

# Stove's Gem and the Fallacy of Equivocation.

Tom Cunningham, Philosophy Dissertation, 1998.

“In the pursuit of truth we must beware of being misled by terms which we do not rightly understand. That is the chief point. Almost all philosophers utter the caution; few observe it.”

Berkeley, *De Motu*, p. 251

*(apologies to Stove for being so earnest and humourless)*

## CHAPTER ONE: INTRODUCTION

### 1. THE GEM

This dissertation is about a family of arguments which David Stove dubs “Gems”.

A Gem, according to Stove, is any argument which purports to deduce a substantial anti-realist metaphysical conclusion from merely tautologous premises. He says that the Gem is an uncommonly bad philosophical argument, but that it is also uncommonly common. In his essay *Idealism: A Victorian Horror Story (Part II)*, Stove traces the genealogy of the Gem from Berkeley through the 19th century idealists to modern conceptual idealists and relativists<sup>1</sup>.

Stove describes Berkeley’s original Gem as:

You cannot have trees-without-the-mind in mind, without having them in mind.

∴ You cannot have trees-without-the-mind in mind.

Another general form of Gem which Stove ridicules is:

We can know things only if condition C, which is necessary for knowledge, is satisfied.

∴ We cannot know things as they are in themselves.

### 2. THE GEM’S FALLACY

Stove’s essay discusses why the Gem’s conclusion could be so alluring: perhaps it satisfies a desire for a congenial universe, or perhaps it reinforces a prejudice that anything human must be inferior - so human knowledge must be inferior knowledge (Stove calls this cognitive Calvinism).

But Stove hardly considers why the argument has a semblance of soundness, how such a great fallacy could slip past many competent philosophers. In fact even after reading Stove’s essay I still felt a grudging sympathy for some of the example Gems, a sympathy which even Stove’s ridicule could not banish. That is the topic of this dissertation: the logical appeal of Gems.

A Gem, I contend, commits the fallacy of equivocation. Furthermore, the fallacy of equivocation is poorly described in typical logic textbooks, so I suggest a new account.

So in this dissertation my principal assertions are these:

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<sup>1</sup> See also Musgrave’s “Conceptual Idealism and Stove’s Gem”

(1) The fallacy of equivocation is best described not as twice using some word or phrase in different senses; rather it occurs when no argument satisfies the specifications of the text used to express the argument.

(2) All Gems (or almost all) commit the fallacy of equivocation.

(3) Stove says that all Gems are patently invalid, but a consequence of my approach to equivocation is that an equivocating argument is not intrinsically invalid, it is only invalid under some interpretation.

(4) The new theory of equivocation can be well applied to the analysis of a variety of Gems, old and new, including Berkeley's original Gem.

The next three chapters discuss the fallacy of equivocation. The final two chapters apply the theory to Gems, the last chapter being its application to the original Gem itself - Berkeley's paragraph 23.

## CHAPTER TWO: EQUIVOCATION

In brief my idea is this: equivocation is not a failing of arguments, it is a failing in the specification of arguments.

In this chapter I prepare an account of the fallacy of equivocation, which I propound in more detail in later chapters, and finally apply to the analysis of Gems.

First I will give an example of equivocation and describe the standard definition; next I present a variety of difficulties which the standard account faces. In the third section I consider how we decide which sense a word is being used in, as a preliminary to a new definition of equivocation (section four), and with it solutions of the motivating difficulties.

### 1. EQUIVOCATION

Irving Copi, in his *Introduction to Logic* has a good example of an equivocating argument: "The end of a thing is its perfection; death is the end of life; hence, death is the perfection of life." (p. 77)

The problem is that 'end' seems to be being used in different senses in the two premises; in the first premise it is used to mean something like 'purpose', and in the second premise it means something like 'final event'.

So the standard definition of the fallacy of equivocation is to use a word or phrase in two different senses, thus Copi says "when we confuse the different meanings a single word or phrase may have, using it in different senses in the same context, we are using it equivocally. If the context happens to be an argument, we commit the fallacy of equivocation." (p. 77)<sup>2</sup>

Before we go any further let me make a distinction: an argument, as defined by Copi, is a set of propositions - one is the conclusion and the rest are premises. On the other hand, some particular words and sentences must be used to express an argument, and we shall call any such text which purports to express an argument the argument specification, or for short just the specification.

Any one argument can be expressed by a number of different specifications; e.g. just one argument is specified by both: "All ducks are birds and all birds have feathers, so all ducks have feathers" and "All ducks have feathers because ducks are birds, and everything that's a bird has feathers."

It is important to note then that equivocation is a failure not of an argument but of a specification. An argument is made out of propositions, so it contains no words which can be used in different senses; and the invalid argument expressed by an equivocating specification can be expressed by other specifications which do not equivocate. Thus an argument does not equivocate, it is a specification which equivocates.

An equivocating specification must, according to our definition, correspond to an invalid argument. Our example specification, about ends and perfection, appears to be valid because it uses the word 'end' in the appropriate places; but because it adopts different senses when an argument is made out of the specification the first 'end' will correspond to a term in the argument meaning something like purpose, and the second 'end' will correspond to a term meaning something like final event. In the argument then, both premises may be true but the conclusion can be false; therefore it is an invalid argument.

So, the standard account of equivocation offers us:

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<sup>2</sup> Likewise, Hacking: "[in equivocation] Some word may be used in two different senses" (p. 36); "To equivocate is to use words in different senses in the course of an argument." (p. 37). Roughly similar theory is expressed in Kirwan

definition: An argument specification commits the fallacy of equivocation if and only if it uses the same word or phrase in different senses; its corresponding argument must be invalid since different senses will be encoded as different terms.

## 2. PROBLEMS DESCRIBED

There are four problems which I can find with the standard account of equivocation, and I list them here in what seems to me order of increasing importance:

### (a) Not sufficient

An argument specification may use the same word or phrase in different senses without committing any fallacies, take for example the following:

“All things near one another are in proximity, the oak’s branch and the National Bank’s George street branch are near one another, so they are in proximity.”

### (b) Not necessary

An argument specification may commit what certainly seems to be equivocation without using any word or phrase twice in different senses. I think that both of the following specifications are properly described as committing the fallacy of equivocation, even though the definition does not apply:

(i) “A thing’s end is its perfection, death is life’s finish, so death must be life’s perfection.”

(ii) “A thing’s end is its perfection, so death must be life’s perfection.”

### (c) Are all equivocating arguments invalid?

The standard theory, as we have seen, takes all equivocating specifications to be associated with invalid arguments. But it often seems that an equivocating argument can be criticised in different ways; take again our first example:

The end of a thing is its perfection.  
Death is the end of life.  
∴ Death is the perfection of life.

It seems that we could equally take the argument to be valid but criticise it for having a false first premise (the final event of something is not its perfection) or a false second premise (death is not the purpose of life), and as we shall see equivocating arguments do tend to be criticised in such different ways.

### (d) How do we know the sense a word is being used in?

Finally I think the most crucial problem is how we decide in what sense a word is being used in an argument specification. It is the simple fact of polysemy that the exact same physical word can mean a number of different things; so how do we decide which meaning it has on any particular occasion?

There seem to be some cases where a word appears in an equivocating specification but it is simply unclear whether it is being used in one sense or another. For simplicity as an example I am going to use an argument I have made up, but we shall see in future chapters how some real arguments are very similar. So take the following bad idealist specification in the style of Berkeley:

Everything conceived is in the mind.

Everything in the mind is mental.  
∴ Everything conceived is mental.

The trouble here is that both 'conceived' and 'in the mind' have potential ambiguity. 'Conceived' can either apply to some object which is being thought about, or to some thought which is about an object, i.e. either a conceived thing or a conception; 'in the mind' can either apply to something mental, or to something which is being thought about. Both words have object and thought senses.

If the conclusion is meant to establish idealism then 'conceived' must be in its object sense, i.e. all objects we think of are mental. So if 'conceived' means an object being thought about, then the first premise - if it is to be plausible - must use 'in the mind' in its object sense; then the first premise says just that everything being thought about is something which is being thought about. So then, if we are to interpret the argument as being consistent, 'in the mind' in the second premise will still be in its object sense, and it will say that everything being thought about is mental, i.e. it will blatantly beg the question.

But the second premise taken by itself has a more plausible reading, if 'in the mind' is taken in its thought (or mental) sense then it says that all the contents of the mind are mental, an unremarkable premise. We could say then that the argument is invalid because 'in the mind' is used in different senses in the two premises; but on the basis of the second premise, we might interpret the sense in which 'in the mind' is used in the first premise differently. The first premise is plausible with 'in the mind' in its thought sense as long as 'conceived' is also in its thought sense - the first premise would then express the obvious truth that conceptions are among the contents of the mind. Then if we move to the conclusion, and by consistency interpret 'conceived' in its thought sense, the conclusion becomes very weak - just that thoughts of things are mental. The argument does not establish idealism, as it purports to.

So, finally, if you followed my reasoning, the question pertinent is what sense the 'conceived' in the first premise is being used in. We tried interpreting it in two different ways, and neither made the argument very good; so what sense does it really have?

Even Copi and Hacking, who say that equivocation is a matter of using words in different senses, both have trouble deciding exactly what sense a word is being used in:

Copi, p. 77: "The premisses are plausible only when the word "end" is interpreted differently in each of them ... Of course, the same sense of "end" could be used in both premisses, but then the argument would lose all its plausibility..."

Hacking, p. 37: "there are two ways to construe the argument ... in one sense of the word ... the premisses are probably true whereas in another sense the argument is valid."

### 3. RECONSTRUCTING ARGUMENTS

In this section I will digress for a moment, into how we understand which sense a word is being used in, and in the next section I will outline an alternative means of understanding equivocation.

#### Potential ambiguity

Specifications vary in how much they leave to the reader to reconstruct. Writing in mathematics exhibits both extremes: sometimes arguments are formulated in excruciating detail, while at other times the argument specification will consist of just "this lemma may be proved by the same method as used for the previous lemma."

In philosophy specifications are typically somewhere in the middle. Sometimes one is an enthymemes, i.e. it neglects to mention one or more vital premise because the author supposes them easily inferred. More important, they all are full of potential ambiguity. Almost every word in English has more than one sense, so for some given specification there are dozens of different combinations of senses which we could validly use in reconstructing an argument; and yet we tend not to have too much trouble. Why?

