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Irwin Goldstein

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Ontology, Epistemology, and Private Ostensive Definition

IRWIN GOLDSTEIN
Davidson College

When people learn a word through an *ostensive definition*, they learn the word through direct contact with objects of the type the word denotes. A child might learn the word 'robin' through an ostensive definition. A parent might direct the child's attention to a robin and tell the child the bird is a 'robin'.

Philosophers ponder whether there might be words people learn through *private* ostensive definitions. A person who learns a psychological word through a private ostensive definition 'looks within' himself, picks out a sensation or other mental state, and decides to use the word to denote mental states of the same kind. He does not pin his use of the word to behavior expressive of the mental state. He does not tie the word to any signs of the mental state that other people might observe. Wittgenstein thinks there cannot be a word that is learnable only through such a socially isolated, introspective act (1953, #257 ff.).

People think the issue of whether there can be words that a person can learn only through private ostensive definitions has major implications. They say proponents of various philosophical theories are committed to the use of words that can be learned only in this way. These theories include: 1. *skepticism about other minds*, 2. *skepticism about an external world*, 3. *foundationalism*, 4. *dualism*, and 5. *immaterialism* (phenomenalism). The first three of these theories are in epistemology (the study of knowledge and its limits), the last two in ontology (in part, the determination of what types of substances the world contains). People say Wittgenstein refuted these theories by showing, they believe, there can be no word that is learnable only through a private ostensive definition.

In this paper I defend the above five theories from the attack on private ostensive definition. I do not claim there *can* be words that are learnable only through private ostensive definitions. Rather, I confront the Wittgensteinian on a deeper plane. The Wittgensteinian assumes proponents of the contested theories have a special commitment to private ostensive definitions. I show these theorists do not have this special commitment. (They do not need pri-

vate ostensive definitions in cases when philosophers of other schools do not.) Thus, even if people could prove there can be no words learnable only through such introspective acts, their proof would not refute the contested theories.

People might object to one or more of these five theories on non-Wittgensteinian grounds. They might oppose these theories with Wittgensteinian arguments that do not rest on the assumption that the contested theorists need private ostensive definitions. These other arguments would not threaten my thesis here. My thesis is only that *one* (famous) argument, the argument from private ostensive definition, does not refute these theories.

THE CASE AGAINST THE FIVE THEORIES

The link to private ostension words

Wittgensteinians think the five theorists I mention have a special need for 'private ostension words', words that can be learned only through introspective, private ostensive definitions. People have two kinds of reasons for thinking this.

First, a person who doubts the existence of other minds imagines there may be no minds other than his. He thinks the 'people' he interacts with may be mind-less automata—machines indistinguishable from people in every property he can detect. A person who doubts the existence of a world external to himself also imagines there may be no minds other than his. These two skeptics, like other philosophers, use language, the Wittgensteinian reasons. Each skeptic needs a view of language compatible with his being alone. Suppose one such skeptic *were* alone, the Wittgensteinian reasons. How would he have learned the word 'pain' and the other names for sensations he uses? He could not have learned the words from *other* people. Then he must have learned them 'from his own case', the Wittgensteinian says. A person who learns a sensation name 'from his own case', the Wittgensteinian assumes, learns it through an introspective act of attending to some sensation he experiences and assigning a name to sensations of the same kind.¹ Norman Malcolm appears to reason this way when he nails skepticism about other minds to private ostensive definition in his famous attack on other minds skepticism (Malcolm, 1958, pp. 137–38).

Second, proponents of various theories in ontology and epistemology endorse or entertain immaterialism. Immaterialists believe immaterial minds, not material objects, make up the world. Suppose the world were immaterial,

¹ "How does the solipsist acquire his language? He claims to learn from his own case what, for example, pain is. He experiences a sensation of a certain sort, and decides to apply the word 'pain' to every sensation like the first...." (Dancy, 1985, p. 73).

