**Introduction to *Act-Based Conceptions of Propositions. Contemporary and Historical Perspectives***

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**1. Introduction**

Propositional attitudes such as judgments and desires are part of our common sense psychology. We ascribe them to people and explain their actions in the light of them. It is also part of our common sense psychology that such attitudes have contents, propositions, that can be shared by different thinkers: Because we both judged that the train will be late and thus made the same judgment, we did the same thing: we both got a taxi. However, the nature of propositional attitudes raises fundamental philosophical issues, most importantly one of explanatory priority: should propositional attitudes be understood by taking the existence and nature of their contents for granted (*contents first*) or should the order of explanation be reversed and the contents of attitudes be understood as derivative with respect to the attitudes themselves (*acts first*)? This issue was at the center of debate in philosophy of language and mind in early analytic philosophy and phenomenology and now again, in strikingly similar ways, in contemporary analytic philosophy. This book aims to shed light on the issue by bringing together central contributions from the historical debate with contemporary contributions from philosophers of language as well as one linguist.

Let us put things into perspective by going back in the history of philosophy to the source of the distinction between mental act and content. The introduction of this distinction was an important step in the development of both analytic philosophy and phenomenology. The work of the Bohemian philosopher Bernard Bolzano (1781-1848) can be considered a starting point. Bolzano anticipated ideas that Frege and Russell later expounded and influenced Husserl and Twardowski, who figure prominently in this volume.[[1]](#footnote-1)

Bolzano is to our knowledge the first philosopher who motivated a sharp distinction between acts and contents and made it do philosophical work. If you assert that there are eight planets in the solar system, Bolzano pointed out, then what you said is true; but it is a contingent feature of what you said that it is asserted or even put into words:

[By] a *proposition* [*Satz an sich*] I understand any statement [*Aussage*] that something is or is not; *whether this statement is true or false; whether someone has put it in words or not; indeed whether it has been thought in one’s mind or not*. (1837 I, 77. Textor’s translation and emphasis.)

That is, there is a ‘statement’, that is, a proposition, to the effect that the stars have a certain number; independently of whether it is or ever will be expressed by a sentence of a natural or formal language; whether it was or ever will be entertained or its truth (falsity) be recognized. These entities, not acts like assertion or judgement, were for Bolzano the basic bearers of truth.

Bolzano did not only distinguish between propositions and mental acts. He also took the notion of a proposition to be a primitive notion, whose role is to explain central psychological and epistemological concepts.[[2]](#footnote-2) He is an exponent of the *contents first perspective:* propositions come first in the order of explanation.

Roughly 50 years later Frege and Russell second Bolzano’s introduction of the distinction between content and act. In Frege’s work, the distinction between content and act is connected with his criticism of Idealism and Psychologism. Frege labeled his brand of propositions ‘thoughts’. For Frege, any attempt to argue that there are no thoughts, but only acts, undermines itself.[[3]](#footnote-3) For assume that there are only mental acts that have no propositional contents. Acts are neither true nor false. If your assumption is an act, it is therefore neither true nor false. Hence, if your assumption were true, there would be nothing which is true or false. Consequently your initial assumption is also neither true nor false, and thus the view proposed is neither true nor false.

Frege concluded that if we want to see ourselves as engaged in reasoning and debate, we must acknowledge a realm of thoughts that is independent of our thinking. These thoughts are the things for which the question of truth arises.

What do we know about thoughts? According to Frege, the thought that Hesperus twinkles is different from the thought that Phosphorus twinkles. One can believe (doubt, desire, etc.) the first without believing (doubting, desiring, etc.) the second. Since both thoughts ascribe the same property to the same object, thoughts cannot be identified with complexes out of objects and properties. Frege modeled thoughts therefore as truth-evaluable combinations of modes of presentations, that is, ways in which an object is given. Just as a way of dancing exists independently of dancer’s dancing in that way, a way of thinking exists independently of someone thinking in that way.

