

Evidence and the Law of Excluded Middle: Brentano on Truth

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INTRODUCTION¹

The central question of my paper is whether there is a coherent logical theory in which truth is construed in epistemic terms and in which also some version of the law of excluded middle is defended. Brentano in his later writings has such a theory.² My first question is whether his theory is consistent. I also make a comparison between Brentano's view and that of an intuitionist at the present day, namely Per Martin-Löf. Such a comparison might provide some insight into what is essential to a theory that understands truth in epistemic terms.

1. BRENTANO'S THEORY OF TRUTH

Brentano, who developed his theory of judgement in the 1870's, presented his theory not only in opposition to the traditional S-is-P theory of judgement, but also in opposition to the logical realism of that century, in which the bearers of truth and falsity (the propositions), as well as their truth and falsity, are understood as being independent of the knowing mind.

For Brentano, the basic notion in his theory of truth is not truth of a proposition, but correctness of a judgement (made). A judgement is correct (*richtig*), if it judges the objects adequately, Brentano says in 1889. The correspondence definition of truth says nothing more. One of Brentano's central criticisms of the correspondence definition of truth is that such a definition does not explain how we may know something, for, he says, it is not through a comparison between a thing and my judgement that I can determine the truth or correctness of my judgement about that thing. According to Brentano, the correspondence definition of truth is merely nominal, and does not explain anything about the notion of truth. We may elucidate the notion of truth, though, by appeal to examples of judgements of whom we know that they are correct. For Brentano, it is evident judgements that have this central role.³

Brentano's life as a priest gives us some background for his views on truth. Brentano was very much opposed to any form of dogma of which he was not able to see the truth

¹ A former version of this article was commented on in detail by Göran Sundholm.

² It is inevitable to elaborate strongly on what is published of Brentano's later ideas. On the one hand, because these ideas were in progress, and not formulated in any definitive and authorized publication. On the other hand, what is published of Brentano's later writings is very unreliable. Therefore I have checked the passages which are central for my paper by comparing them with the typoscripts of Brentano's manuscripts at the Husserl Archives at Leuven. I wish to thank the Archives for this possibility. In these passages I found no important deviations from the typoscripts.

³ "Evidence" is here used in the sense of the property for being evident, and not in the sense of "support for".

himself.⁴ Concerning the dogma of papal infallibility, that was to be promulgated in 1870, Brentano helped the German Bishops who opposed it by preparing a special brief for them.⁵ Not unlike Descartes, who was confronted with conflicting philosophical theses, Brentano took the standard for truth in what oneself clearly sees, what one can judge with evidence. To know truth, it makes in the end no sense to listen to authority. One of Brentano's mottoes was: down with the prejudices ('Nieder mit den Vorurteilen'); for Brentano, the opposite of a prejudice is something that we know, which means that we judge it with insight.

For Brentano, a correct judgement is always a piece of knowledge.⁶ A judgement is correct in so far as it is 'logically', that is, epistemically, justified.⁷ A judgement is correct or right, if it is as it should be, which is only the case if it is judged with evidence.⁸ An error is a judgement that is not knowledge.⁹

Truth and correctness are different, though related notions.¹⁰ A judgement is true if it is in all respects, except possibly for its being evident, similar to the judgement of someone who would make this judgement with evidence. He makes a true assertion who asserts what an evidently judging person would assert.¹¹

From this definition it follows that Brentano (implicitly) makes a distinction between what is evident (known) and what can be made evident. For a judgement to be true it is not necessary that someone actually judges it with evidence; a judgement is true if it is possible for someone to judge it with evidence. A true judgement is *evidenceable*, one might say, although Brentano never uses this term.

Brentano adheres to the traditional view that there are two different ways for a judgement to be evident; either it is immediately evident in itself, or it is evident in so far as it is inferrable from evident judgements by applications of evident rules; the latter type of evidence is called 'mediate evidence' [Brentano (1974), p. 148; cf. Brentano (1925), p. 50].

⁴ On the transformation of Brentano's religious convictions during the 1870's, and especially the doubts Brentano raised about the dogmas, see Stumpf (1976), pp. 22ff.

⁵ This brief he wrote on behalf of Bishop Ketteler, see Kraus (1976), p. 5.

⁶ "Denn die Logik ... soll uns das Verfahren lehren, das uns zu der Erkenntnis der Wahrheit führt, d.i. zum richtigen Urteil," Brentano (1956), pp. 1, 2.