#### Interpreting according to assumptions

We infer the argument from the argument specification on the basis of assumptions about the author's intention. When the author tries, in earnest, to specify a good argument we assume that they mean it to be:

- (i) valid
- (ii) have true premises
- & (iii) have the appropriate significant conclusion.

So for example take the argument specification "cows have four legs because cows are land mammals". This could be taken to specify the patently invalid argument:

All cows are land mammals  
∴ All cows have four legs

To reconstruct this argument from the specification would be to be very un-cooperative, it is clear that the author of the specification tacitly assumes that all land mammals have four legs, since without it the argument is invalid. The argument we should reconstruct is:

All cows are land mammals  
All land mammals have four legs  
∴ All cows have four legs

Likewise—in an un-cooperative spirit—we might interpret 'cow' not as meaning 'female domestic bovine' but as meaning 'female whale'. This interpretation of the word might be fair in other contexts, but in this case interpreting it that way would make one of the premises obviously false - and unless we have reason to expect a false premise this is hardly a fair way to interpret the author.

Our interpretations of the sense of each term usually converge. 'Cow' could potentially mean 'female of any bovine animal' or 'female whale' or 'coarse or unpleasant person'; 'leg' could mean 'organ of support and locomotion in animal', or 'part of field on playing batsman's side and behind his wicket', or 'one of two or three games constituting a round'. Having worked out which sense one of the words is being used in, it makes it much easier to work out which sense the other word is being used in; we saw this also in the argument involving things 'conceived' and 'in the mind'.

so: We infer the argument from the argument specification on the basis of the assumptions that the author intends the argument to be valid, for it to have true premises, and to have a significant conclusion. These assumptions usually converge and are all satisfied.

#### 4. EQUIVOCATION AS IRRECONCILABLE SPECIFICATION

What happens when these assumptions do not converge on an interpretation which satisfies them all? Equivocation.

So as to try to make the idea more naturally appealing I will try to make some analogies.

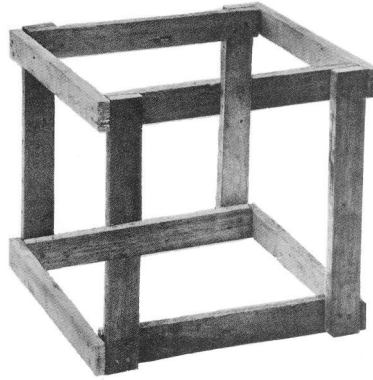


Figure 1

The drawing in figure 1 is of a Necker cube, an impossible object. Each join taken separately is perfectly understandable and coherent, we are well aware of what that part of the drawing implies for the shape of the object depicted. The only problem comes when we try to reconcile all of the implications into one coherent physical object: it is not possible. If we are to imagine some physical object corresponding to the picture then we have to give up some of the natural implications of the drawing. For example we might say that the two dark planks which meet at the closest corner - at the upper left - should (by other evidence) go in front of the lighter back planks, yet they seem by the picture to go behind; so perhaps they do not really go behind - perhaps each of them is missing a small section which allows us to see the back planks. This is not the only way to find a possible interpretation, we might allow that the dark planks do go behind the light planks, and that something else is misleading: perhaps the planks really bend amongst each other, and they only seem straight.

A second analogy: in a formal system, with axioms and rules of derivation, a contradiction might appear - i.e. both some well formed formula and its negation can be derived from the axioms. A contradiction is typically disastrous for a formal system, because by *reductio ad absurdum* every possible formula can be deduced from it. So we want to get rid of the contradiction perhaps by cutting back our axioms; the problem is that almost always no one axiom is by itself responsible for the contradiction, the contradiction can only be derived from a set of axioms, and to get rid of the contradiction we have to choose one of the axioms to sacrifice. So we are left with a choice between a variety of pruned formal systems, each free of the contradiction, because each is deprived of one of the axioms which allowed it to first be derived.

And in a very similar way, when reconstructing an argument from a specification we sometimes end up with a pair of antagonistic predictions. Typically the antagonistic predictions are not baldly present in the specification, but they may be derived from the collection of basic assumptions. To get rid of the problem we must give up one of the contributing basic assumptions, but often a number of different assumptions contribute and it may be a fairly arbitrary choice which to give up.

So, let us again drag out our example of equivocation:

The end of a thing is its perfection.  
Death is the end of life.  
∴ Death is the perfection of life.

Remember that there are three assumptions we make about the author's intentions in interpreting an argument specification: that the premises are true, that the conclusion is appropriate, and that the argument is valid. Let us suppose

that we have satisfactorily worked out the logical form of each proposition, and the meanings of 'death' and 'life' and 'perfection', all that remains is to decide how to interpret the two occurrences of 'end'. Three assumptions are relevant:

assuming that the premises are plausible:

- (i) Premise one is plausible.
- (ii) Premise two is plausible.

assuming that the form is valid:

- (iii) 'end' is being used in the same sense in both premises.

The first assumption implies that the first 'end' mean 'purpose', the second assumption implies that second 'end' mean 'final event', but the third is only satisfied if they both mean the same thing. We are left with an incompatible triad of assumptions; by conceding any one of them we can reconstruct an argument, hence there are three possible imperfect reconstructions of the specification:

The end<sub>purpose</sub> of a thing is its perfection,  
Death is the end<sub>purpose</sub> of life,  
∴ Death is the perfection of life  
[second premise is implausible]

The end<sub>final event</sub> of a thing is its perfection,  
Death is the end<sub>final event</sub> of life,  
∴ Death is the perfection of life.  
[first premise is implausible]

The end<sub>purpose</sub> of a thing is its perfection,  
Death is the end<sub>final event</sub> of life,  
∴ Death is the perfection of life.  
[argument is invalid]

So: In equivocation the assumptions necessary for interpretation conflict, i.e. no resolution of senses into an argument satisfies the specification, the specification is irresolvable. So for as many conflicting criteria there are, there exist that many arguments which are almost resolutions.

## 5. PROBLEMS SOLVED

(a) Not necessary

The following specification is problematic for the standard theory because it uses one word in different senses but does not commit any fallacy:

“All things near one another are in proximity, the oak's branch and the National Bank's George street branch are near one another, so they are in proximity.”

According to our new theory this is straight-forward. The specified argument is already valid without insisting that the two uses of 'branch' use the same sense, so the drive for plausible premises happily resolves the two uses into meaning different things, first 'limb springing from tree or bough' and second 'local establishment of bank or other business'.

(b) Not sufficient

The following two specifications are problematic for the standard theory because they equivocate without using the same word twice in different senses:

- (i) "A thing's end is its perfection, death is life's finish, so death must be life's perfection."
- (ii) "A thing's end is its perfection, so death must be life's perfection."

Again, on our theory this is straight forward. For (i) the specified argument will only be valid if 'end' and 'finish' are taken to mean the same thing - which is plausible in itself but it conflicts with the possible truth of both of the premises.

In (ii) the specified argument will only be valid if we supply a missing premise of the form "death is life's end", and then we find the same problems with the assignment of senses.

(c) Are all equivocating arguments invalid?

The standard theory predicts that all equivocating specifications will correspond to invalid arguments, because they use words in different senses, yet it is often tempting to say that an equivocating specification has false premises or an inappropriate conclusion. In fact, Copi and Hacking say as much themselves, when discussing their example arguments:

Copi, p77: "[regarding the 'end' / 'death' argument] The premisses are plausible only when the word "end" is interpreted differently in each of them, as: "The goal of a thing is its perfection", and "Death is the last event of life." But the conclusion that "death is the perfection of life" does not even apparently follow from these premisses. Of course the same sense of "end" could be used in both premisses, but then the argument would lose all its plausibility, for it would have either the unplausible premiss "The last event of a thing is its perfection" or the patently false premiss "Death is the goal of life." "

Hacking, p37: "we are tricked into thinking an argument is valid, with true premises, because in one sense of the word ... the premises are probably true whereas in another sense the argument is valid. But there is no sense in which the premises are probably true and the argument is valid."

The new theory solves the problem of how an equivocating specification could seem to have a variety of different faults. Having false premises or the wrong conclusion or being invalid are strictly speaking properties of arguments, not specifications, and an equivocating specification corresponds to no one argument so it cannot be said to suffer any of these faults. However, an equivocating specification does almost correspond to a number of different arguments, and each of these arguments has some fault.

So when one person says of an equivocating specification that it has false premises and another says it is invalid, they can both be right in the sense that they both interpreted the specification as charitably as they could, but both found it wanting.

(d) How do we know the sense a word is being used in?

The standard theory had difficulty because in some equivocating specifications it is simply not clear which sense a particular (token) word is being used in, and according to the standard theory two separate uses with different senses are necessary for equivocation.

The new theory, on the other hand, tells us that we infer the sense of the word according to various assumptions. When these assumptions conflict there is simply no fact of the matter about which sense the word is being used in, it is being used in both senses for different purposes.

The particular example I marshalled to make this point earlier in this chapter contained two phrases with unresolved ambiguities, 'conceived' and 'in the mind':

Everything conceived is in the mind.  
Everything in the mind is mental.  
∴ Everything conceived is mental

We are now prepared to give this specification's problems a more formal analysis. The three assumptions used to interpret arguments in this case come out to the following:

truth of premises

- (i) The first premise is plausible.
- (ii) The second premise is plausible.

appropriate conclusion

- (iii) The conclusion establishes idealism.

validity

- (iv) 'conceived' is used in the same sense in the first premise and the conclusion.
- (v) 'in the mind' is used in the same sense in the first and second premises.
- (vi) 'mental' is used in the same sense in the second premise and the conclusion.

The final assumption is easily satisfied because 'mental' is a relatively unambiguous word. Under the heading of validity we might include other easily satisfied assumptions, e.g. that each of the premises and the conclusion is a categorical proposition of type A (i.e. of the type All Xs are Ys)<sup>3</sup>.

In working out the senses of 'conceived' and 'in the mind' the assumptions (i) through (v) form an impossible set. Any four of them may be satisfied, but not all five. Given that we have reconstructed most of the argument, and are left just with deciding the meanings of the two phrases 'conceived' and 'in the mind', then assuming (i) through (v) will have the following implications:

- (i) In the first premise 'conceived' and 'in the mind' take the same sense (either both thought or both object).
- (ii) In the second premise 'in the mind' takes its thought sense.
- (iii) In the conclusion 'conceived' takes its object sense
- (iv) 'conceived' is used in the same sense in the first premise and the conclusion.
- (v) 'in the mind' is used in the same sense in the first premise and the second premise.

