# The semantics of sense perception in Berkeley

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**Abstract:**   **George Berkeley's linguistic account of sense perception is one of
the most central tenets of his philosophy. It is intended as a solution to a wide range
of critical issues in both metaphysics and theology. However, it is not clear from
Berkeley's writings just how this 'universal language of the Author of Nature' is
to be interpreted. This paper discusses the nature of the theory of sense perception
as language, together with its metaphysical and theological motivations, then
proceeds to develop an account of the semantics of the perceptual language, using
Berkeley's theory of reference for human language as a guide.**

George Berkeley's linguistic account of sense perception is one of the
central tenets of his philosophy. It is so central, in fact, that his metaphysics
stands or falls upon it. Sense perception must communicate to us a very large
number of important truths – such as the existence and nature of God and of
other human minds – if Berkeley's project is ever to get off the ground. Equally
importantly, there are a number of things it must *not* say if Berkeley's meta-
physics is not to implode. For instance, according to the thesis of semantic
atomism which was popular in Berkeley's day, all meaningful words refer to
particular non-linguistic entities – whether objects or ideas. If this thesis is
accepted, then in order for the 'words' of the perceptual language – i.e.
phenomenal objects – to be meaningful, each one will have to refer to some
non-linguistic (which for Berkeley may imply unperceived) entity, which lands
us either back in materialism or in something like Leibniz's 'monadology',
depending on what sorts of things we take these referents to be. Nowhere in
Berkeley's published work is there an adequate explanation of the correct method
of interpreting our perceptions.

This critical problem of the *semantics* of sense perception threatens to either
leave Berkeley in solipsism (if the 'words' of the perceptual language have no
referents) or undermine the critique of matter (if semantic atomism is accepted),
and neither is acceptable. The purpose of this paper will be to extricate Berkeleian
metaphysics from this difficulty by constructing an account of the semantics of

sense perception on which inanimate objects lack direct non-linguistic referents but are nevertheless meaningful, while those perceived objects which we take to be literally 'animate' (i.e. ensouled) do have such referents. The purpose of the language as a whole, it will be argued, is to communicate information to us about other minds, including God, which can inform our actions, thus creating a linguistic context for meaningful interaction among a community of minds. An account of this sort preserves the strengths of Berkeley's theory and avoids both of the extremes indicated above.

We will begin by examining the theory itself, including its metaphysical and theological motivations, in order to gain a thorough understanding of its nature and importance within Berkeley's overall metaphysical understanding. When this has been accomplished, we will be in a position to construct a more complete account of the nature of the threat posed by the problem of semantics. Following this, we will identify three specific characteristics the perceptual language must have in order for Berkeley's project to succeed, and it will be argued that Berkeley recognized each of these as an important characteristic of human language. While the development of a rigorous theory of language as a whole is beyond the scope of this paper, the identification of these characteristics will be sufficient to enable us to begin in the final section to apply ourselves to the actual interpretation of the perceptions before us.

## Sense perception as language

### The theory

Berkeley's theory of sense perception as language is at the core of his understanding of the phenomenal world which, in turn, helps to form the epistemological basis for his claims about the noumenal world. The theory was undoubtedly at the forefront of Berkeley's thought from the very beginning of his philosophical career. The theory is hinted at throughout the *Essay Toward a New Theory of Vision*, Berkeley's earliest published work, but does not receive its real introduction until section 147 which reads in its entirety:

> Upon the whole, I think we may fairly conclude that the proper objects of vision constitute an universal language of the Author of Nature, whereby we are instructed how to regulate our actions in order to attain those things that are necessary to the preservation and well-being of our bodies, as also to avoid whatever may be hurtful and destructive to them. It is by their informations that we are principally guided in all the transactions and concerns of life. And the manner wherein they signify or mark unto us the objects which are at a distance is the same with that of languages and signs of human appointment, which do not suggest the things signified by any likeness or identity of nature, but only by an habitual connexion that experience has made us observe between them.[1]

Thus it is Berkeley's view that vision is a language by which God communicates with us and instructs us as to 'how to regulate our actions'. The language

of vision is taken in the *Essay* primarily to communicate information about tangible objects. In Berkeley's words, 'visible figures represent tangible figures in much after the same manner that written words do sounds' (143, see also *Principles*, 44).

This, of course, is not a theory of *sense perception* as language, but only a theory of *vision* as language. However, we learn quickly in Berkeley's next publication, the *Treatise on the Principles of Human Knowledge*, that tangible objects are no more mind independent than visible objects (3, 44, etc.), and throughout the *Principles* Berkeley seems to speak loosely of all of the phenomenal world as a single divine language (66, 108, etc.), as he also does in *Siris* (252ff.). These factors, among others, led Colin Turbayne to argue that Berkeley's implicit view is that vision and touch are related as spoken English is related to written English.[2] However, the passage from the *Essay* quoted above notwithstanding, Berkeley seems to deny this view in the *Alciphron* where he remarks regarding the ideas of smell and taste:

> That they are signs is certain, as also that language and all other signs agree in the general nature of sign, or so far forth as signs. But it is as certain that all signs are not language …. It is the articulation, combination, variety, copiousness, extensive and general use and easy application of signs (all which are commonly found in vision) that constitute the true nature of language. Other senses may indeed furnish signs; and yet those signs have no more right than inarticulate sounds to be thought a language. (4.12)

It seems, then, that Berkeley's mature view is that the other senses provide signs which are annexed to the divine language – vision – but do not properly form a part of it. Thus smell and taste, for instance (and presumably also touch), though forming no part of the language of vision, may have significations in the same way that green lights for 'Go' and red lights for 'Stop', though no part of the English language, have significations for speakers of English. It will be convenient, for purposes of this paper, to continue speaking of the total set of signs or symbols by which God communicates with us as a language of sense perception, but it must be kept in mind that, strictly speaking, Berkeley's theory is a theory of *vision* as language; other perceptions are also signs, but lack the requisite level of sophistication to be properly called language.

The theory as a whole is, then, that the phenomenal world makes up a series of signs or symbols by which God communicates to human beings. The world we experience and our interaction with it is, on Berkeley's view, nothing less than a 'rational discourse' with God (*Siris* 254).