The same thought can be grasped by different thinkers. Frege explained agreement/disagreement in terms of the agreeing/disagreeing parties being related to the same thought: the truth of the same thought may be endorsed by one thinker, while denied by another.[[4]](#footnote-4) He coined the term ‘grasping’ for the most basic of mental relations relating agents to thoughts. The term is suggestive, but it seems only to label the problem how thinkers can interact with abstract objects. Here is a telling quote:

But still the grasping of the law is a mental process! Yes, indeed but it is a process that lies at the border of the mental and therefore cannot be completely understood from a purely psychological point of view. For in grasping the law one needs to take into consideration something that is not in a proper sense mental, namely the thought; and perhaps this process is the most mysterious of all. (Frege 1897, 157 [145])

Frege was happy to tolerate such a mysterious process. But even if we accept that grasping is a primitive relation, other problems are pressing. For while ways of thinking of an object may be mind-independent and therefore shareable, it is an empirical fact that in many cases people will not think in the same way of the same object. For example, a typographical proper name such as ‘Rome’ can and usually does express different modes of presentations even if we take its reference to be fixed. Consequently the thought expressed by ‘Rome was not built in a day’ varies from speaker to speaker and from utterance to utterance. Thoughts may be shareable, but they are mostly not shared. Yet communication and reasoning are unaffected. If this is right, thoughts seem not to be the shared contents that enable people to engage each other in rational argument.

Russell expanded on this criticism. Philosophers like Locke and Berkeley placed a veil of ideas between us and the facts. Frege, argued Russell, merely replaced the veil of ideas with the veil of modes of presentations. Hence, he wrote to Frege in a letter:

I believe that in spite of all its snowfields Mont Blanc itself is a component part of what is actually asserted in ‘Mont Blanc is more than 4,000 meters high’. We do not assert the thought, for this is a private psychological matter: we assert the object of the thought, and this is, to my mind, a certain complex (an objective proposition, one might say) in which Mont Blanc is itself a component part. (Russell 1904, 251 [169])

Both thoughts and objective propositions are in some sense complex and the primary bearers of truth and falsity; thoughts and objective propositions differ in that the later can, while the former can’t, contain physical particulars like mountains. Even if each of us thinks of the bearer of ‘Mont Blanc’ in a different way, we all grasp the same objective proposition.

Russell soon came to the view that objective propositions are *entia non grata*. Take the objective proposition that Mont Blanc is more than 4,000 meters high propositions. It is a complex of Mont Blanc and the universal of being more than 4000 meters high. Which mind-independent relation needs to obtain between these entities such that they are unified to one thing that is true/false? Russell himself argued that the only independently plausible answer is that Mont Blanc instantiates the universal being more than 4000 meters high. But then *only true* objective propositions exist!

In contrast, if we start from acts of judging, we can give a *prima facie* plausible answer. Russell proposed in his 1912 that some things are unified into a truth-evaluable complex if, and only if, there is a thinker such that his act of judgement relates them to each other. For this idea to work, a judgement, a datable mental act, needs to be a multiple relation of variable adicity. This multiple relation unifies some things into a truth-evaluable complex. Hence, the name ‘multiple relation theory of judgement’.

While Russell’s multiple relation theory of judgment responded to important concerns about propositions, it had for a long time a bad press, though there has been a recent revival of Russell’s multiple relations theory, in the work on Jubien (2001), Moltmann (2003, 2013), and Soames (2010). One complaint against Russell is that he provides no suitable replacement for a proposition as a truth bearer.

Soames’s paper ‘For Want of Cognitively Defined Propositions: A History of Insights and Lost Opportunities’ (reprinted here as chapter 5 of part II) takes Russell’s multiple relation theory as its starting point. He argues that at the core of Russell’s multiple relation theory is an important insight, namely that ‘the intentionality of all truth bearers is explained in terms of the intentionality of the cognitive activities of agents, rather than the other way around’ (p. …) Russell missed the opportunity to turn this insight into a theory of propositions; instead he tried to do without propositions. Soames argues that this missed opportunity deprives Russell and philosophers such as Wittgenstein, Strawson and Austin after him of a plausible theory of propositions and, as a further consequence, of plausible theories of truth and presupposition. Soames’s cognitive theory of proposition embraces Russell important insight and takes it to yield a theory of propositions: propositions are cognitive acts of predication (see also his 2010). Other approaches to cognitive (or mind-dependent) notions of propositions take also Russell’s multiple relation theory as its departure, but posit entities on the basis of that theory to play the role of propositions, such as qua-objects (Moltmann 2003), or complex tropes (Moltmann 2013).

Russell was not alone in trying to do without propositions. At the beginning of the 19th century Edmund Husserl (1859-1938) and the Polish philosopher Kazmierz Twardowski (1866-1938), both students of Franz Brentano (1838-1918), also tried to find replacements for propositions. Both took their cue from Bolzano.