In essence then (i), (iv), and (v) require that all the uses of 'conceived' and 'in the mind' be in the same sense, whether the object sense or the thought sense; (ii) requires that 'in the mind' take at one point its thought sense; and (iii) requires

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<sup>3</sup> See Copi, chapter 5: Categorical Propositions

that 'conceived' take at one point its object sense. Each is reasonable in the interpretation of the argument, yet they cannot all be fulfilled.

We can predict then that there will be five different arguments which could be sympathetically reconstructed from the specification, but each sacrifices one of the five requirements, and so none quite lives up to the boast of the specification. These five partial reconstructions are as follows:

1.  
Everything conceived<sub>object</sub> is in the mind<sub>object</sub>,  
Everything in the mind<sub>object</sub> is mental,  
Everything conceived<sub>object</sub> is mental.  
[second premise implausible]
2.  
Everything conceived<sub>object</sub> is in the mind<sub>object</sub>,  
Everything in the mind<sub>thought</sub> is mental,  
Everything conceived<sub>object</sub> is mental.  
[invalid]
3.  
Everything conceived<sub>object</sub> is in the mind<sub>thought</sub>,  
Everything in the mind<sub>thought</sub> is mental,  
Everything conceived<sub>object</sub> is mental.  
[first premise implausible]
4.  
Everything conceived<sub>thought</sub> is in the mind<sub>thought</sub>,  
Everything in the mind<sub>thought</sub> is mental,  
Everything conceived<sub>object</sub> is mental.  
[invalid]
5.  
Everything conceived<sub>thought</sub> is in the mind<sub>thought</sub>,  
Everything in the mind<sub>thought</sub> is mental,  
Everything conceived<sub>thought</sub> is mental.  
[conclusion not significant]

## 6. SUMMARY

Definitions:

- argument = a set of propositions, one of which is the conclusion and the rest are premises.
- argument specification = words and sentences purporting to express an argument.

Standard definition of equivocation:

- An argument specification commits the fallacy of equivocation if and only if it uses the same word or phrase in different senses, and so its corresponding argument is invalid since different senses must be encoded as different terms.

Problems for the standard definition:

- (a) Not necessary
- (b) Not sufficient
- (c) Are all equivocating specifications invalid?
- (d) The sense a word is used in can be obscure.

Reconstruction of an argument from a specification:

- Potential ambiguity is ubiquitous, so we need context and background assumptions to resolve it.
- Among the assumptions are those that the speaker means their argument to be good (have true premises, be valid, and have an appropriate conclusion).
- Usually some interpretation satisfies every assumption.

Equivocation as an irresolvable specification:

- In equivocation the assumptions that the argument is good conflict, i.e. no resolution of senses into an argument satisfies the specification, the specification is irresolvable.
- So for as many conflicting assumptions as there are, there exist that many arguments which are almost resolutions.

Problems solved:

- (a) Using the same word in different senses is acceptable as long as there exists a resolution.
- (b) It doesn't matter how sketchy the specification is as long as there is enough context to guarantee a resolved argument; and equivocation can occur when it is natural to interpret two different words as expressing the same sense.
- (c) Having false premises, or the wrong conclusion, or being invalid, are not intrinsic to an equivocating specification; they depend on where the attempted resolution starts.
- (d) Some word having a particular sense depends on our interpretation of the specification, one maxim of interpretation can demand one sense, and another maxim another sense.

## CHAPTER THREE: NEW THEORY OF EQUIVOCATION

In this chapter I outline more clearly and in more detail my new theory of equivocation.

### 1. RECONSTRUCTION

Equivocation, according to my theory, arises from the process of reconstructing an argument from a specification. So in this section I survey the types of information which must be inferred in reconstruction, where that inference is based in part on the assumption that the speaker is meaning to express a good argument.

#### Word meaning

Most obviously, there is word meaning. All but the most formal mathematical specifications have potential lexical ambiguity, because almost every word has more than one sense. Most words listed in a standard dictionary have more than one meaning; more striking is the report from psycholinguists that in doing psychological experiments on ambiguity they found it “very difficult to find completely unambiguous control words”<sup>4</sup>.

Some relatively recent work in philosophy has suggested that words in fact have less polysemy than previously supposed, and that actual variation in meaning is often attributable to the context<sup>5</sup>. The fallacy of equivocation, however, is impervious to the source of variation in meaning as long as different uses are naturally taken to denote different things: whether the variety in senses come from among a fixed set or from novel construction according to context, there is still a potential variety - and the actual sense is inferred under assumptions about the author’s intentions.

When for some use of a word there are two different senses, each compatible with all the assumptions of interpretation, we say the use is ambiguous.

#### Logical form of propositions

Besides the meaning of each particular term, specifications also often leave to inference how the meanings should combine into a proposition. There are some well known types of circumstance in which two different logical forms are reasonable interpretations:

Scope. The phrase ‘old friend’ can mean either someone who is old and is a friend, or someone who used to be a friend, i.e. either the friendship or the person themselves could be old<sup>6</sup>.

De re: de dicto. Locutions using a modal operator are often easily interpreted in two different ways, e.g. ‘a is necessarily P’ can be naturally interpreted to mean either of the quite different ‘necessarily (Pa)’ (de dicto) or ‘a is (necessarily-P)’ (de re)<sup>7</sup>.

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<sup>4</sup> Quoted in Kess and Hope p. 73

<sup>5</sup> See e.g. Grice p. 47: “Senses are not to be multiplied beyond necessity”, and Bach

<sup>6</sup> See also Quine, *Word and Object*, §29

<sup>7</sup> Honderich, p. 188; Quine, *Quantifiers and Propositional Attitudes*

When a sentence can be sympathetically interpreted into either of two propositions with different logical forms, then we say the sentence suffers from amphiboly (or amphibology)<sup>8</sup>.

#### Tacit subjunctive information

In Subjunctive Conditionals: Two Parameters vs. Three Pavel Tichý argues that many subjunctives (conditionals of the form 'if it had been the case that A then it would have been the case that B') depend for their truth on tacit information. This is demonstrated by some pairs of subjunctives which have the same antecedent and incompatible consequents, and yet are both plausible because they appeal to different tacit information; e.g., given that Lindsay lives in Jonesville - a backwater - and that she is not a movie star, Tichý claims that both of the following are plausible:

- (1) If Lindsay were a movie star then a movie star would live in Jonesville.
- (2) If Lindsay were a movie star then she would not live in Jonesville.

If a specification contains a subjunctive then the tacit information must be inferred upon reconstruction of the argument. The plausibility of the premise or conclusion and the validity of the argument can depend on the tacit information in a subjunctive, and so a subjunctive could contribute to an equivocating specification if the assumptions conflict. E.g.:

If I burned money then I would be judged crazy,  
If I was a millionaire then I would burn money,  
∴ If I was a millionaire then I would be judged crazy.

Each premise is plausible only when read as - approximately -

- (1') If I burned money and everything else was as it is, then I would be judged crazy.
- (2') If I were a millionaire and everything else was as it is, then I would burn money.

The first premise, (1'), is only true if everything is as usual - but in the conclusion of (2') everything is not as usual - I am a millionaire, so the conditions for transitivity of subjunctives are not satisfied because the situation specified by the consequent of (2') is not compatible with that specified by the antecedent of (1').

Unfortunately, solving these problems is not really as simple as merely adding 'and everything else was as it is' clauses, because for the subjunctives to be plausible some things must be allowed to be different. For example if I were a millionaire and everything else really was as close as possible to the real circumstances, then I would not know I was a millionaire, nor would anybody else, I would only be a millionaire in the strictest and least significant possible way, and so I would not burn money.

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<sup>8</sup> In linguistics a similar but not identical phenomenon is called grammatical ambiguity or structural homonymy: when a sentence could correspond to two or more syntactical structures (Matthews, p. 151). Some amphibolies are not grammatical ambiguities: e.g. 'I want a sloop', though logically ambiguous (Quine, "Quantifiers and Propositional Attitudes") has, according to Bach, an unambiguous syntax. See also Quine, *Word and Object*, §28

Obviously relevant to this issue are the conditions under which subjunctive transitivity is valid, i.e. what the tacit information must be like to make the following argument valid:

If it were the case that X then it would be the case that Y  
If it were the case that Y then it would be the case that Z  
∴ If it were the case that X then it would be the case that Z

What these conditions might be, I do not know.

This point has relevance in philosophy for extended arguments which rely on subjunctives. For example in part I of Robert Nozick's *Anarchy, State, and Utopia* an elaborate stepwise argument is put forward, to show how a political organization will naturally develop from the state of nature. The conclusion is a subjunctive: 'if it were the case that we were in a state of nature, then we would soon be organized in such-and-such a way', and the premises are a number of individually more plausible subjunctives, of the form: 'if we were in a state of nature then we would do A', 'if we did A then we would do B', etc. It is possible that the tacit assumptions necessary in each case to make the premise plausible when taken together conflict, and therefore make the derivation of the conclusion invalid.

I do not mean this as an argument against Nozick, it is just an illustration of the variety of circumstances in which equivocation can occur.

Arguments which appeal to dependence are prone to a similar type of tacit equivocation. When we say that one thing depends on another there are typically some tacit conditions under which this dependence takes place.

For example when talking about the different co-ordinates of a point in a plane, where the distance from the origin is equal to the square root of the sum of the squares of the distances along each axis, we might then say that the distance from the origin depends on the x-value and likewise the x-value depends on the distance from the origin, but that the x-value and the y-value are independent. Talking in this vein one can come up with the paradoxical argument:

The x-value depends on the distance from the origin,  
The distance from the origin depends on the y-value,  
∴ The x-value depends on the y-value.

The problem here is that for each premise to be plausible it must tacitly assume that the other co-ordinates are being held stable, because the distance from the origin does not depend on the y-value if all changes in the y are absorbed by the x-value. So when interpreted in their most plausible way, the tacit information of the premises conflicts and makes the argument invalid<sup>9</sup>.

Tacit temporal information

Specifications also often leave a lot of the temporal information about the propositions to inference<sup>10</sup>.

Logical form of argument

Given some specification we must break it into two chunks: the conclusion and the premises.

