RESEARCH ARTICLE

Concepts May Still Be Objects

Harold Noonan*

Received: 11 May 2022 / Revised: 20 August 2022 / Accepted: 28 August 2022

Abstract: In his book (2021) Trueman attempts to provide a solution to the problem of the concept horse, which according to Frege's published writings is an object, not a concept. In the course of doing so Trueman rejects Wright's response (1998) according to which some objects are also concepts, for example, the concept horse, so the categories are not exclusive. Trueman's argument for exclusivity (Chapter 4) is the heart of the book, and as he says , it is his response to holders of differing views, like Wright. I think that there is a gap in Trueman's argument which needs to be filled if Wright is to be considered refuted.

Keywords: Concept; objet; Wright; singular term; predicate; Frege.

Concepts may still be objects

In his book (2021) Trueman attempts to provide a solution to the paradox of the concept *horse*, which according to Frege's published writings is an object, not a concept. In the course of doing so Trueman rejects Wright's response (1998, 2001) according to which some objects are also concepts,

- * University of Nottingham
 - (b) https://orcid.org/0000-0001-5538-5444
 - University of Nottingham, Department of Philosophy, Room C41 Humanities, University Park, Nottingham, NG7 2RD, United Kingdom.
 - ☑ Harold.Noonan@nottingham.ac.uk
- \odot The Author. Journal compilation \odot The Editorial Board, Organon F.



This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International Public License (CC BY-NC 4.0).

for example, the concept *horse*, so the categories are not exclusive. According to Wright this is so because the concept *horse* is an object in virtue of being the *reference* of the singular term 'the concept *horse*' and a concept in virtue of being the *ascriptum* of, what is *ascribed* by, the predicate 'is a horse'. Reference and ascription are two different relations, but some things, concepts, are both referents and ascripta. Wright's aim is to offer a resolution of the paradox of the concept horse whilst retaining the intuitive sounding reference principle, that sameness of reference ensures sameness of semantic role, which making the distinction between reference and ascription allows him to do. His motivation is to allow that a distinguished category of entity can be associated with predication, as objects (or particulars) are associated with the use of singular terms, but to avoid paradox by distinguishing the relation between predicate and its associated entity as a sui generis one.

Trueman's argument for exclusivity (Chapter 4) is the heart of the book, and as he says (2021:98), it is his response to holders of differing views, like Wright. I think that there is a gap in Trueman's argument which needs to be filled if Wright is to be considered refuted.

Trueman argues that we have to recognize two notions of reference, term-reference and predicate-reference. Singular terms term-refer, predicates predicate-refer. Term-referents are objects, predicate-referents are concepts, though as Trueman explains, this is loose talk (see e.g., 2021, 55, fn. 13). Predicate-reference is the relation between a predicate and a concept which is analogous semantically to the first-level relation of term-reference in which singular terms stand to objects.

A statement of term-reference takes the form of, for example:

(1) 'Socrates' refers to Socrates.

Wright (2001, 72) notes at the beginning of the paper that his solution may however be subject to other well-known problems such as the intensional version of Russell's paradox. But at the end of the paper, noting this again, he writes (2001, 90): 'this, like the recent resurgence of tuberculosis in the western world, is a disappointment. But I do not think it is really an objection — too many of the family of paradoxes that exercised Russell survive the imposition of Frege's hierarchy to allow us to think that it gets to the root of that particular one.'

In this 'Socrates' occurs twice, once mentioned, once used—the statement disquotes. And it is reasonable to think that this is what someone knows if he understands the meaning of 'Socrates' (which he may do, of course, without understanding the use of quotation marks, or the meaning of 'refers' in English, or use any word at all which means 'refers').

In parallel, a statement of predicate-reference must disquote. It must take the form of, for example:

(2) 'is wise' predicate-refers to is wise.

Of course, this looks ungrammatical. But it is not, because 'predicate-refers to' is a novel expression we can use how we like. So (2) is grammatical by stipulation. But what does it mean? Trueman (2021, 71) says that for his purposes we can take it to mean: 'is wise' is true of z iff z is wise (or: z satisfies 'is wise' iff z is wise). It is reasonable to think that this is what someone knows if he understands the meaning of 'is wise' (which he may do, of course, without understanding the use of quotation marks, or the meaning of 'is true of' in English or use any expression at all which means 'is true of').