First Husserl. Initially he took propositions to be mysterious entities. But then he found a way to conceive of propositions that made them acceptable:

Bolzano’s *Sätze an sich* [propositions] seemed to me, like to almost all other readers, to be mythical entities hovering between being and non-being. Now it suddenly became clear to me that it really was a very uncontroversial conception, albeit insufficiently appreciated in traditional logic, that is, that by ‘Satz an sich’ one had to understand nothing but the object that one calls, in the ideal objectifying way of speaking, the sense of a statement [...] And further it became clear that this identical sense could be nothing but the universal, the species, of a particular feature present in all statements of the same sense […]. (Husserl 1903, 156. My translation)

Just as two different red expanses belong to one color kind, my judging that Rome will be a great city and your desiring that Rome will be a great city belong to the same kind, indeed there are many kinds to which both belong. Neither my judgement nor your desire, in the sense of datable acts, is a relation to the proposition *that Rome will be a great city*. There is no such proposition, but there is a kind that is instantiated by a feature of both acts.

Since kinds are parts of our common sense ontology, Husserl’s identification of propositions with kinds is parsimonious and explains something mysterious, propositions, in terms of something less mysterious, kinds. Husserl’s *Logical Investigations* (see the reprinted chapter) articulated this idea further. He distinguished between the matter – in current terminology: content – and the quality of a mental act. These are particularized properties or tropes which belong to kinds. The kind whose instances are the matter tropes are supposed to be what Bolzano called ‘Satz an sich’.

Husserl put *acts* first and yet preserved the plausible view that contents are independent of acts. However, the view faces serious challenges. For contingent reasons no one may ever have judged that 12221 raindrops fell in Brighton on the 15th of June 1887. Is there or is there not a proposition to this effect? On Husserl’s view, the answer to this question depends on whether there are kinds that have no instances. He did not combine his theory of propositions with a theory of kinds. But such a theory is needed to assess his proposal. More work is needed.

Next Twardowski. Like Husserl he mined Bolzano’s *Wissenschaftlehre* for philosophical ideas. (His Habilitationsschrift *On the Doctrine of the Content and Object of Presentations* (1894) was influenced both by Brentano and Bolzano.) The influence of Bolzano is also crucial for his work that is of importance for the topic of this volume. ‘Logicians have,’ wrote Twardowski ‘for ages operated with mental products as something distinct from actions, even though perhaps they have not always been clearly aware of this distinction.’[[5]](#footnote-5) Bolzano, though, was clearly aware of the distinction between mental products and actions, Twardowski point out. Let us have a look at the context in which Bolzano used the distinction to get clear about it.

Bolzano tried to get his readers to grasp the notion of a proposition on the basis of their understanding of German terms. He investigated whether German has words that refer solely to propositions such that he could use them to explain his theory. The result is negative:

No other words of German come to mind which are to some extend suited for this purpose than: *sentence*, *judgment*, *statement* and *assertion*. They all have the defect that they carry with them the secondary concept of something that became and that became in virtue of the activity of a thinking being. […] When understanding the words “a *judgment*”, “a *statement*” “an *assertion*” we think certainly nothing else but something that has been produced [hervorgebracht] by *judging*, *stating* and *asserting*. (Bolzano 1837 I, 81-82. Textor’s translation.)

Bolzano was looking for expressions that denote only propositions and have no further connotations. The words ‘judgement’, statement’, ‘assertion’ etc. don’t fit the bill. For they refer to *what has been produced*, *products*, by *activities* such as judging, stating, and asserting. He does not say much about such products are except that they are produced and have themselves causal powers (ibid, 81). In contrast to products, propositions are supposed to exist independently of any activity and have no causal powers. While he does not further elaborate the distinction between actions and products, referring to it sufficed for making his point that German lacks terms that denote only propositions. It should be noted, though, that this is not the standard view in contemporary philosophy of language and linguistic semantics about terms such as ‘judgement’, ‘statement’, ‘assertion’. The standard view is rather that such terms are ambiguous between describing actions and describing propositions. That is, in contexts as below they describe actions:

(1) a. John made an assertion at 12 and another shortly afterwards.

b. The prime minister’s assertion was precisely timed to confuse the opposition.

By contrast, in contexts such as these they describe products:

(2) a. John’s assertion is true.

b. John’s assertion implies that he won’t come.

