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Bergmann and Wittgenstein on Generality

I

General statements have been the chief subject matter of logic since Aristotle's syllogistic. They have also been a fundamental concern of metaphysics, though only since Frege invented modern quantification theory. Indeed, logicians and even metaphysicians seldom ask what, if anything, general statements correspond to in the world. But Frege and Russell did, and the question became a major theme in Wittgenstein's early (pre-1929) and Gustav Bergmann's later (post-1959) works. All four were aware that, as Bergmann put it in his posthumously published *New Foundations of Ontology*, there could not be any laws of nature if generality were not in the world.[1] Generality must be in the world if the world is at all how science, indeed any cognition beyond that of babes, takes it to be. This is why all four were also aware of the tie of the topic to what became known as the realism/antirealism issue.[2]

Frege held that general statements express the saturation of second-level functions by first-level functions; Russell, that they assert general facts; Wittgenstein, that they involve matters that can only be "shown," not "said"; and Bergmann, that they involve the entities generality and existence. All four rejected the facile answer that general statements, if universal, are merely the disguised conjunctions, and if particular, the disguised disjunctions, of their singular instances. Frege wrote: "It is surely clear that when anyone uses the sentence 'all men are mortal' he does not want to assert something about some Chief Akpanya, of whom perhaps he has never

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[1] Gustav Bergmann, *New Foundations of Ontology* (Madison, University of Wisconsin Press, 1992, edited by William Heald), p. 173. Page references in the text will use the abbreviation "NF." Heald's introduction is obligatory reading for all interested in Bergmann's philosophy. He has also included an invaluable glossary.

[2] For a discussion of the relevance of the topic of generality to the realism/antirealism issue, see my "Metaphysical Realism and Logical Nonrealism," in Richard Gale, ed., *Guide to Metaphysics* (Oxford: Blackwell, 2002).

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heard."[3] Russell concurred: "When you have taken all the particular men that there are, and found each one of them severally to be mortal, it is definitely a new fact that all men are mortal."[4] For, "In order to arrive [by "complete induction"] at the general proposition 'All men are mortal', you must already have the general proposition 'All men are among those I have enumerated.'" General propositions, such as "All men are mortal," stand (if true) for general facts. So, "there are general facts" (LA, 101). Russell continued: "You cannot ever arrive at a general fact by inference from particular facts, however numerous… [T]here must be primitive knowledge of general propositions" (LA, 101-102). Thus there is "the necessity of admitting general facts, i.e., facts about all or some of a collection" (LA, 289). And Bergmann wrote in his article "Generality and Existence": "What can be said with the quantifiers cannot be said without them….Consider (1) '*(x)G(x)*' and (2) *'$G(a_1)$. $G(a_2)$… $G(a_N)$.'* (1) implies (2). (2) does not imply (1)."[5] In *New Foundations* he just said, "[(x) f_1(x)] is not a conjunction, either finite or infinite, nor even analytically equivalent to one. Similarly, for [(∃x) f_1(x)] and disjunction" (NF, 167).

Bergmann went on in "Generality and Existence" to argue that, like "individuality, universality, and exemplification," generality and existence, i.e., what he took the quantifiers, (x) and (∃x), in universal and particular ("existential") statements respectively to stand for, belong to the "world's form." One is "presented" with them, but they do not "exist" – rather, they "subsist." In that article Bergmann used "existence" in two senses: for what the particular quantifier represents and what the world's form (but also Pegasus and the golden mountain) lack. In conversation, he often expressed regret over the ambiguity. It is absent from *New Foundations of Ontology*, where Bergmann's views received, with remarkable subtlety, depth, and breadth, their most developed and detailed formulation.

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[3] Peter Geach, and Max Black, eds., *Translations from the Philosophical Writings of Gottlob Frege* (Oxford: Blackwell, 1970), p. 83.

[4] Bertrand Russell, *The Philosophy of Logical Atomism* (Chicago and La Salle: Open Court, 1996), p. 103. Page references in the text will use the abbreviation "LA." See also R. C. Marsh, ed., *Logic and Knowledge* (London: Allen & Unwin: 1956), p.42.

[5] Gustav Bergmann, "Generality and Existence," *Theoria*, 28 (1962), 1-26. Included in *Logic and Reality* (Madison: University of Wisconsin Press, 1964), p. 69. Page references in the text will use the abbreviation "LR."

"Generality and Existence" was preceded by "Ineffability, Ontology, and Method."[6] Bergmann described the two articles as "materially one." The first topic of "Ineffability, Ontology, and Method" was the "ineffability" of individuality, universality, and exemplification. Bergmann wrote: "When I know that this is a green spot, I know also that (1) the spot is an individual, (2) the color is a character, and (3) the former exemplifies the latter (and not, perhaps, the latter the former). How could I know all this if it were not, in some sense, presented to me?" (LR, 47). But what was thus presented could not be represented, at least not without futility. For, "Looking at a name…I know…even if I do not know *which thing* it has been attached to as a label…the *kind of thing*, whether individual or character, to which it has been or could be attached" (LR, 49-51). Bergmann noted that a certain name "is on the lips of every likely reader," but would not mention it because he did not "on this occasion wish to make assertions about the reading of a notoriously difficult text" (LR, 50). The name of course is Wittgenstein's, and the text is *Tractatus Logico-Philosophicus*. Wittgenstein had written: "If I am to know an object, though I need not know its external properties, I must know all its internal properties" (2.01231).[7] By "external property" he meant what philosophers usually mean by "property," but by "internal property" he meant what he also called a "formal property," e.g., that of being an object. Statements about an object say what external properties it has. Formal properties, Wittgenstein held, cannot be properly predicated, but they can show themselves: "When something falls under a formal concept as one of its objects, this cannot be expressed by means of a proposition. Instead it is shown in the very sign for this object" (4.126).

The similarity of Bergmann's views in "Ineffability, Ontology, and Method" and "Generality and Existence" to Wittgenstein's in the *Tractatus* is obvious, and Bergmann readily acknowledged it. It centered on Wittgenstein's distinction between "saying" and "showing," which Wittgenstein later described as the main contention in the *Tractatus*. Some interpreters, for example, Cora Diamond[8] and Warren Goldfarb,[9] deny that according to

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[6] *Philosophical Review*, 69 (1960), 18-40, also included in *Logic and Reality*.