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<sup>9</sup> Actually this is a case of floating equivocation, because there is an interpretation which would allow the argument to be valid and sound, in which case the conclusion would be inappropriate

<sup>10</sup> See Quine, *Word and Object*, §36, §40

Sometimes, in specifications called enthymemes, context impels the reader to add a premise in the reconstruction, a premise not explicitly mentioned in the specification but which is necessary for the argument's validity and is easily inferred.

In reconstructing an argument form we also must decide when the same words should correspond to different argument terms (e.g. for the specification "All things near one another are in proximity, the oak's branch and the National Bank's George street branch are near one another, so they are in proximity"). Likewise we must sometimes decide when different words should correspond to the same argument term (e.g. for the specification "A thing's end is its perfection, death is life's finish, so death must be life's perfection.").

## 2. ASSUMPTIONS

So, as we have seen, in the reconstruction of an argument there is a lot which is not explicitly given in the specification and so must be inferred.

### Premises

When reconstructing premises we do not always assume that they are true or even plausible. For example in reductio ad absurdum arguments the premises are believed by the author to be false. In a reductio ad absurdum argument the standard for the disbelieved premise is that it is appropriate - that it accurately represents the idea being attacked. If this premise is the crux of an equivocation then we would say that on one reading it correctly represents the attacked view, but only on another reading is the absurd conclusion derived.

So though it is often plausibility, the general desiderata of premises is appropriateness.

### Validity

An argument is valid if and only if it is impossible for the premises to be true and the conclusion false. Usually valid arguments instantiate some known valid schema, the simplest schema is the AAA-1 syllogism<sup>11</sup>:

All As are Bs  
All Bs are Cs  
∴ All As are Cs

But some valid arguments do not have valid forms, for example:

Lucy is an aunt to somebody,  
∴ Lucy is a sister to somebody.

This argument is valid because it is impossible for Lucy to be an aunt without being a sister, yet the following argument with the same form is not valid:

John is a mechanic to somebody,  
∴ John is a godfather to somebody.

This circumstance only occurs when the other premises necessary to make the argument have a valid form are necessary truths, i.e. it is impossible for them to be false. In this case the missing necessary truth is "Everybody who is an aunt is a sister", it is necessary because it expresses not a possible matter of fact but a consequence of the very meaning of the word 'aunt'.

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<sup>11</sup> Copi p. 155

For the sake of simplicity I will treat an argument as valid only if it has a valid form.

So: when reconstructing from a specification, we assume that the intended argument has a valid form.

Important in judging validity is the distribution of terms, so considerations of validity dictate which way to interpret different words. Usually each word type used in the specification corresponds to one term in the argument, but sometimes validity forces us to interpret the same word as different argument terms (e.g. in the argument “All things near one another are in proximity, the oak’s branch and the National Bank’s George street branch are near one another, so they are in proximity”), or different words as the same term (e.g. in “A thing’s end is its perfection, death is life’s finish, so death must be life’s perfection.”).

The insertion of missing premises is also based on considerations of validity.

### Conclusion

Finally the conclusion is assumed to be appropriate, in that it establishes at least what the arguer takes it to establish.

### 3. RESOLVING

Here I narrate an imaginary process in the reconstruction of arguments. I do not have any evidence that this is how we actually interpret specifications, but I think the way that I put it is both plausible and enlightening.

The first step in reconstructing an argument from a specification is dividing up premises and conclusions. We may then insert extra premises if they seem appropriate and required for validity.

The outcome of these first steps in reconstruction is a list of sentences, one meant to express the conclusion and the rest premises. We work out which proposition is expressed by each sentence on the basis of assumptions, and it is at this stage which conflict can set in.

We start with just three assumptions: about the premises, the conclusion, and the validity of the argument. Applying an assumption in interpretation involves reasoning of the following sort:

If A is to be true then B must be true

where A is an assumption and B is some fact about the argument. For example, in the course of some interpretation we might reason:

If premise 1 is to be plausible then ‘end’ must mean ‘final event’

Sometimes the consequent of these interpretative conditionals is a conjunction, e.g.:

If premise 1 is to be true then ‘end’ must mean ‘final event’ and ‘death’ must mean ‘event of becoming death’ and ‘life’ must mean ‘state of functional activity ...’.

In such cases it is useful to treat each of the conjuncts as sub-assumptions. We soon have a hierarchy of assumptions, thus:

plausible premises	premise 1 is plausible	‘end’ means ... ‘perfection’ means ...
	premise 2 is plausible	‘end’ means ... ‘life’ means ...
argument is valid	form is correct	some valid form

	terms are consistent	'death' is used consistently
		'end' is used consistently
		'life' is used consistently
		'perfection' is used consistently
appropriate conclusion	appropriate conclusion	'death' means ...
		'life' means ...
		'perfection' means ...

Where the three assumptions on the left give rise to the five sub-assumptions in the middle, and in turn the twelve quite specific assumptions on the right.

In the usual case the intended logical form of the argument is clear, so we need only juggle the senses of each word and try to find an allocation which satisfies every assumption.

But this is not necessarily so. One of the assumptions could be disjunctive, e.g. - relating to an example from the last chapter:

If premise 1 is to be plausible then either (both 'conceived' and 'in the mind' are in their object senses) or (both 'conceived' and 'in the mind' are in their thought senses).

Having disjunctive assumptions does not show that a specification is irresolvable, in fact arguably most interpretative assumptions will in fact be disjunctive, but usually one horn of the disjunct is eliminated by other considerations.

This observation predicts the existence of a certain kind of specification: one for which there exist two quite different arguments each of which satisfies all the assumptions, because the assumptions contains a disjunction where neither of its disjuncts is contradicted by other assumptions. For example:

Everything experienced is in the mind,  
 Everything in the mind is conceived,  
 ∴ Everything experienced is conceived<sup>12</sup>.

Assuming that each of 'conceived', 'experienced', and 'in the mind' is ambiguous between thought and object senses, this specification has two corresponding arguments - both have plausible premises and both are valid, but admittedly the conclusion is hardly exciting in either.

This occurs because each of the assumptions regarding the premises and conclusion are of the form:

If the premise is to be true then either ('experienced' and 'mind' are in their thought sense) or ('experienced' and 'mind' are in their object sense).

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<sup>12</sup> Or equally:  
 Everything in the painting is painted  
 Everything painted enters into the relation of representation  
 ∴ Everything in the painting enters in relation of representation  
 Where 'enters into the relation of representation' has determinate sense but is true of both represented objects and representations of objects, so both the represented and representation readings of 'in the painting' and 'painted' are supported throughout the argument

But neither disjunct leads to a contradiction, i.e. both yield different but equally good arguments.

The assumption of validity usually entails sub-assumptions of relation: e.g. that some term is being used in the same sense, whatever that might be, in different parts of the argument; or equally that two statements are either both *de re* or both *de dicto*.

#### 4. IRRESOLVABILITY

Now we can clearly state the definition of equivocation:

An argument specification commits the fallacy of equivocation if and only if the assumptions guiding its reconstruction conflict, and no argument will satisfy them all.

##### Approximate resolutions

An equivocating specification is characterized by giving rise to a mutually incompatible set of assumptions. By sacrificing any one of these assumptions we end up with a compatible set, and therefore an argument which fits that compatible set. So for as many assumptions as there are in the mutually incompatible set, we can expect that many different arguments, each an almost perfect reconstruction of the specification, but each failing in just one respect.

##### Non-equivocating arguments

But does this make every bad specification a specification which equivocates? After all, an argument which is simply invalid or simply has false premises could not satisfy all the assumptions of reconstruction, but surely it is too much of a stretch to say that it commits the fallacy of equivocation.

This bizarre conclusion is not a consequence of my theory, because for a specification to equivocate the assumptions must conflict during its reconstruction. Take the following specification:

“All Spartans are ascetics,  
Leroy is an ascetic,  
so Leroy is a Spartan.”

We say that this specification is invalid (by extension, meaning that the argument it specifies is invalid) because there is no way in which it could be valid. There is simply no scope for imposing a valid form on this, the assumption of validity is thwarted before it can begin to conflict with any other assumptions.

If we had instead specified:

“Leroy must be a Spartan because he is an ascetic - and you know what they say about ascetism and the Spartans.”

This specification commits the fallacy of equivocation, because validity demands that the loosely specified second premise be “all ascetics are Spartans”, but plausibility would allow it to only be “all Spartans are ascetics”.

Likewise specifications can be plainly and intrinsically unsound or with inappropriate conclusions if there is no means of interpretation which could satisfy these desiderata. For example:

Leroy is a fish  
All fish have wings  
∴ Leroy has wings

No amount of ingenious interpretation could render the premises plausible, and therefore the assumption of plausible premises is not in conflict with any other assumptions.

## 5. SUMMARY

### Reconstruction

Reconstruction of an argument from a specification may involve inference of any of the following:

- Word meaning
- Logical form of propositions
- Tacit subjunctive information
- Tacit temporal information
- Logical form of argument

### Assumptions

- Premises are assumed to express the appropriate type of proposition, usually this means a plausible proposition.
- The conclusion is likewise assumed to be appropriate to the context.
- The argument form is assumed to be valid.

### Resolving

- The three main assumptions may be broken down into sub-assumptions, all serving as constraints on the argument being specified.
- There are three possible outcomes of this process: no argument at all may fit the assumptions, in which case the specifications commits the fallacy of equivocation; just one argument may fit the assumptions - which is the ideal case; or more than one argument may fit the assumptions - in which case the whole specification is ambiguous.

### Irresolvability

- An irresolvable specification gives rise to a set of incompatible assumptions, and for as many assumptions are in that set there exist that many arguments which almost satisfy the specification.
- A specification can fail to satisfy the three primary assumptions without equivocating if there is no conflict among the assumptions, i.e. if one or more of the assumptions can in no reasonable way be satisfied.

## CHAPTER FOUR: CONSEQUENCES OF THE NEW THEORY

### 1. RELATIVITY OF BADNESS

As we have seen, each equivocating specification is associated with a variety of arguments - each of which almost lives up to the claims of the specification, but each has one fault or other. So when different readers come across the same specification, one might object that it is invalid, and another that it has false premises; they are both right, in a way, just as two people who look at an impossible figure might complain about the impossibility of different parts.

So being invalid or having false premises are extrinsic properties of the equivocating specification, they are relative just to the order in which assumptions were deployed in the interpretation. For a specification which does not equivocate it does not matter the order in which the assumptions are used, readers will always reconstruct the same argument.

