BOLZANO ON THE INTRANSPARENCY OF CONTENT[1]

Stephan KRÄMER

University of Leeds

- penultimate version; please cite from original -

Summary

Content, according to Bolzano, is *intransparent*: our knowledge of certain essential features of the contents of our contentful mental acts (such as their identity and composition) is often severely limited. In this paper, I identify various intransparency theses Bolzano is committed to and present and evaluate the defence he offers for his view. I argue that while his intransparency theses may be correct, his defence is unsuccessful. Moreover, I argue that improving on his defence would require substantially modifying his general epistemology of content.

1. Introduction

One of the most well-researched components of Bernard Bolzano's philosophy is his theory of the contents of our contentful mental acts and states, i.e. his theory of propositions (*Sätze an sich*) and objective Ideas (*Vorstellungen an sich*). This paper is concerned with an aspect of Bolzano's theory of content which, as far as I am aware, has received comparatively little attention in the existing literature: the thesis that content is *intransparent* in the sense that our knowledge of the contents of our mental acts and states is often severely limited. While it is well-known that Bolzano held this view, I know of no detailed examination of the *defence* he offers for it. I shall here attempt to close this gap in the literature. The main source for my discussion is Bolzano's *Wissenschaftslehre* (henceforth: *WL*), and in particular *WL* III, §350 which contains Bolzano's most explicit discussion of his intransparency thesis.[2]

The structure of the paper is as follows: After briefly explaining the key concepts of Bolzano's theory of content in §2, I distinguish a number of intransparency theses that Bolzano is

---

1 Numerous people provided helpful feedback on the material on which this paper is based. I would like to thank in particular Peter Simons, Mark Textor, Benjamin Schnieder, Moritz Schulz, and Mirja Holst. Thanks are also due to the audience at the conference on *Truth and Abstract Objects: Issues from Bolzano and Frege*, where I presented an earlier version of the paper.

2 A note on citation. Titles of Bolzano's works are abbreviated; a key is provided in the bibliography. References to *WL* are made by volume, paragraph and (where applicable) page number.

explicitly or implicitly committed to (§3). §4 analyses Bolzano's attempt to provide a defence for one of his intransparency theses and shows how, and under what assumptions, it can be extended to the others as well. In §5 I evaluate the defence of intransparency and argue that it fails. §6 briefly summarizes the paper's main conclusions.

2. Preliminaries

The core elements of Bolzano's theory of content are his concept of a *proposition* and his concept of an *objective Idea*. Before I explain these concepts, a brief remark on terminology: Bolzano often uses 'Vorstellung' (*idea*) without qualification and leaves it to context to disambiguate between the objective and the subjective variety. I will use 'Idea' (capital 'I') for objective Ideas, and 'idea' for subjective ones. In quotations, unqualified occurrences of 'Vorstellung' are translated by 'idea'.

A *proposition* is the kind of thing that is grasped in an act of thinking, that is judged to be true in a judgement, or presented as true in an assertion, where it is to be understood that a proposition need not be considered in thought or expressed in speech in order for it to exist (cf. *WL* I, §19, pp. 76ff). So if someone judges that *p*, the content of his judgement is the proposition that *p*.[3] (In what follows, I shall often abbreviate 'the proposition that *p*' by '[*p*]'.) Note that these remarks are intended by Bolzano merely as an informal elucidation of the concept of a proposition, not as a reductive analysis; Bolzano explicitly says that he does not know how to give such an analysis (cf. *WL* I, §23, p. 91).

Every proposition is either true or false, but not both, and it is true or false *simpliciter*. In contrast to utterances or acts of thinking, which are also true or false simpliciter, propositions are *non-actual*, i.e. they are incapable of acting upon something. Bolzano contends that by drawing on these characteristics, we can fix the extension, though not the content, of 'proposition': something is a proposition iff it is non-actual and true or false simpliciter (cf. *B/Exner*, pp. 62f).[4]

---

3 Bolzano calls what is judged in a judgement the *matter* (*Stoff*) of the judgement; I will use the more common term 'content' instead.

4 On proposition's being true or false simpliciter, see also *WL* II, §125; on actuality, see *AA*, p. 85; on proposition's being non-actual, see *WL* I, §19, p. 78; *WL* II, §122. – The bi-conditional invites questions: Could there not be, in addition to Bolzano's propositions, which are individuated very finely, truth-bearers which are more coarsely individuated, such as intensions? If so, the bi-conditional might be false, since intensions are also non-actual. Bolzano might reply that intensions couldn't be true or false in the same sense that his propositions are, so the bi-conditional comes out true on the intended reading of 'true' and 'false'. (In the paragraph of the *WL* which is concerned with the notion of truth, Bolzano does distinguish numerous senses of the terms 'true' or 'false', differing in part in what kind of thing they apply to (cf. *WL* I, §24).) However, if this reply is adequate, then the non-actuality condition appears redundant, since the sense in which judgements or utterances are true or false presumably also differs from the sense in which propositions are. (Note that Bolzano usually calls judgements correct or incorrect rather than 'true' or 'false', where a judgement's correctness (incorrectness) is defined as the truth (falsity) of its content (cf. *WL* I, §34). – Thanks to Moritz Schulz and Mark Textor for pressing me on these points.

Bolzano thinks that both propositions and the mental acts they are the contents of have *mereological structure*. Every part of a proposition which is not itself a proposition is an *objective Idea*. Analogously, every part of a propositional act (such as an act of judging) which is not itself a propositional act is a *subjective idea*.[5] According to Bolzano, we can turn these observations into analyses of the concepts *objective Idea* and *subjective idea*:[6]

(Objective Idea – OI)

x is an objective Idea ↔ *x* is not a proposition & ∃*y* (*y* is a proposition & *x* < *y*).

