

INFERENTIALISM AND INDETERMINACY AT HOME

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By Cem ŐiŐkolar

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# Inferentialism and Indeterminacy at Home

The thesis of Cem Şişkolar

has been approved by

Prof. Dr. Stephen Voss  
(Thesis Advisor)

---

Assist. Prof. Ali Karatay

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Assoc. Prof. Berna Kılınç

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Cem Şişkolar

## ABSTRACT

According to W.V. Quine his thesis of the indeterminacy of radical inter-linguistic translation applies to the home language as well. This view implies that the usual homophonic understanding of our interlocutors' utterances at home can be replaced by a non-homophonic understanding without the least semantic drawback. In my thesis I will argue that it is possible to accord a semantic superiority to the homophonic understanding at home provided that one adopts an inferentialist account of meaning. I will note that inferentialism with its stress on inferential relations between sentences as a determinant of their meaning enables us to attribute a semantic relevance to the verbal circumstances and sequels of the use of sentences, which is overlooked by Quine except in the case of sentences that contain logical vocabulary. I will then argue that even though attention to the verbal circumstances and sequels of the use of sentences is not sufficient to overrule different but equally acceptable manuals of translation from a radically foreign language into English, it is sufficient to rule out the English-English non-homophonic manual as a manual semantically on a par with the homophonic manual.

# Çıkarımcı Anlam Kuramı ve Dil-içi Çevirinin Belirsizliđi

Cem Őiřkolar

## KISA ÖZET

W.V. Quine'a göre kendisinin dillerarası kökten çevirinin belirsizliđi tezi kendi dilimiz için de geçerlidir. Bu görüşe göre en ufak bir anlam kaybı olmaksızın eş-sesli olmayan bir anlayış, aynı dili konuştuđumuz muhataplarımızın sözlerini eş-sesli anlayışımızın yerine geçebilir. Tezimde Çıkarımcı bir anlam kuramının kabul edilmesi koşuluyla eş-sesli anlayışa anlamsal bir üstünlük atfedebileceđini savunacađım. Çıkarımcı anlam kuramının cümleler arası çıkarım ilişkilerine cümlesel anlamın bir belirleyicisi olarak yaptıđı vurgu cümlelerin kullanımının sözel koşul ve sonuçlarına anlamsal bir önem atfetmemize izin veriyor. Bu koşul ve sonuçların anlambilimsel önemi mantıksal sözcüklerin yeraldıđı cümleler dışında Quine tarafından gözardı edilmiřtir. Cümlelerin kullanımının sözel koşul ve sonuçlarını göz önüne almak İngilizce'ye kökten yabancı olan bir dilden İngilizce'ye çeviri için farklı fakat eşit derecede kabul edilebilir çeviri talimnamelerinin hazırlanabilir oluşunu deđiřtirmeyebilir. Ancak sözel koşul ve sonuçların dikkate alınması durumunda İngilizce'den İngilizce'ye eş-sesli olmayan çeviriler veren bir çeviri talimnamesinin ortaya çıkması mümkün deđildir.

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## PREFACE

Quine rejects the existence of a determinate relation of synonymy between the sentences of two languages, because he believes there is not a determinate relation of translation between the sentences of two languages. His argument for the rejection draws on a conjecture. Suppose there exists a community, possibly a quite advanced one, hitherto unknown by the English speaking community. Quine conjectures that if two English speaking persons set out to translate their language they may come up with two translation manuals that map the same foreign sentences onto different English sentences such that both manuals will ensure smoothness of dialogue and success in negotiation with the alien community but the different English translations they yield for the same foreign sentences will not be interchangeable in the home context.

Quine however not only rejects the existence of inter-linguistic synonymy, he rejects as well the existence of a determinate relation of inter-subjective sentential synonymy at home. He thinks that the same sentence need not necessarily be taken to mean the same in the mouth of two different speakers of English. The latter rejection depends on a corollary of the conjecture that concerns the inter-linguistic context. He

notes that if the conjecture that concerns the radical inter-linguistic translation is granted then there must as well be a non-homophonic manual from English onto English that can be used as a substitute for the homophonic manual in communication.

Quine goes even further. Although he recognizes that the use of the homophonic manual is pedagogically indispensable, and that it is clearly more convenient to use, he thinks that apart from these respects the homophonic manual has no semantic superiority over the non-homophonic manual in question.

I think this last claim is not correct. I think it is possible to argue on inferentialist grounds that the conjecture, the consequent rejection of inter-linguistic synonymy, and the corollary that concerns the home context by no means imply the view that homophonic understanding at home is not semantically superior to an understanding guided by a non-homophonic manual of translation from English onto English. Showing how one can accord a semantic superiority to the homophonic understanding at home without thereby having to accept a relation of sentential synonymy, be it between two languages or between the utterances of the same English sentence by two different speakers, will be my aim in the sequel. The inferentialist framework I will adopt to this end mainly derives from Sellars. Occasionally, I will supply certain ideas from Brandom in support of this framework.

Is pursuing this goal worth the effort? I think it is. Quine's conclusion that a non-homophonic understanding of our interlocutors at home can be semantically on the same footing as the homophonic understanding of them is utterly un-intuitive. I believe that an argument against Quine's conclusion is worthwhile in right proportion to the un-intuitiveness of this conclusion. On the other side, the philosophical material to be laid

in the pursuit of this goal will bring out the plausibility of the thesis of indeterminacy of radical inter-linguistic translation from an inferentialist perspective.

My discussion will be organized in the following manner.

In the introductory chapter I will expose the nature of the non-homophonic manual Quine envisages in order to reject the existence of a determinate relation of synonymy between the two utterances of the same sentence by different speakers of English. One important constraint on such a manual is that it yields translations that are not interchangeable with the homophonic translations of the same sentences. I will then argue that this non-interchangeability must be due to the different verbal circumstances and sequels of use of the sentences that are rival translations of the same sentences. This leads to the crucial point that if I and my interlocutor are disposed to use the same sentence under similar verbal circumstances and with similar verbal sequels then the non-homophonic translation of this sentence must have different verbal circumstances and sequels of use. The introductory chapter will conclude with the observation that the rejection of Quine's claim that the understanding guided by the non-homophonic manual of the sort he envisages is not semantically inferior to the homophonic understanding depends on the possibility to accord a semantic relevance to the verbal circumstances and sequels of utterances.

The inferentialist account of meaning enables us to accord the required semantic relevance to the verbal circumstances and sequels of utterances. The second chapter will accordingly consist of a presentation of the inferentialist way of explaining the meanings of sentences. The fundamental inferentialist tenet is that language is the vehicle of thinking. This tenet accounts for the inferentialist way of explaining the meanings of sentences in terms of regularities in verbal behavior rather than explaining it in terms of

mental contents. The regularities in verbal behavior that constitute the explanatory basis are patterns of verbal response to observational situations, patterns of inferential transitions, and patterns of behavioral response to verbal circumstances. The semantic relevance of verbal circumstances and sequels of utterances follow from the inferentialist emphasis on patterns of inferential transitions as a determinant of the meanings of sentences.

Quine's sole argument for his conjecture concerning radical inter-linguistic translation draws on his thesis of under-determination of theories by empirical evidence. In the third chapter I will present this argument. Then I will move on to the discussion of the corollary of this conjecture. The corollary was that there is a non-homophonic English-English translation manual, which can be used as a substitute of the homophonic manual in communication, but such that the non-homophonic translations it yields are not interchangeable with the homophonic translations of the same sentences. The third chapter will conclude with the presentation of Quine's reasons for his view that this non-homophonic way of understanding English sentences is not semantically inferior to the homophonic way of understanding them.

My argument for the rejection of this view will come in the fourth chapter. The argument will draw on points highlighted in the preceding two chapters. Essentially my argument will consist of pointing out that, unlike the homophonic manual, the sort of non-homophonic manual that follows from Quine's argument discussed in the third chapter will correlate sentences which stand in dissimilar webs of inferential relations. Additionally, I will provide an argument in support of the semantic superiority of homophonic manual over the sort of non-homophonic manual that supports Quine's thesis of inscrutability of reference. A separate treatment is needed for two reasons.

First, Quine provides a different argument for this type of non-homophonic manual. Second, this sort of non-homophonic manual yields translations which are interchangeable with the homophonic translations of the same sentences. Finally, I will briefly portray the picture of intra-linguistic comprehension and inter-linguistic translation that follows from the views I have put forward throughout the preceding discussions.

## CHAPTER I

### INTRODUCTION

#### The Non-Homophonic Manual of Translation

Suppose there exists a community, possibly a quite advanced one, hitherto unknown by the English speaking community. Quine conjectures that if two English speaking persons set out to translate their language they may come up with two translation manuals that map the same foreign sentences onto different English sentences such that both manuals will ensure smoothness of dialogue and success in negotiation with the alien community but the different English translations they yield for the same foreign sentences will not be interchangeable in the home context.<sup>1</sup>

The home-context corollary of Quine's conjecture concerning radical inter-linguistic translation follows from the following possibility: "I have directed my indeterminacy thesis on a radically exotic language for the sake of plausibility, but in principle it applies even to the home language. For, given the rival manuals of

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<sup>1</sup> For a textual grounding for this neat formulation of the conjecture see W. V. Quine, "Where Do We Disagree?" in *The Philosophy of Donald Davidson*, ed. Lewis Edwin Hahn, (Chicago: Open Court, 1999), p. 73.

translation between Jungle and English, we can translate English perversely into English by translating it into Jungle by one manual and then back by the other.”<sup>2</sup>

The resulting English to English translations will be non-homophonic, as the two Jungle-English manuals translate the same Jungle sentences differently. We can suppose that it is possible to give an English-English manual of translation that yields just the same translations as that roundabout way Quine describes does.

Manuals of translation in Quine’s sense are sets of analytical hypotheses that equate terms and modes of grammatical composition that belong to two different languages. They in fact do not relate sentences, but by using them we can give translations of sentences in both directions. So, we can consider a manual of translation as defining two mappings between two sets of sentences, one being the inverse of the other. A homophonic manual of translation will yield the identity function. A non-homophonic manual from English onto English may yield two mappings, one the inverse of the other, or just one mapping whose inverse mapping is identical with itself, which map if not all, several English sentences onto different English sentences. I suppose that the non-homophonic manual we are concerned with defines just one mapping which is identical with its inverse mapping. I cannot see any inconvenience in doing so. And my points could as well be formulated without this supposition albeit not as easily. Let’s thus term it ‘f’.

The mapping f will be such that we shall be able to linguistically get along with competent English speakers by using it as well as we get along with them heeding simply what they utter –i.e. using the homophonic mapping. More precisely, we shall be

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<sup>2</sup> W. V. Quine, *Pursuit of Truth* (Cambridge: Harvard University Press, 1992), p. 48.

able to dialogue as smoothly and negotiate as successfully as ever while heeding the images of what they utter under  $f$ , first forming a response or a continuation of the conversation as if they in fact had uttered the image under  $f$ , but then uttering the image under  $f$  of that response or that continuation sentence. But the images of  $f$  will not be interchangeable with the images of the homophonic mapping.

Suppose such a non-homophonic mapping exists. Does it follow that a competent speaker of English can be taken to mean what we mean by  $A$  as well as to mean what we mean by  $B$ , which is the image of  $A$  under  $f$ ? If it does, can this then be a reason for rejecting the existence of a determinate relation of inter-subjective sentential synonymy at home?

The implication depends on a specific notion of meaning that is meant to explain instances of successful verbal communication. According to this notion, the meaning of a sentence is conferred by the non-linguistic intentional content with which it is related through being the expression of an intentional state. Such non-linguistic intentional contents are traditionally thought to be propositions. Propositions are truth value bearers and objects of psychological attitudes. So knowing the propositions related with a person's sentences and knowing in which way those propositions are related with these sentences provide information both about the conduct of the person and the world. In the intralinguistic context we can get along with our interlocutors linguistically because we relate the same sentences with the same propositions. The existence of the non-homophonic mapping however implies that we can get along with our interlocutors as well if we relate their sentences with propositions we normally relate with other sentences. For, in heeding not the uttered sentences but their images under the non-

homophonic mapping we would presumably be associating with the uttered sentences propositions which we normally relate with the image sentences.