Intrinsic to an equivocating specification is the fact that it is irresolvable, so in attacking such a specification it is best to note that no interpretation will do justice to its claims. And in fact this is often how equivocating arguments are disambiguated, as shown by my earlier quotes from Copi and Hacking. Likewise Dummett disambiguates the fatalist argument as follows:

fatalist argument: 'Either you are going to be killed by a bomb or you are not going to be. If you are, then any precautions you take will be ineffective. If you are not, all precautions you take are superfluous. Therefore it is pointless to take precautions.' (p. 339)

Dummett's dissolution: "briefly, my method of rebutting the fatalist is to allow him to infer from 'You will not be killed' to 'If you do not take precautions, you will not be killed'; but to point out that, on any sense of 'if' on which this inference is valid, it is impermissible to pass from 'if you do not take precautions, you will not be killed' to 'Your taking precautions will not be effective in preventing your death'. For this to be permissible, the truth of 'If you do not take precautions, you will not be killed' would have to be incompatible with that of 'If you do not take precautions, you will be killed'; but, on the sense of 'if' on which the first step was justified, these would not be incompatible." (p. 341)

Likewise Stove:

p. 138: "When interesting conclusions are drawn from tautological premises, it is sometimes quite obvious that that is what has been done. But it is much more common to meet with arguments which you cannot be certain are of that kind, though you have strong and rational suspicions that they are so. The usual reason for this uncertainty is that the premise is ambiguous, between one meaning which is tautological, and another which is not.

In these cases, it especially-often happens that the premise is ambiguous, between a tautological meaning from which the interesting conclusion does not follow, and another meaning from which the conclusion does indeed follow, but only because the conclusion is actually logically-equivalent to the premise. Where this is the case, you cannot, of course, say straight out that the argument is invalid. You have to content yourself with saying instead that it is either invalid, or it 'begs the question' in favour of the conclusion. Such a disjunctive verdict is very often the best one can do in philosophy."

## 2. SPOTTING EQUIVOCATION

In the set of incompatible statements the larger the number of statements and the more complex each statement is, the more insidious is the equivocation. I mean by an insidious equivocation one which is difficult to disambiguate.

Consider the psychological process of spotting an equivocation. We identify an equivocation by the existence of contradictory implications for some element in reconstruction. By definition, the contradictory implications only appear when we take into account every member of the set of incompatible assumptions. So, in our archetype of equivocation, when reconstructing the sense of the first use of 'end', to recognise the contradiction we must simultaneously entertain all three considerations: (i) that plausibility entails the purpose sense; (ii) that validity entails synonymy with the other use; and (iii) that plausibility entails the final event sense in the other use. By (i) this use of 'end' should adopt the purpose sense, but by (ii) and (iii) together this use should adopt the final event sense, thus a contradiction, thus equivocation.

Actually, coming across a contradiction in reconstruction is not an infallible sign of equivocation. It may be that we have already come across a disjunction among the assumptions and chosen to ad hoc adopt one of the disjuncts as a working hypothesis. If we then derive a contradiction we should backtrack and try out the other disjunct, to see if it will allow us to find an argument which satisfies the assumptions.

If neither disjunct is acceptable, or rather - if no combination of all the disjuncts in all the assumptions is acceptable - then the specification is equivocating.

So we can see that if an argument contains a disjunctive assumption then equivocation can be harder to spot because more considerations need be simultaneously taken into account to show the specification irresolvable.

When do we come across such disjunctive assumptions? The following line from Blake is a good example:

Never seek to tell thy love, Love that never told can be<sup>13</sup>

"thy love" can mean either the person that you love, or your love for some person; "tell x" can mean either say x or say something to x. Since there are two independent ambiguities we might expect four possible readings of the sentence, but actually reasonable interpretation allows only two: either you 'tell your love' in that you say something to the person you love, or you 'tell your love' in that you describe the nature of your love for someone.

This may be perfectly charming in literature<sup>14</sup>, but it is positively a nuisance in philosophy. Suppose we had as specification of one premise of an argument:

"My love cannot be told"

If we apply the assumption of plausibility we will get a sub-assumption which is disjunctive, i.e. the premise is only plausible either if 'love' means person and 'told' means said to, or 'love' means emotion and 'told' means described. If the specification which this sentence forms a part of is an equivocating specification then the disjunct would make the equivocation more difficult to see.

The equivocating specification in chapter 2, which used 'conceived' and 'in the mind', had a disjunctive assumption:

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<sup>13</sup> In Grice p. 35. The phrase "my love is true" is similar

<sup>14</sup> See esp. Empson

- (i) In the first premise 'conceived' and 'in the mind' take the same sense (either both thought or both object).

And this made it a specimen of equivocation more nasty than usual.

#### Example

Noam Chomsky's 1959 review of B F Skinner's *Verbal Behavior* is famous as delivering a death-blow to behaviourism and helping to inaugurate cognitive science. Chomsky makes various cogent criticisms of Skinner, one of the most important is that the vocabulary of behaviourism suffers from a systematic ambiguity:

"The notions 'stimulus', 'response', 'reinforcement' are relatively well defined with respect to the bar-pressing experiments and others similarly restricted. Before we can extend the to real-life behavior, however, certain difficulties must be faced. We must decide, first of all, whether any physical event to which the organism is capable of reacting is to be called a stimulus on a given occasion, or only one to which the organism in fact reacts; and correspondingly, we must decide whether any part of behavior is to be called a response, or only one connected with stimuli in lawful ways. Questions of this sort pose something of a dilemma for the experimental psychologist. If he accepts the broad definitions, characterizing any physical event impinging on the organism as a stimulus and any part of the organism's behavior as a response, he must conclude that behavior has not been demonstrated to be lawful. In the present state of our knowledge, we must attribute an overwhelming influence on actual behavior to ill-defined factors of attention, set, volition, and caprice. If we accept the narrower definitions, then behavior is lawful by definition (if it consists of responses); but this fact is of limited significance, since most of what the animal does will simply not be considered behavior. Hence the psychologist either must admit that behavior is not lawful (or that he cannot at present show that it is - not at all a damaging admission for a developing science), or must restrict his attention to those highly limited areas in which it is lawful (e.g. with adequate controls, bar-pressing in rats; lawfulness of the observed behavior provides, for Skinner, an implicit definition of a good experiment)." (30)

Skinner's specification can be characterized as approximately:

If something is a response then it is lawful.  
All behaviour is responses.  
∴ All behaviour is lawful.

Chomsky says that 'lawful' is fine, but both 'response' and 'behaviour' can adopt either narrow or broad senses. So our collectively contradictory assumptions are:

premises

- (i) 'response' in the first premise has a narrow sense.  
(ii) in the second premise either both 'behaviour' and 'response' are in the narrow sense, or both 'behaviour' and 'response' are in the broad sense.

validity

(iii) The two 'response's in the first and second premises have the same sense.

(iv) The two 'behaviour's in the second premise and conclusion have the same sense.

conclusion

(v) 'behaviour' in the conclusion has its broad sense.

As Chomsky says, the narrow sense is necessary in the conclusion but implausible in the premises, and the broad sense is plausible in the premises but inappropriate in the conclusion, yet we must consistently use one or the other.

### 3. AVOIDING EQUIVOCATION

How then might we spot equivocation in others', and avoid equivocation in our own arguments?

Equivocation can only take a hold, as we have seen, in the distance between specifications and arguments; so by making our specifications more complete and thus leaving less to inference there is less chance for equivocation to occur. In writing a specification the following practices will make less reconstruction necessary:

- Use the same words or phrases consistently when meaning the same argument term, i.e. do not vary with what seem to be synonyms, e.g. 'end', 'finish', etc.
- Define your terms, or at least give examples of what you mean by each abstract term. In fact, even if you give a definition it is worthwhile to give examples also, because abstract definitions can themselves easily contain ambiguity (e.g. see above, Skinner's definitions).
- Use the apparatus of formal logic to clearly specify the scope of your claims.
- Mention specifically the logical form of your argument.
- Keep the specifications of the different parts of the argument in close proximity, because it is the very nature of equivocating arguments that each piece seems plausible by itself but brought together they do not make sense.

These instructions might seem to be a recipe for very dry philosophy, and perhaps they are. A solution then, to marry both natural exposition and conceptual rigor, is to follow standard explanation or argument with concise and rigorous summary. I have made a slight attempt at practising this method in this dissertation.

In spotting equivocation in someone else's specification, similar methods are relevant, i.e. expanding and formalizing the specification to see if the plausibility remains.

### 4. QUINE AND PROPOSITIONS

My exposition of the theory of equivocation has revolved around, in part, the definition of arguments as sets of propositions. Some philosophers do not believe in propositions (e.g. Quine, *Word and Object*, §42 & §43), but I think the essence of the theory is still tenable without them. For example Quine in *Word and Object* says similar things about equivocation, but makes reference to eternal sentences instead of propositions:

"We do apply logic to sentences whose truth values vary with time and speaker. We leave temporal and pronominal references unfixed, and even the senses of ambiguous words,

simply because the circumstances that would settle these matters on any particular occasion of utterance may be expected to settle them uniformly for the space of the argument. Occasionally this expectation fails and we have the fallacy of equivocation. Appliers of logical theory must keep alert to this hazard and, when it threatens, expand the offending sentences: not into eternal sentences, but just enough to mark any differences that would otherwise be brought out by vicissitudes of the argument. The relation of eternal sentences to our logic is like that of silver dollars to our economy: mostly we do not see them, but we reckon in terms of them." (p. 227)

## 5. GRICE

Grice, in his essay "Logic and Conversation" outlines a general theory of what he calls conversational implicature, based around a cooperative principle and a variety of more specific maxims in interpretation. The main point made is that we interpret the meaning of utterances according to assumptions about the speaker's co-operative intentions.

My theory has some obvious affinities to Grice's, and was surely influenced by his to some extent, but I do not think that the plausibility of my theory depends on the more controversial aspects of Grice's. Grice has a relatively complicated system of maxims and some contestable examples of their application; my theory relies simply on the facts that much information needs to be inferred on reconstruction of an argument, and in practice the inference tends to be in accord with assuming that the argument is a good one.

## 6. GEMS

A Gem is defined by Stove as an argument which "pretends to deduce, from a tautological premise about knowledge or thought or consciousness, that the only possible objects of knowledge, or that the only possible objects, are internal or mental or spiritual."