⁷ This broader sense of the term 'logical' is in accordance with earlier uses of the term; compare the title of Mill's 'A System of Logic', and think of Bolzano who uses 'Wissenschaftslehre' as the title for his logic. And it is also in accordance with Brentano's idea of logic as the art of correct judgement; see quote in the last note.

⁸ "Ein Urteil, welches ist, wie es sein soll, entspricht der logischen Regel. Und dies tut das evidente Urteil, sowohl das unmittelbar - als das mittelbar - evidente." letter to Kraus, April 1916, Brentano (1966), p. 300.

⁹ "Jeder Irrtum ist ein Urteil, das keine Erkenntnis ist" Brentano (1970), p. 160.

¹⁰ Brentano uses the terms 'correctness' and 'truth' not always in this way. In fact, he distinguishes the term 'logical correctness' from 'qualitative correctness', the latter meaning *truth* (in the broad sense). And he distinguishes two senses of 'truth': a primary sense in which it means evidence, and a secondary, less restricted sense. I deal with the relation between these two uses of the term 'truth' in 'L' analogie et la vérité chez Franz Brentano', to be published. The way I distinguish the terms 'correctness' and 'truth' above is quite common in Brentano, cf. Brentano (1966), pp. 305, 307. One should not forget that nearly all material is not published by Brentano himself.

¹¹ "... daß die Wahrheit dem Urteile des richtig Urteilenden zukommt, d.h. dem Urteile dessen, der urteilt, wie derjenige darüber urteilen würde, der mit Evidenz sein Urteil fällt; also der das behauptet, was auch der evident Urteilende behaupten würde." Brentano (1974), p. 139. Cf. Brentano (1966), pp. 301, 305.

A mediately evident judgement is as much a piece of knowledge as an immediately evident one.

For Brentano, *evidence* is a primitive notion; it cannot be defined. Still, something can be said about it: examples of evident and non-evident judgements can be given, so that we may be able to see what an evident judgement is. Sometimes it appears to us that we judge something with evidence, where, in fact, we judge only blindly. Such blind judgements have in common with evident judgements that we do not doubt them, but there are also important differences between the two types. Only evident judgements are judged with clarity; blind judgements are no better than prejudices, which cannot be grounded with reason. A judgement's being evident does not consist in a kind of natural force or special feeling. Such a feeling or force does not distinguish the evident judgement from prejudices. Evidence is not a *psychological* notion.

On the contrary, evidence is objective: if something is judged with evidence, it is impossible that its contrary is judged with evidence at the same time. Even God's omnipotence could not make that when I judge something with evidence, someone else judges the opposite with evidence [Brentano (1994), I, p. 33, or Brentano (1974), p. 157]. Also there are no degrees of evidence. From these characteristics it follows that, for Brentano, evidence is a transcendent or absolute notion. When I have evidence, I cannot err, Brentano says.¹²

Brentano also holds that a judgement's being evident is epistemically accessible to the person who judges with evidence. This means that evidence is a phenomenological character of certain judgements. But the same notion of evidence cannot function both as transcendent and as epistemologically accessible. Brentano's oscillation of these two uses of 'evidence' shows that his notion of evidence is inherently ambiguous.

Günther Patzig's perceptive observation concerning Husserl's theory of evidence, also applies to Brentano's theory of evidence: one cannot use a transcendent and a non-transcendent, phenomenological notion of evidence at the same time. If evidence is a phenomenological notion, it gives us no guarantee for the truth of our judgement. If an evident judgement cannot turn out to be incorrect, that is, if a judgement's being evident gives an infallible guarantee for the truth of our judgement, evidence is a transcendent notion, and cannot be epistemically accessible in the sense that we are sure that we judge with evidence. As Brentano says, he who judges with real evidence ('wahrhafte Evidenz'), who truly knows, is certain of the truth of his judgement; he knows that no one can judge the contradictory with evidence.¹³ For Brentano, there is no distinction between 'wahrhafte Evidenz' and 'Evidenz'.

2. THE LAW OF EXCLUDED MIDDLE

¹² not completely free from papal proclivity. "Bei Evidenz ist Irrtum ausgeschlossen" Brentano (1974), p. 143.

¹³ "Wer wahrhaft evident urtheilt, wahrhaft erkennt, der ist der Wahrheit sicher," Brentano (1994), p. 33, or Brentano (1974), p. 156; "... er hat die Einsicht, um auch zu wissen, daß kein anderer die entgegengesetzte haben kann." *idem*, p. 157.