### *Metaphysical motivation*

Berkeley is remembered first and foremost for what he called 'immaterialism', but later ages have more often referred to as 'classic idealism'. Immaterialism, simply put, is the denial of the existence of matter as a mind-independent metaphysical entity. In place of matter, Berkeley offers us his

maxim, '*esse* is *percipi*': 'to be is to be perceived' (*Principles* 3, emphasis original). That is, Berkeley views the material world as quite real, but in a purely phenomenalist sense. Minds are fundamental in Berkeley's ontology, and physical objects are dependent on them.

What are sense perceptions, and what is their source? The 'common-sense' reliabilist view is that sense perceptions report to us information about a mind-independent physical reality. This is precisely the sort of view Berkeley sets out to attack in the *Principles* and *Dialogues*. If this view is denied, then what is to replace it? At *Principles*, 26 and in the following sections, Berkeley argues that the source of our ideas must be another mind. Berkeley calls this mind 'the Author of Nature' or simply 'God'.

Although Berkeley first presents his linguistic account of vision in the *Essay* which was his first published work and did not presuppose an immaterialist account of metaphysics, there is every reason to believe that Berkeley already had issues related to immaterialism in mind when he developed the theory (see *Principles*, 44). Furthermore, it is in the *Principles* that Berkeley first expands the signification relation to apply to *all* perceptions, replacing the common notion of causal relations (*ibid.*, 64–66), and he does this in the context of responding to the objection that his theory cannot account for the complexity of, for instance, living organisms (*ibid.*, 60). Thus we can see that one of the chief purposes of the theory is to give meaning to the world described by Berkeley's immaterialist metaphysics. Why, Berkeley expects his critics to ask, should the world be the way it is if there is no necessary connection between one event and another? Even supposing the existence of a God, why should He make things this way?

The *Essay* asks the same question on a smaller scale. That is, it argues that there is no necessary connection between the ideas of vision and those of touch, then asks the reason for the constant conjunction between them. Berkeley concludes that 'the proper objects of vision constitute an universal language of the Author of Nature' (*Essay*, 147) and signify ideas of touch (*Principles*, 44). In the *Principles*, having laid out his view that all perceptions are equally arbitrary,[3] Berkeley expands the linguistic account of vision to perception in general,[4] and argues that all those things which are commonly taken to be related causally are in fact related by signification (*ibid.*, 65). In this way, the theory explains the existence and nature of the phenomenal world, given Berkeley's immaterialist thesis. However, there is an even more critical task which the theory must undertake: the meanings given to sense perceptions must rescue Berkeley from solipsism.[5]

At *Principles*, 148 Berkeley remarks that,

> A human spirit or person is not perceived by sense, as not being an idea; when
> therefore we see the colour, size, figure, and motions of a man, we perceive
> only certain sensations or ideas excited in our own minds: and these serve to mark
> out unto us the existence of finite and created spirits like ourselves.

'To mark out' is used by Berkeley as a synonym for 'to signify' (see, e.g. *Essay*, 140). Thus, it is clear that a human body is taken to signify a human mind, and in this way Berkeley can claim that God is informing us of the existence of other human beings and thus, provided that our interpretation is correct and God can be trusted, I can in fact know that other persons exist.[6] In this way, the perceptual language strengthens the immaterialist thesis by explaining the existence and purpose of the material world, giving a reason for the constant conjunction of one perception with another, and establishing a rational basis for belief in the existence of other human persons.

### Theological motivation

In addition to these critical metaphysical points, the idea of the physical world as a language in which God speaks to us has a great deal of theological significance, most of which is contained in a loose cluster of closely interrelated issues which may be classed broadly as part of the epistemology of religion. The subtitles Berkeley gave to the *Dialogues* and the *Principles* are quite revealing as to what he believed he was accomplishing by laying out his theories.

The first and second editions of the *Dialogues* bear the subtitle:

> The design of which is plainly to demonstrate the reality and perfection of human knowledge, the incorporeal nature of the soul, and the immediate providence of a Deity: in opposition to Sceptics and Atheists. Also to open a method for rendering the Sciences more easy, useful and compendious.[7]

Thus, the *Dialogues* have an explicitly *apologetic* purpose; the design is to show that 'the incorporeal nature of the soul, and the immediate providence of a Deity' are subject to 'plain demonstration', contrary to the claims of 'Sceptics and Atheists'. Berkeley's theory of sense perception as language plays an essential role in this design. God, Berkeley holds, is known quite certainly, since there must be an active, thinking source of our perceptions. Equipped with this 'direct and immediate demonstration', he claims, 'you may now, without any laborious search into the sciences, without any subtlety of reason, or tedious length of discourse, oppose and baffle the most strenuous advocates of atheism' (*Dialogues*, 212–213; see also 230–231).

However, the advantage of Berkeley's theory in the area of the knowledge of God does not stop at mere existence. By means of the theory of sense perception as language, Berkeley is able to argue that we know God better than we know other human persons. This is because we receive our knowledge about other human persons entirely by mediation of sense perception, but God is the source of every perception and every perception therefore adds to our knowledge of God (*Principles*, 147–149; *Alciphron*, 4.3–12).[8] Furthermore, our perceptions are not merely random, but follow a determinate order which is taken to make up the *syntax* or *grammar* of a language; these are the rules we call natural laws

(*Principles*, 108). Because of this, we can aspire to *interpret* our perceptions and so to come to understand God better. As Berkeley says in *Principles*, 109:

> As in reading other books, a wise man will choose to fix his thoughts on the sense and apply it to use … . We should propose to ourselves nobler views, such as to recreate and exalt the mind, with a prospect of the beauty, order, extent, and variety of natural things: hence, by proper inferences, to enlarge our notions of the grandeur, wisdom, and beneficence of the Creator.

Since our life in the physical is a conversation with God, 'we need only open our eyes to see the sovereign Lord of all things with a more full and clear view, than we do any of our fellow-creatures' (*Principles*, 148).