Wittgenstein appears to attack solipsism in this way in the set of passages #24, #202, and #243 ff. in *Philosophical Investigations*.

the Wittgensteinian reasons. People would be immaterial. We would have no bodies, our sensations would have no bodily expression. How would an immaterial person learn sensation names? He could not learn them through a procedure that requires a body. "The connection between the words and the sensations must be set up without the intermediary of the natural expression of sensation in bodily behaviour," Anthony Kenny writes (Kenny, 1966, p. 362). A person who learns a sensation name without connecting the name to some bodily expression of the sensation learns the word by introspectively attending to a sensation and assigning a name to sensations of the same kind (Kenny, *ibid.*; Wittgenstein, 1953, #257–58). He learns the word through a private ostensive definition.²

People think dualists need private ostensive definitions for the reason immaterialists do. Dualists believe a person is a compound of two substances—an immaterial mind and a physical body. Suppose mind and body were distinct substances. A mind could, in principle, exist disembodied. It could exist without any material object existing. Suppose this were possible, the Wittgensteinian reasons. Then, as Charles Taylor reasons, it would be possible, in principle, to isolate experiences "by means of concepts which identify mental states 'intrinsically', without linking them to anything outside" (1969, p. 78). Suppose a person has concepts with which he might identify mental states 'intrinsically'. He has words with which he could identify mental states without connecting the mental states to outward, bodily expressions. To have learned these words, Taylor reasons, he needs to have used private ostensive definitions.

For both of the above kinds of reasons Wittgensteinians think egocentric foundationalists need private ostension definitions. An egocentric foundationalist thinks a person may infer the existence of a material world, and other minds, by reasoning from beliefs about his sensations.³ Suppose a person uses the anti-skeptical reasoning the foundationalist recommends. When he refers to his sensations, he uses sensation names. Consider his use of these words at the point at which he is trying to prove other minds and a material world exist. He cannot assume other minds and a material world exist. Then he must concede that it is only 'from his own case' that he could have learned these sensation names. He must concede that when he learned these sensation names, he need not have connected these sensation names to any bodily

² When Bernard Gert (1989, p. 222) claims *phenomenalists* need private ostensive definitions, he reasons in the way Kenny reasons.

³ John Searle, who views Wittgenstein's attack on private ostensive definition as a threat to egocentric foundationalism, sees the founders of modern empiricism as egocentric foundationalists. "Traditional epistemology of the sort one finds in Locke, Berkeley, and Hume, for example, is based on the idea that we should build knowledge of the world from the inside out. We start with our inner private sensations and then construct public language and public knowledge on the basis of our inner experiences," Searle says (in Magee, 1988, p. 338).

expressions the sensations might have. Sensation names that are learnable only under these restricted conditions are learnable only through private ostensive definitions, the Wittgensteinian believes.

The case against private ostension words

To show there cannot be private ostension words critics reason as follows. Suppose there were private ostension words. I experience a sensation and decide to use a word to name that kind of sensation. I do not pin my use of the word to public, bodily signs of the sensation. Under these circumstances other people do not know what private event I am referring to when I use the word, Wittgenstein says. Furthermore, the word lacks determinate meaning even to me. Suppose I identify 'the emotion of anxiety as the sensation of pain'? Neither I nor anyone else could know about this 'mistake' (Malcolm, 1958, pp. 137–38). I have no 'criterion of correctness' for identifying the event's recurrence. The original sensation is irretrievable. No record of it remains. "One would like to say: whatever is going to seem right to me is right. And that only means that here we can't talk about right," Wittgenstein writes (1953, #258).

A rule governs the use of a word. A person must know the rule that governs a word to understand the word. Suppose there were private ostension words. When a person uses such a word, he follows a rule only he can know. However, there can be no rule that only one person can know. Hence, there can be no language that contains words of this type.⁴

Other minds and a material world are requirements for language

A word has determinate meaning for a person—Peter—only if an objective standard exists by which Peter may distinguish correct from incorrect uses of the word. Only persons other than him can provide this standard (Davidson, 1991, p. 157). To confirm that he is using a word correctly Peter must interact with other people. He can interact with other people only if other people exist.