Now let us shift to another example of term-reference:

(3) 'The property (concept) of being wise' term-refers to the property of being wise.

Now you might think that conjoining (3) and (2):

- (3)+(2) 'the property of being wise' term-refers to the property of being wise and 'is wise' predicate-refers to is wise
- you get a *witness* to the existential generalization:
- (EG1) for some x, x is an object and x is a concept i.e.,
 - (EG1*) for some x, there is a term which term-refers to x and a predicate which predicate-refers to x.

But you don't, Trueman (2021, 51-2 and 60) points out, since what follows 'term-refers to' in (3)+(2) is different from what follows 'predicate-refers to': one is a term and one is a predicate.

Similarly, (3)+(2) is not a witness to the second-order existential generalization:

(EG2) for some Y, Y is an object and Y is a concept.

So Trueman concludes that the statement that there is something which is both an object and a concept is nonsensical since it has not only no true instance, but no possible instance since terms are not predicates. (He explains (2021, 117) what he means by saying that this is nonsense: The meanings of the words in the sentence 'there is something which is both an object and a concept', as he understands them, are such that there is no meaningful sentence composed of words with those meanings arranged in that way.)

Trueman's thought that there is no single relation of reference in which both terms and predicates can be regarded as standing may be Frege's. It is certainly entirely in accord with Frege's thought and emphasized by Dummett (1973, 182–83, 171, 411), as Oliver (2005) points out. But it is not disputed by Wright. In fact, as noted, it is a key point in his article. However, Wright contends that some objects are concepts (e.g., the property (concept) of being wise). So how can Wright reply? How can he produce a witness to (EG1)?

I think that there is only one way, which appeals to the Fregean thought that the same content can be carved up in more than one way.²

First, a simple example of this. Consider 'John hates Mary's father'. This asserts a relation between John and Mary—he hates her father. It also asserts a relation between John and Mary's father (who may be Peter, or John himself if John hates himself)—he hates him. We can carve up the content in (at least) two ways. Frege's example is 'the direction of line a is identical with the direction of line b', as explained by the equivalence with 'a is parallel to b' (the Fregean 'direction principle'). We can regard this

For a statement by Wright of this Fregean doctrine see Hale and Wright (2012: 120-1): 'We owe to Frege the insight that one and the same thought may allow of decomposition into distinct logical forms: the thought that Socrates is wise, for instance, may be regarded both as a first-level predication of wisdom of Socrates, and as a second-level predication, of "Socratising", or applying to Socrates, of wisdom.'

as asserting identity between the direction of line a and the direction of line b or as parallelism between a and b.

Now let us consider the thought that (2), 'is wise' predicate-refers to is wise, i.e.,

'is wise' is true of something iff it is wise.

And let us express this, using Wright's terminology, as:

(WL) 'is wise' ascribes the property which something possesses/the concept something falls under iff it is wise.

No one can prevent us doing this (just as no one could prevent Frege stipulating that 'the direction of line a is the direction of line b' is to be understood as expressing the thought that a is parallel to b). But this is a bit long, so we can abbreviate harmlessly to reach the shorter:

(WS) 'is wise' ascribes the property of being wise.

Now (WL) is true iff 'is wise' stands in a relation—predicate-reference—to what 'is wise' predicate-refers to. But it also, if we carve the content differently, is true iff 'is wise' stands in a different relation—ascription—to the term-referent of 'the property which something possesses iff it is wise', i.e., the term-referent of 'the property of being wise'. But can we carve the content differently? Well, one of Wright's long-held beliefs, also frequently argued for by Bob Hale (see e.g., Hale 2013, also Hale and Wright 2012, 113–14) is the syntactic priority thesis, the thesis that Fregean objects are to be understood as the (term)-referents of singular terms, and singular terms are to be understood just as expressions which behave as singular terms. But we can recognise 'the property which something possesses if and only if it is wise' in (WL) as a singular term, and so as standing for an object if anything. And if we do, we must recognize (WL) as asserting, as well as the relation of predicate-reference, the relation of ascription between the predicate 'is wise' and that object. So we must recognise its content as capable of being carved up in different ways. And so recognising it, it is to be noted, we do not have to deny the essential role of knowledge of the truth of a thought expressed by a statement in which the predicate is disquoted to our understanding of the predicate 'is wise' since in (WL) 'is wise' occurs both quoted and not quoted (and (WS) is only intelligible as an

abbreviation). Hence Trueman's requirement that the statement that relates to the predicate 'is wise' as (1) relates to the name 'Socrates' must disquote, as (1) does, is satisfied, on Wright's account.