While accepting the existence of the non-homophonic mapping it may seem possible to maintain that there is nonetheless a fact of the matter as to which propositions our interlocutors relate with their sentences. One problem with this insistence is that the fact of the matter would then forever remain unknown. The major problem however, the one that led Quine to reject an account of meaning, understanding and communication which involves reference to propositions, is that the acceptance of the existence of the non-homophonic mapping deprives the account of its *raison d'être*, which was explaining successful instances of linguistic intercourse. The existence of the non-homophonic mapping implies that successful instances of verbal intercourse do not depend on interlocutors' associating the same propositions with the sentences they utter.

#### The Non-Interchangeability Constraint

The inter-linguistic indeterminacy thesis depends on the constraint that the conjectured alternative manuals provide translations which are not interchangeable for the speakers of the target language.

The parallel constraint concerning the non-interchangeability of the images of the non-homophonic mapping with those of the homophonic mapping is equally crucial for the rejection of inter-subjective sentential synonymy at home. The difference between the images and the pre-images of the non-homophonic mapping cannot just be a morphologic one (that is the difference between the images of the same sentences under the homophonic and non-homophonic mapping cannot just be a morphologic one). The

difference must be such that we should be able to acknowledge, standing in the shoes of those who postulate propositions, that the homophonic and the non-homophonic mappings associate different propositions with one and the same sentence. Mere morphologic difference cannot satisfy this requirement. For instance a mapping that mapped sentences to their passive versions would not cut any ice.

Let's reconsider the case of the radical inter-linguistic translation. We have said that the indeterminacy thesis depended on the supposition that translations provided by the alternative acceptable manuals were non-interchangeable. The non-interchangeability cannot be due to (i) the non-verbal aspects of the circumstances which prompt the utterance of these sentences and (ii) the non-verbal aspects of the behavioral sequels prompted by their utterance. For the alternative translations are associated with the same foreign sentences, in such a way that (i) the circumstances that prompt their utterance more or less match those that prompt the utterance of the foreign sentences they translate, and (ii) the behavioral sequels prompted by their utterance more or less match those prompted by the utterance of the foreign sentences they translate.

The verbal aspects of (i) the circumstances that prompt the utterance of the proposed translations and (ii) the behavioral sequels that are prompted by the utterance of the proposed translations may then perhaps be seen as the required source of difference to account for the sentences' not being interchangeable.

If so, in the context of the home language as well the non-interchangeability of the images of the homophonic mapping and the non-homophonic mapping, that is, the non-interchangeability of the arguments and the images of the non-homophonic mapping must be due to (i) the verbal aspects of the circumstances which prompt their utterance and (ii) the verbal aspects of the behavioral sequels prompted by their utterance.

Namely, it must be due to the difference of the verbal aspects of the circumstances which prompt their utterance and of the behavioral sequels prompted by their utterance.

### Superiority of the Homophonic Manual

In the case of radical inter-linguistic translation the verbal aspects of the circumstances that prompt the utterance of foreign sentences cannot be part of the circumstances that prompt the utterance of any English sentence, apart perhaps from some of those English sentences that are about the foreign language to be translated. Similarly the verbal aspects of the sequels prompted by the utterance of a foreign sentence cannot be part of the sequels prompted by the utterance of any English sentence. (Had a customary translation scheme been in effect this would not be true). However this is not the case in the home context.

Even we who grew up and learned English at the same knee, or adjacent ones, talk alike for no other reason than that society coached us alike in a pattern of verbal response to externally observable cues. We have been beaten into an outward conformity to an outward standard; and thus it is that when I correlate your sentences with mine by the simple rule of phonetic correspondence, I find that the public circumstances of your affirmations agree pretty well with those of my own. If I conclude that you share my sort of conceptual scheme, I am not adding a supplementary conjecture so much as spurning unfathomable distinctions; for what further criterion of sameness of conceptual scheme can be imagined? The case of a Frenchman, moreover, is the same except that I correlate his sentences with mine not by phonetic correspondence but according to a traditionally evolved dictionary. The case of the linguist and his newly discovered heathen, finally, differs simply in that the linguist has to grope for a general sentence-to-sentence correlation that will make the public circumstances of the heathen's affirmations and denials match up tolerably with the circumstances of the linguist's own.<sup>3</sup>

I think this passage underplays the difference between the radical inter-linguistic context and the home context by not taking into account that in the home context the match between the public circumstances of my affirmations and denials and those of the

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<sup>3</sup> W.V. Quine, "Speaking of Objects," in *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969), p. 5.

affirmations and the denials of my interlocutors comprises also the verbal aspects of these circumstances. This cannot be the case in the *radical* inter-linguistic context. The passage does not mention the behavioral sequels prompted by the affirmations and denials as a parameter of match, but the home context differs from the radical inter-linguistic context along this parameter too as regards the verbal aspects of the sequels.

It then appears that the non-homophonic mapping on which depends Quine's rejection of inter-subjective sentential synonymy at home envisages only a match of the non-verbal aspects of the circumstances that prompt the utterances of the object sentences and the image sentences, and of the sequels prompted by their use. But at home, unlike the radical inter-linguistic context, we can aim at even a greater match. Namely, we can aim at matching both the verbal aspects and the non-verbal aspects of the circumstances that prompt the object sentences and the target sentences, and of the sequels prompted by their use. Such a match is readily ensured by the homophonic mapping.

Consider the query, "To which species does this tree belong?" undertaken before a chestnut tree by pointing at the tree. Suppose the addressee in response utters, "This is a chestnut." One possibility, we are told, is to correlate the queried sentence say with "To which species of the universal complements of a tree does this universal complement of a tree belong" and the response with "This is the universal complement of a chestnut." As far as the non-verbal aspects of the circumstances and of the sequels pertaining to the utterance of the original sentences are concerned, the circumstances and the sequels pertaining to the proposed translations match these. However, note that the verbal aspects of the circumstances that pertain to "This is a chestnut" and "This is the universal complement of a chestnut" do not match. "This is the universal complement of

a chestnut” is not a response I would give to the query, “To which species does this tree belong?” Similarly, nor do the verbal aspects of the sequels of the sentences “To which species does this tree belong?” and “To which species of the universal complements of a tree does this universal complement of a tree belong?” match. For “To which species of universal complements of a tree does this universal complement of a tree belong?” is not a sentence to which I would respond by uttering “This is a chestnut.” The homophonic correlation however ensures a match that covers both the non-verbal and the verbal aspects of the circumstances and the sequels of the use of these sentences.<sup>4</sup>

This example is just given to illustrate that there may be a respect in which a largely homophonic mapping can be argued to provide a better correlation of sentences than a non-homophonic mapping. Quine thinks that apart from being more convenient to use the homophonic mapping has no semantic superiority over the non-homophonic mapping. For two reasons I cannot claim that the afore-illustrated superiority of the homophonic mapping over a non-homophonic mapping constitutes a rejection of Quine’s view. Firstly, the non-homophonic mapping involved in this example is not of the sort that primarily concerns us.<sup>5</sup> But it is certain that a non-homophonic mapping of the required sort would correlate sentences whose verbal circumstances and sequels of

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<sup>4</sup> The sort of non-homophonic translation exemplified in this illustration is not one that yields translations that are not interchangeable with those provided by homophonic translation of the same sentences. Although “This is a chestnut” and “This is the universal complement of a chestnut” are non-interchangeable as answers, they are interchangeable as candid assertions. The illustration is meant just to show what I mean by the match of verbal circumstances and sequels of the use of translational correlates. I would like to give an illustration that exemplified the sort of non-homophonic translation I am interested in but even Quine himself could not provide such an example.

<sup>5</sup> See the previous note.

use did not match.<sup>6</sup> Secondly, even if the non-homophonic mapping involved here were of the right sort Quine's claim could be rejected only if we can attribute a semantic relevance to the match of the verbal circumstances and sequels pertaining to the use of the translational correlates. We can attribute a semantic relevance to such a match if the verbal circumstances and sequels of the use of sentences play a role in the determination of their meaning.

I believe they do. According to inferentialism the meanings of sentences draw upon the inferential relations their use bears to the use of other sentences, the non-inferential relations their use bears to the things in the world and to non-verbal behavior. Furthermore sub-sentential expressions acquire a semantic role by virtue of enabling the sentences in which they figure to stand in these relations.

Considering inferential relations among sentences as a determinant of their meaning opens us a way to attribute a semantic relevance to some of the verbal circumstances and sequels of the use of sentences. If someone infers one sentence from the other, the former sentence can be considered as constituting the verbal circumstance of the use of the latter, and the latter sentence can be considered as constituting the verbal sequel of the use of the former. So, in correlating the sentences of our interlocutors with ours the match between some verbal circumstances and sequels of the use of the sentences to be correlated may count as semantically relevant as the match between the non-verbal circumstances and sequels of their use.

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<sup>6</sup> I have noted that the non-interchangeability of the images of the same sentence under a non-homophonic mapping of the required sort and the homophonic mapping should be due to their different verbal circumstances and sequels of use.

## CHAPTER II

### INFERENCEALISM

Inferentialism is essentially a use theory of meaning. The meanings of sentences are determined by their roles as perceptual reports, premises and conclusions of inferences, and volition-expressions or obligation-expressions leading to behavior. The sentences' assuming these roles in turn bears on the way their constituents and their mode of grammatical compositions are being used. However there may be a completely different approach to meaning which may as well claim to provide a use theory of meaning. Given the crucial importance of differentiating inferentialism from this approach I begin by contrasting it with that approach.

#### Two Conceptions of Language

The dictum "Meaning is use" can be read in two ways depending on whether one holds (i) language is an instrument for communicating non-linguistically framed content, or (ii) language is the vehicle of thought. The latter standpoint is fundamental for inferentialism.

## Language as an Instrument for Communication

The following is a characterization of an approach to meaning that Sellars describes as “picking language by the handle *means of communication*.”<sup>7</sup> Sellars does not name the actual proponents of this approach but the most likely candidate is Grice. My characterization is not intended as an accurate rendering of the views of this philosopher, but as a good starting point to introduce inferentialism by way of contrasting it with an approach that Sellars thinks to “get things upside down.”<sup>8</sup>

(i) Language is an instrument for communicating non-linguistically framed intentional contents to one’s interlocutors. Language is used to communicate the contents of such intentional attitudes as the belief that Zeynep has quit smoking, the desire that Zeynep quit smoking etc. The contents expressed by the sentences that figure in these that-clauses are regarded as contents framed independently of linguistic practice. That is, these contents are taken as primitives whose characterization does not depend on the way the sub-sentential components and the grammatical mode of composition of these sentences are used. The latter simply makes these sentences suitable receptacles to communicate these contents.

The contents are universal. The same content can be communicated by using different sentences belonging to different languages. The Turkish sentence “Zeynep sigarayı bıraktı” is made up of components and a grammatical form used in a way that

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<sup>7</sup> Wilfrid Sellars, *Naturalism and Ontology* (Atascadero: Ridgeview Publishing Company, 1996), p. 98.

<sup>8</sup> Ibid.

make it communicate the same intentional content, namely the belief that Zeynep has quit smoking, as the English sentence “Zeynep has quit smoking.”

Under (i) the meaning of a sentence is determined by the way its components and mode of composition are used in the following sense. The meaning of a sentence is in effect determined by the non-linguistic intentional contents it can be used to communicate. The sub-sentential components that make it up contribute in specific ways to make it the receptacle of the intentional contents it can express because of the ways they are used across other sentences of the language to which they belong. The relevant aspect of these other uses as well is that of making specific contributions to the sentences in which they figure so as to enable them to be receptacles of specific intentional contents. That is, to repeat, the way expressions are used contributes to the formation of suitable receptacles for the communication of contents that exist independently of linguistic practice.

### Language as a Vehicle of Thinking

The following is a characterization of an approach that picks language out by the handle of *vehicle of thinking*.

(ii) Language is primarily the vehicle of thinking, rather than being an instrument for the communication of non-linguistically framed thoughts. The meanings of sentences do not derive from primordial non-linguistically framed intentional contents they are used to express; on the contrary intentional contents are themselves linguistically framed.

The meaning of the sentence “Zeynep has quit smoking,” does not derive from contents conceived independently of linguistic practice, and which it is supposed to merely express. Its meaning is a product of the way its constituents and the grammatical form that puts them together are generally being used by the speakers of English.

Under (ii) the order of explanation between the meanings of sentences and the intentional contents of psychological states is reversed. The meanings of sentences are not explained in terms of non-linguistically framed intentional contents. Rather contents of intentional states are explained in terms of the meanings of sentences, which are in turn explained in terms of the uniformities in linguistic behavior.