The *Principles* is somewhat different in scope and purpose from the *Dialogues*, as is clearly illustrated in its subtitle, which reads, 'wherein the Chief Causes of Error and Difficulty in the *Sciences*, with the Grounds of Scepticism, Atheism, and Irreligion, are inquired into' (emphasis original). Whereas the *Dialogues* have an apologetic purpose and seek to apply Berkeley's 'plain demonstration' of God to persuade others, in the *Principles* Berkeley is concerned with the question of the causes of the mistakes of those others. That is, if the demonstration of God is so plain and obvious, why are there so many intelligent atheists and sceptics?

Berkeley's difficulty here is nothing if not Biblical. He quotes constantly from St Paul's sermon on the Areopagus, usually with very little context. The relevant portion of that text reads,

> And [God] has made from one blood every nation of men to dwell on all the face of the earth, and has determined their preappointed times and the boundaries of their dwellings, so that they should seek the Lord, in the hope that they might grope for Him and find Him, though He is not far from each one of us; for in Him we live and move and have our being.[9]

Why, Berkeley wants to know, must people grope in the dark to find God if, in fact, 'He is not far from each one of us', and 'in Him we live and move and have our being?' Berkeley believes that his theory provides the answer. He attempts to explain the failure of the rest of the world to infer that God, rather than matter, must be the cause of their perceptions in part as follows:

> Whenever the course of Nature is interrupted by a miracle, men are ready to own the presence of a superior agent. But when we see things go on in the ordinary course, they do not excite in us any reflection; their order, and concatenation, though it be an argument of the greatest wisdom, power, and goodness in their Creator, is yet so constant and familiar to us, that we do not think them the immediate effects of a *free spirit*: especially since inconstancy and multability in acting, though it be an imperfection, is looked on as a mark of *freedom*. (*Principles* 57, emphasis original)[10]

The language itself is thus not only the explanation for how God is 'not far from each one of us', but also the explanation of why people are nevertheless

groping in the dark for Him. He is immediately present because He is speaking to us in everything, but we fail to recognize Him because the grammar of the language in which He speaks has such great regularity that we observe the pattern while failing to notice its meaning and purpose.

It is necessary, however, for Christian theology to preserve the *transcendence* of God. That is, although, as we have been saying, God is knowable and immediately present to us ('it is in Him that we live and move and have our being'), He is not ultimately comprehensible by any finite intellect ('For who has known the mind of the Lord?'[11]), nor is He contained within the creation. Indeed, despite Berkeley's concern for refuting scepticism, when discussing our knowledge of God in a more theological context he says,

> We are like men in a cave in this present life seeing by a dim light through such chinks as the divine goodness hath open'd to us …. We confess that we see through a glass darkly: and rejoice that we see enough to determine our practice and excite our hopes. (Letter to Sir John James, 7 June 1741).

What, then, are the limits of human comprehension of the divine?

Berkeley is quick to point out that his theory, unlike the 'enthusiasm' of Malebranche,[12] does not 'imagine we see God … by a direct and immediate view' (*Principles*, 148). Rather, on Berkeley's view, God, as not being an idea, is not knowable directly, but only by mediation of certain symbols and notions. However, the same is true of human persons:

> A human spirit or person is not perceived by sense, as not being an idea; when therefore we see the colour, size, figure, and motions of a man, we perceive only certain sensations or ideas excited in our own minds: and these being exhibited to our view in sundry distinct collections, serve to mark out unto us the existence of finite and created spirits like ourselves …. And after the same manner we see God; all the difference is, that whereas some one finite and narrow assemblage of ideas denotes a particular human mind, whithersoever we direct our view, we do at all times and in all places perceive manifest tokens of the divinity: everything we see, hear, feel, or any wise perceive by sense, being a sign or effect of the Power of God …. (*Ibid.*)

Thus, although our knowledge of God is limited and indirect, and we do not ultimately grasp His nature, we nevertheless know God by the very same means by which we know other human minds, and these means give us much more information about God than they do about other human minds. In fact, most of what we know about the world we know only by trusting what God is telling us through the language of sense perception.

The observation that, despite this deference for the transcendence of God and the limitations of the human mind, we know of God much the same way we know of other human persons, brings us to a final issue in this cluster. This issue is not properly part of the *epistemology* of religion, but might more correctly be referred to as the *gnostology* of God. That is, it is not sufficient for Christian orthodoxy that we be able to have an *episteme*, of God: we must have *gnosis.*

*Episteme* is theoretical and intellectual knowledge. We reach an *episteme* of God by the sort of philosophical and theological investigation we have been undertaking in this paper thus far. *Gnosis* is the sort of knowledge that comes by intimate, experiential acquaintance. To know another person in the sense of *gnosis* is to know that person through interaction and personal experience in a way that cannot be reduced to knowledge of a certain collection of facts. If the knowability of God as understood by orthodox Christianity is to be preserved, we must have both epistemology and gnostology.[13]

Although this idea is one found throughout the Christian tradition, would Berkeley, specifically, want to defend it, or would he consider it simply another form of 'enthusiasm'? Berkeley's letter to James takes the idea of direct individual interaction with God very seriously. For instance, against the need for infallible Papal proclamations Berkeley argues that

> … we have the Spirit of God to guide us into all truth. If we are sanctified and enlightened by the Holy Ghost & by Christ, this will make up for our defects without the Pope's assistance …. There is an indwelling of Christ and the Holy Spirit, there is an inward light.

Later, he specifically asserts that all Christians must be illuminated in this fashion, and not only a few who lead the others: 'The sincere Christians of our communion are governed or led by the inward light of God's grace … we see, as all must do … by a common light, but each with his own private eyes.' Berkeley is careful to guard against 'enthusiasm' here by insisting that such illumination be subjected to the light of reason and to scripture and tradition and that the 'light' of the understanding should, in matters of religion precede the 'heat' of the 'affections'.

