indeterminacy thesis begins at home.

*Objection 2:* Does the above usage of Quine's claims about theoretical equivalence not go beyond mere predicate reconstrual?

*Answer:* It is true that, in speaking of equivalent theories, Quine only specifically talks of reconstrual of *predicates,* whereas I, in dealing with equivalence of translation manuals, spoke of reconstrual of *words.* This does raise the question of whether this move is legitimate.

Now, clearly Quine would have no objection to reconstruing names as well as predicates in order to show that two theory formulations are in fact formulations of the same theory. Thus, consider a theory $T$ ranking heavyweight boxers and an empirically equivalent theory $T1$ that contains the same sentences as $T$, save that wherever the name 'Muhammad Ali' occurs in $T$ the name 'Cassius Clay' occurs in $T1$. Surely, Quine would allow that $T$ and $T1$ are in fact formulations of the same theory, since they may be rendered logically equivalent by reconstruing $T$'s name 'Muhammad Ali' as 'Cassius Clay'.

Yet note, in dealing with the Massey-type purported rival manuals in case 5 above, we went beyond reconstrual of predicates and names to reconstrual of quantifiers. To reconcile Joe's and John's dictionaries for $N$'s speech, we reconstrued, among other things, Joe's quantifier '(E$x$)' as John's quantifier '($x$)'. A Quinean might here object that there is a fact of the matter about whether a particular expression $e$ of a person's idiom is a universal quantifier or an existential quantifier, and since Quine's criterion of equivalence of theories does not explicitly allow reconstrual of quantifiers, we cannot reconstrue Joe's universal quantifier '($x$)' as John's existential quantifier '(E$x$)' in order to show that Joe and John have equivalent dictionaries for $N$'s speech.

Yet, how can this objection be maintained when, as in our case, there are two manuals for translating Joe's idiom into John's idiom, both of which fit Joe's speech dispositions, though one translates Joe's expression '$(x)$' as John's universal quantifier and the other translates it as John's existential quantifier? (For the purposes of constructing a *reductio*, we take for granted the claim that John's expression '$(x)$' is a universal quantifier and his expression '$(Ex)$' is an existential quantifier.) If there is no meaning except that which is fixed by speech dispositions then there is no fact of the matter as to which of such manuals is (exclusively) correct. In other words, in our case there is no fact of the matter whether Joe's expression '$(Ex)$' is a universal or an existential quantifier. The indeterminacy thesis itself conflicts with the objector's hypothesis that there is a fact of the matter as to whether Joe's expression '$(Ex)$' is an existential rather than a universal quantifier.

We shall now consider an objection to our argument for the conclusion that Quine's indeterminacy thesis is incompatible with his notion of the equivalence of theories which will lead to a new criterion of rival dictionaries.

VI. THE REJECTION OF (Q.C.1) IN FAVOR OF (Q.C.2)

In developing (Q.C.1) from Quine's remarks about the identity of theories, I have been tacitly assuming that what Quine explicitly says about the identity of *world* theories—for this is the explicit subject matter of Quine's "On Empirically Equivalent Systems of the World"—goes also for those less global theories that constitute translation manuals, or dictionaries. This assumption may raise the objection that we have erred in considering translation manuals *in vacuo*, that what we should consider, if we are to make our case, is manuals in the context of total world theories.

Let us consider how this claim might be developed as an objection to our argument.

According to Quine, two theorists may share exactly the same theory of the world, indeed they may assent to the same set of sentences (any member of that set having the same stimulus conditions for both theorists), except that they disagree about the translation of some individual's speech. Let Mork and Mindy be two such theorists. Aside from offering different dictionaries for $N$'s speech, they affirm the same set of sentences (with the same stimulus conditions). Mork's dictionary for $N$'s speech (hereafter Mork's dictionary) includes the following entry: (A1) gavagai/rabbit. Mindy's dictionary for $N$'s speech (hereafter Mindy's dictionary) includes the entry: (B1) gavagai/undetached rabbit part. Let us also suppose that Mork's total world theory contains the claims: (A2) Rabbits are not

identical to undetached rabbit parts; and (A3) Rabbits are identical to rabbits. Then, *ex hypothesi,* Mindy's total world theory will contain the claim: (B2) Rabbits are not identical to undetached rabbit parts.