The belief content that Zeynep has quit smoking is not conceived independently of the linguistic acts of using the sentence “Zeynep has quit smoking”. The nature of the relation between that content and the uses of this sentence is not of epistemological order as one would think under (i), as the affirmative use of the English sentence “Zeynep has quit smoking” provided the epistemic warrant for the ascription of a belief with that content. It is rather of explanatory order. The intentional content, that Zeynep has quit smoking, is explained in terms that refer to the public conditions and sequels of the uses of the sentence “Zeynep has quit smoking”.

Sellars’ Verbal Behaviorism (VB) satisfies the afore-given characterization. VB is a conception of thinking that “simply equates thinking with processes which are ‘verbal.’”<sup>9</sup> According to VB, thinking in the episodic sense that Zeynep has quit smoking is either a saying “Zeynep has quit smoking” or a developing of a short term propensity to say “Zeynep has quit smoking.” Saying “Zeynep has quit smoking” is

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<sup>9</sup> Ibid., p. 64.

understood as uttering it in a manner that conforms to the linguistic practice of the speakers of English.<sup>10</sup> Saying “Zeynep has quit smoking”, understood in this way, is termed ‘thinking-out-loud that Zeynep has quit smoking’.<sup>11</sup> Furthermore, the intentional state of believing that Zeynep has quit smoking, is equated with the ascription of a disposition to have a short term propensity to think-out-loud that Zeynep has quit smoking, whenever the question whether Zeynep smokes arises.<sup>12</sup> Provided, of course, that the person in question can be treated as a speaker of English on the basis of his observed linguistic behavior.<sup>13</sup>

According to VB the contents of the intentional states or episodes of an English speaking person are framed as the meanings of the English sentences these episodes or states as defined by VB are related with. The meanings of sentences in turn are regarded as functions of the way their constituents and their grammatical mode of composition are being used by the English speaking people. The upshot of this reversal in the order of explanation is that meanings, and consequently intentional contents, are not universal, but specific to the linguistic community. For the ultimate explanatory elements, namely the sub-sentential expressions of English, the modes of sentence composition in English, and the way what falls under these two rubrics is used, are specific to the linguistic practice of English speaking people. Furthermore, as no two English speaking people speak or are disposed to speak in exactly the same way, even though the expressions and

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<sup>10</sup> Ibid., p. 67.

<sup>11</sup> Ibid., p. 65.

<sup>12</sup> Wilfrid Sellars, “Language as Thought and as Communication,” *Philosophy and Phenomenological Research* 29, no.4, (1969), pp. 506-527.

<sup>13</sup>This is problematic. For, what it is to speak the same language needs to be clarified. This clarification will come in the fourth chapter.

the modes of composition they use are the same, the semantic contents of their utterances, and the contents of their intentional states, may be said to be idiosyncratic to each person.

### Inferentialism

According to inferentialism the meanings of sentences are determined by the roles they play as perceptual reports, as premises and conclusions of inferences, and as volition-sentences or obligation-sentences. Before explaining why these functions are picked out as determinants of meaning, highlighting some important points of what has gone before and clarifying certain related issues will be in order.

We have said above that taking language to be essentially the vehicle of thinking is fundamental for inferentialism. The VB version of this standpoint required a reversal in the order of explanation: instead of explaining the meanings of sentences in terms of the non-linguistically framed intentional contents they can communicate, explaining intentional contents in terms of the meanings of sentences, and the latter in terms of regularities in the use of sub-sentential expressions, which thus stand at the basis of this reversed order of explanation.

Sellars does not propose VB as his final word on thinking. He envisages it as a precursor of a 'fine grained framework' which would involve a "concept of thinking other than that of shifting propensities to think-out-loud."<sup>14</sup> The new concept will be construed by taking the concept of thinking-out-loud as a model. Most importantly the

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<sup>14</sup> Sellars, *Naturalism and Ontology*, p. 99.

contentfulness of thinking in the fine grained sense will be modeled upon the contentfulness of thinking-out-loud. One important presupposition of this strategy is thus to suppose that thinking-out-loud's can already be regarded as contentful independently of the fine grained thoughts yet to be introduced. For this reason Sellars warns against thinking that the fine grained framework is meant to explain the contentfulness of episodes of thinking-out-loud by providing the causes of these episodes. So, with or without the fine grained framework the episodes of thinking-out-loud will remain intrinsically contentful; and their contentfulness will remain the product of the way the components and the modes of composition of the sentences that are involved in these episodes are generally being used. On the other side with the fine grained framework in place episodes of thinking will be accorded an intrinsic contentfulness that is modeled along the lines of the contentfulness of the episodes of thinking-out-loud, but nonetheless independent from it.<sup>15</sup>

Hence the fine-grained theory Sellars envisages does not reject but presupposes the intrinsic contentfulness of verbal behavior; and inferentialism is the theory of content he develops so as to explain the contentfulness of verbal behavior which he thinks can be regarded as thinking in its own right.

#### Perceptual, Inferential and Practical Roles

Considering language essentially as the vehicle of thinking implies that spontaneous utterances be regarded as being essentially episodes of thinking-out-loud.

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<sup>15</sup> Ibid., pp. 99-101.

Utterances' capacity to communicate thoughts may then be explained in terms of their essentially being episodes of thought. According to this line of thinking my uttering the sentence "Zeynep has quit smoking" is essentially an episode of thinking, and what I am at that moment thinking is transparent to my interlocutors provided that we speak the same language.<sup>16</sup>

A thought in the episodic sense may occur through observation or through reasoning; having such thoughts may lead one to have other thoughts through reasoning or eventually to action. If utterances are to be episodes of thinking-out-loud then the use of sentences should be capable of being considered as the immediate outcomes of observations and reasonings.

According to the picture of language I have referred to as (i) the outcome of an observation is a mental episode which is related with a certain proposition. Hearing the sound of rain drops hitting the ground causes individuals to have the episode of thinking that it is raining. The utterance of the perceptual report, "It is raining" is explained in terms of the subject's having a mental episode that is related with the proposition that it is raining at that particular moment.

Similarly, under (i) reasoning is considered as a transition from one mental episode that is related with a certain proposition to another that is related with another proposition. The utterance of "the streets are getting wet" by a subject who has heard the sound of the rain drops but is in no position to observably ascertain the state of the streets is explained in terms of the subject's transition from the episode of thinking that it is raining into the episode of thinking that the streets are getting wet.

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<sup>16</sup> The same problem arises as the one touched in the 13th note.

According to the Sellarsian line adopted here, a perceptual report can itself be considered as an episode of thinking, and therefore as immediately related with the appropriate perceptual situation, instead of bearing a relation mediated by a mental episode with a non-linguistically framed content. Similarly, the utterance of the conclusion of an argument can itself be considered as an episode of thinking and thus as bearing an immediate relation to the utterance of the premises which as well count as episodes of thinking, instead of one which is mediated by mental states whose propositional contents the premises and the conclusion merely express, as a proponent of (i) would hold. In the same vein the utterance of a volition or obligation sentence can be taken as bearing an immediate relation to the non-verbal action that ensues, instead of one mediated by a mental state of willing that something be the case.

According to inferentialism these relations that are to be immediately assumed by the use of sentences considered as episodes of thinking determine the meanings of sentences.<sup>17</sup> The meaning of a sentence depends thus on the relations its uses bear to perceptual situations, to the use of other sentences and to non-verbal actions. To these three types of semantically relevant relations the use of a sentence may stand in correspond three types of pattern governed linguistic behavior: language entry transitions, intralinguistic transitions and language departure transitions.<sup>18</sup>

Sellars characterizes the concept of pattern governed behavior as “the concept of behavior which exhibits a pattern, not because it is brought about by the intention that it exhibits that pattern, but because the propensity to emit the behavior of the pattern has

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<sup>17</sup> According to Sellars stating the meaning of a sentence is classifying it with regard to these relations. Sellars, *Naturalism and Ontology*, p. 67.

<sup>18</sup> *Ibid.*, p. 69.

been selectively reinforced.”<sup>19</sup> What selectively reinforces these transition patterns are one’s linguistic trainers and peers. This emphasis on the non-intentional character of the acquisition of dispositions to manifest these transition patterns is important. For if language is the vehicle of thought one cannot ascribe to a child a developed capacity of thinking that passes beyond animal-thinking in the process of learning her mother tongue. Hence, the explanation of the child’s acquisition of these patterns cannot be that they parallel the mental transition patterns which she already has, and that she intends to be able to verbally express these latter. The acquisition of language rather innovates and broadens the rudimentary capacity to think which the human child can be said to share with animals.<sup>20</sup> A proponent of (i) on the other hand would adopt a picture of language acquisition that repeats Augustine’s picture which Wittgenstein denounces as a picture that falsely likens the process of acquiring one’s mother tongue to the process of acquiring a second language.

### Linguistic Transition Patterns

Now let’s briefly consider what the aforementioned transition patterns are.<sup>21</sup>

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<sup>19</sup> Ibid., p. 68.

<sup>20</sup> The ascription of thought to animals and to children who are not capable of linguistic behavior is not to grant that language is after all not the vehicle of thinking. The view that language is the vehicle of thinking is a special application of the broader view that behavior is the vehicle of thinking. The view discussed under (i) is a view that takes behavior, and specially linguistic behavior, as the expression of non-behaviorally framed thought.

<sup>21</sup> For Sellars’ explicit discussion of these patterns see the following. Wilfrid Sellars, “Is there a Synthetic *A priori* ?” in *Science Perception and Reality* (Atascadero: Ridgeview Publishing Company, 1991), pp. 313-314. Wilfrid Sellars, “Some Reflections on Language Games,” in *Science Perception and Reality* (Atascadero: Ridgeview Publishing Company, 1991), p. 333. Sellars, *Naturalism and Ontology*, p. 69.

Language entry transitions: They are acquired as stimulus response patterns in which the stimuli are non-verbal and the responses are verbal. They correspond to what Quine terms observation sentences and they are indeed the entering wedge into language. A genuine language entry transition is not however merely a response that differentiates a given feature present in the environment, for example the color red; such a response cannot be considered as a genuine language entry transition, an ascription of the color red to a certain object in the environment, unless it is wired to other pieces of verbal behavior through intralinguistic transitions. For instance the response “red ball” in the mouth of a child to a red ball cannot assume the status of a genuinely linguistic response, the status of the observation sentence “red ball,” unless the child is able to produce the transition to “not a green ball,” “it is extended” etc. The reason for this condition will become clear in a moment.

Intralinguistic transitions: They are acquired as stimulus response patterns in which both the stimuli and the responses are verbal. They correspond to inferential connections between utterances. We have noted that taking language as the vehicle of thought implies that the use of a given sentence cannot just be considered as communicating what one thinks. So, linguistic utterances should somehow take upon themselves the functions considered as genuinely ascribable to thoughts considered as inner mental episodes. It is essential for a thought that it may work as a reason for a further thought or stand in the need of such a reason. So, any sentence that can be involved in an episode of thinking-out-loud should have the potential to fulfill an inferential role as a premise or a conclusion. For this reason a child’s utterance “red ball” does not count as a genuine language entry transition, unless it is wired to the use

of other sentences through inferential transitions.<sup>22</sup> These transitions become more tangible in the conversation between two people than they are in the verbal behavior of a person considered in isolation from her interlocutors. For instance a speaker of English would acquire the propensity to assent to the sentence “Streets are wet” if queried, upon hearing his interlocutor who has just come indoors uttering “It is raining.”

Language departure transitions: They are acquired as stimulus response patterns in which the stimuli are verbal and the responses can either be verbal or non-verbal. They correspond to transitions from the use of such sentences as “I want to wear my red coat” and “I should warn him about that” to the actions of wearing the red coat and of warning somebody about something. Again as in the case of language entry transitions, their linguistic nature depend on their being inferentially linked to the use of other sentences through intralinguistic transitions.

The meaning of a sentence for a person bears on these relations its uses stand in in her mouth or ear: what feature of her immediate environment she thereby responds to; what other sentences she acquires the propensity to assent to or dissent from upon hearing it, which utterances, being heard, can give her the propensity to use it; what she does upon uttering or hearing it.<sup>23</sup>

Sentences which can play the role of language entry transitions essentially are immediate responses to the features in the environment; and they are usually related with other sentences as premises of inferential transitions leading to them. But not all

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<sup>22</sup> Sellars, *Naturalism and Ontology*, p. 103.