If the pretence to deduction is up to anything, i.e. if there is some semblance of validity in the specification, then a Gem is by definition irresolvable, because the conclusion - assuming it to be contingent<sup>15</sup> - cannot follow validly from just a tautological premise.

Stove says that all Gems are invalid, but I would disagree. My theory predicts that Gems, in committing the fallacy of equivocation, only extrinsically have the faults of invalidity or false premises or the wrong conclusion, each is just a symptom of the fundamental malady: being irresolvable.

In the next two chapters I apply the theory of equivocation to actual Gems.

## 7. SUMMARY

Relativity of badness:

1. Apparent disagreements about the fault in an argument may be not genuine, because different readers can interpret the irresolvable specification in different ways.

2. The best way to attack an equivocating argument is not to accuse it of having false premises or the wrong conclusion or being invalid, since each accusation is relative to some interpretation, but to show that no interpretation can resolve the specifications.

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<sup>15</sup> As Stove does, p. 139

### Spotting Equivocation

Each equivocating argument is compatible with a set of incompatible assumptions, the more numerous and the more complex the members of this set are, the more difficult the equivocation will be to identify, because the equivocation will only reveal itself if all of the members are entertained simultaneously.

### Avoiding Equivocation

Try to leave less to reconstruction by making your argument specification more explicit, in philosophy this might be well achieved by concise and rigorous summaries of the argument and discussion.

### Equivocating Gems

Gems are specifications which seem to be (i) valid, (ii) have a plausible premise to the degree of tautology, and (iii) have a contingent metaphysical conclusion. No argument can satisfy all these appearances, so by definition a Gem must suffer from equivocation.

## CHAPTER FIVE: GEMS EXAMINED

Before I start, let me disclaim my criticisms. When I attack an author I mean only to attack their style of argument, i.e. their Gem; often - I think - a Gem is used to try to express some genuine insight or to account for some surprising fact, but the means chosen is an unfortunate one. So when I ridicule someone's arguments, especially in the case of the linguist Jackendoff and the psychologist Velmans, I do not mean to ridicule their intentions or their evidence.

### 1. JACKENDOFF A

This example is not quite a Gem, or not a usual Gem, because instead of proving that everything we see is in the mind it proves that everything in the mind is out in the world; but it uses very much typical Gem reasoning and is a model of clarity. Before I discuss the actual quotation I want to prepare the ground by discussing the particular type of ambiguity I think is being used.

A good way of generating an ambiguous term is to take one word with a relatively clear sense and inflect it into another grammatical category<sup>16</sup>. The noun 'health' has a relatively unitary meaning, but when we inflect it into an adjective - 'healthy' - it can come to mean a whole variety of things, i.e. a 'healthy meal', 'healthy body', and 'healthy blood pressure' are not healthy in the same sense (not to mention healthy economies). A quick argument:

Everything healthy is good for you  
John is healthy  
∴ John is good for you

Likewise if we take the verb 'destruct' and inflect it into the noun 'destruction' we end up with an ambiguity. 'Destruction' can refer either to the process of destruction (as in 'the destruction has finally ceased') or the product of destruction (as in 'the destruction is widespread'). This process-product ambiguity is common to many nominalizations of verbs<sup>17</sup>.

Finally, turning a verb into an adjective can also generate this kind of ambiguity, e.g. 'photograph' into 'photographed'. A 'photographed tree' can either be a tree which has had a photograph taken of it, or a photograph of a tree. In general, verbs of representation - when inflected into their past participle (an adjective, usually 'verb-ed') - support an ambiguity between referring to the object and product of representation. Thus 'painted mountain' can refer either to a mountain that has been painted or a painting of a mountain, and 'recorded performance' can refer either to a performance that has been recorded or a recording of a performance.

Most important among the verbs of representation, for our present purpose, are the verbs of mental representation: 'perceive', 'conceive', 'experience'. The past participle of each of these ('perceived', 'conceived', 'experienced') is then ambiguous between denoting the object and the product of mental representation; and such terms are perfect for constructing Gems, since we only ever experience the objects of mental representation, yet the products of mental representation are assuredly mental.

So a crude Gem:

We only ever perceive perceived things.

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<sup>16</sup> There is a very good discussion of this phenomenon by Archbishop Whately, quoted in Mill, Vol. II, p388-390

<sup>17</sup> See Black pp. 194-195; Quine, Word and Object, pp. 130

Perceived things are mental.  
∴ We only ever perceive mental things.

Now, Jackendoff. In *Consciousness and the Computational Mind* he presents a problem for various theories of the mind-body relationship, the problem of externalization of experience, “the fact that my experiences may be of things external to me.”

He explains:

“The blueness of the sky is out there in the sky; the pain is in my toe ... [this is a problem because] the identity theory claims that the experienced blueness in the sky is identical with a state of neurons in my brain and that the experienced pain in my toe is identical with another state of neurons in my brain. How can the same thing be in two different places?” (p. 12, his italics).

So, pedantically:

the experienced blueness is a mental state,  
(according to the identity theory) all mental states are identical  
to brain states,  
so, the experienced blueness is a brain state,  
so, the experienced blueness in my brain,  
so, the experienced blueness is not in the sky.  
But the experienced blueness is in the sky.  
So, the identity theory is false.

The two premises which Jackendoff introduces as common-sensical are:

- (1) The experienced blueness is a mental state.
- (2) The experienced blueness is in the sky.

And the competing specifications are:

- (i) For the argument to be valid ‘experienced blueness’ must mean the same things in each premise.
- (ii) For (1) to be plausible ‘experienced blueness’ must mean the experience of blueness.
- (iii) For (2) to be plausible ‘experienced blueness’ must mean some blue (or blueness) which someone is having an experience of.

Besides the ambiguity in ‘experienced’, using ‘blueness’ also contributes to the plausibility of the argument, since colours have always had an equivocal metaphysical and grammatical status. If Jackendoff had instead said ‘experienced sun’ the mistake would be more obvious.

## 2. BRADLEY

Stove quotes Bradley’s saying, “I myself can conceive of nothing other than the experienced” (p. 157). This is highly plausible, in fact tautologous, if we take ‘the experienced’ to mean things (like apples and trees) which we see and think of and conceive of. But if we are to take the saying as idealist, as Bradley seems to mean it, then ‘the experienced’ must mean the experiences rather than the things which the experiences are about.

So if we disambiguate it in the direction of plausibility it becomes just “I can conceive of nothing other than things which are conceived” (which is no more interesting than “I can only drive on driven-on roads”), if in the direction of significance then it becomes the bizarre “I can conceive of nothing other than my very experiences.”

### 3. VELMANS

The word 'percept' is ideally suited to deriving a Gem: my dictionary (Concise Oxford) says that it can mean either 'object of perception' or 'mental product, as opp. to action, of perceiving'. So a simple Gem can take the form "we perceive only percepts, percepts are mental, therefore we perceive only mental things."

I think this ambiguity is exploited in the following passage:

"When one stares at a cat, out-there in the world, there is no duplicate experience of a cat 'in the mind' or for that matter, 'in the brain'. Rather, all that one experiences is one cat out-there in the world. Asked to describe what one experiences, the only thing to describe is the physical cat as-perceived ... fat, furry and friendly, beyond the body surface. In this sense, one's percept of the cat, and the cat as-perceived beyond the body surface are one and the same." (Velmans, p. 82)

Also the phrase "there is no ... experience of a cat 'in the mind'" is interesting. It has a scopal ambiguity, it can mean either '(experience of a cat) in the mind', or 'experience of (a cat in the mind)'. Just like Jackendoff, Velmans seems to confuse the location of the experience (in the mind) and the location of the object of the experience (in the world).

Likewise, 'what one experiences' could mean either an experience or what the experience is of, just as 'what one records' could apply either to a recording or a sound.

### 4. JACKENDOFF B

Here Jackendoff's argument is of a form which Stove ridicules at some length. The form is:

We can know things only if condition C, which is necessary for  
knowledge, is satisfied,  
So,  
We cannot know things as they are in themselves.

The premise is tautological, and the conclusion is contingent, so - Stove says - it cannot be valid (p. 153).

Jackendoff (Semantics and Cognition, p29) "It should now be clear why we must take issue with the naïve position that the information conveyed by language is about the real world. We have conscious access only to the projected world - the world as unconsciously organized by the mind; and we can talk about things only insofar as they have achieved mental representation through these processes of organization. Hence the information conveyed by language must be about the projected world."<sup>18</sup>

The argument seems to be roughly of the form:

We can talk about things only insofar as they have achieved  
mental representation through subconscious processes of  
organization.  
∴ The information conveyed by language must be about a world  
unconsciously organized by the mind, not the real world.

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<sup>18</sup> Similar passages: Jackendoff (1990) 127-128; (1992) 157-162; (1997) 214-217

The fundamental problem here is this: is a 'thing insofar as it has achieved mental representation' just a particular kind of real-world thing, which would make the premise plausible, or a different kind of thing altogether, which would make the argument valid?

That we can only talk about things with mental representations seems to me - if not a tautology - then at least very simple and unsurprising. Only if put in the right causal idiom does it seem to be a restriction on a thought, because fundamentally whether something has a mental representation depends on our choice to think of it - not the other way around. In fact, by thinking the false thought "everything is blue" I have created a mental representation of everything, so there remain no things which have not achieved mental representation, and so there are no Jackendoffian limits to my thought.

## 5. FINE

In a paper arguing for the Natural Ontological Attitude, a compromise between realism and anti-realism about science, Fine offers the following problems for realism:

d (p. 151)

Fine's conclusion is "everything we observe is not independent of us", and since he puts emphasis on this argument, it seems to be the important statement that everything we observe is dependent upon us. Given this conclusion, and the assumption of validity, we work back to reconstruct:

All observed things are causally interacted with  
All causally interacted with things are dependent on us  
∴ All observed things are dependent on us

Now for the second premise to be true we must think of 'causally interacted with' as meaning things which we somehow affect, not just things which affect us. So we clarify further:

All observed things are affected by us  
All things affected by us are dependent on us  
∴ All observed things are dependent on us

But now the first premise seems implausible, since a long extinct distant star may send its light to us, and so be an observed thing, but as it is long extinct it can hardly be affected by us. This formalization is valid but not sound.