To resume the central question: Can one consistently combine a theory of truth according to which truth is what can be made evident with the law of excluded middle? To say the least, there is a tension between the idea that truth is understood in epistemic terms, and the thesis that every statement is true or false. For there are statements for which we do not have a method to decide whether they are true or false, such as Goldbach's conjecture that every even number greater than 2 can be expressed as the sum of two primes, or statements about the past whose truth or falsity nobody can establish.

Brentano formulates the law of non-contradiction, which he considers to be the central law of thought, as follows:

"It is impossible that someone who rejects something what someone else correctly, that is, evidently acknowledges, rejects it correctly; similarly, that someone who acknowledges something what someone else correctly rejects, acknowledges it correctly".¹⁴

To put it simply, the law of non-contradiction says that of two contradictory judgements only one can be correct. Two judgements are contradictories if one affirms what the other denies. For Brentano, affirmation and denial are two primitive forms of judgement, which means that they are not defined in terms of each other. For Brentano, this law is an apodictic rejection (of a person who correctly judges the opposite of someone who judges with evidence). Being a rejection, the law does not have existential import. Because it is an axiom, it can be known to be true purely by considering the concepts used. Notwithstanding the fact that the concepts used are empirical, such as that of an evidently judging person, the correctness of the judgement can be determined immediately and *a priori*. Brentano's law is in terms of judgement and correctness; therefore, it is really a principle concerning knowability, which is at the heart of his logic as theory of correct judgement. The law does not concern a relation between the truth-values of propositions. Rather, it concerns a relation between the correctness of different judgements. The law of non-contradiction is really an explication of the notion of correctness, which shows that Brentano meant his notion of correctness, or evidence, to be objective.

The law of excluded middle has for Brentano the following form:

¹⁴ Which quote continues: "presupposed that both judge with the same mode of presentation and with the same mode of judging" (1916), Brentano (1956), p. 175. And we may add 'simultaneously' to read the definition correctly. In German: "Es ist unmöglich, daß einer, der etwas leugnet, was ein anderer richtig, d.h. evident anerkennt, es richtig leugnet; sowie auch, daß einer, der etwas anerkennt, was ein anderer richtig leugnet, es richtig anerkennt, vorausgesetzt, daß beide es mit demselben Modus des Vorstellens vorstellen und mit demselben Modus des Urteilens beurteilen." Brentano (1956), p. 175.

"It is impossible that someone who rejects something that someone else incorrectly acknowledges, rejects it incorrectly, similarly, that someone who acknowledges something that someone else rejects incorrectly, acknowledges it incorrectly".¹⁵

For Brentano, the law of excluded middle says that of two contradictory judgements only one can be incorrect. For example, if I see that the judgement 'This square is round' is incorrect, I immediately see that the judgement 'It is not the case that this square is round' cannot also be incorrect.¹⁶

The first question to be raised is: What is the relation between what Brentano calls the 'law of excluded middle' and his law of non-contradiction? Brentano says that the law of excluded middle is not of the type of the law of non-contradiction.¹⁷ But he also says that the law of excluded middle says the same as the law of non-contradiction but in a disjunctive form [Brentano (1956), p. 202]. These theses seem to contradict each other.

We may find a solution for this problem in the formulation of the law of excluded middle as presented above. What does it mean to say that someone incorrectly acknowledges something? 'Incorrect' does not mean the same as 'non-evident'; it is the stronger notion where something cannot be made evident. How can we know that a judgement is incorrect? We know that the acknowledgment of A is incorrect, because we are able to deny A with evidence. "False[= incorrect] is what contradicts an evident judgement."¹⁸ It is in accordance with the law of non-contradiction, to say that what contradicts an evident judgement, cannot be made evident. So, the terms "incorrectly acknowledging A" and "correctly rejecting A" are equivalent. This means that we may substitute the one for the other in what Brentano calls the law of excluded middle. Such a substitution exactly gives the law of non-contradiction.¹⁹ That we are allowed to make this substitution depends on the equivalence that is implied by Brentano's definition of incorrectness, which itself contains a version of the law of excluded middle: an affirmation (or denial) of something is incorrect, if and only if the denial (or affirmation) of that thing is correct.