(Subjective Idea – SI)

x is a subjective idea ↔ *x* is not a propositional act & ◊∃*y* (*y* is a propositional act & *x* < *y*).

Some, but not all, Ideas are themselves composite; their parts are either Ideas or propositions. Likewise, some, but not all, ideas are composite; their parts are either ideas or propositional acts. The relation between Ideas and ideas corresponds to that between propositions and judgements: every idea has an Idea as its content (cf. *WL* I, §§56, 58, 61; *WL* III, §§271, 277).

Given *that* propositional acts, ideas, and their contents are structured, *how* are they structured? Firstly, the structures of propositions and Ideas correspond, though only roughly, to the structures of their linguistic expressions. Only roughly, because some simple expressions have composite contents, because some natural language sentences are syntactically ambiguous, and because not all structural differences between sentences affect the content of the sentences.[7] Restricting attention to structurally perspicuous expressions, we can say that if *c* is the content of

---

5 According to Bolzano, judgings are the only acts of thinking which have propositions as their complete contents; an act of merely considering whether *p* is *about* the proposition that *p*, which is represented (denoted) by the complete content of the act of thinking. Künne argues convincingly that we do u Bolzano a favour if we modify his account so as to allow that mere entertainings of a thought have propositions as complete contents (cf. Künne 1997, p. 218ff). I shall here adopt this modification and use 'propositional act' for both kinds of acts of thinking.

6 '<' means *is a proper part of*. – Naturally, in the case of subjective ideas, Bolzano's explanation appeals only to judgements (cf. *WL* III, §270). On objective Ideas, cp. *WL* I, §48, p. 216; *WL* II, §128; *B/Exner*, p. 67. Note that in *WL* I, §52, p. 228 Bolzano denies that (a variant of) (OI) is to be seen as a conceptual analysis; I am following Künne in taking the opinion expressed in the passages mentioned before to be his considered view (cf. Künne 1997, p. 211). Finally, in *WL* I, §48, p. 216; §49, p. 221 Bolzano explains an objective Idea as something which can be part of a proposition. The possibility operator is redundant unless there are objective Ideas which are not (but could have been) parts of propositions which seems implausible. The fact that in *WL* I, §52, p. 228, Bolzano himself endorses the non-modal version of the claim indicates that he also thinks that the possibility operator is redundant.

7 Bolzano takes it to be obvious that the structure of expressions is a guide to the structure of their contents, he does not argue for the claim (cf. e.g. *WL* I, §50, p. 222, §56, p. 244; *WL* II, §123). As for syntactical ambiguity, see Bolzano's remarks in *WL* I, §59 on 'a painted fish', which may mean *a fish, of which there is a painting* but is usually used to mean *painting of a fish*, and on the ambiguity of phrases of the form 'this *A*'. As for insignificant structural differences: Bolzano thinks that in Ideas of the form [something which has a, b, c] (I here extend the bracket-notation in the obvious way), the property-Ideas [*a*], [*b*] and [*c*] are not ordered, so 'something which has *a*, *b*, *c*' expresses the same Idea as 'something which has *b*, *c*, *a*' (cf. *WL* I, §58, pp. 256f). See also Textor 1997, pp. 190f.

expression *e*, then every significant fragment of *e* expresses a part of *c*, and the significant parts of *e* are arranged in the same way as their respective contents are arranged in *c*. Secondly, there is an exact correspondence between the structures of acts of thinking and their contents: if *c* is the content of an act of thinking *t*, then every part of *c* is the content of a part of *t*, every part of *t* has a part of *c* as content, and the parts of *t* are arranged in the same way as the corresponding parts of *c* (cf. *WL* III, §281, p. 39; §291, p. 109).

It is clear that in addition to having contents, many propositional acts and subjective ideas also stand in some special relation to an *expression* of their respective content. When we think in words, or read a sentence with understanding, we grasp the relevant propositions, in some sense, *by means* of linguistic vehicles that express them (or maybe which we take to express them). Correspondingly, some of the subjective ideas that make up a propositional act are likewise associated with an expression that occurs in the expression corresponding to the propositional act and that expresses (or is taken to express) the content of the idea. I shall call the expression (if any) thus associated with a given contentful mental act or state its *guise*. Although Bolzano does not have an official term equivalent to my 'guise', there is a way of interpreting the term within Bolzano's framework. In *WL* III, §§283-4, Bolzano discusses the phenomenon that an idea may *renew*, *create*, or, as I shall say, *trigger* another idea. When one has frequently had an idea with content *c* and an idea with content *d* at (roughly) the same time, one may come to associate ideas of these kinds so that often when one has an idea with content *c*, one will also form an idea with content *d*, which is *triggered* by the former. For example, if a certain song keeps reminding you of a particular event at which it was played, your hearing the song may trigger an idea of that event. Now on seeing an expression which one understands, say 'snow', one will usually form an idea of snow, and when one thinks of snow, one will often form an idea of 'snow' (or of another term expressing [snow]). Bolzano conceives of these cases of reading with understanding and thinking in words as instances of the phenomenon just described: for thinkers who are familiar with the word 'snow', ideas of snow and ideas of 'snow' tend to trigger each other (cf. *WL* III, §285). It does not appear very plausible to claim that the fact that an idea or propositional act has triggered, or was triggered by, an idea of an expression of its content *guarantees* that the expression in question is the guise of the idea. Perhaps, if one is attempting to translate 'snow is white' into German, one's idea of snow that is guised by 'snow' could also trigger an idea of 'Schnee'.[8] Fortunately, as far as I can tell, Bolzano is not committed to this stronger and implausible thesis. Thus, we should ascribe to him only the weaker (if less specific) claim that the relationship between a guised idea or

---

8 Thanks here to Moritz Schulz.

propositional act *x* and its guise consists in *x*'s having triggered or having been triggered by an idea of an expression of its content *in the right kind of way* (whatever it is).