Thus, Berkeley explicitly holds at the very least that the individual believer is inwardly illuminated by the Spirit of God. Berkeley here shows that he, like other Christian thinkers, takes meaningful individual interaction with the divine to be an important part of the Christian life. It is as a result of this sort of idea that the Christian tradition, beginning at least as early as Clement of Alexandria,[14] has often spoken of prayer in terms of 'conversation with God', and attempted to contrast itself with religious traditions which it has characterized as praying only formulaically and without expectation of a responsive divine voice.[15]

What has all of this to do with sense perception as language? Berkeley explicitly affirms a mystical inward illumination of the Holy Spirit, and would be unlikely to deny that one can converse with God through prayer. Both of these assure the type of meaningful, personal interaction the Christian tradition has always affirmed. However, Berkeley goes farther than this in that, according to the theory of sense perception as language, our every interaction with the physical is a statement in an ongoing discourse with God himself.

### Conclusion

Thus, it can be seen that Berkeley understands the phenomenal world to be a language by which God communicates with us for a variety of purposes. This theory strengthens Berkeley's metaphysical position by answering questions about the purpose and nature of the phenomena and also by facilitating Berkeley's escape from solipsism. At the same time, Berkeley's commitments in the realm of Christian theology are strengthened by the solution of a number of difficult problems in the epistemology of religion. However, the theory is, as has been said, plagued with incredible difficulties as to the semantics of the perceptual language. The only straightforward interpretive cases Berkeley gives us are of perceptions signifying one another, of human bodies signifying human minds, and various general statements about the nature of God which are derived not from any particular perceptions but from the language as a whole (*Principles*, 146ff.). Why, then, do we have so many other perceptions? What do they mean?

The next section of this paper will have as its primary purpose outlining these problems in more detail, especially as they relate to Berkeley's own understanding of language, and in particular the theory of reference developed in *Alciphron*, 7. After this we will be prepared to begin our attempt at a solution.

### The semantic difficulty

If semantics is a difficult field in human language, it is all the more so in Berkeley's 'divine language', and Berkeley's own writings are, for the most part, little help. Berkeley ordinarily talks about sense perceptions signifying one another (e.g. *Essay*, 140, 147; *Principles*, 44) and instructing us as to how to conduct our lives in the physical (e.g. *Essay*, 147; *Principles*, 31). He then claims that we can learn all sorts of wonderful truths about God from this 'rational discourse' we are having with Him. To state the objection most strongly, it is as if I were to say to you 'This clause refers to the following one; this clause refers to the preceding one', and you were to walk away exclaiming about how much you have learned from our conversation. In fact, the only thing you have learned is that conversing with me is a singularly uninformative activity. Furthermore, as has been said, it is critically important that Berkeley escape from this 'horizontal signification', for if he does not he will be trapped in solipsism.[16] In order to get a better idea of the precise nature of the problem and where we ought to begin looking for a solution, this section will examine two issues in Berkeley's own text: where in the perceptual language meaning is to be found, and what precisely it is for a term to have meaning.

### Semantics vs syntax

If Berkeley has anything to say about the semantic problem in general, and where we are to look for semantic content, it is in his discussion of the place of

natural philosophy, especially that of *Principles*, 108–110. Here, Berkeley discusses the study of the rules or patterns according to which perceptions present themselves. In section 108 Berkeley points out a rather straightforward application of his system to natural philosophy, remarking that 'Those men who frame general rules from the *phenomena*, and afterwards derive the *phenomena* from those rules, seem to consider signs rather than causes' (emphasis original). In other words, the laws of physics are systematic accounts of the significations of various perceptions. Since the perceptions are passive and have no causal power, they do not, strictly speaking, cause anything; they simply occur before or after some other event according to the will of God, who is the source of our perceptions. Berkeley goes on, however, to draw an unexpected parallel with human language: 'And as it is very possible to write improperly, through too strict an observance of *general grammar rules*: so in arguing from general rules of Nature, it is not impossible we may extend the analogy too far, and by that means run into mistakes' (*ibid.*, 108, emphasis added).

We discover that this remark is not merely an illustration but a real part of Berkeley's linguistic account of sense perception when, in the following section, Berkeley criticizes certain natural philosophers for writing only 'grammatical remarks on the language'. Instead, Berkeley suggests, 'a wise man will choose to fix his thoughts on the sense and apply it to use'. Here, the 'sense' of the language is found in 'the beauty, order, extent, and variety of natural things'. By understanding the language in this way, we will be able 'by proper inferences, to enlarge our notions of the grandeur, wisdom, and beneficence of the Creator: and … to make the several parts of the Creation, so far as in us lies, subservient to … God's glory, and the sustentation and comfort of ourselves and our fellow-creatures' (*ibid.*, 109).

Finally, in section 110, Berkeley remarks that 'the best key to the aforesaid analogy', that is, the best *grammar manual* of the perceptual language, is 'a certain celebrated treatise of *mechanics*', by which Berkeley almost certainly means Newton's *Principia*.

It seems, then, that one perception does not ordinarily refer to another perception in the linguistic sense of reference after all. Rather, these consistent rules of the ordering of perceptions form the *grammar* or *syntax* of the language, in which some other content is encoded. To focus on these rules to the exclusion of the 'sense' of the perceptual language would be ridiculous, for the same reason it would be ridiculous to suppose that the principle purpose of studying literature was the writing of grammar manuals. Grammar manuals are useful, and the study of language is worthwhile, but the purpose of literature is nonetheless not to be analysed grammatically, but to be read for its content. This is the purpose of the phenomenal world: to be 'read' by human beings, that we may get at some sort of 'content' which God has prepared for us.

If this is the case, then why does Berkeley nonetheless refer to these syntactic relations with the same terms as semantic relations, saying that one perception 'signifies' or 'marks out to us' another according to the laws of physics? Does Berkeley really believe that these regularities are always grammatical rules, and that perceptions never reference other perceptions in the narrow semantic sense of 'reference'? Berkeley constantly speaks of one perception being connected to another by the signification relation, yet none of his discussions of the perceptual language include a definition of signification. Furthermore, in several places (e.g. *Essay*, 147; *Principles*, 31, 109), Berkeley includes knowledge of the phenomenal world as a critical part of what the language is supposed to communicate to us.

Thus, we are left with at least four problems regarding the location of semantic content in the perceptual language:

(1)  What are the referents of phenomenal objects? Can phenomenal objects refer to other phenomenal objects?