[7] *Tractatus Logico-Philosophicus*, translated by D. F. Pears and B. F. McGuinness (London: Routledge, 1972), 6.522. References in the text will use the decimals Wittgenstein assigned to sentence or sentences in the *Tractatus*. All italics, upper-case letters, and parentheses in the quotations will be Wittgenstein's.

the *Tractatus* there is anything that cannot be said but can be shown. In this respect they differ strikingly from most other interpreters, including David Pears[10] and P. M. S. Hacker.[11] At any rate, Wittgenstein did write: "There are, indeed, things that cannot be put into words. They *make themselves manifest*. They are what is mystical [*Es gibt allerding Unaussprechliches. Dies 'zeigt' sich, es ist das Mystische*]" (*Tractatus*, 6.522). Moreover, at least in the case of ethics, he held that what only shows itself is "the higher." To understand Wittgenstein's distinction between saying and showing and its role in the *Tractatus* we must take seriously its applications to logic, ethics, and even religion. To say that Socrates is an individual, rather than, say, a relation, is not to add to Socrates's wealth of properties, but neither is it to say nothing. To speak of the meaning of life is not like speaking of the duration of life, but it is hardly to speak of nothing. To be told that "God does not reveal himself in the world" since "how things are in the world is a matter of complete indifference for what is higher," may depress us but it is not to tell us nothing.

Wittgenstein's earlier and Bergmann's later views faced similar reception in the philosophical community, perhaps because both dealt with metaphysical questions that few philosophers had even considered, and offered answers of which no philosophers had even been aware. Critics of Bergmann complain that his philosophy is a Meinongian jungle, or just avow that they find it "too difficult." Critics of Wittgenstein's *Tractatus* disparage it as "too metaphysical," or just interpret it in terms of the *Philosophical Investigations* (Bergmann would have said they find misery in Wittgenstein's glory, and glory in Wittgenstein's misery).[12]

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[8] Cora Diamond, *The Realistic Spirit: Wittgenstein, Philosophy and the Mind* (Cambridge, MA: MIT Press, 1991).

[9] Warren Goldfarb, "Metaphysics and Nonsense," *Journal of Philosophical Research* XXII (1997). See also, in the same issue, Cora Diamond, "Realism and Resolution: Reply to Warren Goldfarb and Sabina Lovibond."

[10] David Pears, *The False Prison* (Oxford: Oxford University Press, 1987).

[11] P.M.S. Hacker, *Insight and Illusion* (Oxford: Clarendon, 1972), pp. 20-4.

[12] Bergmann used these terms in "The Glory and the Misery of Ludwig Wittgenstein," *Rivista di Filosofia*, 52, 1961, 587-406, Italian translation. Included in *Logic and Reality*.

II

In *Tractatus* 5 Wittgenstein proposed that "A proposition is a truth-function of elementary propositions. (An elementary proposition is a truth-function of itself.)" He had explained earlier that "The simplest kind of proposition, an elementary proposition, asserts the existence of a state of affairs" (4.21), and that "It is obvious that the analysis of propositions must bring us to elementary propositions…" (4.221). (In his Introduction to the Second Edition of *Principia Mathematica*, Russell explained that "Atomic and molecular propositions together are 'elementary propositions.'"[13]) It seems to follow that a general proposition, too, is a truth-function, presumably the conjunction or disjunction of the elementary propositions that are its singular substitution instances. And so, in a letter to Wittgenstein written in 1919, Russell objected: "[In an account of general (universal) propositions in terms of elementary propositions,] it is necessary also to be given the proposition that *all* elementary prop[ositions] are given."[14]

Wittgenstein vehemently disagreed: "There is no such proposition! That all elementary propositions are given is *shown* by there being none having an elementary sense which is not given…." And he continued: "I'm afraid you [i.e., Russell] haven't really got hold of my main contention, to which the whole business of logical prop[osition]s is only a corollary. The main point is the theory of what can be expressed *(*gesagt) by propo[osition]s – i.e., by language – (and, which comes to the same, what can be *thought*) and what can not be expressed by prop[osition]s, but only shown (gezeight); which, I believe, is the cardinal problem of philosophy."[15]

By "given," Russell and presumably also Wittgenstein, meant being at least in some manner presupposed, taken for granted, perhaps not asserted or even considered, present but perhaps only in the thematic background. And Wittgenstein began his detailed explanation of the distinction between saying and showing in the *Tractatus* as follows: "We can now

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[13] Alfred North Whitehead and Bertrand Russell, *Principia Mathematica to *56* (Cambridge: University Press, 1962), p. xvii.

[14] *Russell: the Journal of the Bertrand Russell Archives* 10, 2, pp. 107-09.

[15] *Letters to Russell Keynes and Moore*, ed. G.H. von Wright (Ithaca: Cornell University Press, 1974), pp. 71-73.

talk about formal concepts, in the same sense that we speak of formal properties…. When something falls under a formal concept as one of its objects, this cannot be expressed by means of a proposition. Instead it is shown in the very sign for this object" (4.126). "Thus the variable name 'x' is the proper sign for the pseudo-concept object. Wherever the word 'object' ('thing', etc.) is correctly used, it is expressed in conceptual notation by a variable name. For example, in the proposition, 'There are 2 objects which…', it is expressed by ' (x,y) ... '. Wherever it is used in a different way, that is as a proper concept-word, nonsensical pseudo-propositions are the result. So one cannot say, for example, 'There are objects', as one might say, 'There are books'. And it is just as impossible to say, 'There are 100 objects', or, 'There are χ_0 objects'. And it is nonsensical to speak of the total number of objects. The same applies to the words 'complex', 'fact', 'function', 'number', etc. They all signify formal concepts…" (4.1272). Presumably, since propositions are logical pictures of facts (4.01), and elementary propositions are the simplest kind of proposition, those that assert the existence of atomic facts (4.21), "proposition" and "elementary proposition" also are formal concepts. In his objection, Russell seemed to take for granted what has been called the substitutional interpretation of quantification, according to which, put roughly, general statements may be said to refer to their elementary substitution instances. According to the more common objectual interpretation, general statements may be said, also put roughly, to refer to all *objects*. Whether the two interpretations in fact involve such reference is a question we need not consider here.[16] Suffice it to say that if Russell had taken for granted the objectual interpretation, his objection would have been that the proposition "all objects are given" must be given, and Wittgenstein would have replied that there is no such proposition because "object" signifies a formal concept, which can only be shown.

The sense in which an object's being an object can only be shown, not said, is obvious. Bergmann called it the ineffability of individuality, the futility of saying about an individual that it is an individual. The sentence "*a* is an object" presupposes what it purports to say, since its subject term could only be a name, and in Wittgenstein's technical uses of "name" and "object" names can name only objects: "A name means (*bedeutet*) an object. The object is its meaning (*Bedeutung*)" (3.203). This is why "A name shows [*zeigt*] that it signifies an object" (4.126). Wittgenstein's claim that

[16] The classic discussion of the two interpretations of quantification is Ruth Barkan Marcus's, in "Interpreting Quantification," *Inquiry* 5 (1962): 252-59.