A person can confirm that he uses a sensation name in the way other people use it only if people tie their use of the word to an intersubjectively identifiable sign of the sensation. Only a sensation's public, *bodily* expression can furnish this sign. "It is that 'natural' connection—our 'natural' incarnation, one might say—that allows for the possibility of checking and correcting first-person memories against something outside pure self-consciousness, thus allowing us to make a distinction between correct and incorrect uses of a (sensation) name" (Edwards, 1990, p. 199).

⁴ "There is no sense in the supposition that a forever-solitary person could know a language, any more than he could buy and sell" (Malcolm, 1989, p. 22).

Implications for ontology and epistemology

A person cannot sensibly suppose other minds, an external world, or a material world might not exist. Other minds skeptics, external world skeptics, and immaterialists use sensation names. Embodiment and other minds are conditions of a person's using words.

Dualism is mistaken. A mind cannot exist apart from a body. A person cannot exist disembodied after death. It is impossible, in principle, to identify mental states in isolation from bodies.⁵

Egocentric foundationalism is mistaken. A foundationalist uses words to refer to his sensations. Other minds and matter must exist for him to have these words. It is a mistake to suppose that a person can know other minds and material objects exist only by reasoning from what is intrinsic to himself (his sensations) to what is distinct from, and external to, himself (external objects).⁶

So the reasoning goes.

THE REPLY

Learning words 'from one's own case' without using private ostensive definitions

Wittgensteinians say that a person who thinks he can talk about his sensations while suspending belief in other minds needs words he can learn only 'from his own case'. One thing they may be thinking when they use the cited expression is that the skeptic needs words he can learn only *from his own experience*. The skeptic suspends belief in other minds or an external world. He cannot assume (sensory) experiences of *other people* assisted him when he learned the words he uses. He thinks it is possible that no one else exists. So, he must suppose the words he uses are words he could have learned only *from his own experience*.

Wittgensteinians who understand learning a word 'from one's own case' in this way tie the theorists they oppose to an innocent, unavoidable practice. 'There are words a person can learn only through his own (sensory) experience' is an innocent truth. Even a non-skeptic, who entertains no doubts about other minds or an external world, must admit there are words a person can learn only from his own sensory experience.

Apart from any *a priori* or innate knowledge a person might have, *all* of his knowledge rests on his sensory experience. A person's knowledge of En-

⁵ Reasoning from the principle that we identify sensations and feelings by their connections to physical settings, Peter Geach concludes, "The ascription of sensations and feelings to disembodied spirits does not make sense" (1969, p. 658), and "Unless a man comes to life again by (bodily) resurrection, he does not live again after death" (p. 662).

⁶ Bryan Magee (1988, pp. 338-39) and D. W. Hamlyn (1970, p. 162) reason in this way.

glish and other national languages is neither *a priori* nor innate. He learns words in these languages by hearing or otherwise perceiving how the objects he regards as 'other people' use the words. A person learns what a word means through experience—*his* experience.

Knowledge of language *Rachel* gains through her sensory experience may at some point advance *my* understanding of language. However, it does so only when she voices or otherwise expresses what she knows, and I perceive her utterance or other public expression. Thus, even when another person's experience advances my knowledge of language, my knowledge hinges, immediately, on *my* sensory experience.

It is not only names for sensations that a person can learn 'only through his own sensory experience.' To learn any word in English and other national languages a person must rely on *his* sensory experience to indicate what the word means.

Other mind skeptics, external world skeptics, and foundationalists have no special commitment to private ostensive definitions.

How a lone person in a land of automata learns words

Were there a solitary person of the sort the other minds skeptic imagines he might be, that person would have no special need for private ostensive definitions.

Wittgenstein believes a person learns the word 'pain' by tying his use of the word to wincing, grimaces, and other behavior expressive of pain. Suppose Wittgenstein is right.⁷ A person learns 'pain' by pinning his use of the word to certain behavior. A skeptic about other minds might embrace a view of language learning empirically identical to Wittgenstein's. He might insist the solitary person he imagines he may be need not have learned the word 'pain', or any rule that might govern its use, through a private ostensive definition.