We can try in the other direction, clarifying the argument with the first premise's truth in mind. The first premise was originally 'all observed things are causally interacted with', this seems true because for us to observe something we must be affected by it. So we can interpret 'causally interacted with' as 'either affect us or affected by us', which gives us a plausible first premise but a false second premise - since something which merely affects us is not dependent on us:

All observed things either affect us or are affected by us  
All things which affect or are affected by us are dependent on us  
∴ All observed things are dependent on us

So there are a variety of ways we could interpret Fine's fragmentary specification: it could specify a valid and sound argument which establishes only the uninteresting conclusion that observed things either affect us or are affected by us. It could specify an argument with the interesting conclusion that observed things are dependent on us, but if so then either the premises will be implausible or the form invalid. There is no satisfactory way to resolve Fine's specifications, and one way of explaining the reason for this is to say that 'A is independent of B'

is being used ambiguously, between meaning 'A is not dependent on B' or 'A is not dependent on B and B is not dependent upon A',<sup>19</sup>.

## 6. BERKELEY

Berkeley: (First Dialogue, p. 609)

PHIL. But (to pass by all that hath been hitherto said, and reckon it for nothing, if you will have it so) I am content to put the whole upon this issue. If you can conceive it possible for any mixture or combination of qualities, or any sensible object whatever, to exist without the mind, then I will grant it actually to be so.

HYL. ...What more easy to conceive a tree or house existing by itself, independent of, and unperceived by, any mind whatsoever? I do at this present time conceive them existing after that manner.

PHIL. How say you, Hylas, can you see a thing which is at the same time unseen?

HYL. No, that were a great contradiction.

PHIL. Is it not as great a contradiction to talk of conceiving a thing which is unconceived?

HYL. It is.

PHIL. The tree or house therefore which you think of is conceived by you?

HYL. And how otherwise?

PHIL. And what is conceived is surely in the mind?

HYL. Without question, that which is conceived is in the mind.

PHIL. How then came you to say, you conceive a house or tree existing independent and out of all minds whatsoever?

Berkeley's advocate, Philonous, rests the entire case on this matter so the conclusion cannot be trivial, it must be idealist, i.e. that we can only conceive of mental things.

What premises can we reconstruct for this conclusion? It seems:

- (1) We cannot conceive something without it being conceived.
- (2) Anything conceived is in the mind.
- (3) What is in the mind is mental.

The first two are straight from Philonous' mouth, but the third must be supplied to make the argument valid. In the course of the argument I am inclined to agree with Hylas in assenting to (1) and (2), but can we reconcile the senses of 'conceive' and 'in the mind' among their uses?

There are two potential ambiguities: 'something conceived' can mean either an object which someone is conceiving of, or a conception of the object (just as 'something recorded' can mean the thing or the recording); second 'in the mind' can mean either 'object of thought' or 'mental'.

Let us first assume validity, i.e. that both 'in the mind' and 'conceived' are used consistently throughout the specification; then we ask, can we assign senses so that all the premises are plausible?

Given the earlier remarks of Hylas and Philonous, about conceiving houses and trees, 'conceived' must be in its object sense in premise (1), though the premise is tautological no matter what sense 'conceived' is in.

The second premise can be plausible in two different ways: either (i) if 'anything conceived' means object of conception, and 'in the mind' means object of

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<sup>19</sup> Musgrave, 1989, discusses this argument. He seems to assume that 'independent' means 'either affects or is affected by us', and so says the conclusion is very weak

thought; or (ii) if 'anything conceived' means a conception, and 'in the mind' means mental.

Finally, for (3) to be plausible 'in the mind' must be in the sense meaning essentially just mental.

These three conditions on interpretation are not reconcilable. If we take the first premise to be plausible then 'conceived' must mean object of conception, 'in the mind' must mean object of thought, and the third premise is implausible. If we take the third premise to be plausible then 'in the mind' must mean mental, 'conceived' must mean conception, and the first premise is implausible. We could of course interpret each use of the term differently, as seems natural, but then the argument is invalid.

## 7. SUMMARY

I have applied the theory of equivocation as irreconcilable specification to six different Gems, hopefully highlighting their fallacy.

## CHAPTER SIX: THE UR-GEM

In this chapter I will discuss in detail the argument from Berkeley which Stove calls the Ur-Gem (p. 157). I will try to consider every point relevant to reconstruction of the argument, and then compare my commentary on the argument to the commentary of Russell, Armstrong, and Stove. But first, the specification, so here are paragraphs 22, 23, and 24 of Berkeley's Principles of Human Knowledge:

### 1. STATEMENT

"22. I am afraid I have given cause to think I am needlessly prolix in handling this subject. For, to what purpose is it to dilate on that which may be demonstrated with the utmost evidence in a line or two, to any one that is capable of the least reflexion? It is but looking into your own thoughts, and so trying whether you can conceive it possible for a sound, or figure, or motion, or colour to exist without the mind or unperceived. This easy trial may perhaps make you see that what you contend for is a downright contradiction. Insomuch that I am content to put the whole upon this issue:- If you can but conceive it possible for one extended movable substance, or, in general, for any one idea, or anything like an idea, to exist otherwise than in a mind perceiving it, I shall readily give up the cause. And, as for all that compages of external bodies you contend for, I shall grant you its existence, though you cannot either give me any reason why you believe it exists, or assign any use to it when it is supposed to exist. I say, the bare possibility of your opinions being true shall pass for an argument that it is so.

23. But, say you, surely there is nothing easier than for me to imagine trees, for instance, in a park, or books existing in a closet, and nobody by to perceive them. I answer, you may so, there is no difficulty in it; but what is all this, I beseech you, more than framing in your mind certain ideas which you call books and trees, and the same time omitting to frame the idea of any one that may perceive them? But do not you yourself perceive or think of them all the while? This therefore is nothing to the purpose; it only shews you have the power of imagining or forming ideas in your mind: but it does not shew that you can conceive it possible the objects of your thought may exist without the mind. To make out this, it is necessary that you conceive them existing unconceived or unthought of, which is a manifest repugnancy. When we do our utmost to conceive the existence of external bodies, we are all the while only contemplating our own ideas. But the mind taking no notice of itself, is deluded to think it can and does conceive bodies existing unthought of or without the mind, though at the same time they are apprehended by or exist in itself. A little attention will discover to any one the truth and evidence of what is here said, and make it unnecessary to insist on any other proofs against the existence of material substance.

24. It is very obvious, upon the least inquiry into our thoughts, to know whether it is possible for us to understand what is meant by the absolute existence of sensible objects in themselves, or without the mind. To me it is evident those words mark out either a direct contradiction, or else nothing at all. And to convince others of this, I know no readier or fairer way than to treat they would calmly attend to their own thoughts; and if by this attention the emptiness or repugnancy of those expressions does appear, surely nothing more is requisite for the conviction. It is on this therefore that I insist, to wit, that the absolute existence of unthinking things are words without a meaning, or which include a contradiction. This is what I repeat and inculcate, and earnestly recommend to the attentive thoughts of the reader. "

### Ambiguities

Let us first consider some of the potential ambiguities.

1. 'In the mind' is well known to be ambiguous between meaning 'mental, or among the contents of the mind' vs. 'being thought of'. In general when we talk about representations, if we say that something is in the representation we can either mean that it is literally inside or part of it, or mean that it is represented in it. E.g. silver is in all photographs (first sense), and I am in some photographs (second sense); there is dust in my telephone book (first sense), and the mayor is in my telephone book (second sense); and likewise an idea is in my mind (first

sense) and you, the reader, are in my mind (second sense)<sup>20</sup>. 'Without the mind' suffers from the same ambiguity.

2. Berkeley's use of the word 'idea' is worthy of suspicion throughout his writings<sup>21</sup>, but it plays only a minor part in this argument.

3. We have to watch out for de re / de dicto confusion<sup>22</sup>. Among other contexts, this confusion can occur in a statement of the form 'x is possibly P' - which can mean either (i) 'possibly(Px)' or (ii) 'x is (possibly-P)'.

For example, "it is possible for the mayor of Invercargill to be mad" could mean either (i) It is possible that the mayor of Invercargill be mad, or (ii) Regarding the mayor of Invercargill, that particular person, it is possible for them to be mad. So the first reading is only true if it is possible that the present mayor of Invercargill be mad and still mayor, or if there were someone else who was mad and mayor. The second reading is only true if the actual mayor of Invercargill (Tim Shadbolt) could be mad somehow.

Likewise we have to be careful with Berkeley's talk about the possibility of conceiving unconceived objects.

### Equations

Perhaps as part of his rhetorical style Berkeley often varied his phrasing, but made it fairly clear when a number of different formulations are meant to express the same thing, thus:

1. Berkeley seems to equate something being conceivable with it being possible, but surely many things are not humanly conceivable yet are possible, simply because we do not have the mental capacities to entertain some possibilities. So when 'conceivable' and 'possible' are used interchangeably we should be careful to note which meaning they are meant to express.

2. Each of "perceived", "conceived", "in a mind", "thought of" seems to be used as meaning essentially the same thing, and for the premises to be plausible it must be a very open sense such that something is conceived if any reference is made to it<sup>23</sup>

3. The conclusion we know is of some substantial import, because Berkeley says he is prepared to rest his entire argument on the point. But it is expressed in many different ways, Berkeley keeps repeating it in different formulations, the following all seem to be meant to express the same impossibility (they appear here in the same order as they appear in Berkeley):

- (1) "[to] conceive it possible for a sound, or figure, or motion, or colour to exist without the mind or unperceived."
- (2) "[to] conceive it possible for one extended moveable substance, or in general for any one idea, or anything like an idea, to exist otherwise than in a mind perceiving it"
- (3) "that you can conceive it possible the objects of your thought may exist without the mind."

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<sup>20</sup> On Berkeley's use of 'in' see Stove p. 157

<sup>21</sup> See Russell, p. 627; Armstrong, p. 8

<sup>22</sup> In Berkeley, see Russell, pp. 627-628. Generally, see Quine, *Quantifiers and Proposition Attitudes*; Quine, *Word and Object*, §§30-32; Honderich, entry on de re and de dicto, p. 188

<sup>23</sup> Armstrong says "the sense of "thought of" in which Berkeley is claiming that nothing can exist is an incredibly empty one. It means only "a reference of any sort at all" (p. 10) )

- (4) “[for you to] conceive [the objects of your thought] existing unconceived or unthought of”
- (5) “[to] conceive bodies existing unthought of, or without the mind”
- (6) “the existence of material substance”
- (7) “the absolute existence of sensible objects in themselves, or without the mind”
- (8) “the absolute existence of unthinking things”

## 2. ANALYSIS

### Premises

Given the assumption that Berkeley’s premises are plausible, what can we come up with?