But there are also contemporary views that maintain the univocality of such terms, as terms referring to entities that are neither actions nor propositions, but just share properties of both (see Ulrich 1976, Moltmann 2003, 2013, 2014). The most important historical proponent of the view that such terms refer to entities of a third kind, namely products, is Twardowski.[[6]](#footnote-6)

In his paper ‘On Actions and Products’ and in ‘The Psychology of Thinking’ (this volume), Twardowski focused on the distinction to which Brentano drew our attention. He argued that the products of judging, asserting etc. play the role Bolzano held only propositions could play: judgements, assertions etc. can be true or false and can enter logical relations.[[7]](#footnote-7) But unlike propositions, products of acts come into existence only in virtue of the acts and they last no longer than the acts themselves. Moreover, they are dependent on the mind of a particular agent. This then raises the Fregean worry of how contents can be shared among different agents and throughout time. According to Twardowski, for two thinkers to share a content means that they perform acts with similar products. An enduring sharable notion of propositional content emerges only in virtue of the production of similar products by mental or illocutionary acts. Exact similarity among products, for Twardowksi, means ‘being the same in content’.[[8]](#footnote-8)

Within the school of Brentano, Meinong pursues a somewhat different view and is an interesting counterpart to both Twardowski and Husserl. In order to expound Meinong’s view we need first to have a look a Brentano’s *Psychology from an Empirical Point of View.* Brentano used a number of examples to illustrate his notion of intentionality:

In presentation something is presented, in judgement something is affirmed or denied, in love loved, in hate hated, in desire desired ….

Every mental act has an intentional object. This seems plausible for love and hate: we love (hate) an object. But what is affirmed in a judgement? Brentano answered: an object (or some objects). In judgement one does not predicate something of something, but one thinks of an object in a particular way. Judging is acknowledging an object, one *acknowledges an object*. For example, my judgement that there is a reddish color dot is acknowledging a located particularized property. While this may a promising description of a non-propositional attitude, it is difficult to see that every judgement is an acknowledgement of an object.

Meinong (1902/1910) took his cue from Brentano’s remarks about the intentionality of judgments. Yes, every judgement affirms something, but not every judgement acknowledges an object. My judgement that there has been no disturbance affirms something, namely *that there has been no disturbance of peace*. That there has been no disturbance is ‘not a piece of reality’, but something one can judge. Meinong called these ‘objects of judgement’ ‘objectives’. In contrast to Husserl and Twardowski, Meinong is not troubled by the fact that objectives cannot be defined or reduced to objects of other kinds. But Meinong felt the need to distinguish his objectives from states of affairs and Bolzanian propositions. We have included the chapter on Meinong’s theory of objectives in order to give an idea of this early conception of the content of propositional attitudes. Meinong himself actually located his conception in the 19th and early twentieth century literature on the topic.

The idea that products, and not propositions or acts, are truth bearers contrasts with recent approaches by Peter Hanks and Scott Soames that, in the aim of replacing abstract propositions with cognitive entities, identify propositions with types of acts. More specifically, propositions are identified with types of acts of predicating a property of an object (or a relation of a sequence of objects). The idea is that acts (of predication) are the primary truth bearers and types of acts are truth bearers in a derivative way (Hanks 2011, 41). Taking acts to be truth bearers is also the older view that Twardowski had still pursued in ‘The Theory of Judgments’ (this volume). This (incomplete) paper argues for the ability to bear truth to be the defining characteristics of judgments, viewed as activities, and it focuses on the structure of judgments, acknowledging judgments that are not of the subject-predicate sort.

The view of acts as truth bearers faces some serious issues, though. Most importantly, there is something profoundly counterintuitive in calling acts true or false. John’s speech act or John’s act of judging is not really something that can be said to be true or false.[[9]](#footnote-9) Is has been pointed out by Aune (1967, 217f), though, that in English, the adverbial *truly* appears to be able to apply to acts, the Davidsonian event arguments of cognitive and illocutionary act verbs, as below

(3) John truly claimed / judged that he won the competition.

However, this is at best questionable evidence for acts being truth bearers since in at least a range of languages, including German, French and Italian, the correlate of *true* (*wahr, vraiment* or *veramente*) does not form adverbials applicable to acts (see Moltmann, this volume).

In addition to truth and falsehood, products, but not actions, enter logical relations to each other, as Twardowski points out in ‘The Psychology of Thinking’ (this volume). Thus, John’s claim that S may imply or contradict John’s claim that S’, but not so for John’s speech acts or John’s claiming that S and John’s claiming that S’.