In this case, if we try to reconcile Mork's and Mindy's dictionaries by simply reconstruing Mindy's term 'undetached rabbit part' as (being equivalent to) Mork's term 'rabbit', we render Mindy's total world theory no longer compatible with Mork's. For, in this case, Mindy's (B2) becomes: (B2*) Rabbits are not identical to rabbits— which is inconsistent with Mork's (A3).

So far the objections seems good. It seems that, in the above case, we cannot reconcile the two dictionaries without contradicting our hypothesis that Mork and Mindy have, aside from their dictionaries, the same world theories. Thus, it seems we have here a case of genuine rival dictionaries and hence a case of genuine indeterminacy of translation.

The point is that we cannot simply use (Q.C.1) to reconcile two translators' different dictionaries for an individual's speech, where such a reconciliation would lead to the creation of contradictions between the translators' background theories. Our criterion for identity of dictionaries (Q.C.1) is not acceptable in its current form. The above considerations suggest an obvious amendment, however; thus we have the new criterion:

(Q.C.2)  Two dictionaries, both of which fit an individual's speech, are rival dictionaries if and only if there is no reconstrual of words that transforms one into a logical equivalent of the other without also creating some (new) contradiction between the respective background theories in which the respective dictionaries are embedded.

### VII. (Q.C.2), (I.T.), AND BEYOND

In the above case, our attempted reconciliation failed because we invariably mapped Mindy's term 'undetached rabbit part' onto Mork's term 'rabbit'. Yet note, if we treated Mindy's term 'undetached rabbit part' *as it occurs in her dictionary* as a technical term to be mapped onto Mork's term 'rabbit', while mapping other occurrences of the term 'undetached rabbit part' in Mindy's world theory onto Mork's term 'undetached rabbit part', then both Mindy's dictionary and her total world theory are identical with, and hence logically equivalent to, Mork's dictionary and total world theory. Hence, by our criterion (Q.C.2), Mork and Mindy do not have rival dictionaries.[5]

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[5] Of course, this "double strategy" may well have to be taken with some of Mindy's other terms. For example, the term 'identical' may have to be given differ-

Now, it might here be objected that this gimmick of only partially reconstruing occurrences of Mindy's term 'undetached rabbit part' is, by Quine's lights, illicit. It depends on the assumption that that term as it occurs in Mindy's dictionary has a different meaning from that which it has in occurrences in other parts of Mindy's world theory, though the term as it occurs in Mindy's dictionary is stimulus synonymous with its occurrences in the nondictionary part of Mindy's world theory. For Quine, there is no fact of the matter as to whether it has such a "double life."

To see this, consider the case of linguists $X$ and $Y$, who are engaged in the project of translating Mindy's world theory into their own idioms. $X$ translates Mindy's world theory homophonically into his language, $Y$ translates it homophonically save that occurrences of the term 'undetached rabbit part' in Mindy's dictionary for $N$'s speech are mapped onto $Y$'s term 'rabbit'. Clearly, both these manuals would equally fit Mindy's dispositions to speech. Thus, from a Quinean point of view, there is no fact of the matter as to which manual is correct. In other words, since $Y$'s manual treats Mindy's term 'undetached rabbit part' as having a double life and $X$'s does not, there is no fact of the matter whether Mindy's term does or does not have such a double life.

Yet note: the case of linguists Mork and Mindy only represents a case of rival translation manuals if Mindy's term 'undetached rabbit part' is uniform in meaning throughout her world theory. Thus, if there is no fact of the matter as to whether there is such uniformity, then there is no fact of the matter as to whether Mork and Mindy have genuine rival manuals. That is to say, there is no fact of the matter as to whether this case is one of the indeterminacy of translation.