We may conclude that Brentano defends some version of the law of excluded middle: It is impossible that a judgement is neither true nor false. Here we have the broader notions of

¹⁵ Which quote continues: "presupposed that both judge with the same mode of presentation and with the same mode of judging." In German: "Es ist unmöglich, daß einer, der etwas leugnet, was ein anderer unrichtig anerkennt, es unrichtig leugnet, sowie auch, daß einer, der etwas anerkennt, was einer unrichtig leugnet, es unrichtig anerkennt, vorausgesetzt wiederum, daß beide mit demselben Modus des Vorstellens vorstellen und mit demselben Modus des Urteilens beurteilen." (1916), Brentano (1956), p. 175.

¹⁶ In Brentano's theory this has to be formulated in terms of affirmation and denial, and in terms of existential judgements. If I see that your affirmation of an object that is a round square is incorrect, I (immediately) see that the rejection of that object cannot also be incorrect.

¹⁷ Brentano (1956), p. 166. The typoscript 'Zur Axiomatik' also has it that the law of excluded middle stands besides the law of non-contradiction as a law of its own (EL 4 16.11.1916).

¹⁸ "Im Widerspruch zu Einsichten können nur blinde Urteile stehen. Widersprechende können unmöglich beide evident sein. Falsch aber heißt, was dem evidenten Urteil widerspricht." Brentano (1970), p. 150.

¹⁹ This explains that Chisholm, in his (1982), p. 76, says that Brentano's formulation of the law of excluded middle really is a formulation of the law of non-contradiction. Cf. Simons (1987).

truth and falsity, for this law concerns the possibility of knowing something. Suppose that an affirmation is neither true nor false. So, that affirmation is not true, that is, it cannot be judged with evidence - because of the definition of truth as what is possibly judged with evidence. If it cannot be judged with evidence, it cannot be made evident, therefore, by definition, it is false. But, by supposition, it is not false. Therefore, there is no affirmation, and in general, no judgement, that is neither true nor false. In his later writings, Brentano defends a version of the law of excluded middle, namely the law in its negative form as presented above.

How can Brentano defend the law of excluded middle while at the same time defining truth in terms of evidence? Brentano's early writings presuppose a notion of an ideal judge unfettered by human restrictions. All correct judgements are judged by God with evidence.

In his later writings, Brentano gives more prominence to the idea that other knowing beings have essentially the same proofs as we have.²⁰ When we speculate about other beings which possibly take part in having knowledge, we see that their knowledge must fall in the human region where it is directly accessible to our investigations [Brentano (1971), p. 182]. Care should be taken not to say anything about beings who could have axiomatic knowledge of a different kind from ours.²¹

It is not so clear what we are to understand by the notion *evidently judging person* in the definition of a true judgement. Whereas in his earlier thought Brentano could resort to the notion of God the ideal judge, he now presupposes that the ideal judge should know the way a human being knows. The ideal judge is someone like us except that for him the circumstances are different; for example, we can assume that he has more practical resources to investigate whether a judgement is correct. Brentano's position reminds one of Aristotle in the *Nicomachean Ethics*, III, 4, where it is said that what is good is what appears to the good man; he himself is the norm or standard of what is good. Henry Pietersma, who rightly makes this comparison with Aristotle, believes that the ideal subject, which he takes to be presupposed by Brentano's definition of truth, is never an actual subject because no actual subject is infallible. I agree with Pietersma that we are fallible, but I do not think that this captures Brentano's ideas: the notion of an ideal subject is important for Brentano's philosophy, and it makes sense only if this subject does not differ essentially from us. The aim of Brentano's definition of truth is to make it possible for us to determine whether there is truth or not. We can speak of an ideal judge, but such a judge must potentially be one of us. Like Aristotle, Brentano takes his starting-point in concrete human beings that act good or judge correctly. There simply is no point in positing another world besides or above our world, whether it is inhabited by ideal objects or by an ideal subject.

²⁰ "... für alle erkennenden Wesen [bestehen] dieselben Beweisgründe"(1915), Brentano (1974), p. 150.

²¹ "[W]ir hüten uns, etwas darüber zu sagen, ob nicht anderen Wesen andersartige axiomatische Erkenntnisse zukommen könnten, z. B. affirmative." Brentano (1956), p. 171. cf. EL 4, §39 and EL 35.

3. BRENTANO AND THE INTUITIONISTIC NOTION OF TRUTH²²

Owing to the modal element in Brentano's definition of truth, there is more to truth than what is actually known. An epistemic theory of truth that does not distinguish between possible and actual evidence cannot be very convincing, because it has to say that a judgement becomes correct or true the moment it is judged by someone with evidence. We should not have a notion of knowledge and correctness that depends in such a way on what contingently happens at a certain time. A similar distinction is made by Martin-Löf; he distinguishes between the notions the judgement **A is true** is actual and the judgement **A is true** is potential, that is, between what is known and what is knowable.²³ Further, some ideality should one be allowed for, in order to avoid that what is knowable changes from day to day, because of the invention of new instruments.