But then (3) in conjunction with (WS) is an instance of, a witness to the truth of:

(EG1) for some x, x is an object and x is a concept

– if we understand 'x is an object' to mean 'there is a term which termrefers to x' and 'x is a concept' to mean 'there is a predicate which ascribes x', since 'the property of being wise' does term-refer to the property of being wise, and the predicate 'is wise' does ascribe the property of being wise. (Note that on this explanation 'concept' is a genuine count-noun applicable to objects, so its meaning so understood is different from the meaning it has on Trueman's account; when Wright says 'concepts are objects' he is not

Trueman does not have to give 'concept' any meaning at all, but he notes that it is useful to use sentences in which it occurs to make certain claims easier to pronounce, e.g., to use 'the concept wise is a concept' to mean 'for some F, for every x, Fx iff x is wise' (2021, 112), or to use 'it is nonsense to say that a concept is an object' to express the view ascribed to him above about the sentence 'there is something which is both an object and a concept'. (Note that we can also use the apparently object-language sentence 'nothing is both an object and a concept' to express this view (2021, 215). It remains that if this sentence is not understood in this way it must either say something irrelevant, whether true or false, to Frege's concerns in 'On Concept and Object'—e.g., that nothing is both an object and an extension or be meaningless. There is no truth here that cannot be said, but only shown.) Trueman could also use the word 'concept' as part of a second-level predicate, 'Concept x, ...x...', so defined that 'Concept x, Fx' means, say, 'for all x, Fx iff Fx'. He could do the same with other words denoting properties of concepts, or more generally of functions, including 'function' (specifically 'first-level function of one argument', and so on) itself (cf. Frege 1980, 141). So he could use 'Function x, ...x...' so defined that 'Function x, Fx' means 'for all x, for some y, Fx=y', e.g., 'Function x, $\sin(x)$ ' means 'for all x, for some y, $\sin(x)=y$ '. He could then use 'the sine function is a function' to assert this in a more easily pronounceable way. Frege himself renders The real function $\Phi(x)$ of a real variable x is continuous throughout the interval from A to B' (note the definite article 'The real ...') in his logical notation (Frege 1979: 24). He adds: 'If in this case the formula seems longwinded by comparison with

asserting what Trueman denies when he says (speaking loosely) 'concepts are not objects'.)

So Wright is not refuted unless it can be shown that the thought that:

(WL) 'is wise' ascribes the property which something possesses iff it is wise,

the thought that 'is wise' is true of something iff it is wise, cannot be understood as asserting two different relations to obtain, one of predicate-reference, one of ascription, one of unequal level, R(x,Y), one of first-level, R(x,y), as according to Frege, 'the direction of a is parallel to the direction of b' can be understood as asserting both identity and parallelism (and as, evidently, 'John hates Mary's father' may be understood as asserting two different relations to obtain). But why not? Or is Frege wrong too?

In fact, it may be that Wright, writing with Hale (2012, 117–19), has anticipated and answered Trueman's argument in a response to Noonan (2006).

Wright and Hale write:

Noonan claims ... a fatal incoherence in Wright's claim that a concept can be both *ascriptum* of a predicate and reference of a singular term:

...the expression 'ascription' was coined [by Wright] to indicate just that unequal-level relation between a predicate and a concept which is analogous semantically to the first-level relation between singular term and referent. It is, in fact, that relation expressed by: ... applies to something if and only if it ... (e.g. 'is a horse' applies to something iff it is a horse)

But if [so], Noonan argues, Wright's position is incoherent. For he must hold that ... there is some X such that 'is a horse' ascribes X and 'the concept *horse*' refers to X. But "is a horse" ascribes X' expands as "is a horse" applies to something iff it X', so Wright needs to hold that some instance of the schema:

the verbal expression, you must always bear in mind that it gives the definition of a concept which the latter only names.'

_

'is a horse' applies to something iff it X and 'the concept horse' refers to X

is true. But there can be no true instance, ... since what must replace the first occurrence of 'X' is a predicate, ... the second a singular term.