3. The Intransparency Theses

Discussions, and endorsements, of claims to the effect that our knowledge of the contents of our mental states is often very limited can be found in many passages throughout the *WL* (cf. e.g. I, §64; III, §§280f, 350ff; IV, §§554ff). These claims play a particularly important role in Bolzano's theory of *Explanations* of Ideas. The demand for an Explanation of an Idea, in Bolzano's use of the term, is

> […] the demand that we specify in a way conforming to the truth whether a certain idea which we presently find in our consciousness is atomic or complex, and in the latter case, out of which further ideas and in what combination of them it is composed. (*WL* III, §350, p. 397.)[9]

In discussion of Explanations, Bolzano sometimes oscillates between talk of Ideas and talk of ideas. His notion of Explanations officially applies to both. Given the structural correspondence between ideas and their contents, one presumably straightforwardly obtains an Explanation of an idea from an Explanation of its content, et vice versa. As will become evident later on, Bolzano regards knowledge of the composition of an idea as prior to knowledge of the composition of its content; that is, one explains an Idea by explaining an act of grasping it.

Bolzano's notion of an Explanation clearly is a close relative to what is nowadays usually called 'conceptual analysis'. The latter notion is notoriously troubled by the threat of paradox: it appears that if an analysis is to be correct, analysans and analysandum have to be synonymous, but that if they are, the analysis would have to be trivial.[10] A version of this puzzle appears in Bolzano's discussion of the epistemology of Explanations. Bolzano concedes that it may appear very easy to figure out the composition of an Idea one grasps, but insists that experience proves this appearance to be deceptive:

---

9 Translations from Bolzano's works are my responsibility. I have usually consulted, but not always stuck to, the translations in *ToS* or those of other commentators, and am therefore to be blamed for mistakes but not to be praised for accuracy. In key quotations, I reproduce the German original in footnotes. – '[. . .] die Forderung, daß wir auf eine der Wahrheit gemäße Art bestimmen, a ob eine gewisse Vorstellung, die wir so eben in unserem Bewußtsein vorfinden, einfach oder zusammengesetzt, und in dem letzteren Falle, aus welchen andern Vorstellungen und in welcher Verbindung sie aus denselben zusammengesetzt sey.'

10 Langford 1942 is the classical source for (this version of) the paradox of analysis. Langford's paper is explicitly concerned with Moore's notion of analysis, Moore replies in Moore 1942, pp. 660–7. See also Black 1944; 1945; 1946; White 1945a; 1945b; Church 1946; Carnap 1947, §15.

At first glance, one is inclined to think that a question of this kind is very easy to answer; since it seems that everybody must know whether an idea which he possesses is atomic or composed out of parts and [if complex] out of which parts and in what combination of them it is put together. But experience teaches us that just this is one of the most difficult tasks. (ibid.)[11]

Bolzano is therefore committed to the claim that specifying the composition of an idea one presently has is often very difficult. And the context in which he endorses this claim also makes it clear why it is important to him: it forms the basis of his answer to the paradox of analysis.

A bit of conceptual machinery will be useful for finding a more precise reformulation of this intransparency claim as well as the ones we will discuss later on. I shall try to capture the intransparency theses in terms of what a thinker is or is not guaranteed *to be in a position to know* concerning the contents of his present mental acts or states. Roughly, a thinker is said to be in a position to know something iff were he to consider it, he would know it or come to know it. This is somewhat vague, but for our purposes it is good enough. The knowledge with which the various intransparency theses are concerned is supposed by Bolzano to often be very difficult to acquire. If it is very difficult to come to know something, then one is not, in the relevant sense, in a position to know it.[12]

The kind of knowledge the above intransparency claim is concerned with is knowledge of the composition of an idea one presently has (or equivalently, its content). I therefore propose to reformulate the claim thus:

(I-ComS – Intransparency of Composition, Specification)
It is not the case that necessarily, if one has an idea *x*, then one is in a position to know the composition of *x*.

Note that in order to be interesting, this claim has to be construed as restricted to 'cognitively well-functioning' individuals, i.e. individuals capable of a normal degree of rational reflection in a standard epistemic situation. (This point applies to all the intransparency claims I discuss in what follows.) Even when so construed, (I-ComS) is a fairly weak intransparency thesis. Notably, it is

---

11 'Auf den ersten Blick möchte man zwar glauben, daß eine Frage der Art sehr leicht zu beantworten wäre; indem es doch Jeder, wie es scheint, selbst wissen muß, ob eine Vorstellung, die er besitzt, einfach oder aus Theilen und aus welchen Theilen und in welcher Verbindung derselben sie zusammengesetzt sey. Die Erfahrung aber lehrt, daß gerade diese Aufgabe eine der schwierigsten sey.'