"There are objects" is a pseudo-proposition has to be understood, of course, with some care. It does not mean that there are no universal first-order propositions, in which the quantified variable ranges unrestrictedly over all objects. For example, the proposition "(x) (x is material)" must not be confused with "(x) (if x is an object then x is material)." The former does say something, true or false. It is the thesis of materialism. The latter says nothing, because it employs the pseudo-concept "object."

The distinction between saying and showing thus has a reasonably clear and important application to propositions of the forms "x is an object" and "All objects are Φ." How it applies to other, more complicated cases is less clear but not less important. This is certainly true of its application to general propositions. Let us take advantage of the notion of presupposition that P. F. Strawson proposed decades later and agree, at least for the moment, that presupposing something includes implicitly referring to it. Then we can agree that, even if "(x) Φx" does not *say* that all objects are Φ (since "object" is a formal concept), surely it does *presuppose* that all objects are Φ and thus implicitly refers to all objects. It is "(x) (if x is an object then x is Φ)," not "(x) Φx," that says, rather than just presupposes, that all objects are Φ. "All men are mortal," translated as "(x) (if x is a man then x is mortal)," with the variable ranging unrestrictedly, does not say that all individual *objects* are such that if they are men then they are mortal, though it does presuppose that they are. What "All men are mortal" says is just that all men are mortal. If we adopted the substitutional interpretation of quantification, we could agree that, even if "(x) Φx" does not *say* that all elementary propositions of the form "Φx" are true (since "elementary proposition" is a formal concept), it *presupposes* that all elementary propositions of the form "Φx" are true and thus implicitly refers to all elementary propositions. "All men are mortal" does not say that all propositions of the form "if x is a man then x is mortal" are true, though it does presuppose that they are. What it says is just that all men are mortal.

Wittgenstein's account of generality in the *Tractatus* was based on his theory of truth functions. "All propositions are the result of truth-operations on elementary propositions" (5.3), he wrote. In 5.5 we are told: "Every truth-function is a result of successive applications to elementary propositions of the operation '(-----*T*)(ξ,....)'. This operation negates all the propositions in the right-hand pair of brackets, and I call it the negation of those propositions." Wittgenstein went on to explain: "ξ is a variable whose values are terms of the bracketed expression…How the description of the terms of the bracketed expression is produced is not essential. We

can distinguish three kinds of description: 1. direct enumeration, in which case we simply substitute for the variable the constants that are its values; 2. giving a function *fx* whose values for all values of *x* are the propositions to be described; 3. giving a formal law that governs the construction of the propositions, in which case the bracketed expression has as its members all the terms of a series of forms" (5.501). It follows that "If ξ has only one value, then [the negation of all the values of the propositional variable ξ] = ~*p* (not *p*); if it has two values, then [the negation of all the values of the propositional variable ξ] = ~*p*.~*q* (neither p nor q)" (5.51). And "If ζ has as its values all the values of a function *fx* for all values of *x,* then [the negation of all the values of the propositional variable ξ] = ~*(*∃*x). fx*" (5.52), the logical equivalent to *(x) fx*.

Yet Wittgenstein immediately added: "I dissociate the concept *all* from truth-functions (5.521). This is compatible with 5.3 because of the difference between what in 5.501 Wittgenstein had called kinds of description 1 and 2. Unlike the case of ~*p* and ~*p*.~*q* , where ξ has as its values *propositions* (kind of description 1), in the case of *(x) fx* ξ has as its values the values of the *propositional function fx* (kind of description 2).[17] In the former case, the terms to which the truth-operation '(-----*T*) (ξ,....)' is applied, i.e., p and q, are propositions that are *explicitly* mentioned, "enumerated." In the latter case, they are merely the propositions, whichever they might be, that are the values of the propositional function *fx*, and thus they remain *implicit*. To be sure, general propositions are truth-functions, but only in the sense that their truth depends on the truth of all their substitution instances. Since these are not mentioned, they are truth-functions only implicitly. By contrast, ~*p* and ~*p*.~*q* explicitly mention, enumerate, the propositions, i.e., *p* and *q*, of which they are truth-functions.[18]

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[17] Cf. Max Black, *A Companion to Wittgenstein's Tractatus* (Cambridge: Cambridge University Press, 1964), pp. 281-82.

[18] In *Philosophical Grammar* (p. 268) Wittgenstein wrote: "My view about general propositions was that (∃x). φx is a logical sum and that though its terms are not enumerated *here*, they are capable of being enumerated….For if they can't be enumerated we don't have a logical sum….Of course it is correct that (∃x). φx behaves in some ways like a logical sum and (x). φx like a product….for instance for "all the primary colours occur in this picture." I take Wittgenstein to mean that the sentence about the primary colors would be an exception because "primary color" is an abbreviation, say, of "red, green, or blue," and so the sentence would be an abbreviation of "red, green, and blue occur in this picture." But, as we have seen, in the *Tractatus* his view had been that the substitution instances of no general proposition are, or even can be, enu-

5.521 is immediately followed by the following: "What is peculiar to the generality-sign is first, that it indicates a logical prototype, and secondly, that it gives prominence to constants" (5.522) and: "The generality-sign occurs as an argument" (5.523). *Pace* G.E.M. Anscombe[19] and Robert Fogelin,[20]who think that the generality-sign is the variable *x* itself, I suggest that it is the propositional function *fx*, which is the argument of the function which is the quantifier "(*x*)…," and may indeed be said to indicate a "logical prototype" and to "give prominence" to the sign *f* , the only constant in (*x*) *fx*. The generality of (*x*) *fx* shows itself in that the propositional function *fx* is the form of *all* of the substitution instances of (*x*) *fx*. It is a truth-function of its instances in the straightforward, literal, sense that its truth depends on their truth. But this only shows itself. It is not and cannot be said. For (*x*) *fx* is not replaceable by the conjunction "*fa* . *fb* . *fc* …." Wittgenstein followed, though with major differences, the pattern proposed by Frege, who had described the quantifiers as second-level functions, saturated by first level functions. We shall find that Bergmann also followed that pattern, with even greater differences, when describing the quantifiers as functions, though with arguments quite different from propositional functions.

The next proposition in the *Tractatus*, 5.524, reads: "If objects are given, then at the same time we are given all objects. If elementary propositions are given, then at the same time all elementary propositions are given." In view of the two propositions that preceded it, I take 5.524 to imply that the variable *x* in (*x*) *fx* "gives" all objects in the sense that it is an *object* (individual) variable, and that the propositional function *fx* in (*x*) *fx* "gives" all elementary propositions in the sense that, "*f*" being proxy for any predicate, simple or complex, monadic or relational, all elementary propositions are substitution instances of *fx*. A general proposition thus may be said to refer to all objects, if we accept the objectual interpretation,

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merated. I have no explanation of the claim to the contrary in Philosophical Grammar. Nor can I explain why in the *Tractatus* Wittgenstein claimed, falsely, that "Frege and Russell introduced generality in association with logical product or logical sum" (5.521), a claim that has puzzled all his commentators.