The view that it is not acts that are truth bearers but products of acts faces a number of challenges of its own. The most important challenge clearly is to answer the question of how the action-product distinction is to be understood? Twardowski says very little about that, but rather just focuses on differences in the semantic behavior between action and product nominalizations regarding the understanding or acceptability of various sorts of predicates. Moltmann (2014, this volume) argues that the action-product distinction should be viewed as part of the more general distinction between an action and the (abstract or materially realized) artifact that the action may produce.

We have now a historically grounded overview over different conceptions of truth bearers in the history of analytic philosophy and phenomenology. Against this background, let us situate the contributions to this volume in the discussion.

The historical part of this volume contains original papers by Husserl, Meinong, Reinach and Twardowski. As was mentioned, Husserl and Twardowski both pursue act-related views of propositional content. Twardowski’s ‘Theory of Judgements’ as well as the first part of his ‘Psychology of Thinking’ are published English in this volume for the very first time. Twardowski’s ‘On Actions and Products’ and central parts of Husserl’s *Logical Investigations* are reprints.

Wioletta Miskiewicz’s paper ‘*On Actions and Products* by Kazimierz Twardowski: its historical genesis and philosophical impact’ is a companion piece to Twardowski’s ‘On Actions and Products’ that gives the reader the background that is needed to appreciate Twardowski’s view.

Alexius Meinong’s (1853-1920) theory of objectives is an alternative to Twardowski’s product and Husserl’s kind view of propositions. Like Husserl and Twardowski, Meinong was also influenced by Bolzano. We have included parts of Meinong’s book *On Assumptions* here that discuss objectives.

Adolf Reinach’s (1883-1917) ‘On the Theory of Negative Judgment’ (1911) is an important contribution to the discussion whether there is an act of denial ‘on all fours’ with an act of judging. Whether there is such an act was hotly debated between logicians and philosophers at the end of the 19th and beginning of the 20th century. Frege (1918b) argues that one can systematize classical logic without assuming an act of denial. Brentano and his school held that there is denial and acceptance for psychological reasons. Reinach argued that there is an act of rejection, but it is not ‘on all fours’ with judgment. We have included here excepts of this paper that contain its main arguments.

Now to the contemporary part of the book.

Husserl held that propositions are types of features of cognitive acts. A related idea is pursued by Scott Soames (2010) and Peter Hanks (2011). In their work, they focus on the problem of how abstract (structured) propositions can be grasped by an agent and have the particular truth conditions they are supposed to have. They both, in somewhat different ways, propose that propositions be replaced by types of acts of predicating a property of objects. This replacement, on their view, guarantees both cognitive graspability as well as truth-directedness.

In his contribution to this volume, Hanks makes use of an influential objection from Quine and Davidson in order to promote propositions as types of acts. The objection goes as follows:

(1) If there are language- and mind-independent propositions that univocal non-indexical indicative sentences express, then there is a determinate synonymy relation between such sentences.

(2) There is no determinate synonymy relation between sentences.

Therefore:

(3) There are either no language- and mind-independent propositions or univocal non-indexical indicative sentences don’t express them.

This argument goes against propositions conceived in the Fregean way. If propositions are types of utterances (assuming that utterances fall into such types), this won’t bring about an unwanted synonymy relation. Rather the existence of the kinds of propositions there are depends on the obtaining of synonymy or similar equivalence relations between utterances.

The type approach to propositions takes the basic type of a proposition to consist in acts of predication, which itself is generally taken for granted and not explored further. Can one say more? Husserl tried to do so. Textor’s contribution explores what distinguishes at the most fundamental level merely thinking of an object and a property and, predicating, that is, taking a property to belong to an object. Husserl located the source of such predications in object perception, Husserl argues, we perceive properties *as belonging to objects*. Perceiving is the mental activity that ‘hooks’ objects and properties together ‘in the right way’. While this is only a partial answer to the problem of the unity of a predicative judgment, it provides a model for a full answer.