12 On the notion of being in a position to know, see also Williamson 2000, p. 95, from where I have borrowed the terminology.

consistent with the claim that *as soon as one is confronted with* a correct specification of the composition of an idea one presently has, one must be in a position to recognize it as correct. That Bolzano also rejects this latter claim is clear from his discussion of the identity conditions of objective Ideas in *WL* I, §64, pp. 269ff. Bolzano here considers the thought that an Idea x is identical with an Idea y if necessarily, all and only those objects stand under x as stand under y. He points out that this thesis commits one to numerous counter-intuitive claims concerning the composition of our ideas. For example, since necessarily, all and only equilateral triangles are equiangular, the thesis implies that [equilateral triangle] is identical to [equiangular triangle] and thus that [equiangular], which is a part of [equiangular triangle], is also a part of [equilateral triangle], which is counter-intuitive. Crucially, although Bolzano takes the proposed identity criterion to be inadequate, he does not take this particular argument to decisively refute it, on the grounds that we might simply be unaware of the alleged part of our idea (cf. *WL* I, §64, pp. 272f). Bolzano thus allows for the possibility that one may take a correct (partial) specification of the composition of an idea one currently has to be incorrect:

> (I-ComR – Intransparency of Composition, Recognition)
> It is not the case that necessarily, if one has an idea x, and is presented with a correct
> specification S of x's composition, one is in a position to know that S is correct.

Note also that Bolzano *has* to allow for this possibility in order for his response to the paradox of analysis to be satisfactory, since it seems that even a correct conceptual analysis need not be instantly recognizable as correct. At any rate, many of the Explanations Bolzano himself puts forth, such as the Explanation of [Idea] as [non-propositional part of a proposition], are certainly not immediately obvious.

A slight modification of the above example also makes clear that one may have two ideas with the same content without being in a position to know that they have the same content. If this was not the case the identity thesis could be refuted by pointing out that it implies the claim that [equilateral triangle] is identical with [equiangular triangle], although it certainly does not seem as though ideas which have these Ideas as contents are content-identical. Bolzano is therefore also committed to the following intransparency thesis:

> (I-ConI – Intransparency of Content-Identity)
> It is not the case that necessarily, if one has an idea x and an idea y, and x has the same
> content as y, one is in a position to know that x has the same content as y.

In addition to these claims, there is a further, stronger intransparency thesis which I think Bolzano has to accept, even though his commitment to it is less direct and explicit than in the previous cases. Consider again the case of [equilateral triangle] and [equiangular triangle]. Not only may one (rightly) doubt that these are one and the same Idea, one may also fail to be in a position to know that they have same extension; more precisely, one may fail to be in a position to know the proposition expressed by 'All and only equiangular triangles are equilateral triangles' under the guise of that sentence.[13] It is clear from Bolzano's discussion in the mentioned passage that he does not regard even this as establishing the distinctness of the Ideas in question. But of course, even one who is not in a position to have this knowledge may at the same time be in a position to know the proposition expressed by 'All and only equiangular triangles are equiangular triangles' under the guise of that sentence. Bolzano is therefore also committed to the following intransparency claim:

> (I-Eqv – Intransparency of Equivalence)
> It is not the case that necessarily, if one attaches the same proposition x to sentences S and T, then if one is in a position to know x under the guise of S, one is in a position to know x under the guise of T.

Note that again, the paradox of analysis would appear to force Bolzano to accept this claim: it is plausible that misleading evidence may prevent one from being in a position to know even the extensional adequacy of a correct analysis. (Some have argued that there are actual counter-examples to the claim that knowledge requires belief, but no one has ever taken the mere fact that some philosophers believe there to be such counter-examples to establish, by itself, the falsity of analyses of knowledge which entail that knowledge requires belief.)

4. The Defence of Intransparency

We have seen that while Bolzano concedes that it is prima facie very plausible to think that the composition of one's present ideas is the kind of thing one must be in a position to know, he thinks that experience shows otherwise. By itself, this does not constitute a satisfactory defence of intransparency. Firstly, even if Bolzano is right about what experience shows, it is still puzzling why it is hard to know the composition of one's ideas. His view would thus be significantly strengthened by an account of why our pertinent intuitions are misleading. Secondly, I don't think it is obvious that Bolzano is right about what experience shows. It is clear, perhaps, that we know

---

13 Here and in what follows, 'knowing a proposition x' is to be understood not in the sense of acquaintance with a proposition, but as equivalent to knowing that p, where the proposition that $p = x$.

from experience that conceptual analysis is hard; this is part of what makes the paradox of analysis a paradox. But from this it only follows that knowing the composition of one's ideas is hard *given that Bolzano's account of conceptual analysis is correct*. That Bolzano's account is correct, however, cannot simply be taken for granted. It is certainly conceivable that what we do when we try to analyse certain concepts is not accurately described as an attempt to specify the composition of our acts of grasping these concepts. A satisfactory defence of intransparency must therefore tell us both why the transparency claims appear so plausible, and why this appearance is deceptive.

Bolzano comes closest to providing an explicit answer to these questions in the following passage:

> Because most of our ideas do not achieve clarity, or, what means just the same, are not intuited by us; so the same often holds for those part-ideas (Theilvorstellungen) out of which some other [idea] is composed, even in the case where we intuit the latter, insofar as it is a whole. But if we do not intuit each of the parts of an idea individually, then it is no wonder that we also cannot make the judgement that those ideas occur as parts in [the complex idea]. (*WL* III, §350, pp. 397f.)[14]

The phrase 'one cannot make the judgement that *p*' is here most naturally understood in such a way that one's being able to make the judgement that *p* implies that one is in a position to make the judgement *and thereby come to know that p*. Bolzano's suggestion then seems to be that as soon as one appreciates that in most cases, the parts of our complex ideas are not clear, one should no longer find it surprising that one is often not in a position to know how one's ideas are composed.[15] We can capture his proposal by the following theses:

(T1)   Most of one's ideas are not clear.

(T2)   One can make the judgement that a complex idea one presently has is composed in such and such a way only if its parts are clear.

(T3)   (T1) and (T2) jointly make it unsurprising that one is often not in a position to know the composition of one's ideas.