Indeed, when we reconsider our other purported cases of indeterminacy of translation and inscrutability of reference, we see that the same conclusion may be drawn: there is, by Quinean lights, no fact of the matter as to whether there is any indeterminacy of translation.

Thus, consider the case of linguists Joe and John in case 4 above, who respectively translate $N$'s utterance 'Yeg; $(Ex)$ (Rabbit $x$)' as 'It is the case that; $(Ex)$ (Rabbit $x$)' and 'It is not the case that; $(x)$ (nonrabbit $x$)'. Now, if there is no fact of the matter as to whether $N$'s terms 'Yeg', 'rabbit', and '$(Ex)$' mean, respectively, 'It is the case that', 'rabbit', and '$(Ex)$' as opposed to 'It is not the case that', 'nonrabbit', and '$(x)$', then there is no fact of the matter as to

whether Joe's terms 'It is the case that', 'rabbit', and '(E$x$)' mean, respectively, 'It is the case that', 'rabbit', and '(E$x$)' rather than 'It is not the case that', 'nonrabbit', and '($x$)'. That is to say, there is no fact of the matter as to whether Joe and John have merely different dictionaries or genuine rival dictionaries for $N$'s speech.

Put in another way: there are rival manuals for translating John's idiom into Joe's idiom, a homophonic manual and a nonhomophonic manual. Translating by one manual leads to the conclusion that Joe and John have rival manuals for $N$'s speech. Translating by another manual leads to the conclusion that Joe and John do not have rival manuals. Since, if Quine is right, there is no fact of the matter as to which manual is (uniquely) correct, then, by Quine's lights, there is no fact of the matter as to whether Joe and John have genuine rival manuals for $N$'s speech.

Thus, it seems that the theses of the indeterminacy of translation and the inscrutability of reference are inconsistent with other parts of Quine's philosophy of language. In particular, it is inconsistent with his account of the equivalence of theories. To make sense of the indeterminacy and the inscrutability theses we need to make sense of the notion of rival, though empirically equivalent translation manuals. Yet it is this very type of notion, notions that incorporate the idea that there can be real *semantic* differences (i.e., conflicts) even where there is empirical equivalence, at which Quine's attacks on "the museum myth of the mental," on analyticity, and on the determinacy of translation and the scrutability of reference are aimed. To put the point yet another way, the indeterminacy thesis entails that there can be two rival, though empirically equivalent theories of what a speaker's utterances mean. Yet if we, *like Quine,* "recognize with Pierce that the meaning of a sentence turns purely on what would count as evidence for its truth," we should conclude that any two manuals that assign the same stimulus conditions to utterances of a translatee's idiom are in fact assigning the same meaning to those utterances.

Before proceeding, I would like to register one observation and one reservation about the above argument.

First the observation. I have not yet considered the objection that I have only dealt with cases of two translators offering purported rival dictionaries for a translatee's speech. Indeed, I have not, so far, addressed (directly) the case of a single translator who offers two apparently rival dictionaries for an individual's speech. Yet from the above we may clearly draw an answer to this objection.

Suppose Joe offers two purported rival manuals, $A$ and $B$, for $N$'s speech. In translating Joe's idiom onto our idiom, or, for that matter, when translating Joe's idiom onto itself, we may, if the indeterminacy

thesis is correct, reconstrue Joe's words so that $A$ and $B$ are (intranslated form) identical. A non-Quinean may here object that to do this is to treat Joe as using one language in constructing manual $A$ and using another language in constructing manual $B$. Yet, continues our hypothetical non-Quinean, there is a fact of the matter as to whether Joe has switched languages or not. If he has in fact not switched languages, then $A$ and $B$ are rival manuals. For this objector, there is a real fact of the matter about whether Joe, in moving from manual $A$ to manual $B$, has switched theories about the meaning of $N$'s speech or merely switched languages.[6]

All this is something a thorough-going Quinean must reject. He will reject this because it relies on a thoroughly un-Quinean notion of same language. If we could make sense of such a fine notion of sameness (and hence of change) of language, we would have all the material we need for reconstructing the old analytic-synthetic distinction. A sentence would be analytic for individual $X$ if and only if its rejection represents a change in $X$'s language as opposed to a change in $X$'s world theory.