<sup>23</sup> It is obvious that these relations, particularly inferential relations, a sentence may bear in one English speaker’s mouth or ear cannot be identical with the relations the same sentences bear in another English speaker’s mouth or ear. The case of a speaker of French is even more radical in that she uses and is responsive to completely different sentences. This is a topic we will briefly consider in the fourth chapter.

instances of their use need be a response to a non-verbal feature of the environment, and a premise for inferential transitions. They may as well be uttered as the conclusion of an inference, as in the case of the example given above. The sentence, “streets are wet” is an observation sentence, even if in our example it functioned as the conclusion of an inference.

Some sentences, however, can never be uttered as immediate responses to the features of the environment. The meanings of such sentences only bear on inferential relations in which they stand. But there cannot be any sentence whose use does not stand in any inferential relation whatsoever, and there cannot be any sentence, even if its use stands in inferential relations with the use of other sentences, whose meaning just bears on the relation its use bears to the observable features of the environment.

At this point the inferentialist handling of language entry transitions seems to differ from Quine’s handling of observation sentences. He seems not to think that the inferential relations an observation sentence bears to other sentences is relevant for its meaning, as evinced by the fact that he thinks the match between the stimulus meanings of two observations sentences gives a sufficient ground for translating one with the other.

The relevance of inferential relations for the meanings of observation sentences, and in fact for the meanings of all sentences, cannot be appreciated if one’s notion of inference comprises only logical inferences.

## Material Inferences

Logical inferences are inferences whose validity depends solely on their logical form. Any substitution of 'red' in "This is red, therefore it is not non-red" will again give a valid inference. Alongside logical inferences Sellars recognizes the existence of material inferences whose validity depends on non-logical vocabulary, like "There is smoke in the room; therefore there is fire in the room." According to Sellars, this latter inference is not a shorthand version of the logically valid inference "If there is smoke, there is fire. There is smoke; therefore there is fire."<sup>24</sup>

Brandom defends the notion of material validity in the following way. Note that "There is smoke in the room, therefore there is fire in the room" will again give materially valid inferences if one makes substitutions for non fire-vocabulary –e.g. "There is smoke in the building, therefore there is fire in the building." Brandom suggests that if we take the notion of material validity of inference as a primitive we can then explain logical validity in terms of material validity by specifying somehow a subset of our vocabulary as 'logical', and then looking for materially valid inferences that remain valid under the substitution of 'non-logical' expressions for 'non-logical' expressions.<sup>25</sup> According to this line of thinking logical vocabulary related validity is just a species of validity alongside fire-vocabulary related validity, color-vocabulary related validity etc.<sup>26</sup>

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<sup>24</sup> Sellars, "Is there a Synthetic *A priori* ?" p. 317.

<sup>25</sup> Robert B. Brandom, *Articulating Reasons* (Cambridge: Harvard University Press, 2000), p. 55.

<sup>26</sup> Robert B. Brandom, *Making It Explicit: Reasoning, Representing and Discursive Commitment* (Cambridge: Harvard University Press, 1998), pp. 104-105.

It is obvious that logical vocabulary is nevertheless different from other vocabularies. For all materially valid inferences can be replaced by logically valid inferences. But it is not possible to replace all materially valid inferences by inferences whose validity depends on color-vocabulary. In fact, every inference, valid or not, with a certain conclusion can be replaced by a logically valid inference that has the same conclusion. This may have to do with the considerations that govern the delimitation of the logical vocabulary. Brandom writes, “Frege’s logical notation is designed for expressing conceptual contents, making explicit the inferential movements that are implicit in anything that possesses such a content.”<sup>27</sup>

Hence, it may not be accidental that we can replace all material inferences by logically valid inferences with the same conclusions. According to Brandom, the reason for this is not that in fact all material inferences are short hand versions of logically valid inferences, but rather that the vocabulary we recognize as logical vocabulary has been used to enable us to make explicit in the form of a claim the inferential moves we endorse.<sup>28</sup> They not only enable us to state explicitly the particular moves but also the move patterns we endorse, of which the particular moves are the instances. That is, the validity of the material inference “Fido is a dog, therefore Fido is an animal” bears on the predicates ‘dog’ and ‘animal.’ According to the line of thinking presented here, this is a zoologically valid inference. The construction “Anything is such that if it is a dog then it is an animal” enables us to express in the form of a claim our endorsement of all inferences of the form, “x is a dog, therefore x is an animal’.

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<sup>27</sup> Brandom, *Articulating Reasons*, p. 57.

<sup>28</sup> For Brandom’s discussion of the function of logical vocabulary see Brandom, *Making It Explicit*, pp. 107-116.

It is obvious that we do not all endorse the same patterns of material inference. The boon of the capacity to lay down explicitly the material inference patterns we endorse is to be able to criticize them, to be able to give reasons for or against their adoption. Without that capacity we would still be intelligent, thoughtful beings. We do not exclude people who are not capable of logically articulating their train of thinking from the community of rational beings.<sup>29</sup> Inferring the presence of fire from the presence of smoke is a rudimentary sign of intelligence that can even be manifested by animals, which obviously cannot be said to entertain the tacit premise, “If there is smoke, then there is fire.”<sup>30</sup>

#### Inferential Functions Conferred by Non-Logical Vocabulary

Material inferences are not singular intralinguistic transitions. That is, each material inference is an instance of a general pattern of inference. Substituting certain terms in the premise and the conclusion of a valid material inference will again yield a valid material inference. The terms whose substitution would affect the validity of the resulting inference are the terms by virtue of which the original material inference is valid. Substituting ‘Rintintin’ for ‘Idéefixe’ in “Idéefixe is a dog, therefore Idéefixe is an animal” will again yield a valid inference. But substituting ‘building’ for ‘dog’ will not do so.

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<sup>29</sup> I here follow Brandom who distinguishes rationality from logical capacity. Brandom, *Making It Explicit*, p. 117.

<sup>30</sup> For, even if their behavior may show such episodes as the perception of smoke –‘there is smoke’- and the subsequent avoidance of that direction –‘there is fire’-, no episode of their behavior can be interpreted as corresponding to ‘if there is smoke then there is fire.’ The latter must be embodied by a behavior that is not necessarily manifested in the presence of smoke or fire.

We have said that the meaning of a sentence is partially determined by its inferential role. This may have led the reader to wonder how hitherto unused sentences can have an inferential role, and thus a meaning. Here we see how the way sub-sentential expressions are generally used can confer an inferential function on a sentence in which they figure. The way the term ‘dog’ is being used manifests a pattern such that its predicative application to a singular term leads one to assent to a sentence that applies the predicate ‘animal’ to the same singular term. The learner can acquire this transition pattern by being exposed to a few instances.

We should have learned to use logical vocabulary, and consequently to understand new sentences involving them, in the same way. For instance, the use of ‘and’ presents a pattern such that people asserting a conjunction tend to assent to both of its conjuncts, and people who separately assert two sentences, tend to assent to their conjunction as well.

The difference between ‘dog’ and ‘and’ is that the use of ‘dog’, unlike ‘and’ contributes to some sentences in which it figures a perceptual role as well. What has been presented should have already made clear that the account of meaning inferentialism proposes generalizes a view that looks quite plausible in relation with the logical vocabulary. Namely, the view that what logical vocabulary contributes to the meaning of a sentence is an inferential function that makes the sentence the premise or the conclusion of a set of logically valid inferences.

This view seems to back the semantic criterion Quine proposes for the translation of truth functional conjunction: “[Conjunction] produces compounds ... one is prepared

to assent to always and only when one is prepared to assent to each component.”<sup>31</sup> Note that in the application of the criterion for the translation of conjunction one must take into account the verbal aspects of the circumstances and of the behavioral sequels pertaining to the utterance of a sentence. To identify the native word for conjunction, we cannot just query a native about a native sentence which we surmise to be a conjunction. We should also either know that the conjoined sentences are sentences to which the native has already assented, or check whether he then also assents to the suspected conjuncts separately.

The inferentialist standpoint implies that such criteria should be applied in the translation of non-logical vocabulary as well. For, according to inferentialism, not only the logical vocabulary but other elements of the lexicon as well contribute to the meaning of sentences by conferring inferential roles upon them.<sup>32</sup> Hence, the verbal aspects of the circumstances and of the behavioral sequels pertaining to the utterance of a sentence should be taken into account in the translation of non-logical vocabulary as well.

We have thus found again the thread of verbal circumstances and sequels of the use of sentences, which we had left at the end of the first chapter. Although as we shall see the generalization in question here does not matter much in inter-linguistic radical translation, it matters in case one attempts a radical translation of the speech of her interlocutors at home.

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<sup>31</sup> W. V. Quine, *Word and Object* (Cambridge: MIT Press, 1960), p. 58.

<sup>32</sup> Sellars, *Naturalism and Ontology*, pp. 103-104.

## Problematic Consequences of Inferentialism

The inferentialist way of explaining meanings deprives meanings of their universality, and even renders meanings of sentences idiosyncratic to each speaker. We can at this point more clearly see the reason thereof.

If the meaning of a sentence is partially determined by its inferential role as premise and conclusion in material inferences, then no sentence belonging to a radically foreign language can have the same meaning as an English sentence, for the simple reason that no foreign sentence will be inferentially related to an English sentence, by entailing it or by being entailed by it. The speakers of a radically foreign language should manifest patterns of inference different than those manifested by the speakers of English, as their sentences are different from those of the English speaking persons.

Neither do all speakers of English manifest the same patterns of material inference; hence there are inferential moves on whose validity we disagree. Given such a pattern of material inference that my interlocutor endorses and I do not, certain sentences, precisely those that appear in the instances of the material inference pattern in question, will have different meanings in my interlocutor's mouth and in mine. This is a problem that raises the questions, What is it to speak the same language? What is it to speak English?

I now put off the discussion of these problematic consequences of adopting an inferentialist standpoint about meaning. I will respond to them in the fourth chapter.

### CHAPTER III

#### QUINE'S ARGUMENT

In the first chapter I mentioned the conjecture that underlies Quine's rejection of a determinate relation of translation between the sentences of two languages. I noted that if that conjecture is true there must as well be a non-homophonic mapping of English sentences onto English sentences such that it can be used as a substitute for the homophonic mapping in communication, but its images will be non-interchangeable with those of the homophonic mapping. This corollary of the conjecture backed Quine's rejection of inter-subjective sentential synonymy at home. Quine went even further. Although he recognizes that the use of the homophonic mapping is pedagogically indispensable<sup>33</sup> and that it is clearly more convenient to use, he thinks that apart from these respects the homophonic mapping has no semantic superiority over the resulting non-homophonic mapping.

But I did not mention any argument Quine gives in favor of the conjecture. In the present chapter I will present Quine's argument. In the following chapter I will attempt

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<sup>33</sup> W.V. Quine, "Ontological Relativity," in *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969) p. 46.

to show on inferentialist grounds that even if this argument renders plausible his conjecture, and a fortiori the possibility of a non-homophonic mapping of English sentences onto English sentences with the qualities specified in the first chapter, it can by no means support the claim that the homophonic mapping is not semantically superior to the non-homophonic mapping.

Quine provides only one argument in support of that conjecture. It draws on the thesis that our theories may be under-determined even by all possible evidence. His argument that concerns the emblematic ‘gavagai’ example in fact falls short of satisfying the non-interchangeability constraint, which is crucial for the rejection of the existence of a determinate relation of sentential synonymy. I will discuss this latter argument, namely the argument for the inscrutability of reference, in the following chapter.

### Indeterminacy of Radical Inter-Linguistic Translation

#### Preliminary: Under-Determination of Theories by Empirical Evidence

Quine’s conjecture was that there may be two manuals of translation from a foreign language onto English that maps the same foreign sentences onto different English sentences. They will be such that both manuals will ensure smoothness of dialogue and success in negotiation with the foreigners but the different English translations they yield for the same foreign sentences will not be interchangeable in the home context.

Quine presents his sole argument for this conjecture in “On the Reasons for Indeterminacy of Translation.”<sup>34</sup> The argument draws on the thesis of under-determination of theories by all possible evidence. Before giving a rough statement of this thesis some preliminaries will be in order.

Quine divides all sentences into two types: occasion sentences and standing sentences. Occasion sentences are sentences like, “it is raining,” “Zeynep has headache” etc. Their truth value changes over time. Standing sentences like “It rained at Kadıköy from 8:00 pm to 8:30 pm on July 8, 2006,” “Zeynep had headache on 8 July 2006” are true or false once for all. Observation sentences constitute a subset of occasion sentences. They are sentences that command the immediate assent or dissent of the subject upon his being exposed to a certain non-verbal stimulus. What counts as an observation sentence is community relative. Observation sentences for a community are those occasion sentences on whose truth or falsity the members of a linguistic community can immediately agree just by witnessing a certain state of affairs. For this reason, “Zeynep has headache” may not count as an observation sentence, except perhaps for Zeynep herself.