Suppose we call the solitary person the skeptic imagines he may be 'Saul'. Though Saul is and always has been a solitary person, his environment has all the empirically detectable properties your environment has. Saul interacts with the kinds of mobile objects you and I regard as 'people'. The objects Saul normally regards as 'other people' are automata. His 'father', 'wife', and six 'children' are automata. Saul learned how to walk, talk, sing, and dance from automata. He learned language from automata.

The automata Saul interacts with present Saul with a social facade empirically indistinguishable from the community that other persons would provide. The automata engage in physical activities that mimic, flawlessly, a conscious agent's use of language. These machines 'vocalize', 'write', and

⁷ He is not, however: behavior does not have the role in learning psychological words that Wittgenstein assigned it. Most psychological words we can learn without connecting them to behavior expressive of mental states (Goldstein, 1985).

otherwise express pain-discourse. They produce pain-discourse in just the physical settings that Wittgensteinians think determine the proper use of the word 'pain': they pin pain-talk to occasions when Saul winces, grimaces, and behaves in certain other ways and to physical movements in themselves that simulate such behavior. Saul might tie *his* pain talk to public events of these types. Saul's impression that 'pain' applies to a particular sensation need not be his final authority for correct usage. His diction is subject to 'external checks'—checks that originate from objects distinct from himself (automata). If he connects 'pain' to the wrong public events, automata might correct him.

People may say there cannot be automata of the sort I depict. An object whose movements are identical to a human being's *is* a human being, and so an agent with a mind, critics may say. Critics do not prove this is so with the argument from private ostensive definition. Other arguments they might use would not threaten my thesis. I maintain only that the attack on private ostensive definition does not defeat other minds skepticism.

How immaterial people learn words

If there were immaterial people of the sort Berkeley thinks people are, they would have no special need for private ostensive definitions.

The immaterial sentient being Berkeley thinks a person is has normal sensory experiences. For every type of object you and I find in our sensory experiences Berkeley's immaterial people find an empirically identical type of object in their sensory experiences. "I am not for depriving you of any one thing that you perceive," Berkeley writes.⁸

Berkeley's immaterial people have visual, tactile, and other sensory experiences. Each person's sensory experience presents a three-dimensional world—a world with width, breadth, and depth—just the way your experience and mine does. Each person sees flowers, bicycles, spiders, and the other kinds of objects you and I see; he sees and hears other people. Or, each person has the kinds of experiences that might lead you or me to report 'seeing spiders' or 'hearing other people'. Berkeley is an immaterialist because he thinks there is nothing more to a flower than our sensory experience of it.

Berkeley's immaterial people could learn sensation names in a way that is experientially the same as the way Wittgenstein thinks people learn these words. Berkeley's people experience what a materialist would regard as 'the bodily expression of pain' in himself and other people. An immaterial person could pin his pain-talk to that bodily expression.

Suppose the *solitary* immaterial person Descartes imagines he may be is 'Phantasm'. The kinds of experiences Berkeley's non-solitary counterpart has Phantasm has. Phantasm might learn psychological words in a way empiri-

⁸ Philonous to Hylas in *Three Dialogues Between Hylas and Philonous*.

cally identical to the way his Berkeleyan non-solitary counterpart does.⁹ (Phantasm's experience is not 'impoverished' in a way your experience or mine is not.) Though solitary, Phantasm has the types of sensory experiences by which a materialist distinguishes other people from himself. Phantasm 'sees' and 'hears' other people at least in the sense in which a dreaming person 'sees' his executioner and a hallucinating person 'hears' demons. (We might call these other people 'figments of Phantasm's imagination'.) These other people provide Phantasm a stand-in for the other people the Wittgensteinian thinks must exist for a person to learn language and so be able to distinguish correct from incorrect word usage. These people provide Phantasm a check on his diction—a check that differs from his bare impression that he is using a word correctly.¹⁰

⁹ John Cook wrongly assumes the solitary immaterial person Descartes imagines he may be needs private ostensive definitions. Cook appears to err, in part, through being misled by Descartes' use of language.

When Descartes imagines there is no material world, and that he is immaterial, he supposes he has "no hands, no eyes, no flesh, no blood, nor any senses." Cook quotes this passage to illustrate how, within the immaterialism Descartes entertains, a person is, in Cook's words, "endowed with no natural expression of sensation" (1972: 45). As Cook interprets him, Descartes depicts a scenario in which an immaterial person has no hands or other bodily parts with which he might express sensations.