So much for the objection. Now for the reservation. So far we have proceeded on the assumption that the translating linguists agree on what segments of the translatee's noise productions count as words. If two linguists disagree over this matter, then we cannot reconcile their dictionaries in the manner suggested above. So it seems we are only entitled to the conclusion that Quine cannot reconcile the claim that two linguists might agree on what segments of a translatee's noise production count as words and yet offer rival (empirically equivalent) translation manuals for the translatee's speech with his criteria of equivalence of theories. That Quine is indeed committed to this claim is evidenced by his claim that an individual's words may be permuted onto themselves in a nonhomophonic mapping that preserves all his dispositions to speech.

### VIII. INDETERMINACY, MENTALISTS, AND QUINE

The central strategy I have been pursuing is that of using Quine's own notion of theoretical equivalence to show that purported cases of genuine rival translation manuals, upon which the indeterminacy thesis and the inscrutability-of-reference thesis depend, collapse into cases of merely different translation manuals. Yet perhaps we should construe the indeterminacy and inscrutability theses, not so much as theses Quine is willing to endorse outright, but rather as theses he believes those who believe in old-fashioned meanings (the idea idea, etc.) may be forced into accepting. Perhaps the indeterminacy thesis and the inscrutability-of-reference thesis are best construed as a

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[6] The above two paragraphs arose from discussions with Haugeland.

*reductio* of the mentalist's conception of meaning: a mentalistic theory of meaning forces one to accept as rivals two theories (two different translation manuals) when there is no empirical difference between the two.

Under this interpretation, the apparent conflict between the indeterminacy thesis and the inscrutability-of-reference thesis and Quine's criterion of the equivalence of theories is no real conflict, since mentalists do not typically share that criterion of the equivalence of theories. For the typical mentalist, what makes two different empirically equivalent theories genuine rival theories is that they express different ideas, different conceptions, of the way the world is (in some or other aspect). For the typical mentalist, what makes A's dictionary for N's speech a rival to B's dictionary for N's speech is that it expresses a different idea about the meaning of N's words.

Thus, suppose again that N is our native and A's dictionary for N's speech contains the entry 'gavagai/rabbit', whereas B's dictionary contains the entry 'gavagai/undetached rabbit part'. According to our mentalist, this constitutes a case of rival dictionaries, because the terms 'rabbit' and 'undetached rabbit part' express/stand for different ideas.

On this interpretation, Quine's claim is that, given the mentalist's notions of meaning and rival dictionaries, there will in fact be rival dictionaries that are such that no empirical fact (and presumably no physical fact, e.g., a fact about the distribution of physical particles) favors one over the other. For Quine, this amounts to a refutation of the mentalist's position.

One obvious problem with this interpretation is that it does not at all gibe with the textual evidence. Quine continually presents the indeterminacy thesis and the inscrutability-of-reference thesis not as part of a greater *reductio* but as theses that he outright endorses. Thus, at one place he says:

> I am persuaded that alternative manuals of translation can exist, incompatible with each other.[7]

Another problem with this interpretation is that, if the indeterminacy thesis is to function as part of a *reductio* of mentalistic conceptions of meaning, it would have to be interpreted as an epistemological thesis rather than an ontological thesis.

Thus, consider the case of a mentalist who accepts Quine's contention that there is no empirical (observable) fact to favor one rival manual over the other. Indeed, let us suppose that he even accepts

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[7] "Mind and Verbal Dispositions," in *Mind and Language*, S. Guttenplan, ed. (New York: Oxford, 1975), pp. 82–95, here p. 90.

the additional claim that there is no physical fact to favor one rival manual over the other. Such a mentalist may still maintain that there is a fact of the matter about which manual is correct. He may still maintain that there is some mental fact in virtue of which one manual rather than the other is correct. Such a mentalist may claim that the question of whether the native's term 'gavagai' is correctly translated by 'rabbit' rather than 'undetached rabbit part' depends upon what idea he (the native) associates with the term 'gavagai'. True, there may be nothing which could give us reason to favor one translation over another, nevertheless there is a fact of the matter about which translation is correct.