How blind judgements are evaluated is what distinguishes an epistemic theory of truth from a non-epistemic theory. A non-epistemic theory has it that blind and evident judgements may be correct in the same manner, namely if they have the same content. An epistemic theory has it that, although a blind judgement may be true, the act that issues a blind judgement is not correct; the blind judgement is a form of error in so far as the judger has no knowledge.²⁴

It is also clear that an epistemic theory of truth needs a distinction between mediate and immediate evidence. Sometimes knowledge is the result of what we immediately see, such as: something which is red has to be coloured too. The moment we see what the terms mean, that is, the moment we apprehend the concepts, we immediately grasp the correctness of the judgement. Other times, knowledge is the result of a chain of inferences. Without this distinction our theory does not match with what we intuitively understand as knowledge. Many logical and arithmetical truths need successive steps to see that they are true, which means that they are not immediately evident. They have no lesser claim to knowledge, though. A distinction between immediate and mediate evidence is also made by Martin-Löf.²⁵

The differences between epistemic and non-epistemic conceptions of truth depend upon the underlying order of concepts. They depend upon whether we hold truth to be prior, and understand knowledge in terms of truth; or that we hold evidence to be prior and construe truth in terms of it, together with such notions as possibility and (im)mediacy. The crucial role of this rational order of concepts is most clearly presented by Martin-Löf in *A Path from Logic to Metaphysics*.

At Brentano's time the distinction between process and product; between state and act; or between judgement and proposition was not obvious at all. In Brentano's theory of

²² I partly owe my understanding of Martin-Löf's writings to Göran Sundholm, see his (1997), (1998), and (1998a).

²³ Martin-Löf (1991), p. 144; compare Martin-Löf (1995), p. 189.

²⁴ Compare Martin-Löf (1996), p. 23.

²⁵ Compare Martin-Löf (1996), p. 30.

judgements, it is acts rather than states that are relevant. The distinction between judgement and proposition was known to Brentano, but he rejected it in his later philosophy. From the short time that he did acknowledge a propositional entity as non-subsisting, we may see that he holds that the truth of a proposition is a notion secondary to that of correctness of a judgement. When we distinguish here between the act of judgement and the judgement made, it is possible to see an important difference between Brentano and Martin-Löf. For the latter *the act of judgement* is the primary notion. If the act is correct, the judgement made is evident, and thus, a piece of knowledge. For Brentano, the primary notion is that of an evident judgement. If the judgement made is evident, that is, of what is judged is a piece of knowledge, my act is correct. This difference in the conceptual order shows that Brentano is not an intuitionist.

For Martin-Löf, the judgements **A false** and **non-A true** are equivalent but not identical; similarly, for Brentano, denying (the existence of) an object A is not the same as affirming non-A, which for Brentano is an indirect judgement, although these judgements are correct in precisely the same circumstances. For Martin-Löf, falsity is not defined in terms of truth and negation. Thus, for him, there are two types of judgement: holding something to be true, and holding something to be false. Similarly, Brentano holds denial to be a primary form of judgement besides affirmation. Is it necessary to have these two types of judgement? It is, if we take *the act of judgement*, and not that of a proposition, to be the important and primary notion, which is in accordance with an epistemic theory of truth.

The main problem of Brentano's theory of truth goes back to his Cartesian quest for certainty. This problem shows itself in the tension within his notion of evidence as being both transcendent and phenomenological at the same time. It is clear that a transcendent or absolute notion of correctness is needed, in order to avoid a form of subjectivism. But why ask of our theory that the very same notion of evidence is also that of epistemically accessible evidence? Isn't it the case that we can always ask, but was it real evidence? Was it real truth? Martin-Löf makes here a distinction between knowledge and real knowledge [Martin-Löf (1991), p. 144].

Finally, in a lecture held in 1994, Martin-Löf makes clear that an intuitionist may defend a negative version of the law of excluded middle: there are no propositions which can neither be known to be true, nor be known to be false. This leaves open the possibility that there are propositions for which we have no method to decide whether they are true or false [Martin-Löf (1995), p. 196]. The conclusion that we cannot say that every proposition is either true or false is not explicitly drawn by Brentano, but it is implied by his idea of truth and his formulation of the law of excluded middle.

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