Descartes restricts names for bodily parts to material objects. He supposes he has no hands or other bodily parts. *Berkeley*, in contrast, does not restrict names for bodily parts to material objects. As Berkeley uses the word 'hand' and other names for bodily parts, immaterial people *have* hands and other bodily parts. (They have hands to place in a bowl of water.) Cartesians might use body talk in this way. While supposing he is immaterial, a Cartesian might say he has hands and other bodily parts. He might say he expresses pain with these bodily parts. If we formulate the Cartesian position in this way, Wittgensteinian readers might be less prone to suppose Cartesians have a special need for private ostensive definitions.

¹⁰ Though Descartes' Phantasm has no special need for private ostensive definitions, there is a way of depicting solipsism which might commit an adherent to the use of private ostensive definitions. Wittgenstein's attack on private ostensive definition might refute a component of this formulation of solipsism.

In the *Tractatus* Wittgenstein analyzes language and thought into elements that represent 'simple' objects. Names for simple objects are indefinable; a person cannot learn these words from definitions. To learn indefinable names a person needs ostensive definitions.

The Empiricists regard *sensations* as 'simple' and their names indefinable. Were sensation names indefinable, a person would need to use *private* ostensive definitions to learn names for sensations. (Locke believes a person learns sensation names through direct acquaintance with his own sensations.) A person who combines Wittgenstein's *Tractatus* commitment to simple objects with the Empiricist view that various specifiable sensations are simple commits himself to the use of private ostensive definitions.

Some people say Wittgenstein endorses solipsism in the *Tractatus*. Suppose he does. Suppose also that Wittgenstein accepts the Empiricist view that pain and certain other sensations are simple and their names indefinable. (In *Philosophical Investigations* #258 Wittgenstein seems to say if a person had names by which he specified sensations by intrinsic properties, those names would be indefinable.) These words would be learnable only through private ostensive definitions. Suppose this reading of the

An egocentric foundationalist suspends belief in other minds and an external world at one point in his reasoning. The foundationalist uses sensation names at this point, Wittgensteinians assume. However, contrary to what Wittgensteinians suppose, other minds and a material world are *not* a condition of a person's learning these words. Without other minds and an external world, a person might learn sensation names in the way Phantasm does.¹¹

People may claim there cannot be an immaterial person of the sort Phantasm is. Critics would not prove this is so by joining immaterialism to private ostension words and then arguing there can be no words of this sort. Other arguments they might use would not threaten my thesis.

Other minds and a single-user language

A Wittgensteinian might object to my position on other minds skepticism and external world skepticism as follows:

Suppose there were a forever-solitary person of the sort an other minds skeptic or an external world skeptic imagines he may be. This person has no special need for private ostensive definitions. He could learn words in a way empirically identical to the way Wittgenstein thinks a person learns words. His diction is subject to events empirically the same as any external checks you and I have. Nevertheless, the language this forever-solitary person uses must be a single-user language—a language that only one person understands. However, there can be no single-user language. To use language a person must be subject to checks that originate

Tractatus is correct: Wittgenstein is a solipsist who accepts that sensation names are indefinable and learnable only through private ostensive definitions. Wittgenstein's subsequent attack on private ostensive definition would not refute solipsism as such. But it might refute an element in the solipsism *he* once endorsed.

¹¹ W. V. Quine objects to egocentric foundationalism on grounds similar to the Wittgensteinian's. Foundationalists may reply to Quine as to the Wittgensteinian.

The foundationalist Quine examines uses reasoning that parallels the reasoning scientists use when they posit the existence of unobserved particles to explain feature of what they do observe. As scientists "posit molecules, and eventually electrons, even though these are not given to direct experience," the foundationalist Quine addresses posits external objects to explain the 'sense data' his sensations present (*Ways of Paradox and Other Essays* (Cambridge: Harvard University Press, 1976), p. 223). Like the traditional Wittgensteinian, Quine objects to the foundationalist by claiming that an external world is a condition of sensation talk: "Even the terms which we have come to regard as strictly and immediately sensory, like 'red', are obviously objective in reference in the first instance: we learn the word 'red' by being confronted with an external object which our parent calls red..." (p. 225).