---

14 'Denn weil die meisten unserer Vorstellungen sich nicht zur Klarheit erheben, oder was eben so viel heißt, nicht von uns angeschaut werden: so geschieht dieß auch häufig mit jenen Theilvorstellungen, aus welchen irgend eine andere zusammengesetzt ist, selbst in dem Falle, wenn wir die letztere, sofern sie ein Ganzes ist, anschauen. Schauen wir aber die Theile, aus denen eine Vorstellung bestehet, nicht einzeln an: so ist es begreiflich, daß wir auch nicht das Urtheil, diese Vorstellungen seien in jener als Theile vorhanden, aussprechen können.'

15 If (and when) a thinker knows how and of what parts an idea he presently has is composed, Bolzano calls the idea in question 'distinct' (cf. *WL III*, §281, pp. 40f).

If true, (T1)–(T3) would constitute an adequate defence of the first of Bolzano's intransparency claims, (I-ComS). In §4.1, I examine the notion of clarity Bolzano's account invokes; §4.2 uses the results of this discussion to further spell out (T1)–(T3) and then shows how the proposal might generalise to the other intransparency claims as well.[16]

4.1 The Explication of Clarity

A subjective idea is clear (klar), according to Bolzano, iff its bearer has an intuition of it (cf. *WL* III, §280, p. 29):[17,18]

> (Clear)
> If a person x has a subjective idea y then y is clear (at t) iff x has an intuition of y (at t).[19]

A (subjective) intuition is a subjective idea which has an (objective) Intuition as content; an Intuition is an Idea which is both singular, i.e. exactly one object stands under it, and atomic.[20] Paradigmatic examples of Intuitions are the Ideas expressed by the demonstrative 'this' in a context of utterance; Intuitions of one's subjective ideas can also be expressed by 'this' (cf. *WL* I, §72, pp. 326f; III, §280, pp. 38f).[21]

(Clear) is not meant to be a mere stipulation, nor is it intended to capture precisely an ordinary use of 'clear', as applied to ideas. Bolzano suggests that in every-day life, 'clear idea' is used to express a variety of different concepts, and seeks a definition of the kind Carnap would later call 'explication', i.e. he tries to define the term in such a way as is most useful for scientic purposes (cf. *WL* III, §280, p. 25).[22] Bolzano approximates the intended sense of 'clear' by saying that an idea is to be called 'clear' iff its bearer is aware of it. The awareness in question, he argues, ought

---

16 For more recent defences of the intransparency of content – often focussing on principles akin to (I-Eqv) – see e.g. Burge 1978, Burge 1986, and Williamson 2006.

17 'Intuition' is a technical term of Bolzano's. I trust that in what follows, context makes it clear whether the Bolzanian use of 'intuition' is intended, or the more common one that is in play when I speak of, for example, our intuitions contradicting the intransparency theses.

18 For a very thorough discussion of Bolzano's notion of clarity, as well as his related notion of an idea's distinctness, which goes into much more detail than I do here, see Centrone forthcoming.

19 The relativization to a time is not explicit in Bolzano. It is strictly speaking required, though, as Centrone points out, since no idea is 'born' clear, but becomes clear if *and when* its bearer forms an intuition of it (cf. Centrone forthcoming, §2).

20 In Bolzano's terminology, objects stand, rather than fall, under Ideas representing them.

21 For more on 'this', see *WL* I, §§59, 68 and the detailed discussion of Bolzano's notion of Intuitions in Textor 1996, ch. 2.

22 In a long first note to §280, Bolzano also discusses in detail how his explication of 'clear' relates to those of previous authors, stressing in particular its similarities to Descartes' acceptation of the term as well as its strong dissimilarities to Leibniz's. For a detailed examination of Bolzano's and Leibniz's notions of clarity, see Centrone (forthcoming).

not to be construed as requiring that the thinker judges that she has this idea, since whether or not such a judgement is made depends in part on accidental aspects of the situation. It ought to be both necessary and sufficient for a thinker's being aware of an idea, Bolzano suggests, that she would make such a judgement if she had any cause to do so (cf. *WL* III, §280, p. 27). In my terminology, this means that a thinker's idea is to be called 'clear' iff she is in a position to judge that she has it.

Bolzano's argument that (Clear) underwrites this bi-conditional is as follows:[23] Any judgement to the effect that I have a certain idea x must have a component under which x and only x stands. So, Bolzano contends, I am, in the relevant sense, in a position to judge that I have x only if I have a singular idea of x. But not any idea which represents x exclusively makes one aware of x. Suppose that of all my present ideas, x is the one whose content I have grasped most often. It is plausible that merely forming an idea with the content [the present idea of mine whose content I have grasped most often] does not make me aware of x; as Bolzano points out, I may form such an idea without so much as knowing the idea it represents (*ohne [die Vorstellung] zu kennen*; *WL* III, §285, p. 28f). What makes the idea unfit to 'clarify' x, Bolzano claims, is that it is in virtue of the idea's specific composition that it represents x and only x. This leads him to demand of clarifiers not just that they are singular, but also that they are atomic, i.e. intuitions (cf. ibid).

It is not clear that the restriction of the title 'clarifier' to atomic ideas of ideas is well-motivated. If the awareness of an idea Bolzano wants to capture is supposed to be a kind of direct awareness, then it does seem plausible that only atomic ideas can serve as clarifiers. But if Bolzano merely wants to rule out ideas of ideas which one can have without knowing the idea they represent, then the exclusion of all complex ideas may be unwarranted. For if knowing the represented idea is knowing which idea is represented, and if one knows that if one knows that the represented idea is, say, my present idea of a pen, then ideas whose content can be expressed by 'my present idea of F' are also suitable as clarifiers.[24] For the moment, we can set this issue aside, but we shall later encounter more reasons to think that ideas representing ideas in terms of their contents are perhaps

---

23 Bolzano does not accept the bi-conditional as an *Explanation* of [clear] because such an Explanation would present as a part of [clear] the idea of a judgement to the effect that one has the respective idea. This is in tension, he claims, with the fact that such a judgement need not actually be made in order for an idea to be clear (cf. *WL* III, §280, p. 27).