It is a tautology that no thing can be simultaneously thought of and not thought of, and Berkeley seems to adduce this fact in his argument, so let us get:

Nothing can be simultaneously thought of and not thought of.

Berkeley also hints at the eminently plausible:

Nothing can be thought of without having some mental representation.

And, finally

The sentence “there exists something that is not thought of” cannot be uttered in truth.

### Validity

There are a variety of valid argument forms which seem to be suggested:

The description ‘X’ is contradictory  
 $\therefore$  No Xs can exist

or perhaps:

Nothing can be at once X and not-X  
 $\therefore$  No X can be not X [de dicto]

or:

Nothing which is an X can be a not-X [de re]  
 $\therefore$  No X can be not X [de re]

### Conclusion

As we have already seen, Berkeley restates the conclusion again and again. I think that there are four distinct possible conclusions, each strong enough to warrant the emphasis Berkeley places on the argument:

It is not possible for something actually thought about to be not thought about, nor something actually not thought about to be thought about. [de re]

No thing can exist which is not being thought about.

You cannot think of anything which is not mental.

No thing can exist which is not mental.

Although all these four conclusions are suggested by Berkeley's writing, it is conceivable that he means only one of them and that some of his reformulations are misleading. So the assumption of an appropriate conclusion is a disjunctive assumption, such that any one of these four propositions would satisfy it.

#### Reconciliation

From this collection of potential premises, argument forms, and conclusions which we have culled from Berkeley, there exists no possible combination of three of them. In fact, even all the premises taken together cannot - using any argument form - entail one of the interesting conclusions.

### 3. OTHERS' DISSOLUTIONS

#### Russell

Russell (pp. 627-628) accuses Berkeley of confusing the de re and de dicto senses of "all conceived objects must be conceived". In one reading it means that nothing can be at once conceived and not conceived, which is admittedly a tautology; in the other reading it means that no object actually conceived could exist unconceived, which is very significant.

#### Armstrong

Armstrong (pp. 9-11) says that Berkeley proves the statement "there are things that nobody has thought of" can never be truthfully uttered, but does not demonstrate that it is self-contradictory, and so does not demonstrate that the world must be thought of in order to exist.

#### Stove

Stove (pp. 139-140) is clear in what he thinks about this argument, he says it is patently invalid because it pretends to deduce a contingent consequence from a tautological premise, thus:

You cannot have three-without-the-mind in mind, without  
having them in mind,  
So,  
You cannot have trees-without-the-mind in mind.

#### Synthesis

Russell takes Berkeley's conclusion to be that no actual perceived thing can exist unperceived (de re), and thus accuses him of deriving it fallaciously from the tautology that nothing can be perceived and not perceived (de dicto).

Armstrong takes Berkeley to be making all his statements in the de dicto mode (i.e. he assumed validity was satisfied), but then the validly derived conclusion is just that the statement "there are things that nobody has thought of" can never be truthfully uttered. So Berkeley's further idealist conclusions are taken as unwarranted, and derived from confusing what cannot be truthfully uttered and what is necessarily false.

Stove takes the conclusion to be that we cannot think of non-mental things, and as such it is not able to be validly derived from the tautologous things which Berkeley says - no matter what the form of the reasoning might be<sup>24</sup>.

So none of the three commentators found an argument which fitted Berkeley's boasts.

By contrasting the difference in the three interpretations I do not mean to say that if there really was a good argument then they might have missed it; each has reconstructed from the specification the best argument they could find, but since all such arguments are flawed the particular one each chose was a matter of subjective judgement.

What I have shown, I think, is that the three commentators' apparent disagreement about Berkeley's faults is not real, but that each of them attacked the argument in a somewhat partial manner - whereas my method is more thorough and complete.

#### 4. SUMMARY

Berkeley's passage is full of different signals about the nature of the argument. Each of Russell, Armstrong, and Stove took one or more of these signals and showed that the resulting argument is somehow untenable.

I have shown that no combination of the signals yields a tenable argument, that contrary to appearances no argument fits Berkeley's specification, and so that the specification commits the fallacy of equivocation. I rather think that my dissolution of Berkeley's argument is the best, because it accommodates those of Russell, Armstrong, and Stove; it also leaves less question of there being another interpretation under which Berkeley is correct.

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<sup>24</sup> There are still other ways of dissolving the argument, see e.g. Stove's account of Anderson on Berkeley's relativism ("A Note on Relativism")

## CHAPTER SEVEN: SUMMARY AND CONCLUSION

### 1. SUMMARY

1. A Gem is an argument specification which purports to validly derive a contingent anti-realist conclusion from only a tautology.
2. An equivocating specification is one which purports to specify appropriate premises, an appropriate conclusion, and a valid form, but which cannot be fulfilled by any argument.
3. Therefore all Gems commit the fallacy of equivocation.
4. Treating them as such sheds light on their nature and the appropriate way to handle them.

### 2. RESERVATIONS

- The apparatus of my theory could do with some work, especially further formalizing the nature of interpretative assumptions.
- There are many other Gems which I have not included, some because I am not sure whether they are Gems or am not sure how to best dissolve them. It would be worthwhile to keep working at such Gems.
- It would be worthwhile, I think, to compare my theory with traditional classifications of equivocation, such as Aristotle's (see Kirwan and Atherton), the Stoics' (Atherton), and Kirwan's.
- I would have liked to offer a better way of accommodating the empirical evidence which Jackendoff and Velmans felt drove them to using Gem arguments.
- Stove hints at equivocation (p. 149, 157) but does not develop as I have done.
- It might be questioned whether the metaphysical conclusions of Gems are contingent, Stove never says straight out that they are but the implication is very strong.
- I am afraid that at points I have left a fair amount of reconstruction up to the reader.

### 3. CONCLUSION

I feel that the following desirable things have been achieved by this essay:

1. I brought some more science to the subtle art of disambiguating arguments.
2. I reduced the appeal of some of the Gems quoted, appeal which survived - at least in me - even Stove's harsh treatment.
3. I said some interesting things about equivocation and interpretation.

## REFERENCES

- Armstrong, D. M., ed., *Berkeley's Philosophical Writings*. New York: Collier Macmillan, 1965.
- Armstrong, D. M., "Editor's Introduction" (in Armstrong, ed.), 1965.
- Atherton, C., *The Stoics on Ambiguity*. Cambridge: Cambridge University, 1993.
- Bach, K., "Ambiguity" in *Routledge Encyclopaedia of Philosophy* (E. Craig ed.) London: Routledge, 1998. Also WWW: "<http://userwww.sfsu.edu/~kbach/ambguity.html>"
- Berkeley, G., *The Principles of Human Knowledge*. (in Armstrong, ed.), 1710.
- Berkeley, G., *Three Dialogues Between Hylas and Philonous*. (in Armstrong, ed.), 1713.
- Berkeley, G., *De Motu*. (in Armstrong, ed.), 1721.
- Black, M., *Critical Thinking*. New York: Prentice-Hall, 1952.
- Chomsky, N., "Review of Verbal Behavior" *Language* 35 (1959), pp. 26-58.
- Copi, I., *Introduction to Logic*. London: Collier Macmillan. 3rd. ed., 1968.
- Dummett, M., "Bringing About the Past" in *Truth and other enigmas*. London: Duckworth, 1978.
- Empson, W., *Seven Types of Ambiguity*. Aylesbury: Penguin, 1930. 3rd ed., 1961.
- Fine, A., "Unnatural Attitudes: Realist and Instrumentalist Attachments to Science." *Mind* 95 (1986), pp. 149-79.
- Grice, H. P., "Logic and Conversation" in *Studies in the Ways of Words*. Cambridge, Mass.: Harvard University Press, 1989.
- Hacking, I., *A Concise Introduction to Logic*. New York: Random House, 1972.
- Honderich, T., (ed.) *Oxford Companion to Philosophy*. Oxford: University, 1995.
- Jackendoff, R., *Semantics and Cognition*. Cambridge, Mass.: MIT Press, 1983.
- Jackendoff, R., *Consciousness and the Computational Mind*. Cambridge, Mass.: MIT Press. 1987.
- Jackendoff, R., *Languages of the Mind*. Cambridge, Mass.: MIT Press. 1992.
- Jackendoff, R., "Why a conceptualist view of reference? A reply to Abbott." *Linguistics and Philosophy* 20 (1997), pp. 211-219.
- Kirwan, C., "Aristotle and the so-called fallacy of equivocation" *The Philosophical Quarterly* 29 (1979), pp. 35-46.
- Kess, J. F. and Hoppe, R. A., *Ambiguity in Psycholinguistics*. Amsterdam: John Benjamins B.V., 1981.
- Matthews, P. H., *Oxford Concise Dictionary of Linguistics*. Oxford: University, 1997.
- Mill, J. S., *A System of Logic*. London: Longmans, 1879. 10th ed.
- Musgrave, A. "Noa's Ark - Fine for Realism." *The Philosophical Quarterly* 39 (1989), pp. 383-398.
- Musgrave, A. "Conceptual Idealism and Stove's Gem"

- Nozick, R., *Anarchy, State, and Utopia*. Oxford: Blackwell, 1974.
- Quine, W. V. O., *Word and Object*. Cambridge, Mass.: MIT Press, 1960.
- Quine, W. V. O., *The Ways of Paradox*. Cambridge, Mass.: Harvard, 1966. 2nd ed., 1976.
- Quine, W. V. O., "Quantifiers and Propositional Attitudes" 1955. In *The Ways of Paradox*.
- Russell, B., *History of Western Philosophy*. London: George Allen & Unwin Ltd., 1946.
- Stove, D. C., "A Note on 'Relativism'" *Australasian Journal of Philosophy*
- Stove, D. C., "Idealism: a Victorian Horror-story (Part Two)" in *The Plato Cult and Other Philosophical Follies*. Oxford: Basil Blackwell, 1991.
- Tichý, P., "Subjunctive Conditionals: Two Parameters vs. Three" *Philosophical Studies* 45 (1984), pp. 156-162.
- Velmans, Max, "Consciousness, brain and the physical world" *Philosophical Psychology* 3 (1990) pp. 77-99.