The foundationalist may reply to Quine as to the traditional Wittgensteinian. The foundationalist may say: "Yes, we learn 'red' in a way empirically the same as the way you describe. We learn 'red' through the kind of experience you describe as one in which we encounter 'an external object which our parent calls red.' However, when a person has this type of experience, he is directly aware of only his own sensations. A

from other people. Checks that originate from projections of his own mind would not suffice,¹² nor would checks from automata. Hence, there can be no forever-solitary person of the sort the skeptic imagines he might be. A person can know there are minds other than his. He can know there is a world external to himself.

A person who rejects other minds skepticism and external world skepticism *for the reason given here* does not rest his rejection on the argument from private ostensive definition. He detaches the no single-user-language thesis from the no private ostensive definition thesis and uses only the former. This critic concedes, what I contend, that other minds skeptics and external world skeptics have no special need for private ostensive definitions. The challenge this critic presents the skeptics is not the one I oppose in this paper. Hence, I say no more about this critic here.¹³

person gains knowledge of an external world only by reasoning from these sensations to their external cause.”

¹² Wittgenstein may be saying this in *Philosophical Investigations* #265.

¹³ Thanks to Errol Bedford, Jonathan Dancy, John Heil, Anthony Kenny, Michael Levin, Al Mele, Bill Throop, Theodore Redpath, and this journal's referees for their insights into the positions and arguments I have addressed.

Bibliography

- Cook, John W.: 1972, "Solipsism and Language," in *Ludwig Wittgenstein: Philosophy and Language*, ed., Alice Ambrose and Morris Lazerowitz (New York: Humanities Press).
- Dancy, Jonathan: 1985, *An Introduction to Contemporary Epistemology* (Oxford: Blackwell).
- Davidson, Donald: 1991, "Three Varieties of Knowledge," in A. Phillips Griffiths (ed.), *A. J. Ayer Memorial Essays* (Cambridge: Cambridge University Press, 1991).
- Edwards, James C.: 1990, *The Authority of Language* (Tampa: University of South Florida Press).
- Geach, Peter: 1969, "Immortality," reprinted in ed. Baruch Brody, *Readings in the Philosophy of Religion* (Englewood Cliffs: Prentice-Hall, 1974), pp. 655–63. Geach's paper was originally published in 1969.
- Gert, Bernard: 1989, "Psychological Terms and Their Criteria," *Synthesis*, 80, pp. 201–22.
- Goldstein, Irwin: 1985, "Mental Events and Communication," *American Philosophical Quarterly*, vol. 22, pp. 331–38.
- Hamlyn, D. W.: 1970, *The Theory of Knowledge* (Garden City: Doubleday).
- Kenny, Anthony: 1966, "Cartesian Privacy," in George Pitcher, ed. *Wittgenstein: The Philosophical Investigations*, (London: Macmillan, 1966), pp. 352–70.
- Magee, Bryan: 1988, Dialogue between Bryan Magee and John Searle on Wittgenstein in Bryan Magee's *The Great Philosophers* (Oxford: Oxford University Press, 1988).
- Malcolm, Norman: 1958, "Knowledge of Other Minds," reprinted in Norman Malcolm, *Knowledge and Certainty* (Englewood Cliffs, Prentice-Hall, 1963); originally published in *The Journal of Philosophy*, vol. LV (1958), pp. 969–78.
- _____ : 1989, "Wittgenstein on Language and Rules," *Philosophy*, vol. 64, pp. 5–28.
- Quine, W. V.: 1976, "On Mental Entities," in *Ways of Paradox and Other Essays* (Cambridge: Harvard University Press).
- Taylor, Charles: 1969, "Two Issues about Materialism," *Philosophical Quarterly*, vol. 19, pp. 73–79.
- Wittgenstein, Ludwig: 1953, *Philosophical Investigations*, translated by G. E. M. Anscombe (Oxford: Basil Blackwell).