24 On these issues, see also Dähnhardt 1992, pp. 61ff and Textor 1996, p. 114. – Note that one might even a wonder whether and how intuitions of ideas make one aware of their objects. Suppose I have an idea of a ball and I make a judgement to the effect that I have this idea, in which the idea is represented by an intuition. What is the content of such a judgement? Intuitions of ideas can be expressed by 'this', so the proposition in question can be expressed by 'I have this (idea)' (cf. WL *III*, §280, pp. 38f). Intuitively, if I am to be said to be aware of my idea of a ball, I should also be able to say something more informative, for example: I have this/an idea of a ball. That is, I should be able to characterize the idea I am aware of in terms of its content. Intuitions thus can only be clarifiers if my intuiting the idea somehow guarantees that I know a way to express the content of the idea. How this might work is not obvious to me.

more pertinent to the relevant kind of reflection on one's present thinking than Bolzanian intuitions.

4.2 Explaining Away the Counter-Intuitions

We can now return to Bolzano's defence of intransparency. We saw that in order for his position to be satisfactory, it needs to explain why transparency, if it is false, nevertheless seems intuitively plausible. Bolzano's answer, recall, consists of the following claims:

(T1)   Most of one's ideas are not clear.

(T2)   One can make the judgement that a complex idea one presently has is composed in such and such a way only if its parts are clear.

(T3)   (T1) and (T2) jointly make it unsurprising that one is often not in a position to know the composition of one's ideas.

An idea's being clear consists in its bearer having a kind of introspective awareness of the idea. (T1) then says that we often lack this kind of introspective awareness of our ideas, and (T2) says that this kind of introspective awareness is required if one is to be able to judge the composition of one's ideas.[25] According to (T3), (T1) and (T2) jointly make (I-ComS) unsurprising; that is, recognizing the truth of (T1) and (T2) undermines the intuitive support for the negation of (I-ComS). Whether (T1)–(T3) are plausible will be discussed in the next section. In the remainder of this section, I want to ask whether *if* they are correct, the defence of (I-ComS) generalises to the other intransparency claims Bolzano is committed to.

The most obvious strategy for arguing that it does is to try and show that these intransparency claims *follow* from (I-ComS). So let us see how one could defend this idea. (I-ComR) says that even when confronted with an adequate Explanation of an idea one presently has, one need not be in a position to recognize it as true. This follows from (I-ComS) just in case recognizing an Explanation as correct requires that one first comes to know how one's idea is composed in order to then judge the proposed Explanation against this knowledge. This suggestion has at least some plausibility; the only way I see in which it could be false is if one could come to know that two of one's ideas are content-identical without first ascertaining the composition of

---

25 On a strong reading, (T2) has obvious counter-examples. Suppose I am aware of my present idea of an *F* and I know that every idea of an *F* is an idea of a *G* which is *H*. I can then infer how my idea of an *F* is composed independently of any kind of introspective awareness of its parts. On Bolzano's view though, this way of coming to know how an idea of mine is composed is parasitic: it depends on knowledge which one standardly acquires by figuring out the composition of just such an idea. The objection therefore misfires if, as is plausible, Bolzano is talking about the canonical way of coming to know the composition of an idea.

each. If this is not a possibility, the defence of (I-ComS) will apparently generalise to (I-ComR), and equally to (I-ConI), which says that one is not always in a position to know that two of one's ideas have the same content even if they are in fact content-identical.[26]

Finally, let us consider (I-Eqv), which says that one may fail to be in a position to know some proposition under the guise of some sentence even if one is in a position to know it under the guise of some other sentence. This claim does not follow in any straightforward way from any of the previous intransparency claims: coming to know a proposition which one already knows under some guise under an additional guise does not require prior knowledge that the guises (or one's propositional acts guised by them) are content-identical. Nevertheless, it is not absurd to think that our intuitions against (I-Eqv) are based on the thought that one must be in a position to know the relevant content-identities: if one can fail to be in a position to recognize the content-identity, what intuitive reason is there to deny (I-Eqv)? If there is no such reason, the defence of (I-ComS) extends to (I-Eqv) as well.

5. Objections

Bolzano's defence of intransparency rests on the claims

> (T1)   Most of one's ideas are not clear.
>
> (T2)   One can make the judgement that a complex idea one presently has is composed in such and such a way only if its parts are clear.
>
> (T3)   (T1) and (T2) jointly make it unsurprising that one is often not in a position to know the composition of one's ideas.