[19] G.E.M. Anscombe, *Introduction to Wittgenstein's Tractatus* (London: Hutchinson' University Library, 1959), p. 145,

[20] Robert Fogelin, *Wittgenstein* (London: Routledge, 1987, second edition), p. 65.

or to all elementary propositions, if we accept the substitutional interpretation But this reference consists in showing, not saying. The variable *x* shows all objects in the straightforward sense that it is an object (individual) variable, and the propositional function *fx* shows all elementary propositions in the no less straightforward sense that, "*f*" being proxy for any predicate, it is the form of all elementary propositions. But, since "object" is a formal concept, (*x*) *fx* does not *say* that all objects are *f*. Nor does it say that all elementary propositions of the form *fx* are true, since "elementary proposition" also is a formal concept.

One of Russell's complaints in the letter to Wittgenstein cited earlier was that "it is awkward to be unable to speak of [the negation of all the values of the propositional variable ξ]." Wittgenstein replied: "This touches the cardinal question of what can be expressed by a prop[osition] and what can't be expressed, but only shown. I can't explain it at length here. Just think that, what you want to *say* by the apparent prop[ositin] 'there are 2 things' is *shown* by there being two names which have different meanings….e.g., ϕ(a, b)…doesn't say that there are two things, it says something quite different; *but whether it's true or false*, *it* SHOWS what you want to *express* by saying: 'there are 2 things.'" Then Wittgenstein added: "I suppose you [Russell] didn't understand the way, how I separate in the old notation of generality what is in it truth-function and what is pure generality. A general prop[osition] is a truth-function of *all* PROP[OSITION]S of a certain form….I suppose you don't understand the notation [for the values of the propositional variable ξ]. It does not mean 'for all values of ξ…."[21] What is truth function in (*x*) *fx*, I suggest, is what is expressed by *"*(*x*)…," and what is pure generality is what is expressed by "*fx.*" All propositions of the form *fx* may be said to be *shown* by that form. (*x*) *fx* is a proposition the truth of which depends on there not being a proposition of the form *fx* that is false, but it does not *say* that there is no proposition of the form *fx* that is false. For there is no proposition about all propositions of a certain form, if "proposition" is a formal concept.

Later, in *Philosophical Remarks* but especially in *Philosophical Grammar*, Wittgenstein returned to the topic of generality. In *Philosophical Remarks*, i.e., soon after his return to Cambridge in 1929, he wrote: "The general proposition 'I see a circle on a red background' appears simply to be a proposition which leaves possibilities open. A sort of incomplete picture. A portrait in which, e.g., the eyes have not been

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[21] *Letters to Russell Keynes and Moore* , pp. 72-73.

painted in. But what would this generality have to do with the totality of objects?"[22] Also: "If I give a correct description of a visual field in which three red circles stand on a green ground, it surely won't take the form of saying '(∃x (x, y, z): x is circular and red and y is circular and red, etc. etc.' You might of course write it like this: there are 3 circles with the property red….It is plain that the proposition about the three circles isn't general or indefinite in the way a proposition of the form (∃x (x, y, z). φx.φy.φz is. That is, in such a case, you may say: Certainly I know that three things have the property φ, but I don't know *which*; and you can't say this in the case of the three circles."[23]

A couple of years later, in *Philosophical Grammar*, Wittgenstein wrote: "If I say 'there is a black circle in the square', it always seems to me that here again I have something simple in mind, and don't have to think of different possible positions or sizes of the circle. And yet one may say: if there is a circle in the square, it must be somewhere and have some size. But in any case there cannot be any question of my thinking in advance of *all* the possible positions and sizes….I would like to say that in the proposition 'there is a black circle in the square' the particular positions are not mentioned at all. In the picture I don't see the position, I disregard it…."[24] The possible particular positions of the circle would be those of the individual objects in the square that might be circles. But when saying that there is a black circle in the square one does not think of these individual objects, they are not mentioned. Indeed, when seeing the circle one does not even see its position, one disregards it. Of course, the circle has a position, any one of an indefinite number of possible position, but none is mentioned. If the position of the circle were not disregarded, i.e., if it were seen, thought of, or mentioned, the case would rather be that of the singular proposition "This black circle is in this square."

Wittgenstein did not explain these remarks in detail. Nevertheless, they fit what he had said in the *Tractatus*. (It is wrong-headed philosophy and poor psychology to think that he had wholly abandoned it.) In

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[22] Ludwig Wittgenstein, *Philosophical Remarks* (Chicago: University of Chicago Press, 1975, ed. Rush Rhees, tr. Raymond Hargreaves and Roger White), p. 115. For the origin of the text, see the Editor's Note.

[23] Ibid., p. 136.

[24] *Philosophical Grammar*, p. 259. For the origin of the text, see the editor's Note in Editing.

Wittgenstein's earlier terminology, which he no longer employed, we might say that the possible positions of the circle, or the individual objects in the square, are not "said" but "show" themselves. According to Russellian logic, the universal statement "(x)Φx" says that all individual objects are Φ, that everything is Φ. But in the *Tractatus* Wittgenstein had held that "it is nonsensical to speak of the total number of objects," since "object" is a formal concept. Now, in *Philosophical Grammar*, he makes the revolutionary further claim that an ordinary general statement is not understood or intended at all in accordance with Russellian logic. It is not about all individual objects. The statement "There is a circle in this square" says nothing about all objects, not even about all objects that are in the square. In effect, Wittgenstein suggests that the particular ("existential") statement "There is a circle in the square" and the universal statement "There are only two things that are circles in this square," though different from the singular statement "This circle is in this square," are better understood in terms of the latter, rather than as quantified statements containing a variable ranging over all individual objects, or even all circles. But what then does the generality of the general statements consists in, how do they differ from the singular statement "This circle is in this square"?

In *Philosophical Grammar* we find no answer, but in his 1919 letter Wittgenstein provided one. It was that the generality of a general statement consists not in what it says but in what it does *not* say yet shows. In both texts he insisted that our use or understanding of general statements is far removed from what Russellian logic tells us. We do not use "There is a circle in the square" to say something about all things, or even about all circles, viz., that some of them are in the square. We certainly do not use it to say that it is not the case that no circles are in the square. It does entail the latter, but (like any statement) it also entails an indefinite number of other statements. Surely we are not making all those statements as well when we make that one statement.