After these preliminaries Quine’s thesis of under-determination of theories by all possible evidence can be roughly formulated in the following way.

If we replace all indexical expressions and features of all possible English observation sentences with the fitting non-indexical expressions and features in all possible combinations –that is, if we supply dates and places, and replace all indexical pronouns with non-indexical terms in all combinations- and pick out of the resulting

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<sup>34</sup> W. V. Quine, “On the Reasons for Indeterminacy of Translation,” *The Journal of Philosophy* 67, (1970), no.6, pp. 178-183.

standing sentences only those which are true then there may still be two physical theories in English, say A and B, which are both equally supported by these sentences but 'at odds' with each other. In Quine's terminology such two theories are empirically equivalent but logically incompatible.

Empirically equivalent theories are those which entail the same observation categoricals. Observation categoricals are conditionals made up of two observation sentences. According to Quine theories draw their empirical support from the true observation categoricals they entail. The two hypothetical theories A and B in question above must entail the same observation categoricals, hence be empirically equivalent, so that they can both be equally well supported by all true observation sentences ever possible.

The logical incompatibility of two theories, say C and D, can be formulated in the following manner. There is a sentence p that is entailed by C under hypothesis S and another sentence q that is entailed by D under the same hypothesis, such that if p then not q. If C and D are also empirically equivalent, like our hypothetical theories A and B, then it is clear that neither p nor q can be observation sentences. For, if C and D entail the same observation categoricals, then they cannot entail under the same observation conditions two observation sentences that differ in truth value.

### Quine's Argument for the Conjecture

A manual of translation from an alien language into English includes a set of analytical hypotheses that equates native terms with terms in English. One principal constraint on a set of analytical hypotheses is that it maps native observation sentences

which the natives tend to assent to in certain observational circumstances into observation sentences in English to which speakers of English tend to assent in similar observational circumstances.

This constraint limits fairly well the acceptable English translations of the native words that figure in observation sentences, but it nevertheless does not reduce the alternatives into one. For in English we have observation sentences that prompt assent in exactly the same observational circumstances, such as “lo, a rabbit” and “lo, an undetached rabbit part.” Quine maintains that it may be possible to work out two sets of analytical hypotheses, one of which equates with the native term ‘gavagai’ the English term ‘rabbit,’ while the other equates the same native term with ‘undetached rabbit part.’ So that one of them yields “Here is a rabbit” as the translation of a native observation sentence, while the other yields “Here is an undetached rabbit part” as the translation of the same native sentence. Two such sets of analytical hypotheses will map the same native terms into non-interchangeable English terms, but eventually will yield different but holophrastically interchangeable translations of sentences.<sup>35</sup> The possibility of giving two such acceptable sets of analytical hypotheses constitutes Quine’s thesis of inscrutability of reference which we have promised to discuss in the following chapter.

We may thus here disregard the possibility of giving different but equally acceptable translations of observation sentences and of the terms that figure in them. For this possibility concerns only alternative manuals of translations that yield different but interchangeable translations of sentences, but the argument I am currently interested in concerns alternative manuals of translations that yield non-interchangeable translations

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<sup>35</sup> Ibid., p. 182.

of the same sentences. So, in so far as we are after sets of analytical hypotheses that yield non-interchangeable but acceptable sentence translations, we may suppose that observation sentences and the terms that figure in them can be given unique translations.

Additionally if we suppose that logical vocabulary and the terms that are used in the determination of space and time can be uniquely translated, then translations of non-observational sentences that are made up just of non-indexical terms that appear in observation sentences can as well be uniquely fixed. But there are bound to be sentences which contain terms that do not appear at all in observation sentences.

Quine's argument in question here concerns the translation of such sentences. Quine claims that even if the translations of observation sentences, of the terms that appear in those sentences, of the logical vocabulary, and of the terms that indicate space and time are uniquely fixed, it may still be possible to give non-interchangeable but equally acceptable translations of theoretical sentences.

More precisely, Quine claims that there may be two acceptable manuals of translation, say M and M\*, from a foreign physicist's language into English with the following specifications. They are made up of identical analytical hypotheses except those that concern some terms that specifically appear in the sentences that figure in the formulation of the foreign physicist's theory, say K; and they yield non-interchangeable translations of the sentences that contain these terms. It is clear that given the identity of the rest of their analytical hypotheses these two manuals will yield identical translations of the sentences that do not contain these specific terms.

The plausibility of Quine's conjecture is bound up with the plausibility of this claim. Quine thinks that under-determination of theories by all possible evidence,

namely the possibility to formulate in English theories that are empirically equivalent but logically incompatible, renders this claim plausible.

Suppose that the manual of translation M from the foreign physicist's language into English ascribes to the foreign physicist belief in theory T formulated in English. That is, the translation of the sentences of K under M yields sentences of T formulated in English. If we accept Quine's thesis of under-determination of theories by all possible evidence then we may also suppose that we may formulate in English other theories, which are empirically equivalent but logically incompatible with T.

Quine believes that among such theories there may be one, say T\*, such that sentences that appear in the formulation of K can be equally acceptably translated into sentences that appear in the formulation of T\*, as into those that appear in the formulation of T.<sup>36</sup> A manual of translation, say M\*, that differed from M just in virtue of analytical hypotheses that concern some theoretical terms that appear in the formulation K, can then map sentences of K into those of T\*.

Such a manual will yield some translations that are non-interchangeable with those provided by T. For, as T and T\* are logically incompatible, there should be p and q, respectively implied by T and T\* under the same hypothesis, such that if p then not q; there should as well be a sentence, say S, implied by K, which is translated by p under M. Now, if S is translated by q under M\*, clearly the translations p and q cannot be used interchangeably. But it may also be the case that under M\* S is translated by a sentence other than q, say r. Neither can p be used interchangeably with r without giving rise to a contradiction. For if p were interchangeable with r then T\* would simultaneously be

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<sup>36</sup>Clearly not all theories empirically equivalent but logically incompatible with T can work as an acceptable translation of K. T and T\* should be inter-translatable. *Ibid.*, pp. 178-183.

implying both p and q. Neither, for the same reason, can all sentences which appear in the formulation of T or T\* and which translate the same foreign sentences be interchangeable.

### The Home Context Corollary of Quine's Argument

The argument presented above can easily be adapted to the home context. Quine himself must already have had in mind a similar line of reasoning when in 1959 he wrote the following:

Our advantage with a compatriot is that with little deviation the automatic or homophonic hypothesis of translation fills the bill. If we were perverse and ingenious we could scorn that hypothesis and devise other analytical hypotheses that would attribute unimagined views to our compatriot, while conforming to all his dispositions to verbal response to all possible stimulations. Thinking in terms of radical translation of exotic languages has helped to make factors vivid, but the main lesson to be derived concerns the empirical slack in our beliefs. For our own views could be revised into those attributed to our compatriot in the impractical joke just imagined; no conflict with experience could ever supervene except such as would attend our present sensible views as well.<sup>37</sup>

Suppose there are two manuals of translations such as M and M\* from a foreign language into English, with the specifications discussed above. Then, there must as well be a non-homophonic mapping of the sentences of my interlocutor onto mine that can be used as a substitute for the homophonic mapping, such that it will map all sentences of my interlocutor onto mine homophonically, apart from the sentences that involve the theoretical terms which M and M\* equate with different foreign terms. I can translate the sentences uttered by my interlocutor into the foreign language by using M, and then translate the resulting foreign sentences back into English by using M\*. The passage from *Pursuit of Truth* that points out this possibility was quoted in the first chapter. It

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<sup>37</sup> Quine, *Word and Object*, p. 78.

must as well then be possible to devise a manual of translation from English onto English to the same effect. Term it H\*.

Using H\* we will obtain just the kind of situation described in the quoted passage. If when interpreted under the homophonic manual H, my interlocutor appears to hold T, she will appear to hold T\* when interpreted under H\*. T and T\* are by definition theories that can be interchanged with each other without causing any conflict with experience even though individual sentences that appear in their formulation or sentences that contain some theoretical terms that are specific to them cannot be used interchangeably.

#### Quine's Rejection of the Semantic Superiority of the Homophonic Manual

Quine thinks the homophonic manual H has no semantic superiority over the non-homophonic manual H\*. Quine supports his view by presenting it as the consequence of a verificationist approach to meaning and a holistic approach to evidence:

When on the other hand we take a verification theory of meaning seriously, the indeterminacy would appear to be inescapable...If we recognize with Peirce that the meaning of a sentence turns purely on what would count as evidence for its truth, and if we recognize with Duhem that theoretical sentences have their evidence not as single sentences but only as larger blocks of theory, then the indeterminacy of translation of theoretical sentences is the natural conclusion.<sup>38</sup>

H and H\* differ only in their analytical hypotheses that concern certain theoretical terms that specifically appear in the formulation of T. H maps these into the same terms, and the sentences that have these into the same sentences. Whereas H\* maps these terms into terms that specifically appear in the formulation of T\*, and the sentences that

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<sup>38</sup> W. V. Quine, "Epistemology Naturalized," in *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969), pp. 80-81.

contain the former into sentences that contain the latter.  $H^*$  preserves also the structure of logical relations that obtain among the sentences. If for example  $P$  follows from  $A$  and  $B$ , which take part in the formulation of  $T$ , under the hypothesis  $S$ , then  $P$ 's translation under  $H^*$  will follow under the same hypothesis from the translations of  $A$  and  $B$ , say  $A^*$  and  $B^*$ , which appear in the formulation of  $T^*$ . Consequently the translation of  $T$  under  $H^*$  yields  $T^*$ .

Verificationism about meaning and holism about evidence rule out the view that  $H$  is semantically superior to  $H^*$ . Apart from sentences that contain the terms concerning which their analytical hypotheses differ, they yield identical translations. As far as these sentences are concerned their translations under  $H^*$  are not semantically inferior to those under  $H$ . These sentences must be theoretical sentences. They are either sentences that appear in the formulation of  $T$ , or sentences that follow from them under certain hypotheses. Their translations under  $H$  yield the same sentences; and their translations under  $H^*$  are as well theoretical sentences, which either appear in the formulation of  $T^*$ , or which follow from sentences that appear in the formulation of  $T^*$  under the same hypotheses.

If the meaning of a sentence depends on what counts as evidence for its truth and if theoretical sentences do not have their evidence as single sentences but together with other theoretical sentences in larger blocks of theory, the rival translations under  $H$  and  $H^*$  of the same  $T$ -theoretical sentences cannot get any distinguishable semantic content which would render one of the rivals a semantically better translation.

$T$  and  $T^*$  imply the same observation categoricals; and theories get their evidential support from the true observation categoricals they imply. There cannot be any particular observation that would immediately lead one to reject a particular  $T$ -

theoretical sentence or a particular T\*-theoretical sentence. But if one decides to reject a T-theoretical sentence for whatever empirical reasons, the same reasons would apply as well for the rejection of the T\*-theoretical sentence that is its translation under H\*.

Consequently rival translations of the same T-theoretical sentences under H and H\* have just the same empirical rejection or affirmation conditions however loose these conditions may be; and thus for someone who takes the verification theory of meaning seriously they individually have indistinguishable semantic contents. This will be the case despite the logical incompatibility of what follows from T and T\*.

## CHAPTER IV

### INFERENCEALIST ARGUMENTS

#### Semantic Superiority of the Homophonic Manual over Non-Homophonic Manuals that Satisfy the Sentential Non-Interchangeability Constraint

While granting the plausibility of the existence of a manual such as H\*, we can reject on inferentialist grounds the view that this manual is semantically on the same footing as the homophonic manual. Shortly expressed the reason for this is that the verbal aspects of the circumstances and of the sequels pertaining to the utterance of some sentences by my interlocutor and by me correlated by H\* would not match. These sentences are those that contain the theoretical terms that specifically belong to T and T\*. We have seen in the second chapter that some verbal stimulations, precisely those leading to inferential transitions, semantically matter. Before fully expressing our reason for rejecting the view that H is semantically on the same footing as H\*, recalling certain points I have highlighted in my presentation of inferentialism will be in order.

## Reminders

According to inferentialism the meaning of a sentence for a person is partially determined by the inferential role it assumes in the mouth or ear of that person. The remaining factors that determine the meaning of a sentence are its perceptual role and practical role.