Hale and Wright go on:

But [Noonan's] objection is mistaken. Wright's explanation [of ascription] runs as follows:

For a predicate to stand in the relation of ascription to a property or concept is just this: for its sense so to relate it to that property/concept that it may be used in concatenation with an appropriate singular term to say of the bearer of that term that it has the property, or falls under the concept in question

Wright does not explain 'ascribes' as an unequal-level relational expression.... Noonan is just not taking seriously Wrights view that concepts/properties are a kind of object. Given that they are a kind of object, there is no reason why the relation of ascription should not be a relation expressed by a first-level predicate.... Thus Wright can say that:

 $\exists x \text{('is a horse' ascribes } x \text{ and 'the concept horse' stands for } x)$ This has a true substitution instance:

'is a horse' ascribes the property of being a horse and 'the concept horse' stands for the property of being a horse. (Hale and Wright 2012, 117-19)

Thus, Hale and Wright argue, Wright can give an instance of the claim that something is both a concept and an object (as Wright understands these terms, i.e., as the ascriptum of a predicate and the referent of singular term).

If Fregean recarving of content is permissible in this case, I think that Noonan, and along with him Trueman, is refuted. That is, it has *not* been shown by either that there is no equal-level relation expressible by a first-level predicate satisfying the description by which Wright explains 'ascription'.

I elaborate. Hale and Wright's key objection to Noonan's objection to Wright's original paper is that he simply ignores Wright's explanation of ascription. Wright's view, as Noonan takes for granted, is that knowledge of the concept a predicate ascribes is constitutive of understanding—in the Fregean terms he uses, grasping the sense of—the predicate. But knowing what the predicate is true of (applies to)⁴ is what is constitutive of this understanding. So knowledge of the concept ascribed *is* knowledge of what the predicate is true of.⁵ (If it were not, one could not inform someone, in German say, that 'is wise' ascribes the concept wise and thereby provide him with the knowledge needed to use the predicate comprehendingly.) Noonan takes it to follow that Wright's ascription must be the unequallevel relation Trueman calls 'predicate-reference'.

Hale and Wright's point is that this does not follow from Wright's view that knowledge of the concept a predicate ascribes is knowledge of what it is true of. Wright's explanation of ascription is in accordance with this view, but it identifies ascription as a relation expressible by a first-level predicate. According to it, 'is wise' ascribes the concept wise/the property of being wise just in case its sense so relates it to that concept that it may be used in concatenation with an appropriate singular term to say that the bearer of the term falls under the concept, so that grasp of the sense of the predicate (understanding it) requires knowledge that concatenation of 'is wise' with an appropriate singular term—'N is wise'—says that the bearer of 'N' falls under the concept wise. But given that objects are just the bearers of singular terms, that to which they refer, this is merely to say that 'is wise' ascribes the concept wise just in case its sense so relates it to that concept that understanding it requires knowing that 'is wise' is true of an object if and only if it falls under the concept wise. That is to say, so relates it to that concept that understanding it requires knowledge that 'is wise' is true of an object if and only if it falls under the concept something falls under just in case it is wise ('the concept wise' is merely an abbreviation). But

_

⁴ I.e., knowing the thought, in the case of the predicate 'is wise', expressed by a sentence of the form: 'is wise' is true of something iff it is wise.

⁵ Cf. Hale (2013, 35–6): 'a predicate stands for a certain property ... knowing what property the predicate stands for will just consist in understanding the predicate, i.e., knowing what something must be like, if the predicate is to be true of it'.

something falls under the concept something falls under if and only if it is wise if and only if it is wise (or: possesses the property something possesses if and only if it is wise if and only if it is wise). So 'is wise' ascribes the concept wise iff its sense so relates it to that concept that understanding it requires knowing that 'is wise' is true of an object iff it is wise. So (WL) (= (2), given Trueman's definition of 'predicate-refers') is implicit in Wright's explanation of ascription and Hale and Wright's point is that the content of this can be carved, not only in a way that reveals it as asserting an unequal-level relation (predicate-reference), which Wright of course accepts, but also in a way that reveals it as asserting a relation expressed by a first-level predicate (ascription).