For the mentalist, the indeterminacy and inscrutability theses would have, at best, to be epistemological theses not ontological theses. Yet Quine himself explicitly rejects this reading. Thus, he says:

> The point is not that we cannot be sure whether the analytical hypothesis is right, but that there is not even . . . an objective matter to be right or wrong about.[8]

Thus, it seems Quine is faced with the following dilemma:

Either

(1) We approach the indeterminacy and inscrutability theses from a Quinean perspective, in which case there is no fact of the matter as to whether there is in fact any indeterminacy of translation or inscrutability of reference.

or

(2) We approach the indeterminacy and inscrutability theses from a mentalist's perspective, in which case translation and reference are at best empirically underdetermined, though not ontologically indeterminate or "inscrutable" (in the Quinean sense that "there is nothing there to scrute").

### IX. TOWARD A NEW INDETERMINACY THESIS

Clearly, one of the purposes of the indeterminacy thesis is to contrast translation theory with physical theory. For Quine, the former is both underdetermined and indeterminate, whereas the latter is at most underdetermined. For Quine, qua physical realist, there is a physical reality in virtue of which two empirically equivalent physical theories can have different truth values.[9] On the other hand, Quine

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[8] *Word and Object*, p. 73.

[9] Cf., however, "Things and Their Place in Theories," in Quine's *Theories and Things* (Cambridge: Harvard, 1981). In that place (cf. p. 22) Quine seems to jettison his realism, claiming that a theory that accords with all observational data could not be false.

does not believe that there is some semantic/intensional reality in virtue of which two empirically equivalent translation manuals can have different truth values.

To put the point another way, Quine, qua physical realist, believes that truth is ultimately determined by the states and distributions of elementary particles. Two theories that fit the same states and distributions of elementary particles are, for Quine, not rival theories. Indeed, Quine even goes so far as to claim

> Two sentences agree in objective information, and so *express the same proposition,* when every cosmic distribution of particles that would make either sentence true would make the other true as well. Each distribution of elementary particles of specified kinds over total space-time may be called a possible world; and then two sentences *mean the same proposition* when they are true in all the same possible worlds.[10]

Yet, as Dagfinn Føllesdal[11] reports, Quine says of the rival translation manuals required for the indeterminacy thesis that they "fit the same states and distributions of elementary particles" (*ibid.,* p. 295). Indeed, Quine himself makes the point quite explicitly in his article, "Things and Their Places in Theories":

> When I say there is no fact of the matter, as regards, say, two rival manuals of translation, what I mean is that both manuals are compatible with all the same distributions of states and relations over elementary particles. In a word, they are physically equivalent (p. 23).

How can there be *rival* manuals that, by Quine's own lights, "express the same proposition" and "mean the same proposition"? Surely, if two manuals express the same proposition, they are not really rival manuals!

Since Quine is a fervent supporter of the old physicalist catch phrase, "no difference without a physical difference," he would, we expect, claim that any two manuals that are empirically equivalent and fit the same states and distributions of physical particles are not conflicting, hence not rival, manuals. Yet, in fact, his favored versions of the indeterminacy thesis entail that certain such manuals are conflicting/rival manuals!

In *Word and Object,* the following formulation of the indeterminacy occurs:

> The thesis is then this: manuals for translating one language into another can be set up in divergent ways, all compatible with the totality of speech

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[10] *Philosophy of Logic* (Englewood Cliffs, NJ: Prentice-Hall, 1970), p. 4 [emphasis mine].
[11] "Indeterminacy of Translation and Underdetermination of the Theory of Nature," *Dialectica,* XXVII (1973): 289–301.

dispositions, yet incompatible with one another. In countless places they will diverge in giving, as their respective translations of a sentence of the one language, sentences of the other language which stand to each other in *no plausible sense of equivalence however loose* (p. 27, emphasis mine).