Inferentialism adopts a liberalized notion of inferential validity, that includes such transitions as “There is smoke; therefore there is fire” as valid inferences in their own right, and different from the transition, “If there is smoke then there is fire; there is smoke; therefore there is fire.” Unlike logical validity, we can disagree on the material validity of an inference. That is the reason why I above relativized the meaning of a sentence to a person.

The view that logical vocabulary contributes to the meaning of sentences in which they figure by conferring on them inferential functions can readily be accepted. The liberalized notion of material validity enables us to extend this view to cover non-logical vocabulary as well. We accordingly have noted that according to inferentialism not only logical vocabulary but non-logical vocabulary as well contributes to the meaning of sentences by conferring on them inferential functions.

This latter view has certain consequences for translation. Before re-stating and elaborating these consequences I have to make a few remarks about the inferentialist position on translation.

## The Inferentialist Standpoint about Translation

According to inferentialism the aim of translation cannot be relating sentences in different languages that have the same meaning. We have more than once noted that one consequence of the inferentialist way of explaining meaning is depriving meanings of their universality. Inferentialism seeks to explain meaning in terms of dispositions to linguistic behavior. Since speakers of different languages have different dispositions to verbal behavior, the meanings of their sentences must differ.

Hence in radical inter-linguistic translation the best we can aspire to will be to correlate sentences that apparently fulfill similar perceptual, practical and inferential roles. Since the meaning of a sentence is completely determined by the perceptual, inferential and practical roles it assumes, what is aimed at in radical translation can be regarded as ensuring similarity of meaning between translational correlates. The similarity to be obtained is bound to be very loose because the similarity of inferential role that can be sought in radical inter-linguistic translation cannot but be a very loose one. We can fare better in relation with perceptual and practical roles. We can devise our analytical hypotheses in such a way that sentences that are correlated as each other's translations be sentences the utterances of which are prompted by similar non-verbal circumstances, and prompt similar sequels of non-verbal behavior. But we cannot correlate sentences whose utterances, as premises of inferential transitions, prompt the utterance of more or less the same sentences, and as conclusions of inferential transitions, are prompted by the utterance of more or less the same sentences. For no English sentence can be inferentially related with a sentence belonging to a radically foreign language.

The most we can do is to devise our analytical hypotheses in such a way that the resulting translation manual preserves as far as possible the overall structure of the inferential relations that exist among the sentences of the foreign language. To repeat, these inferential relations are not just the logically valid ones, but include as well those recognized by the speakers of the foreign language as materially valid.

This result can be sought only by paying attention to the inferential role subsentential terms confer on the sentences in which they figure. Since the inferential relations we are interested in are not just those logically valid ones we should pay attention to the inferential roles conferred by the non-logical vocabulary as well.

Suppose Turkish were a radically foreign language for the speakers of English. Before equating the Turkish word 've' with the English word 'and' we should ascertain that the speakers of Turkish tend to infer from instances of 'x ve y' the sentences that stood in the places of x and y; and conversely instances of 'x ve y' from sentences that stood in the places of x and y. For speakers of English tend to infer from instances of 'x and y' the sentences that stood in the place of x and y, and so on. On the other hand, if we equate with the Turkish word 've' the English word 'or' the structure of inferential relations in which instances of 'x ve y' stood cannot be re-instantiated among the resulting translations.

This way of proceeding should be adopted in devising the analytical hypotheses that concern the non-logical vocabulary as well. Suppose we look for the Turkish word to be equated with the word 'animal', and consider a certain word, say w. We should for example pay attention to make sure that speakers of Turkish tend to infer from sentences which we translate by instances of 'x is a bird' instances of 'y bir w'dir.' In this way we preclude 'memeli' as a likely option.

As I have pointed out we nonetheless cannot ensure more than a very loose similarity of meaning. So loose that two non-interchangeable English sentences can be claimed to have meanings that are each maximally similar with the meaning of the same Turkish sentence.

There can be more than one way of translating Turkish sentences, which correlates sentences that have similar perceptual and practical roles, and moreover preserves the structure of the inferential relations among sentences. For instance, it is possible to give two divergent manuals of translation, one of which equates the Turkish word ‘hayvan’ with the English expression ‘animal stage’, instead of equating it with the English word ‘animal’, as the other manual does. Some other divergent analytical hypotheses will compensate the aberrance that would result from altering just the analytical hypothesis concerning the word ‘hayvan’ in the other manual. But the manuals in question in this particular example will yield interchangeable translation of sentences. Note that “Fido is an animal” is, in all respects relevant for inferentialism, interchangeable with “Fido stage is an animal stage.” For, since they materially entail each other, in all perceptual situations and inferences they can be interchangeably used.

If we want to see how it can be argued that two non-interchangeable English sentences have meanings that are each maximally similar with the meaning of a sentence in Turkish, considered as a radically foreign language, we should look in the direction of Quine’s argument presented in the previous chapter. We can attempt to give a very simplistic illustration of the situation envisaged by that argument.

Suppose the radically foreign language that was in question there were Turkish; and thus K was a Turkish physicist’s theory. Let ‘A’, ‘B’, ‘C’ be theoretical predicates and Q<sub>1</sub> and Q<sub>2</sub> be observational predicates, and K be formulated by the sentences “(x)

$Q_1x > Ax$ ”, “ $(x) Ax > Bx$ ”, “ $(x) Ax > -Cx$ ”, and “ $(x) [Bx \vee Cx] > Q_2x$ ”. Let ‘F’, ‘G’ and ‘G\*’ be theoretical terms and  $O_1$  and  $O_2$  observational predicates in English, and T be formulated by the sentences “ $(x) O_1x > Fx$ ”, “ $(x) Fx > Gx$ ”, “ $(x) Fx > -G^*x$ ” and “ $(x) [Gx \vee G^*x] > O_2x$ ”. Let ‘F\*’ be another theoretical term in English and T\* be formulated by the sentences, “ $(x) O_1x > F^*x$ ”, “ $(x) F^*x > G^*x$ ”, “ $(x) F^*x > -Gx$ ” and “ $(x) [Gx \vee G^*x] > O_2x$ ”. Furthermore suppose that under the manual of translation M, ‘ $Q_1$ ’ is equated with ‘ $O_1$ ’, ‘ $Q_2$ ’ equated with ‘ $O_2$ ’, ‘A’ is equated with ‘F’, ‘B’ is equated with ‘G’ and ‘C’ with ‘G\*’; and that under the manual of translation M\*, ‘ $Q_1$ ’ is equated with ‘ $O_1$ ’, ‘ $Q_2$ ’ equated with ‘ $O_2$ ’, ‘A’ is equated with ‘F\*’, ‘B’ is equated with ‘G\*’ and ‘C’ with ‘G’.

Then K is translated under M as T, and under M\* as T\*. T and T\* are empirically equivalent, since both imply the observational categorical “ $(x) O_1x > O_2x$ ”; and they are logically incompatible, since under the observational hypothesis “ $O_1a$ ”, T implies “Ga” and T\* implies “ $\neg Ga$ ”.

According to the inferentialist standpoint on logical vocabulary, the acceptance by the Turkish physicist of “ $(x) Q_1x > Ax$ ”, “ $(x) Ax > Bx$ ”, “ $(x) Ax > -Cx$ ”, and “ $(x) [Bx \vee Cx] > Q_2x$ ” presupposes or entails his endorsement of the inferences respectively from instances of ‘ $Q_1x$ ’ to instances of ‘Ax’, from instances of ‘Ax’ to the instances of ‘Bx’ and ‘-Cx’, from instances of ‘Bx’ or from instances of ‘Cx’ to instances of ‘ $Q_2x$ ’. These inferences in turn determine the meanings of the instances of  $Q_1x$ ,  $Q_2x$ , Ax, Bx, Cx. In so far as instances of Ax, Bx and Cx are concerned their meaning is completely determined by these inferences since they are not used in observational contexts.

The most we can do in translating these groups of sentences is to preserve the structure of the inferential relations that obtain between them in the mouth of the Turkish physicist. Both M and M\* preserve the structure of inferential relations that

obtain between the instances of ‘ $Q_1x$ ’, ‘ $Q_2x$ ’, ‘ $Ax$ ’, ‘ $Bx$ ’, ‘ $Cx$ ’ in the mouth of the Turkish physicist. For they are either under M translated by instances of respectively ‘ $O_1x$ ’, ‘ $O_2x$ ’, ‘ $Fx$ ’, ‘ $Gx$ ’ and ‘ $G^*x$ ’, or under  $M^*$  by instances of ‘ $O_1x$ ’, ‘ $O_2x$ ’, ‘ $F^*x$ ’, ‘ $G^*x$ ’ and ‘ $Gx$ ’ respectively. In the mouth of a proponent of T instances of ‘ $O_1x$ ’, ‘ $O_2x$ ’, ‘ $Fx$ ’, ‘ $Gx$ ’, ‘ $G^*x$ ’ are inferentially related with each other in the same way as the Turkish sentences they translate are inferentially related in the mouth of the Turkish physicist. The same is the case for the instances of ‘ $O_1x$ ’, ‘ $O_2x$ ’, ‘ $F^*x$ ’, ‘ $G^*x$ ’, ‘ $Gx$ ’ in the mouth of a proponent of  $T^*$ .

Note that under the observational hypothesis “ $O_1a$ ”, “ $Ga$ ” and “ $G^*a$ ” cannot be interchangeably used without giving rise to a contradiction. But it can be argued that both “ $Ga$ ” and “ $G^*a$ ” have meanings that are equally similar to the meaning of “ $Bb$ ” in Turkish, which is translated as “ $Ga$ ” under M and as “ $G^*a$ ” under  $M^*$ . In the mouth of the Turkish physicist “ $Bb$ ” is entailed by “ $Ab$ ” and entails “ $Q_2b$ ”. In the mouth of someone entertaining T, “ $Ga$ ” is entailed by “ $Fa$ ”, which under M translates “ $Ab$ ”; and it entails “ $O_2a$ ”, which under M translates “ $Q_2b$ ”. In the mouth of the same person when he is entertaining  $T^*$ , “ $G^*a$ ” is entailed by “ $F^*a$ ”, which under  $M^*$  translates “ $Ab$ ”; and it entails “ $O_2a$ ”, which under  $M^*$  translates “ $Q_2b$ ”. A similar argument could have been given concerning instances of ‘ $Fx$ ’, ‘ $F^*x$ ’ and ‘ $Ax$ ’.

### The Peculiarity of the Home Context

According to Quine communication among speakers of English as well involves translation. Albeit the translation manual that is usually used is the homophonic

manual.<sup>39</sup> We have seen that Quine thinks there may be a non-homophonic manual which, even though it yields translations that are non-interchangeable with those derived from the homophonic manual, can be used as a substitute of the homophonic manual in communication. We have presented the argument Quine gave in support of the possibility of such a non-homophonic manual. We have as well noted that Quine thinks, on verificationist grounds, that this non-homophonic manual will not be semantically inferior to the homophonic manual we normally use.

However, if we suspend our reliance on the homophonic manual and set out for radical translation at home the conditions under which we have to work will not be the same as those that obtain in inter-linguistic translation. The looseness in the similarity of meaning that can be obtained in the radical inter-linguistic translation was due to looseness of similarity of inferential role that can be ensured. I have noted that in radical inter-linguistic translation it was not possible to correlate sentences whose utterances, as conclusions of inferential transitions, are prompted by the utterance of more or less the same sentences, and prompt, as premises of inferential transitions, the utterance of more or less the same sentences, since no English sentence can be inferentially related with a sentence belonging to a radically foreign language. The most we could aim for was to adopt a manual that preserved the structure of inferential relations in which the foreign sentences stood. And if Quine's argument presented in the previous chapter is correct there may be more than one manual that can achieve this.

In the home context however the sentences my interlocutors may utter are inferentially related with the sentences I may utter. For I and my interlocutors have

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<sup>39</sup> Quine, "Ontological Relativity," p. 46.

virtually the same repertory of sentences. I can therefore aim to translate the sentences uttered by my interlocutor by sentences which I infer from more or less the same sentences as those from which my interlocutor infers hers, and from which I more or less infer the same sentences, as those my interlocutor infers from hers. So, if I ever set out for radical translation at home my general guideline should also include the maxim, devise analytical hypotheses in such a way that the resulting manual correlates sentences that stand in more or less the same inferential relations with more or less the same sentences, in your mouth and in your interlocutor's mouth.