This is not to say that Hale and Wright's defence of concepts as objects is unassailable. It is essential to that position that the content of 'x falls under the concept something falls under if and only if it is wise' can be equated with that of 'x is wise'. But their position also requires that the former contains, as it were, two unknowns, 'concept' and 'falls under'; it is not merely a stylistic variant. But a single equation with two unknowns cannot be solved (what are the values of x and y if 2x+y=7?). So, by what route can someone innocent of the meanings of these two expressions in Hale and Wright's writings come to an understanding of them? Wright's explanation of ascription employs both. (In Frege's direction equivalence 'the direction of line a is identical with the direction of line b iff a is parallel to b' it is assumed that the meaning of 'is identical with' on the LHS is the

Wright himself draws attention to the possibility of using 'refers' as Trueman uses 'predicate-refers': 'that is not to say that we could not stipulate that "refers to" should have a use linking the name of a predicate to an expression—par excellence, the predicate itself—for its semantic value. In that case, "'is a horse' refers to is a horse"—proposal (i) above—would be well-formed, but—just for that reason—"refers to", so used, would not speak of the relation that holds between a singular term and the object for which it stands' (2001, 85).

⁷ This fits in with Wright's comment: 'what fits an object for ascription—what makes it a concept/property—will be that it is the referent of an expression formed by a certain kind of abstraction on a corresponding predicate. That will not be the situation of the ordinary run of singular terms, though of course the details remain to be worked through' (2001, 90, fn. 18). The Direction Principle is, of course, the paradigm abstraction principle.

relation of numerical identity, so there is only one 'unknown', 'the direction of'.)⁸ There is also the worry that Wright's explanation of 'ascription' is inadequate to the generality of the problem (Hale 2013, 30). Concepts are a special case of functions. The problem of reference to concepts is a special case of the problem of reference to functions. Ascription is just a special case of the relation—which is not, of course, reference—between a functor and the associated function (call it 'specification'). Now how are we to fill in the gaps in: 'For a functor to stand in the relation of specification to a function is just this: for its sense so to relate it to that function that it may be used in concatenation with an appropriate singular term to the bearer of that term that it ... the function in question'?

It should be noted that Noonan also articulates a separate worry about Wright's position (Noonan 2006, 169-70), perhaps related to the first in the last paragraph. There is according to Frege (before Russell's Paradox), an object which is the term-referent of 'the extension of the concept horse', namely, the extension of the concept horse, and this, Frege suggests, may permissibly be taken as the term-referent of 'the concept horse'. And, of course, there is a first-level relation between the predicate (which is an object) 'is a horse' and this object. It is the relation which is the predicate-reference of 'is true of something iff it is a member of' (taking extensions to be sets). Noonan uses 'ascribes_E' as an abbreviation for this. Now Noonan's worry is that nothing in Wright's explanation of ascription distinguishes it

-

 $^{^{8}}$ Perhaps the explanation should be understood as two-step. First, we have (a paradox-proof variant of) the abstraction principle: 'The concept which something falls under iff it is F = the concept something falls under iff it is G just in case all and only all Fs are Gs' and then a principle introducing ascription: 'is an F' ascribes the concept something falls under iff it is H just in case 'is an F' is true of something iff it is H'. An instance of the first fixes the reference of 'the concept something falls under iff is it a horse' ('the concept horse') and the second fixes the ascriptum (?) of the relational predicate 'ascribes'.

Noting the presence of the definite article. 'If [Kerry] thinks ... that I have identified concept and extension of concept, he is mistaken. I merely expressed my view that in the expression 'the number that applies to the concept F is the extension of the concept like numbered to the concept F' the words 'extension of the concept' could be replaced by 'concept'. Notice carefully that here the word 'concept' is combined with the definite article' (1969:48).

from ascription_E If so, he claims, Wright has not succeeded in setting out a position opposed to Frege's, as he intends. It may be that this points to a genuine problem with Wright's proposal. ¹⁰

Setting this separate worry aside, however, the main point of this note has been to suggest that unless content carving is either in general illegitimate, or illegitimate in this particular case, there is a gap in Trueman's argument, as there is in Noonan's, understood as an attempted refutation of Wright.

References

Bates, Robert H., Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry
R. Weingast. 2020. Analytic Narratives. Princeton: Princeton University Press.
Boncompagni, Anna. 2016. Wittgenstein and Pragmatism: On Certainty in the
Light of Peirce and James. London: Palgrave Macmillan.