(2)  Does 'signification' for Berkeley mean the semantic reference relation, or something broader?

(3)  How is knowledge about God and the conduct of our lives to be derived from these perceptions – that is, how are they interpreted?

(4)  Are syntactic and semantic relations mutually exclusive of one another? That is, if the rules of syntax require that some perception $x$ is always followed by another perception $y$, can it be the case that $x$ refers to $y$, or does the syntactic relation exclude the semantic one?

### Berkeley's theory of reference

Although Berkeley never develops a detailed account of signification in the context of the perceptual language, he does develop such a theory in connection with human language, in the form of his discussion of the meaningfulness of certain highly abstract scientific and theological terms at *Alciphron*, 7.5ff.,[17] to which we will now turn. In section 4, Alciphron challenges Euphranor with the claim that Christian faith is impossible, because its alleged objects include terms such as 'grace' which are not associated with any 'clear and distinct idea'. Euphranor responds in section 5 by rejecting semantic atomism and beginning to develop a quite innovative account of just what it is for a word to be meaningful, which, as Anthony Flew has argued,[18] presages the later linguistic theories of Ludwig Wittgenstein.

Semantic atomism, as characterized by Berkeley, is the view that words 'do or should stand for ideas, which so far as they suggest they are significant. But words that suggest no ideas are insignificant. He who annexeth a clear idea to every word he makes use of speaks sense; but where such ideas are wanting, the

speaker utters nonsense' (*Alciphron*, 7.2). Berkeley makes much of the word 'suggest' in this formulation. He takes it to mean that 'every time [meaningful words] are used, [they] excite the ideas they signify in our minds' (*ibid.*, 7.5). Thus the view which Berkeley takes to be the 'universally received' one (*Principles*, Introduction, 18), and which he rejects, is that a word is meaningful if and only if every time one hears or reads it one has the same clear and distinct idea, which the word signifies. If this is not true, then what is it for a word to be meaningful? The answer, Berkeley believes, is to be found at the poker table:

> Counters … at a card-table are used, not for their own sake, but only as signs substituted for money, as words are for ideas … is it necessary every time these counters are used throughout the progress of a game, to frame an idea of the distinct sum or value that each represents? (*Alciphron*, 7.5)

Shortly thereafter, Berkeley gives a second example: 'In casting up a sum, where the figures stand for pounds, shillings, and pence, do you think it necessary, throughout the whole progress of the operation, in each step to form ideas of pounds, shillings, and pence?' (*ibid.*, 7.5). From these examples, which Berkeley takes to be the rule rather than the exception, he concludes that, 'words may not be insignificant, although they should not, every time they are used, excite the ideas they signify in our minds; it being sufficient that we have it in our power to substitute things or ideas for their signs when there is occasion' (*ibid.*, 7.5).

Berkeley's idea, it is clear from the further examples in the sections following, is that not only do words not excite the ideas they signify in our minds every time we hear them, but many words do not signify any particular ideas at all, and these words are nonetheless meaningful. Furthermore, most of the words which signify determinate ideas signify not one idea, but many. These are 'general' terms.[19] There are, then, three types of meaningful words: those which stand for one particular idea, those which stand for many particular ideas, and those which stand for no idea at all. The first group I will call 'concrete' terms, the second I will call 'general' terms, and the third 'abstract' terms.[20] In order to gain a clearer understanding of how the theory of reference works, we will now examine each of the classes of terms by way of example and show how and why they are meaningful.

The only single words in English, as far as I am aware, which are concrete terms in this sense are proper names for inanimate objects.[21] It might be thought that Locke's 'simple ideas' were a class of further examples, but, in fact, Berkeley rejects the possibility of forming such simple ideas – for instance, the idea of 'red' – as a class of abstraction (*Principles*, Introduction, 7).[22] Once we have found an example, understanding its meaning is very simple. So, for instance, 'Parthenon' is a concrete term. It refers to a particular marble structure located on the Athenian Acropolis. When describing various facts about the Parthenon

(when it was built, the name of the architect, its current state of repair, etc.), I do not necessarily form a proper idea of the Parthenon in my mind at each step; that is, I do not constantly picture it. However, I know that at any time I may 'cash in' the word 'Parthenon' in these statements for my idea of the Parthenon – that is, my memory of concrete perceptions of it. Note, however, that if I didn't know what the Parthenon looked (or felt, or smelled) like I would have no proper idea of it. This would not stop me from using the word meaningfully, but would simply classify it as an abstract term rather than a concrete one.

The vast majority of English words are general terms. These are words such as 'triangle'. To know what the word 'triangle' means is to know what set of objects I may 'cash it in' for: namely, any particular triangular object.

Abstract terms are rather more nebulous, as they cannot be directly 'cashed in' for any particular, determinate ideas. One of Berkeley's key examples is 'force' (as a technical term of physics) and, after demonstrating how nebulous the concept is and that it does not correspond to any particular determinate idea, he explains how it is nonetheless meaningful:

> … there are very evident propositions or theorems relating to force, which contain useful truths …. And if, by considering this doctrine of force, men arrive at the knowledge of many inventions in Mechanics, and are taught to frame engines, by means of which things difficult and otherwise impossible may be performed; and if the same doctrine which is so beneficial here below serveth also as a key to discover the nature of the celestial motions; shall we deny that it is of use, either in practice or speculation, because we have no distinct idea of force? (*Alciphron*, 7.7)

Although the word 'force' does not correspond to any idea, there are nevertheless *theorems* of force, and these theorems relate one physical object to another, and physical objects are ideas. Thus, for instance, the theorem which says that $F = ma$ permits us to predict the outcome of collisions between specific material bodies, and in this way we are able indirectly to 'cash in' the word 'force' for ideas. Berkeley argues that the same is true of the words 'grace' and 'Trinity'.