#### The Application of the Inferentialist Maxim for Radical Translation at Home

We can illustrate the difference made by the adoption of this extra maxim that has no application in radical inter-linguistic translation by adapting to the home context the illustration we considered above in relation with radical inter-linguistic context.

Let T be formulated by the sentences “ $(x) O_1x > Fx$ ”, “ $(x) Fx > Gx$ ”, “ $(x) Fx > -G^*x$ ” and “ $(x) [Gx \vee G^*x] > O_2x$ ”; and T\* be formulated by the sentences, “ $(x) O_1x > F^*x$ ”, “ $(x) F^*x > G^*x$ ”, “ $(x) F^*x > -Gx$ ” and “ $(x) [Gx \vee G^*x] > O_2x$ ”. Let H be the homophonic manual; and let H\* be the non-homophonic manual that differs from H just in equating ‘F’ with ‘F\*’, ‘F\*’ with ‘F’, ‘G’ with ‘G\*’ and ‘G\*’ with ‘G’. Hence T is translated under H\* as T\*.

Suppose my interlocutor observably makes the inferential moves which are instances of the patterns of inference made explicit by the sentences that figure in the formulation of T. That is, he infers from instances of ‘ $O_1x$ ’ instances of ‘Fx’, from instances of ‘Fx’ instances of ‘Gx’ and ‘ $-G^*x$ ’, etc. Furthermore suppose that even if I myself believe in T, and do not believe in theory T\*, I am acquainted with T\*. That is, I know but do not accept the sentences that figure in T\*'s formulation, and thus do not

endorse the patterns of inference these sentences express. If I were not acquainted with  $T^*$ , I would not be able to consider  $H^*$  as a manual of translation. The meaning of the instances of 'Fx', 'Gx' and 'G\*x', in the mouth of my interlocutor and mine must then be completely determined by the same inferential transitions.

If I adopt  $H^*$ , I will have to translate instances of 'Fx', 'Gx' and 'G\*x' uttered by my interlocutor by instances of 'F\*x', 'G\*x' and 'Gx' respectively. Suppose my interlocutor utters "Fa". By translating "Fa" in his mouth by "F\*a", I translate a sentence which in his mouth implies "Ga" and "-G\*a", by a sentence which would imply "-Ga" and "G\*a" in my mouth, if I believed in  $T^*$ . Whereas if I adopt the homophonic manual I translate his "Fa" with my "Fa" which implies just the same sentences in my mouth as in my interlocutor's.

My "Fa" is a semantically better translation of my interlocutor's "Fa" than my "F\*a" is because the former assumes in my mouth just the same inferential role as in my interlocutor's mouth. Just as the difference between  $H$  and  $H^*$  consisted only of the analytical hypotheses concerning the translation of 'F', 'G' and 'G\*', under the specified conditions,  $H$  yields semantically better translations than  $H^*$ .

If I believed  $T^*$ , and did not know of  $T$ , I would translate my interlocutor using  $H^*$  rather than the homophonic manual. For in that case to translate him homophonically would not be an available option. As I did not know of  $T$ , I would not know how to use 'F', and thus my vocabulary would have lacked the term 'F'. But if the homophonic translation is an available option it is the option that is semantically better.

My illustration may appear too simplistic. Especially because it can be argued that after all  $T$  and  $T^*$  are the same theory expressed in different ways. But the burden to show that there may be two empirically equivalent, logically incompatible and inter-

translatable theories which we would consider as different theories is on Quine's shoulders rather than mine. That any two theories that would support his conjecture concerning radical inter-linguistic translation must be inter-translatable is covertly implied by Quine: If there are two theories which translate equally well a foreign physicist's theory then these two theories must as well be inter-translatable.

If an example of a couple of empirically equivalent, logically incompatible and inter-translatable theories which we would recognize as different theories were available, I believe an analogue of the argument above could have been given. For a necessary condition for our recognizing two inter-translatable theories as different is the possibility to translate one into the other by a manual that yields translations that are not inter-changeable with the sentences they translate. We can then argue along the lines illustrated above that, if my interlocutor appears to go through the inferential transitions specific to one of these theories and I am acquainted with both of the theories, it would be semantically better for me to translate him homophonically rather than non-homophonically since the non-homophonic translation would correlate some sentences that do not stand in the same inferential relations with the same sentences. If all the sentences correlated by the non-homophonic translation stood in the same inferential relations with the same sentences then the correlates would be inter-changeable; there would not be two theories which we recognize as different.

Remember the passage we have quoted from *Word and Object's* second chapter.

Our advantage with a compatriot is that with little deviation the automatic or homophonic hypothesis of translation fills the bill. If we were perverse and ingenious we could scorn that hypothesis and devise other analytical hypotheses that would attribute unimagined views to our compatriot, while conforming to all his dispositions to verbal response to all possible stimulations. Thinking in terms of radical translation of exotic languages has helped to make factors vivid, but the main lesson to be derived concerns the empirical slack in our beliefs. For our own views could be revised into those attributed to our compatriot in the impractical

joke just imagined; no conflict with experience could ever supervene except such as would attend our present sensible views as well.<sup>40</sup>

Here Quine supposes that I can distinguish between the views I am to attribute to my interlocutor and those I am to assume. If I ever can distinguish between theories that can be revised into each other in such a way that no conflict with experience could ever arise this I believe would be possible for the following reason. I would articulate these theories by distinct bodies of sentences with quantifiers. Each body would consist of sentences which involved terms which did not figure in the sentences that belonged to the other body. In my mouth these terms would confer on sentences without quantifiers in which they figured dissimilar inferential roles. These roles would be so dissimilar that I would not be able to equate any of the sentences without quantifiers which involved one of the terms that is specific to one of the theoretical bodies, with another sentence without quantifiers that involved one of the terms that appeared in the sentences belonging to the other theoretical body. Neither, for this reason, would I be able to equate any of the sentences with quantifiers belonging to one of these bodies and which involve a term that is specific to the theoretical body to which it belongs with a sentence belonging to the other body. But I can replace one of these bodies as a whole with the other body as a whole. That is, I can revise one theory into the other without effecting any conflict with experience that did not affect my former theory.

If this is indeed a plausible way to account for my ability to distinguish between theories that can be revised into each other without having any recourse to the notion of propositions as the objects of my intentional attitudes and the meanings of my sentences, then I would not be able to attribute unimagined theories to my interlocutor if she

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<sup>40</sup> Quine, *Word and Object*, p. 78.

articulates her views by using more or less the same sentences as I do to express mine, which involve terms that confer on the sentences in which they figure in my interlocutor's mouth inferential functions similar to those they confer in my mouth on the sentences I utter.

As a matter of fact Quine thinks that the kind of indeterminacy that follows from the under-determination of our views by empirical evidence does not apply just in the case of highly theoretical sentences but in the case of our everyday sentences about middle sized objects as well.

What degree of indeterminacy of translation you must then recognize, granted the force of my argument, will depend on the amount of empirical slack that you are willing to acknowledge in physics...For my own part, I think the empirical slack in physics extends to ordinary traits of ordinary bodies, and hence the indeterminacy of translation likewise affects that level of discourse.<sup>41</sup>

The kind of argument I have presented above has a more obvious application in the case of sentences about middle sized objects, than in the case of highly theoretical sentences which can be logically inferred from an axiomatized theory. An axiomatized theory explicitly lays down the inferential transition patterns that determine the inferential roles conferred by the theoretical predicates appearing in the axioms on the sentences in which they figure. Nonetheless, sentences, which together as axioms express a theory, need not derive from already existing patterns of inferential transitions. They may have been thought out and accepted as such, and the patterns of inference they lay down may have been adopted only then.

We do not however have any theory of ordinary traits of ordinary objects; all we have are inference patterns in which stand instances of sentences about middle sized

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<sup>41</sup> Quine, "On the Reasons for Indeterminacy of Translation," p. 181.

objects. What can be termed a theory of ordinary objects should derive from already existing patterns of inference.

The logically articulate nature of theory formulations may lead us to mistake instances of material inferences as shorthand versions of logical inferences; and thus to overlook the crucial role of material inferences in determining the meanings of sentences which are involved in them. We however seldom pronounce principles about ordinary traits of ordinary objects. We may pronounce them for example when we see someone making a mistaken inference in order to correct him: “too much water will harm the rose!” Normally we just materially infer one sentence about ordinary objects from another without the help of any principles. Our parents did not teach us principles about ordinary objects, as our teachers taught us principles of geometry. They have just selectively reinforced certain patterns of inferential transition we have come to manifest by imitating them. And these patterns of inference partially determine the meanings of sentences about ordinary objects which are involved in their instances. So, the inferentialist maxim of translation I have mentioned above has a much clearer application in devising analytical hypotheses about terms that pertain to the ordinary traits of ordinary objects than in devising analytical hypotheses about highly theoretical terms.

Semantic Superiority of the Homophonic Manual over Non-Homophonic Manuals  
of the Sort that Grounds the Thesis of Inscrutability of Reference

Quine’s thesis of inscrutability of reference draws on the possibility of formulating functions from the set of objects we may linguistically refer onto the same set, such that

each object is mapped onto a different one. Its application to the home context can be formulated in the following way.

Suppose the homophonic correlation of my interlocutor's sentences with mine works. Let  $f$  be a mapping which maps the objects denoted in my mouth by the singular terms figuring in the sentences uttered by my interlocutor onto the same set but to different objects. For each predicate  $G$  true of the objects denoted by these singular terms let  $G^*$  be 'the  $f$  of a  $G$ '. Then,  $G^*a$  if and only if there exists an  $x$  such that  $f(x) = a$  and  $Gx$ . I then map sentences uttered by my interlocutor onto sentences which are obtained by replacing a singular term by a singular term that refers to its image under  $f$  and the predicate that applies to it by the predicate defined in terms of the original predicate and the function  $f$  in the aforementioned manner. In this way I can obtain a non-homophonic mapping of the sentences of my interlocutor onto mine which would enable us to dialogue smoothly and negotiate successfully.

But it is questionable whether a non-homophonic mapping obtained in this way can support the rejection of inter-subjective sentential synonymy at home. Quine himself draws a distinction between indeterminacy of reference, which concerns the translation of sub-sentential terms, and the thesis of indeterminacy of holophrastic translation. I think the reason for this distinction is that it is difficult to argue for the non-interchangeability of the alternative translations obtained in this way. Note that the non-homophonic image of a sentence under such a mapping and its image under the homophonic mapping entail each other. So, at least from an inferential point of view these images are not non-interchangeable. A non-homophonic mapping whose images are interchangeable with those of the homophonic mapping would not be sufficient to reject the notion of sentential synonymy across interlocutors.

Inferentialism however appears to provide resources even for arguing that a homophonic correlation is better than a non-homophonic mapping of the sort discussed above, whose images entail and are entailed by the images of the homophonic mapping.

According to inferentialism sub-sentential terms acquire a meaning by contributing to the meanings of sentences by conferring on them inferential, perceptual and practical roles. The inferential role contributed by a term is determined by the inferential patterns in the instances of which the term occurs, to borrow Quine's term, essentially; that is, so that its substitution by another term may yield an inference that is not endorsed by the person that endorsed the original inference.

I think that when I utter "Socrates is wise" I say something different than what I say when I utter "The universal complement of Socrates is the universal complement of something wise." The difference should somehow be accounted for, and the option to account for it in terms of the difference of the underlying propositions is rejected for good. Inferentialism may account for this difference in terms of the dissimilarity of the inferential patterns that partially determine the semantic contributions of 'wise' and 'the universal complement of something wise' on the one hand, and the semantic contributions of 'Socrates' and 'the universal complement of Socrates' on the other, to the sentences in which they figure in my mouth. The semantic contribution in question here is that of conferring an inferential role. The term 'wise' and the expression 'the universal complement of something wise' confer different inferential roles on my utterances. The same is true for 'Socrates' and 'the universal complement of Socrates' as well.

Note that such an account would also support the correlation of my interlocutor's "Socrates is wise" with my "Socrates is wise" over its correlation with my "The

universal complement of Socrates is the universal complement of something wise,” if the patterns of inference manifested by my interlocutor which involved the four sub-sentential terms in question are sufficiently similar to those I manifest. Consider the following as an illustration<sup>42</sup>:

I suppose that queries of the form ‘What is x?’, where x is replaced by common nouns, reveal some inferential relations among the sentences an English speaking person may use. Someone who responds to the query “What is an M?” by “M is a P,” “M is a Q” and “M is an R” is likely to assent, for singular terms ‘s’s, to ‘s is a P’, ‘s is a Q’ and ‘s is an R’ whenever he assents to ‘s is an M’.