Bruner, Jerome. 2004. "Life as Narrative." Social Research 71 (3): 691–710.

Burbules, Nicholas C. 2017. "Wittgenstein's metaphors and his pedagogical philosophy." In *A Companion to Wittgenstein on Education: Pedagogical Investigations*, edited by Michael A. Peters, and Jeff Stickney, 123–33. Singapore: Springer. https://doi.org/10.1007/978-981-10-3136-6_8

Danto, Arthur. 1965. Analytic Philosophy of History. New York: Cambridge University Press.

Eisele, Thomas D. 1990. Wittgenstein's Instructive Narratives: Leaving the Lessons Latent. *Journal of Legal Education* 40 (1/2): 77–95.

Garrison, Jim. 2017. "Wittgenstein and Classical Pragmatism." In A Companion to Wittgenstein on Education: Pedagogical Investigations, edited by Michael A. Peters, and Jeff Stickney, 321–38. Singapore: Springer.

https://doi.org/10.1007/978-981-10-3136-6_21

Organon F 29 (3) 2022: 376-388

_

¹⁰ The question is 'are Wrightian concepts Fregean extensions?' if the answer is 'No' what distinguishes these objects? Not their principles of individuation since concepts for Frege, and hence for Wright, are individuated extensionally (unlike properties on some current uses of the term, on which, e.g., the property of being a cordate is not the property of being a renate). So what else? But if Wrightian concepts are Fregean extensions what is the disagreement between him and Frege, that is, what is the thought to which he ascribes the truth-value True and Frege ascribes the truth-value False?

Gasking, Douglas Aidan Trist, and Alan Cameron Jackson. 1967. "Wittgenstein as a Teacher". In *Ludwig Wittgenstein: The Man and His Philosophy*, edited by K. T. Fann, 49–55. New York: Dell Publishing Co.

- Gebauer, Gunter. 2017. The Turn to Anthropology. In Wittgenstein's Anthropological Philosophy. History of Analytic Philosophy, 75–107. Cham: Palgrave Macmillan https://doi.org/10.1007/978-3-319-56151-6_4
- Gibson, Arthur, and Niamh Ann O'Mahony, eds. 2020. Ludwig Wittgenstein: Dictating Philosophy: To Francis Skinner—The Wittgenstein-Skinner Manuscripts. Cham: Springer Nature.
- Kačerauskas, Tomas. 1999. "Is L. Wittgenstein Analytic or Hermeneutic Philosopher?" Problemos, 560: 71–84. https://doi.org/10.15388/Problemos.1999.56.6863
- Kuusela, Oskari, Mihai Ometiță, and Timur Uc, an. 2020. Wittgenstein and phenomenology. Abingdon, Oxon; New York, NY: Routledge.
- McDonald, Henry. 2001. Wittgenstein, Narrative Theory and Cultural Studies. Telos 121: 11–53.
- Rorty, Richard. 1989. Contingency, Irony, and Solidarity. Cambridge: Cambridge University Press.
- Synytsia, Andrii. 2020. "Pragmatic Aspect of Wittgenstein's Philosophy of Education: A Modern Interpretation." Journal of Education Culture and Society 11 (2): 39–51. https://doi.org/10.15503/jecs2020.2.39.51
- Unger, Peter. 2014. Empty Ideas: A Critique of Analytic Philosophy. New York: Oxford University Press.
- Wittgenstein, Ludwig. 1922. Tractatus Logico-Philosophicus. Translated by Charles Kay Ogden. London: Kegan Paul, Trench, Trubner & Co.
- Wittgenstein, Ludwig. 1968. *Philosophical Investigations*. Translated by Gertrude Elizabeth Margaret Anscombe. Oxford: Blackwell.
- Wittgenstein, Ludwig. 1969. On Certainty. Translated by Denis Paul, and Gertrude Elizabeth Margaret Anscombe. Oxford: Blackwell.
- Wittgenstein, Ludwig. 1993. Remarks on Frazer's Golden Bough. In *Ludwig Wittgenstein. Philosophical Occasions*, 1912–1951, edited by James Klagge, and Alfred Nordmann, 118–155. Indianapolis: Hackett Pub Co Inc. (in German and English).
- Wittgenstein, Ludwig. 2006. Culture and Value. Translated by Peter Winch. Chicago: Chicago University Press.