Berkeley gives a very helpful example of this pattern at *Alciphron*, 7.14 where he remarks that 'the algebraic mark, which denotes the root of a negative square, hath its use in logistic operations, although it be impossible to form an idea of such any quantity'. Here we are asked to imagine the exercise of attempting to find a real solution to an equation containing the imaginary constant $i$. Although we are dealing only with the real numbers, the symbol $i$ is nevertheless meaningful: knowledge of the theorem $i^2 = -1$ permits us to manipulate an equation according to the rules of algebra in order to eliminate the $i$ from our solution (assuming, of course, that the equation in question has a real solution). Thus, in order for an abstract term to be truly meaningful, it suffices simply that it have some relation to a concrete or general term such that it is possible, by manipulations according to linguistic rules, to come to know the truth of statements which do not contain any abstract terms. In addition to the terms

mentioned above, this class will include words like 'soul', 'God', and 'self' which refer to particular entities which are not contained in the mind.

### The problem re-examined

Armed with the distinctions made above, it is now possible for us to narrow the scope of the semantic difficulty with relation to the perceptual language quite substantially. In particular, we are left with the following questions:

(1)  Which of the 'terms' in the perceptual language are concrete, general, or abstract, and how does one tell the difference?
(2)  What are the rules according to which perceptions may be 'cashed in' for one another?
(3)  Does the existence of a syntactic rule requiring some perception $y$ to come after a perception $x$ make it impossible that $x$'s meaning could be found in its ability to be 'cashed in' for $y$?

Note that in order for Berkeley's project to succeed, once these questions are answered it must be possible to 'trade up' from perceptions to demonstrate theorems about God and other persons, and to gain knowledge about how we ought to live our lives. Furthermore, since this divine language is presumably a perfect language, it seems that every word should be significant; that is, all of our perceptions should be relevant to this process of deriving theorems and actions.

## Characteristics of the language of sense perception

This section will discuss in more detail the characteristics Berkeley's theory must have in order to perform the functions Berkeley needs it to perform. In particular, three characteristics which the perceptual language must have will be examined and it will be argued that each of these is also recognized by Berkeley as a characteristic of human language.

### Direct non-linguistic referents

It is necessary for Berkeley's theory that some, but not all, perceptions have direct non-linguistic referents. In particular, as has already been discussed, human bodies have direct non-linguistic referents, and if they did not Berkeley would be trapped in solipsism. On the other hand, if no perceptions have direct non-linguistic referents then Berkeley's escape from materialism will fail, since there will be some one unperceived thing corresponding to every perceived entity. This is, however, clearly a characteristic of human language: the word 'me' has a direct non-linguistic referent, but, Berkeley is clear in the *Alciphron*, words such as 'force' and 'grace' do not.

### Indirect reference

Some words and phrases in the perceptual language must refer indirectly to non-linguistic entities, just as, in Berkeley's example discussed above, the symbol *i* refers indirectly to the real numbers involved in the equation: no real number is the referent of *i*, but information about the reals (for instance, which of them is the solution to the equation) can be gained by considering it. This is necessary in order to make inanimate objects meaningful. It also explains another puzzle, which we discussed earlier: after claiming that sense perception is a language by which God speaks to us, Berkeley goes on to derive truths about God not from any particular perceptions (he does not interpret some particular 'sentence') but rather from the language as a whole (see, e.g. *Principles*, 151; *Alciphron*, 4.15). Berkeley sees the whole world as referring indirectly to God: 'whithersoever we direct our view, we do at all times and in all places perceive manifest tokens of the divinity: everything we see, hear, feel, or any wise perceive by sense, being a sign or effect of the Power of God' (*Principles*, 148). That this is an important characteristic of human languages is Berkeley's principle contention in his theory of reference, discussed above.

### Pragmatics

The perceptual language must have not only *semantics* but also *pragmatics*. That is, the language is not exhausted by a discussion of the meaning of words and phrases. It is also important that it create a linguistic context for meaningful interaction between minds. This must be the case in order to make sense of Berkeley's discussion of the visual language as the means 'whereby we are instructed how to regulate our actions in order to attain those things that are necessary to the preservation and well-being of our bodies, as also to avoid whatever may be hurtful and destructive to them' (*Essay*, 147).

Our actions in the physical and 'the transactions and concerns of life' are linguistic constructs, yet Berkeley consistently treats guiding these actions as a major purpose of the language. This will make sense only if the language has purposes beyond mere communication of propositional content. This, too is a characteristic of human language, as Berkeley clearly recognized:

> … the communicating of ideas marked by words is not the chief and only end of language, as is commonly supposed. There are other ends, as the raising of some passion, the exciting to, or deterring from an action, the putting the mind in some particular disposition; to which the former is in many cases barely subservient, and sometimes entirely omitted, when these can be obtained without it, as I think doth not infrequently happen in the familiar use of language. (*Principles*, Introduction, 20)

### What is God saying?

Berkeley argues that the world of perception is a language by which God speaks to us. The question of this paper ultimately amounts to: What is He

saying? A general theory of semantics would be required in order to systematize fully the interpretation of the perceptual language, and such a theory cannot be provided here. However, in human language we seem to communicate effectively without a systematic theory. In this section, we will round out our series of comparisons between the perceptual language and human language, and apply ourselves to the interpretation of a few specific examples.

Human language contains concrete, general, and abstract terms. The perceptual language does seem likely to contain all three. A human body furnishes clear examples of both abstract and general terms: your body as a whole is an abstract term referring to your soul, a particular non-idea, of which I have a particular notion. However, there are certain characteristics of your body which are common to all human beings. These combine to form the general term for human being.

It will likely be objected at this point[23] that what I am calling the 'general terms' of the perceptual language are the very abstract ideas which Berkeley so forcefully rejects. Berkeley does not, however, deny that triangles, for instance, all have certain characteristics in common. Rather, he denies that we can think of triangle in the abstract. On Berkeley's view we can only think of either the word 'triangle' or some specific triangle. We use these as tools to reason about triangles in general. The same will be true of human bodies: they have certain characteristics in common, but we cannot think of the common characteristics in abstraction from the others without the mediation of language. This has the very interesting consequence that the general term for 'human' in the perceptual language is what linguists call a 'bound morpheme' – a meaningful bit of language that cannot occur independently, but instead combines with other morphemes to form words. After reflecting upon this point, it seems likely to me that all general terms, and perhaps many other terms as well, in the perceptual language function as bound morphemes.