Suppose the query took place and my interlocutor responded in the mentioned way. Suppose that I think I may have responded to the same query in the same way as she did but for the “M is an R” part instead of which I would rather put “M is a T.” Suppose also that we together assent to ‘s is an M’ for the same ‘s’s, where ‘s’s are singular terms.

Let ‘a’ be a singular term. I surmise that what has been supposed above about the queries of the form ‘What is x?’ is valid also for the queries of the form ‘Who is x?’ where x is replaced by a singular term. Suppose that upon being queried “Who is a?” my interlocutor responds by “a is k,” “a is l” and “a is m,” and that I think I may have responded to it with the same sentences. Suppose also that we assent to ‘a is an S’ mostly for the same ‘S’s, where ‘S’s are common nouns.

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<sup>42</sup> The argument makes use of inferences in which singular terms occur essentially. My acquaintance with such inferences is due to Brandom. See Robert B. Brandom, “What Are Singular Terms and Why Are There Any?” in *Articulating Reasons* (Cambridge: Harvard University Press, 2000).

Suppose Z is a working non-homophonic manual of translation of the afore discussed sort which equates my interlocutor's 'M', 'P', 'Q', 'R', 'T', 'a', 'k', 'l' and 'm' respectively with my 'M\*', 'P\*', ..., 'T\*', 'a\*', 'k\*', ..., 'm\*'. The following statements would then be true. None of the 'M', 'P', 'Q', 'R', 'T', 'a', 'k', 'l' and 'm' can be interchangeably used with their correlates under Z. If queried, I would assent to "M\* is a P\*," "M\* is a Q\*," "M\* is a T\*," and to "a\* is k\*," "a\* is l\*" and "a\* is m\*." There is no singular term that can figure both in the contexts '... is an M', ..., '... is a T' and in the contexts '...is an M\*', ..., '...is a T\*'. There is no common noun that can figure both in the contexts 'a is ...', ..., 'm is ...' and in the contexts 'a\* is ...', ..., 'm\* is ...'.

Now for an inferentialist the relation that holds between 's is an M', and 's is a P', 's is a Q' and 's is an R', for 's's for which my interlocutor assents to 's is an M', partially determines the semantic contribution of 'M' to the sentences in her mouth in which it figures; and the relation, for 's's for which I assent to 's is an M', between 's is an M' and 's is a P', 's is a Q' and 's is an T' partially determines 'M's contribution to the sentences in my mouth in which it figures (I don't repeat the obvious clause for 'M\*' in my mouth).

Similarly, the relation that holds between 'a is an S', and 'k is an S', 'l is an S' and 'm is an S', for 'S's for which she assents to 'a is an S', partially determines the semantic contribution of 'a' to the sentences in her mouth in which it figures (I omit the obvious clauses for the contributions by 'a' and 'a\*' in my mouth).

Now let my interlocutor utter "a is an M", under conditions under which I would myself make an affirmation by using the same sentence. The image of "a is an M" under the conjectured non-homophonic mapping is "a\* is an M\*". Note that the 'a\*' cannot be one of the 's's for which she/I assents to 's is an M', 's is a P', 's is a Q' and 's is an

R’/‘s is a T’. Nor can ‘M\*’ be one of the ‘S’s for which we together assent to ‘a is an S’, ‘k is an S’, ‘l is an S’ and ‘m is an S’. The options are to correlate her “a is an M” with my “a is an M” or to correlate it with my “a\* is an M\*.” Now, even though the meaning of my “a is an M” is not the same as the meaning of her “a is an M,” it can on inferentialist grounds be argued to be more similar to it than is the meaning of my “a\* is an M\*”.

The semantic contribution of ‘a’ to the sentences in my mouth in which it figures is partially determined by the same inferential relations that partially determine the semantic contribution of ‘a’ to the sentences in my interlocutor’s mouth in which it figures. These relations namely are those that hold between ‘a is S’ and ‘k is S’, ‘l is S’ and ‘m is S’, for the same ‘S’s for both of us. Whereas the semantic contribution of ‘a\*’ to the sentences in my mouth in which it figures is partially determined by the inferential relations between ‘a\* is S’ and ‘k\* is S’, ‘l\* is S’ and ‘m\* is S’, for ‘S’s different from those that were involved in the case of ‘a’.

Similarly the semantic contribution of ‘M’ in my mouth to the sentences in which it figures is partially determined by the inferential relations between ‘s is M’ and ‘s is P’, ‘s is Q’ and ‘s is T’, for ‘s’s for which I assent to ‘s is M’. The inferential relations that partially determine the semantic contribution of ‘M’ in the mouth of my interlocutor are those that hold between ‘s is M’ and ‘s is P’, ‘s is Q’ and ‘s is R’, for ‘s’s for which she assents to ‘s is M’. Again the involved ‘s’s are the same for both of us. The only difference is that in my case ‘s is R’ is replaced by ‘s is T’. Whereas the semantic contribution of “M\*” to the sentences in my mouth in which it figures is partially determined by the inferential relations that hold between ‘s is M\*’ and ‘s is P\*’, ‘s is Q\*’ and ‘S is T\*’, for ‘s’s different from those involved in the case of ‘M’.

Since the semantic contribution of her ‘a’ and ‘M’ to her “a is an M” is more similar to the semantic contribution of my ‘a’ and ‘M’ to my “a is an M” than to the semantic contribution of my ‘a\*’ and ‘M\*’ to my “a\* is an M\*”, the meaning of her “a is M” is more similar to the meaning of my “a is M” than to the content of my “a\* is M\*”.

What the singular terms of my interlocutor refer to is a matter of what is the best way to translate these singular terms into my idiom; similarly determining the objects the predicates of my interlocutor are true of, is a matter of finding the best way to correlate these predicates with those in my mouth.<sup>43</sup> It is better to translate my interlocutor’s ‘Socrates’s as ‘Socrates’ than as ‘the universal complement of Socrates’. For the latter option amounts to correlating ‘Socrates’ in the mouth of my interlocutor with a singular term in my mouth which takes predicates of a sort that ‘Socrates’ in the mouth of my interlocutor hardly takes, and whose semantic contribution to the sentences in which it figures draws on inferential relations that do not involve any of the sentences which are involved in the inferential relations that determine the semantic contribution of ‘Socrates’ in the mouth of my interlocutor. A similar reasoning also holds for the predicate ‘wise’ in the mouth of my interlocutor.

### Speaking the Same Language

I have noted above that making inferential transitions a determinant of meaning rendered the meanings of sentences idiosyncratic to the persons who utter them, as no two speakers of English manifest just the same patterns of material inference. However

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<sup>43</sup> Quine, *Pursuit of Truth*, p. 52.

if most of our inferential transitions did not concur we would not be able to communicate using the homophonic manual as we do. I normally process the sentence uttered by my interlocutor as having the same semantically relevant features as the same sentence has in my mouth. That is, I attribute to it the same inferential, perceptual and practical functions the same sentence assumes in my mouth. In most cases this way of proceeding works.

There may be cases where a non-homophonic understanding is semantically better than a homophonic one. If a person uses the word ‘epitaph’ in the way I use ‘epithet’, and vice versa, it may be better to understand her sentences that involve these two words non-homophonically. But such cases do not constitute counter examples against my thesis. For in such cases non-homophonic understanding does not replace homophonic understanding; these are cases where homophonic understanding is not possible. Whereas Quine’s claim that homophonic understanding is semantically on the same footing as non-homophonic understanding concerns cases in which homophonic understanding is possible.

In a great majority of cases homophonic understanding is semantically better than a non-homophonic understanding. The reason for this superiority is not that all speakers of English associate the same propositions with the same sentences. The reason is rather that all speakers of English manifest more or less similar patterns of verbal behavior and that according to inferentialism the meanings of sentences is a function of these patterns. A fraction of these patterns may differ from person to person, or alter as the generations succeed one another.

A century ago no one thought that tobacco consumption was a hazardous habit. No one made the inference, “I consume tobacco, therefore I endanger my health”.

Nonetheless we should still equate the term ‘tobacco’ that appears in the texts of that time with the term ‘tobacco’ as we use it now. For the inferential role the term “tobacco” conferred on the sentences in which it predicatively figured in those days, is to a large extent the same as the one it confers today on the sentences in which it predicatively figures.

So long as in the case of a particular sentence the homophonic understanding is semantically the best in that inferentialist sense, I can say that I and my interlocutor mean the same by the same sentence; and so long as in a great majority of cases homophonic understanding is the best way to proceed I can say that I and my interlocutor speak the same language.

What about the speakers of other languages? It was stated that in radical inter-linguistic translation we cannot obtain more than a loose similarity of inferential roles; and that therefore we cannot preclude the possibility of working out different translation manuals that ensure this loose similarity to an equal extent.

Normally when two radically foreign communities get in contact bilinguals emerge; and normally these bilinguals do not much differ from each other in the way they translate into each other the sentences belonging to the languages of these communities. Although it is theoretically possible that they did at the beginning, through time only one of these ways of translating these two languages into each other becomes customary. The bilinguals forge hitherto non-existent bilingual inferential relations between the sentences of the two languages. For example, I can infer that the streets are wet upon being told “Dışarıda yağmur yağıyor”. In this way a tighter relation of similarity of meaning develops between the sentences of two languages. Today, all national languages are related with English in this way.

## CHAPTER V

### CONCLUSION

I have noted that inferentialism is a use theory of meaning. I do not for this reason think the inferentialist arguments here propounded in support of the semantic superiority of homophonic understanding at home to be at odds with Quine's thoughts. These considerations do not draw on more than "what is to be gleaned from overt behavior in observable circumstances." The inferential relations in which the sentences of my interlocutor stand can be immediately observed while he is reasoning-out-loud or detected by figuring out which conditional sentences he assents to and which he dissents with. The specifically inferentialist move is regarding the acceptance or the rejection of certain conditionals as drawing on something our interlocutors has propensity to *do* or *not to do*, namely *moving* from the acceptance of one sentence to the acceptance or the rejection of another.

Neither does the result of these arguments, the vindication of homophonic understanding at home, re-institutes notions and views Quine strived to reject with his arguments for indeterminacy of translation. Above all, idiosyncrasy of meaning that follows from idiosyncrasy of dispositions to verbal behavior is granted. Consequently

the notion of proposition has not been resuscitated. The indeterminacy of radical inter-linguistic translation has been endorsed.

However, Quine's view that the usual homophonic way of understanding can be replaced with a non-homophonic way of understanding without the least semantic drawback appears utterly implausible in relation with two persons who have acquired their mother tongue under the same roof. For this reason I believe that if my arguments are not altogether flawed their conclusions should also count as a corroboration of the inferentialist premises on which they depend.

## BIBLIOGRAPHY

Brandom, Robert B.. *Making It Explicit: Reasoning, Representing and Discursive Commitment*. Cambridge: Harvard University Press, 1998.

Brandom, Robert B.. *Articulating Reasons*. Cambridge: Harvard University Press, 2000.

Quine, W. V.. *Word and Object*. Cambridge: MIT Press, 1960.

Quine, W. V.. "Speaking of Objects." In *Ontological Relativity and Other Essays*. New York: Columbia University Press, 1969.

Quine, W. V.. "Ontological Relativity." In *Ontological Relativity and Other Essays*. New York: Columbia University Press, 1969.

Quine, W. V.. "Epistemology Naturalized." In *Ontological Relativity and Other Essays*. New York: Columbia University Press, 1969.

Quine, W. V.. "On the Reasons for Indeterminacy of Translation." *The Journal of Philosophy* 67, no.6, (1970), pp. 178-183.

Quine, W. V.. *Pursuit of Truth*. Cambridge: Harvard University Press, 1992.

Quine, W. V.. "Where Do We Disagree ?" In *The Philosophy of Donald Davidson*, edited by Lewis Edwin Hahn. Chicago: Open Court, 1999.

Sellars, Wilfrid. "Is there a Synthetic *A priori* ?" In *Science Perception and Reality*. Atascadero: Ridgeview Publishing Company, 1991.

Sellars, Wilfrid. "Some Reflections on Language Games." In *Science Perception and Reality*. Atascadero: Ridgeview Publishing Company, 1991.

Sellars, Wilfrid. "Language as Thought and as Communication." *Philosophy and Phenomenological Research* 29, no.4, (1969), pp. 506-527.

Sellars, Wilfrid. *Naturalism and Ontology*. Atascadero: Ridgeview Publishing Company, 1996.