Given that the clarity of an idea requires the existence of a further idea exclusively representing the former, (T1) seems plausible to me. It certainly doesn't *seem* as though we more or less constantly introspectively reflect on our present acts of thinking. Moreover, it is not clear that any significant

---

26 There are some passages in *WL* which suggest that Bolzano does hold that knowledge of the composition of ideas is prior to knowlege of content-identity between ideas. For example, when discussing the thesis that necessarily co-extensive ideas are identical, Bolzano considers whether 'perhaps the difference we make between so-called equivalent ideas *consists* merely in the fact that in the one [idea] we think these, in the other we think those parts distinctly, while thinking the others only indistinctly' (*WL* I, §64, p. 273, emphasis added). This remark suggests that the fallibility of our judgements concerning content-identity between ideas would be *explained* by differences with respect to which parts of an idea we tend to be aware of. This, however, would be implausible unless knowledge of content-identity between ideas is standardly based on knowledge of the ideas' composition. Unfortunately though, in other places Bolzano presupposes the contrary view. In particular, Bolzano recommends, roughly, that one test a proposed Explanation of an idea by checking whether substituting the Explanans-expression for the Explanandum-expression in an arbitrary sentence results in an expression of a different content (cf. *WL* III, §350, p. 399). This advice would be singularly unhelpful if checking whether the propositional acts guised by the sentences have the same content required first ascertaining their respective composition.

benefit would be gained from doing so, so it would be a surprise if we found that we do constantly introspect our ideas. However, this is consistent with saying that in situations in which *we have reason* to attend to our present thinking, we invariably succeed in making our pertinent ideas clear – roughly speaking, that most of our ideas are not clear does not imply that they are hard to clarify.[27] I think that this observation spells trouble for Bolzano's defence of intransparency.

Recall that according to Bolzano, if an idea one presently has is not clear, then one is not in a position to judge – and thereby come to know – of the idea that one has it, because such a judgement would have to include a clarifier of the idea in question. We may grant that one cannot make a judgement of the pertinent sort *without first* clarifying the idea in question. Nevertheless, if clarifying the idea presents no *obstacle* – if one succeeds in clarifying one's ideas whenever one has reason to – then one may be said to be in a position to judge (know) of the idea in question that one has it even if one has not (yet) clarified it. (I cannot leave my flat without first unlocking the door, but if unlocking the door presents no obstacle, I am in a position to leave my flat even when the door is locked.) A similar point then applies to (T2). According to (T2), one cannot make the judgement that a complex idea one presently has is composed in such and such a way unless one has clarified its parts. The reasoning, as before, is that such a judgement would have to include clarifiers of the parts of the complex idea (cf. *WL* III, §281, pp. 41f). But while it may be true that one cannot make a judgement of the pertinent sort *until* one has clarified the parts of the respective idea, one may nevertheless be in a position to make such a judgement even before that, provided that clarifying the parts, and recognizing that and how the complex idea is composed of them, presents no obstacle. (At least, this is so unless one construes the phrase 'in a position to' in such a demanding fashion that the claim that one isn't always in a position to know the composition of one's ideas looses interest.)

According to (T3), the claims (T1) and (T2) jointly undermine the intuitions against the view that one need not be in a position to know the composition of one's ideas. The preceding considerations show that, on the reading of 'in a position to know' which is relevant in our context, (T1) and (T2) do not imply that one need not be in a position to know the composition of one's ideas. While this does perhaps not *entail* that (T1) and (T2) do not undermine the transparency-intuitions, I see no reason to think that they do. When presented with (T1) and (T2), someone who is attracted to the view that content is transparent can sensibly stick to her view and reply that she's been given no reason to think that the composition of one's ideas can be hard to figure out. I

---

27 Of course, we cannot at any time clarify *all* of our ideas, as this would require having an infinite number of ideas. (Bolzano uses this argument to show that at least some ideas are unclear; cf. WL *III*, §280, p. 30.)

conclude that in the absence of an argument to show that introspective awareness of our ideas is not just not automatic, but often hard to achieve, Bolzano's defence of intransparency is unsuccessful.[28]

Moreover, I think the prospects for supplementing his defence by trying to provide such an argument are dim. Insofar as it is difficult to find out whether two ideas, or their guises, have the same content, or what the composition of some Idea is, the difficulty surely is not one of achieving introspective awareness of the relevant ideas and their parts. Rather, it seems to me, the difficulty is to come up with the relevant hypothetical scenarios against which to test the alleged identity of the content, or to recognize potential differences in their respective inferential connections, etc.

Closer attention to what is and what is not difficult in trying to determine the composition of certain Ideas reveals a further, more fundamental problem with Bolzano's view. Any account of how we come to know the composition of Ideas, or acts of grasping them, must make the following datum intelligible: parts of a complex idea which correspond to a part of the *guise* of the idea are easier to recognize than parts of a complex idea whose guise has no significant parts. For example, if one grasps [Idea] under the guise of 'Idea', the part of one's idea whose content is [proposition] must be harder to become aware of than when one grasps [Idea] under the guise of 'non-propositional part of a proposition'.[29] Bolzano's account makes this datum appear mysterious, for it is hard to see how an idea's being guised could affect the difficulty or otherwise of forming an intuition of it. An intuition is an atomic idea which directly represents whatever object it is an idea of. The connection between an idea and its guise, according to Bolzano, consists in the idea's triggering, or having been triggered by, an idea of the guise (in the right kind of way). It is unclear to me how a certain expression's being associated in this way with a given idea could facilitate one's forming a *direct* representation of this idea. One way of getting around this problem might be to say that clarifiers, rather than being intuitions, are ideas that represent the ideas they clarify *in terms of their guise*. Earlier I suggested that certain ideas whose content can be expressed by instances of 'my present idea of *F*' might play the role of clarifiers. Thus, one might think that an idea *x* clarifies an idea *y* iff: *x* represents *y* and only *y*, and *x* is guised by (a translation of) 'my

---

28 There is no doubt that Bolzano *believes* that it is often very hard to become aware of one's ideas, and in particular to recognize the parts of a complex idea one presently has. For instance, he explicitly says that even when we have focussed our attention on a given idea we have, and made a determined attempt to discern parts in it, failure to recognize such parts ought to make us at best moderately confident that the idea in question is atomic (cf. *WL* III, §350, p. 398).