Whether there are concrete terms in the perceptual language is slightly more difficult, but it seems likely that these exist as well. These would be perceptions that refer directly and only to other perceptions. Perhaps, for instance, the only immediate signification of the sight of fire is the warmth I will feel if I move close, and the pain if I move closer. These have already been determined to be syntactic relations, but in these types of cases it does not seem problematic that the syntactic relation and the semantic relation should overlap, since a certain degree of regularity is necessary for meaningful interaction. This can be compared with any of a number of phrases – greetings, for instance – which are uttered almost ritually in human language with little, if any, thought of meaning outside the ritual itself. These provide a useful framework for interaction, while not having any real semantic content.

Among abstract terms, we should distinguish between those that have non-linguistic referents and those that have no referents. Here again we expect to find

both. Referented and referentless abstract terms, as I will call them, also exist in human language. 'Me' is a referented abstract term – when I utter it, I am its referent, and I am not an idea. 'Kindness', on the other hand, is a referentless abstract term – there is no substance about which we are speaking when we speak of kindness. Meaningful referentless abstract terms refer indirectly to some kind of idea or substance. So, for instance, 'kindness' gets its meaning from the fact that it can be said to be instantiated by certain human actions, and the actions are perceivable. Understanding the meaning of 'kindness' allows us, among other things, to demonstrate theorems about particular human beings, which can inform our later actions toward them.

Referentless abstract terms in the perceptual language will be similar to those found in human language. A likely example of such a term is a starry night sky. Here, it seems, we are intended to understand the power, wisdom, and artistry of God.[24] A more mundane example is that of a table in a room with two people: by observing the table, Person A can deduce information about Person B's relative location and what Person B is seeing.

It seems, then, that the perceptual language has every type of term that human languages have. There is more to language than denotation, however. The perceptual language, like human languages, has great beauty, and great ability to inspire feeling. It is also entirely through the language that we are made aware of and interact with our fellow minds.

We have already considered a few examples of statements of the perceptual language and their meanings. However, there are some more difficult cases we should consider. For instance, while we do not find it difficult to recognize human beings, and we correctly interpret human bodies as denoting consciousnesses like our own, what about animals? A detailed semantic theory, when applied to the perceptual language, ought to tell us whether any non-human animals experience consciousness and, if so, which ones. What is difficult about this question is that we do not seem to know immediately which part of our perceptions of a human body actually denotes consciousness. We know that human beings are intelligent primarily by their words and actions rather than by their bodies, and some animals – dolphins being perhaps the best example – do, arguably, show signs of intelligence. Is this sufficient? It does seem that if we were able to demonstrate that dolphin chatter or whale songs were sophisticated languages it would show that they experienced consciousness,[25] but is there another way of determining these things?

One might think that the part of the human body which explicitly denotes consciousness is the cerebral cortex, and, in the ordinary case where the cerebral cortex is not visible, we simply infer consciousness from the surrounding perceptions which are known to imply the presence of a cerebral cortex. If this were so, it would be the case that most higher animal bodies are referented abstract terms – that is, these animals would have souls. This seems to be a

reasonable interpretation based on our present knowledge of the perceptual language and, for instance, the correspondence of electro-chemical activity in the cerebral cortex to conscious thoughts. Animals, however, remain a borderline case.

There are corresponding borderline cases in human language. An example is that, while we can in fact tell most of the time, we do not have a systematic procedure for determining whether a particular utterance of the sentence, 'How are you?', is a real question expecting a real answer or simply part of a standard greeting ritual, forming a linguistic context for interaction.

These are issues related to determining the *existence* of finite minds. However, the perceptual language also provides us information about the nature and experience of those minds. For instance, it has already been mentioned that by observing a person's location – specifically, the location and direction of his or her eyes – we can determine with a fair degree of accuracy what he or she must be seeing. Additionally, the words and actions of the person are known to correspond to his or her will, so that information about volition is communicated. Finally, there is a certain degree of involuntary 'body language' – which, on the view being discussed, is quite literally *language* –which communicates information about an individual's emotional state. All of these things provide information about minds, which makes meaningful interaction possible.

Language, however, has a wide variety of purposes beyond the communication of ideas which is the major concern of the above examples. A humorous example used by Berkeley is that 'when a Schoolman tells me *Aristotle hath said it*, all I conceive he means by it, is to dispose me to embrace his opinion' (*Principles*, Introduction, 20, emphasis original). That is, the scholastic is not seeking to impart information about Aristotle, but rather a feeling of confidence in the proposition. The perceptual language seems to be geared even more strongly toward non-conceptual types of communication, and is very effective at creating certain types of attitudes and emotions. In discussing this aspect of the visual language, James P. Danaher observes, regarding two particular individuals commended by Jesus for their great faith,[26] that they possess 'a deep confidence in a God who dispenses his mercy out of his own sovereign goodness, and it seems that they came to faith … through the visual language which made up the circumstances of their lives'.[27]

Danaher's point about the circumstances of life is certainly a correct analysis of one way in which the perceptual language can inspire us to 'a deep confidence', as he puts it, in the author of that language: that is, many people of faith report the strengthening of their faith by, for instance, divine provision for their physical needs, and physical needs are, on Berkeley's view, elements of the divine language. However, there is more to the non-propositional aspect of the language than this. Berkeley exhorts us to consider the 'beauty, order, extent, and variety of natural things: hence, by proper inferences, to enlarge

our notions of the grandeur, wisdom, and beneficence of the Creator' (*Principles*, 109). Here 'inference' can be taken in the strict sense: that is, by observing, for instance, the elegance of natural systems, whether in physics, physiology, or some other science, we are assured that God's wisdom far surpasses our own. Furthermore, by considering the suitability of the world for man and God's provisions for our needs we can come to a firmer belief in divine beneficence.

On the other hand, this way of considering the matter, using 'inference' in the strict sense and discussing our inferences from nature with this kind of detachment, over-intellectualizes the matter. Considering our perceptions in a less analytic vein we become aware that God seems to be using, as it were, a touch of rhetoric or poetic flourish. The beauty of the creation has an emotional effect, which ought, at the very least, to inspire awe. The greatness of God is communicated in the creation by rational demonstration, but this demonstration is not presented dryly, but, rather, in such a way as to truly inspire confidence in the greatness of its creator.