Indeed, in *Philosophical Grammar* Wittgenstein expressed doubts about the very propriety of representing ordinary general propositions in the canonical forms of *Principia Mathematica*. He gave the example "There are two circles in this square," and said the translation of it as "There are only two things that are circles in this square" sounds "crazy." Wittgenstein explained how one was led to this translation as follows: "The original source of this notation ['(∃n)' and in general '(∃x)'] is the expression of our word-language 'There is a … with such and such

properties'. And here what replaces the dots is something like 'the book from my library' or "thing (body) in this room', 'word in this letter', etc. We think of objects that we can go through one after the other. As so often happens, a process of sublimation turned this form into 'there is an object such that …' and here too people imagined originally the objects of the world as like 'objects' in the room (the tables, chairs, books, etc.), although it is clear that in many cases the grammar of this '(∃x), etc.' is not at all the same as the grammar of the primitive case which serves as paradigm. The discrepancy between the original picture and the one to which the notation is now applied becomes particularly palpable when a proposition like 'there are two circles in this square' is rendered as 'there is no object that has the property of being a circle in this square without being the circle a or the circle b'….[T]he Russellian notation here gives an appearance of exactitude which makes people believe the problems are solved by putting the proposition into the Russellian form."[25]

It is possible that Wittgenstein's misgivings about the Russellian interpretation of universal statements were motivated by recognition that in actual talk and thought most generalizations are what linguists today call generic statements, i.e., statements of the form "Fs are Gs," rather than universal statements, which are of the form "All Fs are Gs," and that even universal statements are usually intended only as generic because they allow for "exceptions." Physicians, politicians, and parents say that smoking cigarettes causes lung cancer, but even the politicians are unlikely to say that it always does. Physicians do not even say that it is always bad for your health: the Surgeon General only says that it may be. This is not the place to develop this point; I do so elsewhere in detail.[26] But his misgivings about the Russellian interpretation of general statements fit Wittgenstein's broader conviction in later years that "'Mathematical logic' has completely deformed the thinking of mathematicians and of philosophers, by setting up a superficial interpretation of the forms of our everyday language as an analysis of the structure of facts."[27]

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[25] Ibid., p. 265.

[26] See draft of "Realism and Generality," at http://www.geocities.com/butchvar_1997.

[27] Ludwig Wittgenstein, *Remarks on the Foundations of Mathematics* (Cambridge: MIT Press, 1994), p. 300.

III

In "Generality and Existence" Bergmann used an example similar toWittgenstein's in *Philosophical Remarks* and *Philosophical Grammar*: being presented with a single square inside a circle. Bergmann asked, With what else must I be presented when I say "*This* square is the *only* one inside *this* circle"? He pointed out that the transcription of the statement would be "F(a, b) . (x) [(x = a) v ~ F (x, b)]," which contains the general operator "(x)" and "a," "b," and "F" standing respectively for this square, this circle, and the relation of being inside.[28] Bergmann answered the question by saying that he was also presented with generality and existence. He was presented with generality in seeing that the square was the *only* square in the circle, and with existence (particularity) in seeing that *there is* a square in the circle. They are the entities that the universal quantifier, "(x)" or the phrase "for everything," and the particular quantifier, "(∃x)" or the phrase "there is at least one," represent (LR., 68, 70). Therefore, there are such entities as generality and existence, though they subsist, rather than exist (LR. 70).

In *New Foundations of Ontology* Bergmann continued to hold that he was presented with generality and existence, though now he just called them the universal and the particular quantifiers, representing them with the signs "\/" and "/\ ." But he went far beyond "Generality and Existence" by offering a much more complex account of quantification, still resembling Wittgenstein's, but as a part of a rich, all-encompassing ontology, which Wittgenstein never attempted. Bergmann renounced his earlier distinction between existence and subsistence, holding now that "whatever is thinkable exists" (NF, 61.) He pointed out that "the differences among some of the several existents…are very great indeed…momentous, or enormous" (NF. 43), thus suggesting that his earlier distinction was really a distinction between radically different existents.

Bergmann's assertion that everything thinkable exists should be no more surprising than Meinong's assertion that "there are things of which it is true that there are no such things," but it is free from the latter's paradoxical air, which bewildered and confused Meinong's readers. There

[28] *Logic and Reality*, p. 71. *Philosophical Grammar* was published 22 years after "Generality and Existence."

is a golden mountain, it has being, it exists, Bergmann would say, but of course it is fundamentally different from the Rocky Mountains. Like the latter, it is a "complex" of facts, but unlike it pervaded by the "mode of potentiality," rather than by the "mode of actuality." Bergmann's critics, like Meinong's, seem to attach magic significance to the words "exist" and "being." But these are just words, conventional signs, the ordinary use of which need not be suited for the purposes of ontology. The truth is that we can think and talk about, even describe in detail, say, a golden mountain east of Denver, just as we can think, talk about, and describe the Rocky Mountains west of Denver. What we must not do, of course, is to think that the former is an actual mountain.

Bergmann began his account of generality in *New Foundations* by denying that variables, whether free or bound, stand for anything (NF 64), also an unsurprising view, which however required surprising changes in the analysis of general statements. He argued that the quantifier in a general fact is a function, to be represented in the general statement by the sign "\/," but without attaching to it a variable such as "x." The function \/ takes as argument a "2-tuple" that consists of (1) the individual thing in the singular fact asserted by a singular substitution instance of the general statement and (2) that singular fact itself. The value of the function is the general fact (NF, 167-68). If the statement is "*all f_1's are f_2's*," the 2-tuple might be $<a, f_1(a) \supset f_2(a)>$. Bergmann used "2-tuple," instead of "pair," because in *New Foundations* he also offered a highly original account of sets that prohibits casual uses of set-theoretical terms. Perhaps most surprisingly, however, he now insisted that the conscious state or awareness of the general fact, which he called the "referent" of the general statement, also includes an "auxiliary act" of consciousness, the "intention" (i.e., intentional object) of which is the *sentence* itself, the words, used in making the statement. Bergmann called this intention "the text of the awareness" (NF, 208). And he wrote: "I cannot 'think' any generality such as, say, all-men-are-mortal, without at the same time 'thinking' the words '*all-men-are-mortal*,'" or more precisely, "*One cannot believe, or doubt, or remember, and so on, any generality without also perceiving the appropriate words*" (NF. 204, italics in the original). Indeed, "all awarenesses, except primary Perceivings and Imaginings (and undoubtedly some 'Feelings'), are inseparable from their texts. That…not only gives language its due without giving it too much; it also reassuringly recovers the sound core in a large body of recent and contemporary thought…from Watson to Wittgenstein" (NF, 234).

Since we cannot perceive or imagine it, Bergmann says, the awareness of a general fact is a believing or entertaining, not a perceiving or imagining (NF, 219). The fact that all f_1's are f_2's is "built" by the function $\vee$, "not just from one argument but, indifferently, from an indefinite number of alternative arguments…from $\langle a, f_1(a) \supset f_2(a)\rangle$, from $\langle b, f_1(b) \supset f_2(b)\rangle$, and $\langle c, f_1(c) \supset f_2(c)\rangle$, and so on. In the text of [the awareness], however…there is no cue to this multiplicity" (NF, 235). Bergmann also gave an example from natural language: "all green (things) are square." It is the text of an awareness that has as referent the general fact, presumably not actual, that all green (things) are square.