29 When discussing the example of [equilateral triangle] and [equiangular triangle] I mentioned above, Bolzano suggests that the intuitive difference between necessarily equivalent ideas may consist merely in the fact that 'in the one [idea] we think these, in the other we think those parts distinctly, while thinking the others only indistinctly' (*WL* I, §64, p. 273). Presumably, what he means is that while in ideas guised by 'equilateral triangle', the part with content [equilateral], but not the (hypothesized) part with content [equiangular] tends to be clear, while in ideas guised by 'equiangular triangle', it tends to be the other way round. Why would that be, if not because of which parts correspond to parts of the respective guise?

present idea of *F*', where '*F*' is the guise of *y*. However, on this view, guiseless parts of a complex idea cannot be clarified at all. Accordingly, it can no longer be maintained that coming to know the composition of an idea guised by a simple expression involves the clarification of its parts. Rather, one might suggest, knowledge of the composition of a complex idea standardly *depends on* prior knowledge of the content-identity of two of one's ideas, one of which has a complex guise. Whether or not such a modification is promising, it substantially deviates from the view Bolzano presents, and it still faces the challenge of explaining away the intuitions to the effect that one must always be in a position to know whether two of one's ideas have the same content.

6. Conclusion

In numerous places throughout his writings, Bolzano claims or implies that content is *intransparent*, i.e. that our knowledge of the contents of our own current mental acts or states is often severely limited. One of the main uses to which he puts this thesis is his attempt at a solution to the *paradox of analysis* – the puzzle of how a conceptual analysis can be both correct and informative. In this paper, I identified four different intransparency theses that Bolzano is explicitly or implicitly committed to and examined Bolzano's defence of one of them – that one need not be in a position to know the composition of an idea one presently has (or that of its content) – as well as his notion of a *clear idea* on which it draws. I then presented what I take to be the most plausible assumptions on which the defence can be generalised to Bolzano's other intransparency claims. Finally, I argued that as it stands, Bolzano's defence of his intransparency theses is unsuccessful because it shows at best why we often lack knowledge of certain features of the contents of our mental acts and states, but not why such knowledge is often hard to acquire. Moreover, I suggested that Bolzano's defence is hard to improve on without substantially modifying his overall epistemology of content as the latter appears ill-equipped to explain the relevance of the *linguistic guises* of our mental acts to the acquisition of knowledge of their – or their contents' – composition.

REFERENCES

Black, M.: (1944) 'The "Paradox of Analysis"'. In: *Mind*, New Series, Vol. 53, pp. 263–7.
---- (1945) 'The "Paradox of Analysis" Again: A Reply'. In: *Mind*, New Series, Vol. 54, pp. 272–3.
---- (1946) 'How can Analysis be Informative?'. In: *Philosophy and Phenomenological Research,* Vol. 6, No. 4, pp. 628–31.

Bolzano, B.: [*WL*] (1837) *Wissenschaftslehre*. 4 vols. Aalen: Scientia, 1981 – Partial translation as *Theory of Science*.

---- [*AA*] (1838) *Athanasia oder Gründe für die Unsterblichkeit der Seele*. Sulzbach.

---- [*B/Exner*] (1935) *Der Briefwechsel B. Bolzano's mit F. Exner*. Prag.

---- [*ToS*] (1972) *Theory of Science* (ed., transl. by George, R.). Oxford : Basil Blackwell.

Burge, T.: (1978) 'Belief and Synonymy'. In: *Journal of Philosophy*, 75, pp. 119–38.

---- (1986) 'Intellectual Norms and the Foundations of Mind'. In: *Journal of Philosophy*, 83, pp. 697–720.

Carnap, R.: (1947) *Meaning and Necessity*. Chicago: The University of Chicago Press.

Centrone, S.: (forthcoming) 'Bolzano und Leibniz über Klarheit und Deutlichkeit'. To appear in *Archiv für Geschichte der Philosophie*.

Church, A.: (1946) 'A Note on the "Paradox of Analysis."; The "Paradox of Analysis" Again: A Reply.; Analysis and Identity: A Rejoinder.; How can Analysis be Informative?'. In: *The Journal of Symbolic Logic*, Vol. 11, No. 4, pp. 132–3.

Dähnhardt, S.: (1992) *Wahrheit und Satz an sich*. Pfaffenweiler: Centaurus.

Künne, W.; Siebel, M.; Textor, M. (eds.): (1997) *Bolzano and Analytic Philosophy Amsterdam*: Rodopi.

Künne, W.: (1997) 'Propositions in Bolzano and Frege'. In: Künne et. al. 1997, pp. 203–40.

Langford, C. H.: (1942) 'The Notion of Analysis in Moore's Philosophy'. In: Schilpp (ed.), *The Philosophy of G. E. Moore*, pp. 321–42.

Moore, G. E.: (1942) 'A Reply to My Critics'. In: Schilpp (ed.), *The Philosophy of G. E. Moore*, pp. 535–677.

Textor, M.: (1996) *Bolzanos Propositionalismus*. Berlin: Walter de Gruyter.

---- (1997) 'Bolzano's Sententialism'. In: Künne et. al. 1997, pp. 181–202.

White, M. G.: (1945a) 'A Note on the "Paradox of Analysis"'. In: *Mind*, New Series, Vol. 54, pp. 71–2.

---- (1945b) 'Analysis and Identity: A Rejoinder'. In: *Mind*, New Series, Vol. 54, pp. 357–61.

Williamson, T.: (2000) *Knowledge and its Limits*. Oxford : OUP.

---- (2006) 'Conceptual Truth'. In: *The Aristotelian Society, Supplementary Volume,* 80, pp. 1–41.

17