In sum, it appears that there are two types of interpretation which we can attach to our perceptions: (1) perceptions provide us with information about other finite minds, and (2) perceptions communicate to us the power and goodness of God and inspire us to attitudes of reverence and trust with regard to him. These types of interpretations certainly overlap in the perceptions they describe, and they may not be exhaustive of the interpretations of the perceptions we experience. However, language is a complex and multifarious thing, and to describe its uses and interpretations is a seemingly endless task. What we *can* learn from the above discussion is that the difficulties we have in interpreting the perceptual language are very similar to the difficulties involved in interpreting human languages. The similarities between the two are certainly substantial enough that a detailed general theory of the semantics of human languages would go a long way toward successfully systematizing the interpretation of the visual language. However, as with human language, we can, in most cases, successfully interpret the perceptual language even in the absence of a rigorous systematization of semantics.[28]

## Notes

1. The phrase 'Author of Nature' is an addition found only in the third edition; the first and second editions read 'universal language of Nature.'
2. Colin Murray Turbayne 'Berkeley's metaphysical grammar', in *A Treatise Concerning the Principles of Human Knowledge with Critical Essays* (New York NY: Bobbs-Merrill Company, 1970), 3–36. Turbayne cites the passages mentioned on 13. Turbayne's analysis is also accepted by Walter E. Creery in his 'Berkeley's argument for a divine visual language', *International Journal for Philosophy of Religion*, **3** (1972), 217–218.
3. Arbitrariness is, on Berkeley's view, an essential characteristic of language. See, e.g. *Alciphron*, 4.7ff. Locke is the source of this view. See *An Essay Concerning Human Understanding*, 3.2.1.

4. But see the caveat at the end of the preceding section.

5. Of course, Berkeley is not in danger of true solipsism, as the mere existence of perceptions, independent of their nature, proves the existence of some sort of 'Author of Nature'; the concern here is for the existence of other finite minds.

6. Curiously enough, scholars have often missed this point. For instance, Kenneth P. Winkler mentions in passing 'Berkeley's claim that ideas of sense never signify *vertically*, or in a way that involves descent to a level of things different in kind from the ideas themselves'; *Berkeley: An Interpretation* (Oxford: Clarendon Press, 1989), 21, emphasis original. Walter Creery also remarks that 'ordinary discourse has a referential function but the phenomenal language does not have such (and indeed in terms of the attack on matter and substance, the phenomenal language cannot have such)'; 'Berkeley's argument', 219. This is despite his ultimate recognition that if 'in Berkeley's theory of meaning there is no descriptive function at all', then 'metaphysical solipsism lurks in the background and ... it is by means of the descriptive function that a case can be made out for the defeat of solipsism'; *ibid.*, 222. As will be discussed in depth below, Winkler and Creery are right that if *all* perceptions had direct referents, Berkeley's attack on materialism would fail, but if *no* perceptions have direct referents then Berkeley's theory fails to accomplish one of its key metaphysical purposes: rescuing the immaterialist from solipsism.

7. The third edition shortens this to just 'In opposition to Sceptics and Atheists'.

8. On this argument, see A. David Kline 'Berkeley's divine language argument', in E. Sosa (ed.) *Essays on the Philosophy of George Berkeley* (Dordrecht: Reidel, 1987).

9. Acts 17.26–28a. Quotation from *The Holy Bible, New King James Version.* (Nashville TN: Thomas Nelson Publishers, 1982). Henceforth *NKJV*.

10. See also *Alciphron*, 4.15.

11. Romans 11.34, *NKJV*.

12. The importance to Berkeley of avoiding 'enthusiasm' was pointed out to me by an anonymous referee for *Religious Studies*. The view Berkeley wishes to avoid is referred to as 'the enthusiasm of Malebranche' at *Dialogues* 214.

13. On the concept of knowing God in a way not reducible to knowledge of facts about God in the New Testament, see, e.g. John 10.14–15, 15.1–15, 17.3, Galatians 4.6–9, and Hebrews 10.19–22. In later Christian tradition, see, e.g. Augustine, *Confessions*, 1.1, 12.10 or any of the other classic texts of Christian mysticism.

14. *Stromata*, 7.7.

15. See Matthew, 6.5–8.

16. See n. 6, above.

17. All section numbers in *Alciphron*, 7 are from the third edition of 1752.

18. Anthony Flew 'Was Berkeley a precursor of Wittgenstein?', in W. B. Todd (ed.) *Hume and the Enlightenment: Essays Presented to Ernest Campbell Mossner* (Edinburgh: Edinburgh University Press, 1974).

19. 'But it seems that a word becomes general by being made the sign ... of several particular ideas, any one of which it indifferently suggests to the mind'; *Principles*, Introduction, 11.

20. My usage of 'abstract' here as simply the antonym to 'concrete' is in line with contemporary popular usage rather than early modern technical usage. Berkeley, of course, rejects Lockean abstraction as an impossibility.

21. Proper names of persons are, of course, not 'concrete' terms, since we have only a notion of a person, and not a distinct idea.

22. On Berkeley's rejection of Locke's simple ideas, see Winkler *Berkeley*, ch. 3.

23. I thank an anonymous referee for *Religious Studies* for this extremely important objection, which I initially missed and which led to the development of the ideas in this paragraph.

24. 'The heavens declare the glory of God; and the firmament shows his handiwork'; Psalm 19.1, *NKJV*.

25. This is slightly problematic since our intuitions about artificial intelligences do not here agree with our intuitions about animals, although communications between artificial intelligences might have the same form and be perceived in the same way as communications between animals.

26. The centurion of Matthew 8 and the Canaanite woman of Matthew 15.

27. James P. Danaher 'Is Berkeley's world a divine language?' *Modern Theology*, **18** (2002), 371.

28. The author would like to thank Karen Detlefsen for many helpful discussions throughout the process of producing this paper.