The 2-tuples that the function $\vee$ takes as arguments, e.g., $\langle a, f_1(a) \supset f_2(a)\rangle$ or $\langle$*this*, *if this is green then this is square*$\rangle$, are not mentioned in the general statement, there is no "cue" in it to their "multiplicity." But they all are essential to the general fact. The latter would not be actual if the singular facts in the 2-tuples were not all actual: "*all f_1's are f_2's*" would not be true if its singular substitution instances were not true. From which of them the function $\vee$ builds the general fact is ontologically indifferent. But psychologically it might not be, since the speaker or hearer of the general sentence must at least in principle be able to perceive or imagine one of them. I shall return to this latter point.

The assay, i.e. ontological analysis (NF 232), of "*all f_1's are f_2's*" thus "is not, conventionally … (x) [$f_1(x) \supset f_2(x)$], but, rather, alternatively and indifferently … $\vee$ [(a, $f_1(a) \supset f_2(a)$] or any of its variants; indifferently because all those variants are one and not many" (NF, 202). The "variants" of $\vee$ [(a, $f_1(a) \supset f_2(a)$], of course, are $\vee$ [b, $f_1(b) \supset f_2(b)$], $\vee$ [c, $f_1(c) \supset f_2(c)$], and so on. Each is an alternative assay of the one and same general fact. Indeed, in standard logic it is indifferent, unless the context requires otherwise, whether we symbolize "*all f_1's are f_2's*" as "(x) [$f_1(x) \supset f_2(x)$], "(y) [$f_1(y) \supset f_2(y)$], or "(z) [$f_1(z) \supset f_2(z)$]. But standard logic uses variables, which represent nothing and thus have no place in ontological analysis.

It may seem Bergmann's insistence that the arguments the quantifier $\vee$ takes are 2-tuples is an unnecessary complication, but the reasons for it are compelling. What else could they be? Not, e.g., $f_1(x) \supset f_2(x)$, because it contains variables. Nor the properties f_1 and f_2 themselves. One might be presented with them, as well as with the quantifier, but this would not suffice for being presented with the fact that all f_1's are f_2's. According to Bergmann's "principle of acquaintance," one cannot be presented with f_1 and f_2 except when they are exemplified (NF, 65). But even if one could,

being presented with them, as well as with the quantifier \/, would hardly count as being presented with the fact that all f_1's are f_2's, or indeed with any fact. And if f_1 and f_2 are exemplified, one might be presented with them and the quantifier by virtue of being presented with the fact that all f_2's are f_1's, or with facts such as that all f_1's are f_3's and all f_2's are f_4's, rather than with the fact that all f_1's are f_2's. In general, if f_1 were the argument of \/ for the value (x) **(**f_1x), what would be the argument of \/ for the value (x) [f_1(x) v f_2(x), Bergmann asked rhetorically? Surely not f_1(…) v f_2(…)! Therefore, he wrote, "The only [other] thing I can think of, and which therefore I propose [as the argument of \/**]** is a 2-tuple such as, say, <a, f_1(a)>" (NF, 168). Thus (x) **(**f_1x) becomes \/ **<**a, f_1(a)>

Without the singular fact that is one of the terms of the 2-tuple, there would be no relevant conscious state or awareness at all when one makes the general statement, for there would be nothing relevant to be aware of. Could the quantifier take as argument the singular fact f_1 (a) $\supset f_2$ (a), rather than the 2-tuple <a, f_1 (a) $\supset$ f_2 (a)>? No, because even if \/ could take f_1 (a) $\supset f_2$ (a) as argument, its value would not be a general fact. It must also be explicit with respect to *which* constituent of the singular fact the quantifier operates, just as in standard logical notation it must be explicit which variable the quantifier binds. If variables are not used, this can be explicit only if the quantifier, so to speak, "brings" the constituent "out of" the singular fact, while also "retaining" the singular fact. The constituent and the singular fact must *both* be explicitly in the argument the quantifier takes, and this amounts to saying that the argument must be the 2-tuple of which they are the terms. Bergmann expresses the point by saying that the individual is the "target" of the quantifier, while the singular fact is its "scope." In the case of the statement "all green (things) are square," the target might be any particular perceived or imagined object, even your hand, which would be square if green, were the statement true.

Indeed, in the case of both "all f_1's are f_2's" or "all green (things) are square," there is only one individual in each 2-tuple that could be the target. But a singular fact often has more than one individual as constituent, and thus it could be the scope of the quantifier of different general facts. If the singular fact is, say, *a is to the left of b*, we must distinguish between the general facts that all things are to the left of b and that a is to the left of all things. In standard notation, we do so by distinguishing between "(x)(x is to the left of b)" and "(x)(a is to the left of x)." In Bergmann's notation, the distinction would be between "V <a, a is to the left of b>" and "V <b, a is to the left of b>." We find Bergmann's

notation obscure because it is unfamiliar, but from the standpoint of ontology the variables in the standard notation are far more obscure.

There are important similarities between this account of generality and Wittgenstein's account in the *Tractatus*, his letter to Russell in 1919, and *Philosophical Grammar*, though of course there are also obvious differences. The singular substitution instance of the general statement that stands for the singular fact Bergmann calls the scope of the quantifier is, of course, not asserted, it is not "said," yet it must be, so to speak, in the background, if the general statement is to express a relevant conscious state. There is no reason why we could not say that it must "show" itself. For it is the singular substitution instance that provides the general statement with its target and scope, both of which must, in some sense, be "present" or "given," though of course not as they would be if the singular, rather than the general, statement were asserted. We could say that the 2-tuple from which, as its argument, the quantifier "builds" the general fact must also show itself. Indeed, the whole indefinite number of alternative arguments from which the quantifier indifferently builds the general fact must show themselves. They must be "there," in the background, like the indefinite number of possible positions of the circle on a red background in Wittgenstein's example in *Philosophical Remarks*. Like the latter, the alternative arguments may be thought of as "possibilities left open," neither enumerated nor capable of being enumerated, with the speaker and hearer knowing they are there but not *which* they are, and thus, as Wittgenstein put it in *Philosophical Grammar*, the general statement may be said to be "indefinite," "an incomplete picture, like a portrait in which, e.g., the eyes have not been painted in." There can be no question of thinking in advance of *all* the different alternative arguments the quantifier may indifferently take, they are not mentioned at all, they are unseen and disregarded – yet they must be there, like the different possible positions and sizes of the circle in the square that the statement "there is a black circle in the square" allows even though one has something simple in mind when making the statement.