The inclusion of the italicized phrase makes this an especially strong version of the indeterminacy thesis. Indeed, it is so strong as to be trivially self-refuting. In particular, since such "rival manuals" are both "compatible with the totality of speech dispositions," they are obviously equivalent in some sense. Ordinarily, Quine would call this empirical equivalence. True, Quine here writes of the equivalence of sentences not of manuals. But note, the sentences of both manuals are equivalent as totals. That is, where $A$ is translator 1's translation of $X$ and $B$ is translator 2's translation of $X$, $A$ and $B$ are equivalent in the sense that they, embedded in 1's manual, or, more properly, 1's total world theory, and $B$ embedded in $B$'s total world theory have the same empirical import. To demand empirical equivalence at the level of a single isolated sentence would be to violate Quine's celebrated holistic strictures. The sense of empirical equivalence here is that which applies in the case of the German who says "Giovanni's Satz 'E un libro' bedeutet 'Es ist ein Buch' " and the Australian who says " 'Giovanni's sentence 'E un libro' means 'It's a book'." Their translations only count as empirically equivalent provided the utterers have appropriate background theories. For instance, suppose our Australian's background theory contains the claim 'Books are large marsupials whose primary means of locomotion is the hop'.

This little contretemps is not merely the result of an infelicitous statement of the indeterminacy thesis. Rather, it is indicative of the problem that is the center of this current work: Quine states the indeterminacy thesis as a claim about the existence of rival, that is, incompatible, empirically equivalent translation manuals, yet he cannot give any adequate gloss on the nature of the alleged rivalry/incompatibility. The manuals are not empirically rivals/incompatible, since they both fit all the observational evidence. They are not physically rivals/incompatible, since they are consistent with the same physically possible worlds. They are not formulations of conflicting theories, because they are empirically equivalent and intertranslatable. The only sense in which they are rivals is in the sense that, given the ordinary notion of meaning, they assign conflicting meanings to the same sentence. Yet this is the very notion of meaning Quine has been so trenchantly attacking, often using the indeterminacy thesis as the spearhead of attack!

Ironically, these considerations suggest the following formulations of the point behind the indeterminacy thesis:

(I.T.2)  Any two empirically equivalent translation manuals that are ap-
          parently rival manuals are in fact merely different manuals.

and/or

(I.T.2)  There cannot be two rival translation manuals, both of which fit
          an individual's speech.

How much justice do (I.T.1) and (I.T.2) do to Quine's views?

Consider that one of the things that typically separate physical realists from positivists and other antirealists is the question of whether having the right empirical implications is sufficient for the truth of (the statements of) a physical theory. Physical realists believe that it is what a theory states about physical phenomena, be they macroscopic or microscopic, and the nature of those phenomena, which determines the truth value of (the statements of) the theory. It is this which allows for the possibility of empirically equivalent physical theories having different truth values; despite their empirical equivalence, such theories may be making conflicting claims about the nature of physical reality, and hence may be rival theories.

Typically, antirealists claim that any two physical theories that have the same empirical implications are in fact identical theories and hence share the same truth value.

Analogously, we might say that one of the questions that typically separate mental realists from mental antirealists is the question of whether having the right empirical implication is sufficient for the truth of a mental theory (e.g., a theory about what the words of some individual's idiom mean). Mental realists will typically deny that having the right empirical implications is here sufficient for truth. By the same token, they will typically deny that any two mental theories that are empirically equivalent are in fact identical theories. On the other hand, mental antirealists will typically affirm both these claims.

Clearly, any consistent antirealist about intentional phenomena will be an advocate of (I.T.1) and (I.T.2) and Quine is notoriously an antirealist about intentional phenomena. This at least is some evidence for the claim that (I.T.1) and (I.T.2) do some justice to Quine's views.

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