Twardowski’s distinction between actions and products is at the center of Moltmann’s contribution. She argues that judgments, assertions etc. in the sense of products, and not actions act as the truth bearers involved in the semantics of attitude reports. More precisely, Moltmann gives an account of attitude reports according to which clausal complements of attitude verbs act as predicates of attitudinal objects, that is, cognitive or illocutionary products or mental states. While Twardowski focused on linguistic observations about action and product nominalizations in natural language, Moltmann emphasizes that the distinction is not tied to particular terms in particular languages, but falls under the more general distinction between an action and the (abstract or materially realized) artifact that the action may produce. Moltmann introduces a range of characteristics distinguishing actions and products that are both reflected in the semantic behavior of action and product nominalizations and in language-independent intuitions about products such as works of art and laws. Whereas Twardowski takes products to last only as long as the corresponding action, Moltmann argues that certain actions may produce enduring modal products such as permissions and obligations, and she argues that they are involved in the semantics of deontic modals. Sentences, on her view, generally serve to specify the satisfaction (truthmaking) conditions of cognitive, illocutionary or modal products or mental states.

Fiengo and Ripley address particular questions in the philosophy of language and logic from the ‘acts-first’ perspective.

Based on a paper by Austin, Fiengo discusses the classification of different types of predication as different types of acts. Consider the following explanation of predicating a property: *S* predicates the property *F* to an individual if, and only if, *S* utters with assertoric force a sentence that combines a predicate signifying F with a singular term that refers to *a*. Fiengo argues, drawing on Austin, that explanations of this kind miss important distinctions. For example, when we predicate we sometimes fit an item to a predicate or we fit an item to a predicate. This distinction strikes me as crucial for understanding what is now often termed the flexibility of natural language. A predicate like ‘is human’ is not explained for all circumstances. Sometimes we must fit it to new items: are the animals on Mars that look and behave like tigers *tigers*? There is no determinate answer to this question. We must fit our predicate to the item to give an answer.

Ripley examines the norms for acts that play a role in the philosophy of logic. The so-called *bilateral conception of meaning* is the view that the meaning of the logical constants is given by rules for denial as well as assertion.

Ripley assumes that there is a *sui generis* act for denial, and he questions whether it is governed by a norm of warrant: the assertion that p is correct if, and only if, one has warrant that p is the case; the denial that p is correct if, and only if, one has warrant that p is not the case. Ripley takes standard problems for this view to suggest that assertoric speech acts are governed fundamentally by a coherence norm. Unlike warrant, coherence applies to all collections of acts. Importantly, the warranted assertibility of a complex sentence is, as disjunctions show, not determined by the warranted assertibility of its sentential components, but the coherence of a complex sentence is. Hence, bilateralists should take coherence to be their basic notion.

The philosophical literature when using data from natural language has confined itself to observations about English, German, Polish. This holds in particular for Twardowski, whose article ‘On Actions and Products’ relies crucially on data about nominalizations in Polish, German, and French (in the different versions of the article that Twardowski himself wrote). The obvious danger of such an ‘ordinary language’ methodology is that it makes a philosophical theory dependent on generalizations from a particular language that may not generalize across human languages in general. Matthias Gerner’s contribution is a systematic crosslinguistic study of terms for actions and products in Twardowski’s sense, taking into account a great range of ‘exotic’ languages. Gerner establishes that terms for actions and products can be found across natural languages and are not confined to European languages. Moreover, he shows that natural languages generally lack terms for abstract propositions, thus confirming Bolzano’s observation about German.

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1. On Bolzano and Frege see Dummett (1993, 23). [↑](#footnote-ref-1)
2. See Textor (2013, 5.1 and 5.2) [↑](#footnote-ref-2)
3. See, for instance, Frege (1897) and Frege (1918a, 70-71). [↑](#footnote-ref-3)
4. Thoughts expressed with the first person pronoun are an exception to that, as extensively discussed in the secondary literature on Frege (see, for instance, Perry 1977). [↑](#footnote-ref-4)
5. See Twardowski ‘On Actions and Products’ § 10, Fn. 16. [↑](#footnote-ref-5)
6. Twardowski actually took those terms to be multiply ambiguous. For Twardowski ‘judgment’ could mean (i) the act of judging, (ii) the product of such an act, (iii) the disposition to make judgments, or (iv) the enuntiatio or proposition or Aussage, a sort of enduring artifact associated with the sentence. See Betti (2006) for the latter notion. Thanks to A. Betti for pointing this out to us. [↑](#footnote-ref-6)
7. Twardowski also referred to Bergmann (1879) who took logic to be the study of the product of acts of inferring, ibid, 2. [↑](#footnote-ref-7)
8. In fact, Twardowksi (implausibly, we think) took Bolzano himself to have made this proposal. See Twardowski (1911, § 44). [↑](#footnote-ref-8)
9. See also MacFarlane (2005, 232). [↑](#footnote-ref-9)