In *Philosophical Remarks* Wittgenstein denied that the general proposition "I see a circle on a red background" has anything to do with "the totality of objects," but at least in the *Tractatus* he would have said that it shows that totality. Would "show" as I used the word in connection with Bergmann have the sense it had in the *Tractatus*, or in Wittgenstein's assertion in his 1919 letter to Russell that while a universal statement does not *say* that all elementary (singular) propositions are given, this is *shown*

by there being none having an elementary sense which is not given? The truth is that Wittgenstein did not explain that sense, just as Bergmann did not explain the sense of his term "presented." The reason, in both cases, was not dereliction of duty but the fact, obvious to them if not to their readers, that what they meant was too basic to allow for further explanation.

Of course, for Bergmann, one must be presented with the quantifier, i.e., with generality, what "(x)" or "\/" stands for, and with this Wittgenstein certainly would have disagreed. "There are no 'logical objects,'" he wrote (4.441), thus announcing his break with the logical realism of Frege and Russell, though, as we saw in connection with his distinction between saying and showing, hardly adopting a straightforward logical antirealism.[29] But it is not certain that Wittgenstein would have disagreed that thoughtful use of a general sentence about something perceivable involves being *able* to perceive or at least imagine, however peripherally and unfocusedly, something nonverbal of which it would be true. Nor is it certain that he would have disagreed that thoughtful use of the general sentence involves actual awareness, perhaps also peripheral and unfocused, of the sentence itself, the "text," whether by seeing, hearing, or imagining it. Bergmann held that these are phenomenological, or as he also put it, anthropocentric, even anthropological, facts – that this is how we humans think and speak.

But, unlike Wittgenstein, Bergmann also offered a detailed account of these facts. He explained that the text is needed to close the "phenomenological distance" between what is presented to us when thoughtfully making a general statement and what it is assayed as, to close "the 'gap between what the text of an awareness may lead one to expect, on the one hand, and the assay in fact proposed for its referent, on the other" (NF, 232). The text is "fused," "absorbed," into the nontext, he wrote (NF, 216-17), it has "fusing power" (NF, 235). The general fact that all f_1's are f_2's is built by \/ from an indefinite number of alternative arguments, from $<a, f_1(a) \supset f_2(a)>$, $<b, f_1(b) \supset f_2(b)>$, $<c, f_1(c) \supset f_2(c)>$, and so on, but there is no cue to this multiplicity in the sentence "all f_1's are f_2's," nor of course in its transcription, whether the conventional "$f_1(x) \supset f_2(x)$" or Bergmann's "$\/ <a, f_1(a) \supset f_2(a)>$."

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[29] See my "Metaphysical Realism and Logical Nonrealism."

This phenomenological distance is unnoticed only because of the fusing power of the sentence. On no account of generality does a general statement contain a cue to the multiplicity of what makes it true. Whatever account we accept, we must rely on the statement to serve as proxy for that multiplicity. A merit of Bergmann's account is that it makes clear what all accounts of generality must admit, that when saying, e.g., "all green things are square," we could, as he puts it, in principle also say "generalized for this: if this is green then this is square" (NF, 235). The latter would differ from the former only in making explicit that the assertion is a thoughtful one, not a mere utterance, that one actually has something relevant in mind. In the old empiricist terminology, it makes explicit the presence before the mind of an "idea," whether of "sensation" or "imagination.' In Bergmann's terminology, it makes explicit the presence of an individual actually perceived or imagined. If saying "generalized for this: if this is green then this is square," rather than "all green things are square," were our natural way of expressing the generality, Bergmann suggests that in general when we say that all f_1's are f_2's we would even be presented with the actuality of such complexes as $\vee <a, f_1(a) = \vee <b, f_1(b)$, i.e., we would find the truth of the statement "$\vee <a, f_1(a) = \vee <b, f_1(b)$" obvious, indeed necessary (NF, 236). In the *Philosophical Investigations* Wittgenstein would not have agreed, but in the *Tractatus* he might have been sympathetic. Surely, Bergmann's view is plausible. Can one thoughtfully assert that all green things are square without at least in principle being able to refer to some particular thing, perceived or imagined, even if it were one's hand, which is such that if it is green then it is square? Bergmann of course held that one must *actually*, not just in principle be able to, refer to the thing, but this might be a matter of how we use the adverb "thoughtfully," not a matter of ontological import. In any case, a detailed account of generality is needed, and Wittgenstein offered none of his own, neither in the *Tractatus* nor in his later works.

To appreciate Bergmann's account, we ought to consider the alternatives to it. There is, first, the reductionist account of universal statements as conjunctions, and of particular statements as disjunctions, of their singular instances. As we saw, Bergmann found no merit in it, just as Frege and Russell did not. There is, second, Frege's account of generality as a second-level function "saturated" by a first-level function. Bergmann's account resembles it, but Frege's presupposed Frege's ontology, which

Bergmann rejected for reasons independent of the topic of generality.[30] There is, third, Russell's appeal to irreducibly general facts. Bergmann's view in "Generality and Existence" was similar to Russell's, and his view in *New Foundations of Ontology* may be described as a refinement of Russell's. The referent of "*all f_1's are f_2's*," which Bergmann analyzed as $\vee$ □a, f_1 (a) $\supset$ f_2 (a), is a fact, of course, a general fact. But Bergmann provided an analysis of that fact, which Russell did not. Indeed, Russell totally ignored the obvious and crucial first question he would be asked, In virtue of what are general facts general? To have taken this question seriously was one of the great merits of Bergmann's account. And, fourth, there is the view, often attributed but (as we saw) wrongly, to Wittgenstein, that all there is to generality is general sentences, words. Bergmann probably thought this view a case of "linguisticism" too crude to deserve discussion, but (as we also saw) he did agree that awareness of the referent of a general statement includes perceptual or imaginative awareness of the sentence itself.

The merits of Bergmann's position become especially evident when we contrast his transcription of the general sentence "*all f_1's are f_2's*" as "$\vee$ □a, f_1 (a) $\supset$ f_2 (a)" with the standard transcription of it as "(x) (f_1x $\supset$ f_2x)." The latter includes the unrestricted individual variable "x" and therefore can be read as saying something about all individuals. It is about this computer, the page you now are reading, the moon, and so on. Bergmann thought that if we had no particular individual in mind when we assert the sentence we would have nothing relevant in mind, and so would not be making a genuine statement at all. Indeed, so would have also Locke, Berkeley, and Hume. The traditional empiricist tenet was that to understand what we are saying or hearing we must have an "idea" of what it is about. This, of course, is too strong. What might be plausible is that to understand what we are saying we must in principle be *able* to have an "idea" of it. Bergmann seemed to accept the empiricist tenet, if by "idea" is meant an object perceived or imagined, rather than a representation of it, but surely he was too astute a psychologist to have meant that whenever we make a genuine general statement we must actually perceive or imagine a particular individual of which the statement is true, rather than just that we must in principle be *able* to do so.

The sentence "(x) (f_1x $\supset$ f_2x)" does not mention this computer, the page you are reading, the moon, or any other individual thing. In

[30] "Frege's Hidden Nominalism," *Philosophical Review*, 67 (1958). Included in "Meaning and Existence," (Madison, University of Wisconsin Press, 1959).

Wittgenstein's terminology, it does not say that, e.g., if this computer is f_1 then it is f_2. Nonetheless, presumably Wittgenstein thought that somehow it must show this. It must do so at least in the sense that, if a thoughtful, circumspect, utterer of "(x) (f_1x $\supset$ f_2x)" were asked whether if this computer is f_1 then it is f_2, he would say that it is, or express consent in some other way. Bergmann did not use Wittgenstein's terminology, but he might have done so in order to explain the relevance of this computer's being a term in one of the indefinite number of 2-tuples from which the quantifier indifferently builds the general fact that all f_1's are f_2's. Wittgenstein, of course, denied the empiricist tenet in his later works, but even there he probably would have agreed – because it seems obviously true – that for a statement about things that can be perceived or imagined to make sense, the speaker or hearer must in principle be *able* to, even if in fact does not, perceive or at least imagine something of which the statement would be true.

Bergmann's and Wittgenstein's positions on generality shared a negative but important feature – in Bergmann's words, that a general statement does not mention the singular statement that provides it with its target and scope, and in Wittgenstein's, that the general statement does not mention the elementary statements of which it is a truth function. They also shared an important positive feature. Bergmann argued that if one is aware of what is said by a general statement, one is aware also of the *sentence* used in making it – that thought depends on language in the case of generality, indeed in all cases except some perceivings, imaginings, and feelings. This dependence, he held, is not causal or external; it is internal, constitutive (NF, 225). "Thought is inseparably intertwined with language," Bergmann wrote (NF, 65), thus endorsing much of the linguisticism he had vehemently opposed in the past. And Wittgenstein, of course, was the philosopher who began in the *Tractatus* and in the *Philosophical Investigations* relentlessly accelerated the linguistic turn in philosophy.

It is simplistic to view metaphysics as providing descriptions of the world that are additional to those of science and everyday thought, and metaphysical disagreements as disagreements about the truth of such descriptions. Metaphysicians do not discover entities hidden from the rest of us, including physicists and astronomers, nor do they have the sort of training and means needed for such discoveries. What they can do, however, is to acknowledge, draw attention to, and emphasize similarities and differences between fundamental kinds of items in the world that go

unnoticed in everyday life and even in science, not because they are hidden but precisely because they are fundamental. Bergmann wrote: “Is there a felt difference between the external property, as some call it, of being green and the internal one, as they also say, of being a property? Directly one cannot argue on either side. That is one reason, though to be sure not the only one, why at some place or places one must appeal to the phenomenological basis. All I can say, therefore, is that this particular difference pierces my eyes” (NF, 59). By “phenomenological basis” he meant what he also called the phenomenological “rock bottom” and “the jumping-off place” (NF, e.g., 59, 212).

Bergmann’s view that a general statement does not mention yet involves the singular statements that provide the quantifier with its “target” and “scope,” and Wittgenstein’s view that a general statement does not say yet shows that all elementary propositions are given, acknowledged, drew attention to, and emphasized, in their own but perhaps not incompatible terminologies, the fundamental differences between general and singular statements. These differences are there for all to see, but they “pierce” few eyes. Even Aristotle, the father of logic, did not see them clearly when he counted both as subject-predicate statements. Bergmann wrote of what he thought is “presented,” and Wittgenstein wrote of what he thought is only “shown.” These are metaphors and need not signify fundamental disagreement. There is no established terminology for what Bergmann and Wittgenstein wanted to say, perhaps because there could not be one. Instead of caviling at the obscurity of their writings, we might do better if we open our eyes – and perhaps jump!

REVIEWS

Maria Elisabeth Reicher, *Referenz, Quantifikation und ontologische Festlegung*. Ontos Verlag, Frankfurt, Paris, Lancaster, New Brunswick, 2005, 324 Seiten, ISBN 3-937202-39-0, EUR 89,--.

Philosophische Untersuchungen zur Ontologie können, grob gesprochen, auf zweierlei Weise vorgenommen werden: Entweder man richtet seine Aufmerksamkeit zunächst auf die möglichen Strukturen der Realität, indem man eine kategoriale Analyse durchführt, um dann zu schauen, wie sie mit den grammatischen und logischen Formen unserer Aussagen über die Realität zusammenpassen. Oder man beginnt, umgekehrt, mit einer Analyse von Aussagen oder Sätzen, um dadurch zu entdecken, welche ontologischen Implikationen diese möglicherweise haben, wenn sie wahr sind.

Die Grazer Philosophin Maria E. Reicher wählt den zweiten, semantizistischen, Weg. Hauptgegenstand ihrer Studie ist die Beantwortung der Frage, worauf wir uns mit der Behauptung von Existenzsätzen ontologisch festlegen – und ob wir dies in jedem Fall tun müssen. Die Frage nach dem *Ontological Commitment* ist bei Reicher jedoch nicht wie bei Quine auf Theorien bezogen, sondern auf Personen und deren sprachlich formulierbare Überzeugungen. Es gelte als Mindestanforderung an die Rationalität, das jeweilige Überzeugungssystem konsistent zu halten. Jeder Versuch, Existenzbehauptungen zu rechtfertigen, müsse daher vom Gesamtsystem der Überzeugungen ausgehen, das man auch ein ‚Weltbild' nennen könne (11). Reichers semantische Studie ist somit rationalitätstheoretisch eingebettet und motiviert, worüber zwar, außer im Einleitungskapitel, kaum etwas gesagt wird, das sich jedoch in der Durchführung auf Schritt und Tritt zeigt. Man könnte den etwas sperrigen Titel des Buches deshalb auch so paraphrasieren: Was sollte ich ontologisch akzeptieren, um die Gesamtheit meiner Überzeugungen widerspruchsfrei zu halten?

Es ist gerade dieser intentionalistische Zug, der frischen Wind in die bekannte Analyse von Existenzsätzen, insbesondere der ‚problematischen' Fälle (fiktive, nichtexistierende, vergangene und zukünftige, mögliche und unmögliche Gegenstände) bringt. Entstanden ist so ein angenehm undogmatisches Buch: Schritt für Schritt wird erneut die Akzeptanzfrage gestellt – und an vielen guten, manchmal originellen, Beispielen illustriert.

Reicher beginnt ihre Untersuchung mit folgender Explikation des Begriffs der ontologischen Festlegung: