# Existence and Contingency: A Note

DAVID WIGGINS

Names cannot be anatomized by definitions.
L. Wittgenstein *Tractatus Logico-Philosophicus,* 3.261

Until 1846 there was no theory of Uranus that permitted its movement to be represented satisfactorily. In 1821 Bouvard had constructed tables that adhered very closely to recent observations. Yet twenty years later a discrepancy of two minutes had already been observed. … Le Verrier demonstrated that [Uranus'] observed perturbations could not be explained as the effects of the actions of Jupiter and Saturn... He began to search for signs of an unknown disturbing planet. Finally … on 31 August 1846, Le Verrier fixed the exact position of the unknown planet and gave its apparent diameter.

Le Verrier communicated the result of his investigations to several astronomers who had powerful instruments at their disposal. Among them was J. G. Galle, at the Berlin Observatory, who was notified on 23 September. Two days later, he wrote to Le Verrier: "The planet whose position you indicated *really exists*. The same day when I received your letter I found a star of the eighth magnitude that was not recorded on the excellent Carta Hora XXI (drawn by Dr. Bremiker). …The observation of the following day confirmed that it was the planet sought." The map to which Galle referred had just reached him. The object observed was fifty two minutes from the position predicted by Le Verrier. First called Le Verrier's planet, it was eventually called Neptune. …

Le Verrier hoped that his work would lead to further discoveries analogous to that of Neptune. … He knew by 1843 that the observed motion of Mercury would not agree with theory. In 1859 he showed that Mercury moves as if an unknown agent produced an advance of its perihelion of about thirty eight seconds per century. He then put forth the hypothesis of an intra- mercurial planet [which was later called 'Vulcan'] [or] of a group of such planets. The dimensions of a single perturbing body—on the order of those of

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> Mercury—ruled out the possibility of this body remaining unobserved. The hypothesis was not confirmed."
>
> Jacques R. Lévy, "Le Verrier".[1]

## I

In "Necessary Existents", given in the 2001 lecture series at the Royal Institute of Philosophy and published in *Logic, Thought and Language* (ed. Anthony O'Hear, Cambridge 2002), Timothy Williamson offers a proof that any object that exists exists necessarily. The proof of this surprising contention turns on the claim that the existence of the proposition that TW does not exist implies the existence of TW himself. Roughly, the proposition needs a subject and nothing else will do for subject but TW himself. If the proposition is true it is false. If the proposition is false, it is false. Therefore it is false. So either way TW exists.

What would have been the reaction to this of Frege and Russell, in whose systems of logic and philosophies of logic and language modern philosophy still has the greater part of its foundation? They would have said that the strange result crucially depends—as, in effect, the Ontological Argument also depended—on the supposition that, in "TW exists" and all other sentences of that form, "exists" stands for a property of objects. According to Frege and Russell, ordinary grammar misleads us here. What we need in order to understand existence is not a first-level notion but the second-level notion of instantiation.

Leaving "TW exists" and like sentences to one side, most philosophers of logic have been happy enough to take over from the common heritage of Frege and Russell the idea that, in "Tame tigers exist" and similar contexts,[2] the predicate "exists" applies not to individuals but to that which the specification 'tame tiger', *alias* the propositional function 'x is a tiger and x is tame', introduces, namely the concept, attribute, property or universal *tame tiger*. After Frege and Russell, logicians have not gone out of their way to

[1] "Le Verrier", vol. 7 of *The Dictionary of Scientific Biography,* Charles Gillespie (ed.) (New York: C. Scribner's, 1981).

[2] The tame tigers example is of course G. E. Moore's. See "Is Existence a Predicate?" *Proceedings of the Aristotelian Society*, supp. vol. XV, 1933, pp. 175–88. I have discussed this and kindred matters at greater length in "The Kant–Frege–Russell View of Existence: Towards the Rehabilitation of the Second Level View", in *Modality, Morality and Belief*, Sinnott-Armstrong, Raffman and Asher (eds.) (Cambridge University Press 1995).



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pick a quarrel with the idea Russell and Frege each had (but I shall set it out in Frege's way) that the thing such an existential sentence says is that a certain specification is satisfied—more strictly, that the concept *tame tiger* is instantiated. So the property that the predicate "exists" imports is *instantiation*, the second level notion well represented in the familiar logical form that we encounter in the logical paraphrase consisting of an open sentence with a free variable "$x$" preceded by a quantifier "$(\exists x)$", which picks up or binds the free variable, thus: $(\exists x)$($x$ is a tiger and $x$ is tame) or $(\exists x)$ ($x$ is a cow). Here the quantifier "$(\exists x)$" (or the "there exist/there are" as it occurs in "there exist tame tigers" or "there are cows") conveys a property of first level properties, of *tame tiger* or *cow*, namely the property of being exemplified, or having objects fall under it.

Frege and Russell, conceiving existence in this way, concluded that sentences such as "Vienna exists", "this beach exists", "there is Julius Caesar", "there exists Neptune" did not make sense. This was a pity, because the swiftness of their arrival at that outrageous-seeming conclusion has come to discredit the second level conception. In fact it has reinstated the idea that existing is a continuous state or activity—like breathing, as J. L. Austin quipped, only quieter.[3] (Austin called it 'ticking over'.) Williamson's article shows (for the first time) exactly how sense can be made of that idea. But the purpose of this note is to make more visible one alternative to it.

The alternative conclusion which Frege and Russell might have reached, if they had foreseen the opposition they would encounter, is that the sentence "this beach exists" should be construed as saying that *something answers* to a certain specification—the specification you could make up from the properties of the beach itself that is in question. The sentence means that the concept corresponding to that specification is exemplified. Pursuing the same strategy, Frege might have written in his essay, "Concept and Object",

> [When we consider sentences like "there is Julius Caesar" "Julius Caesar exists" or] "there is only one Vienna", we must not let ourselves be deceived, because language often uses the same word now as a proper name now as a concept-word: in ["there is only one Vienna"] the numeral indicates that we have the latter, 'Vienna' is here a concept word, like 'metropolis'. Using it in this sense, we may also say "Trieste is no Vienna" [and we may also say "Vienna exists"].[4]

[3] See *Sense & Sensibilia*, (OUP: 1962), page 68.

[4] See page 50 in P. T. Geach and M. Black editors, *The Philosophical Writings of Gottlob Frege*, (Oxford: Blackwell 1951).



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## II

What concept then is the individual concept of Vienna? It is the concept *the same as Vienna*, or *identical with Vienna*, the concept that only the city of Vienna falls under. Or else you can say that it is the property that any $x$ possesses if and only if $x$ = Vienna.

Using an abstraction operator we can abbreviate that form of words as follows: $(\lambda x)$ ($x$ = Vienna). The rule for the abstraction operator $\lambda$ may then be given by a threefold equivalence:

Vienna is $\phi \equiv \phi$(Vienna) ≡ Vienna has the property $\lambda x(\phi x) \equiv (\lambda x(\phi x), <\text{Vienna}>)$.

On these terms, "Vienna exists" then becomes

$(\exists y)\ (\lambda x(x = \text{Vienna}), <y>)$,

where

$(\exists y)$ ( ……$<y>$)

is the second level notion of instantiation that the sentence ascribes to $\lambda x$ ($x$ = Vienna).

Once we are granted the individual concept (the concept, that is, of a certain individual) and the question is postponed how exactly the specification of this concept is to be brought off and defended from objections in the case where we cannot dispense with using a name, we can reconstrue "Vienna exists". On these terms, the question of contingency becomes tractable enough. For it seems evident that it is contingent that $(\exists y)(\lambda x(x = \text{Vienna}),<y>)$ It might have been that nothing fell under that concept. Even where the concept is empty we can still refer to the concept and say that it is empty.

## III

Now, however, we must focus more closely on the problem of specifying such concepts of individuals. Can we dispense here with proper names or singular terms? After decades in which it was supposed that every name could be replaced, somehow or other, with a description, Anscombe, Evans, McDowell, Kripke, Barcan Marcus and others have returned us to the insight Witttgenstein expresses at 3.261 of the *Tractatus*. See the first epigraph. For a proper name to have a meaning, there must be an answer to the question "which object does the name stand for?"—and such an answer cannot help but depend on some conception of the thing designated. Such a



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conception has to be *answerable to that actual thing*. This is where our difficulties begin.[5] For reasons that will appear, I shall now move across from Frege's example of Vienna to the examples of Neptune and Vulcan. See the second epigraph.

The rule we have given for λ - conversion permits us to unravel the form

$(\exists y)(\lambda x\ (x = \text{Neptune}), <y>$

and put it back into the form:

$(\exists y)(y = \text{Neptune})$

The problem we now face will be to see *this* as contingent.

The first point to remark about this sentence is that, instead of seeing it as resulting from the application of "$(\exists y)(y$ ……)" to a concept-specification "…. = Neptune", an opponent of Frege and Russell will reparse it, now that the λ-operator disappears, as predicating of Neptune itself the derived first-level predicate "$(\exists y)(y =$ ….)", which is a predicate one might say aloud as "has something identical with it". There is nothing illegitimate in this alternative parsing, even though, on the Frege–Russell view, the predicate "has something identical with it" is neither synonymous with nor equipollent with "exists".

The second point to remark is that it appears to be open to an opponent of contingency to draw on ordinary first-order logic to argue as follows:

1. $(\forall x)(x = x)$
2. Neptune = Neptune
3. $(\text{E}y)(y = \text{Neptune})$

The sentence 1. holds in all universes including the empty universe. Sentence 2. follows from sentence 1. by universal instantiation

[5] For this conception of the meaning of singular terms as it evolved over the last four decades of the twentieth century, see G. E. M. Anscombe, *Introduction to Wittgenstein's Tractatus* (London: Hutchinson, 1959) pp. 41–44; Michael Dummett, "Truth", *Proc. Ar. Soc.* vol LIX (1958–9), p. 153; Ruth Barcan Marcus, "Modal Logics I, "*Synthèse* 27 (1962), pp. 303–22; Saul A. Kripke, *Naming and Necessity*, (Blackwell, 1972); David Wiggins, "Identity Statements" in R.J. Butler (ed.) *Analytical Philosophy* (Oxford: Blackwell 1965) pp. 43–6; John McDowell, "On the Sense and Reference of a Proper Name", *Mind* 86 (1977); David Wiggins, "Frege's Problem of the Morning Star etc.", in M. Schirn (ed.), *Studies on Frege*, vol II (Stuttgart-Bad Constatt, Fromman-Holzbog, 1976); Gareth Evans, *Varieties of Reference* (Oxford, 1982), op. cit., Chapter Two.



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(UI). But sentence 3. then follows from sentence 2. by existential generalization (EG). If 1. is logically true and, precisely as such, necessary, and if UI and EG are valid principles of inference, then how can 3. fail to be a necessary truth?

The Frege–Russell answer to that question has to be this. 1. is indeed a necessary truth. Moreover, on the view of singular terms taken in the first paragraph of this section, neither UI nor EG can take us from a truth to a falsehood. All the same, despite their validity, neither UI nor EG has any counterpart that is a necessary truth. If everything is itself, then provided one is *given* Neptune, i.e. provided there is a proper answer to the question 'which thing is Neptune?', one can indeed apply 'everything is itself' to the case of Neptune and say that Neptune is Neptune. Given Neptune, one *can't* be wrong about that. Even better, let us say, clarifying the scope of this "can't", that one can't, given Neptune, be wrong about that. But *this* necessity is relative to one's being given Neptune. Let us not make the ungrounded assumption that $\Box_{\text{Neptune}}$ (Neptune = Neptune) comes to exactly the same as $\Box$ (Neptune exists$\rightarrow$(Neptune = Neptune)). Even if the first is read as saying "in *any* world that furnishes Neptune, it holds that Neptune is Neptune", why should one think that *that* is the same as saying "In any world at all, it holds that, if Neptune exists, then Neptune is Neptune"? The first only requires us to evaluate "Neptune = Neptune" at worlds containing Neptune. The second faces us with the problem of evaluating "Neptune = Neptune" at any and every world, including worlds lacking Neptune. Let us beware of translating a conditioned necessity into the necessity of a conditional. (Or a conditioned probability into the probability of a conditional.)

So much for UI. But the same point will apply to EG. Given Neptune, given that such a thing was indeed (as J. G. Galle found) identifiable, and given thus that Neptune was Neptune, one cannot arrive at a falsehood by saying that *something* is Neptune. On these terms $\phi$(Neptune) $\vdash$ $(\exists x)(\phi x)$. It does not follow, however, that

$$\Box(\phi(\text{Neptune})\rightarrow(\exists x)(\phi x)).$$

Similar remarks will need to be directed at the problem that, once given the contingency (as we say) of $(\exists x)(x = \text{Neptune})$, its equally contingent negation, namely $\sim(\exists x)(x = \text{Neptune})$, yields, when EG is applied, the absurdity $(\exists y)\sim(\exists x)(x = y)$. This absurdity is entirely due to the fact that $\sim(\exists x)(x = \text{Neptune})$, from which we began, undermines the presupposition that gave us the inference rule EG for "Neptune".

A general remark about EG. Valid applications of EG cannot be



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determined, evidently, from the simple presence in a formula $\phi(t)$ of an expression with the bare form of a proper name.

## III

In this way the Frege–Russell conception maintains contingency and clears its first hurdle. Now however we come to the second hurdle. Let us move across now from Neptune to Vulcan. How are we to say, and say truly, that "Vulcan does not exist"?

Let us begin with "Vulcan exists". Encouraged by his success with the observed perturbations of Uranus and his postulation of their origin in the presence of the then unknown planet that came to be known as "Neptune", Le Verrier went on to formulate a similar hypothesis in order to account for another mystery, the previously unexplained advance in the perihelion of Mercury. He postulated the presence of an intra-Mercurial planet whose name, if only it had been found, was to have been "Vulcan". Indeed, as regards that name, there would have been no special difficulty in Le Verrier's using it himself, however cautiously and speculatively, in the place of the description Russell might have counselled him to prefer. (Such a description would probably have been too vague to be an identifying description or else descriptively over-precise, circumscribing too narrowly the hypothesis that Le Verrier was developing.) At the beginning of such a prolepsis, it will not be clear what 'Vulcan' is to stand for; but then, at some point in Le Verrier's hypothesizing—at some point in his inventing his story, one might say, for this is the analogy we are depending upon—we shall understand him well enough, and he will understand himself well enough, to know what he means by saying that it is presence of Vulcan that explains the behaviour of Mercury. For when this point is reached, a sense is secured for "Vulcan". Availing ourselves of that sense we can say that Le Verrier's hypothesis entailed this:

> Something falls under the concept/specification *identical with Vulcan*.
>
> $(\exists y)(y = \text{Vulcan})$

Suppose Le Verrier's speculation had succeeded. Then J. G. Galle or his successor could have written to him in the words: "the planet whose position you have indicated, Vulcan, as you have ventured to say, really exists. The same day when I received your letter, I found ...."—or else, deploying the proper name in lieu of the kind of description that we find in original report on Neptune,



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Really $(\exists y)(y = \text{Vulcan})$.

Even better from our point of view, placing the "really" more carefully, and being mindful of the theoretical interests of their compatriot (Frege), the Berlin astronomers could have written (even if this is almost unimaginable):

> As regards Vulcan, which you indicated, something really does fall under the concept *identical with Vulcan*.

In fact, though, as our epigraph relates, Le Verrier's second hypothesis was not borne out and we must imagine that this was the news:

> Vulcan doesn't really exist.
> As regards Vulcan, which you sought to indicate, nothing really falls under the concept *identical with Vulcan*.

In these versions which make such free use of "Vulcan", we are preserving the neo-Frege–Russell parsing of $(\exists y)(y = \text{Vulcan})$ and at the same time upholding an analogy between the way in which scientific hypotheses operate and the way in which stories or fictions operate. The Berlin astronomers are going along with the Le Verrier hypothesis to secure a sense to the expectation they are disappointing. Better, they are going along with the hypothesis in order to secure a sense to the concept-specification they are declaring to lack any satisfiers.

## V

To complete this account of true negative existential statements, more needs to be said about the special role (first pointed out by Gareth Evans) of "really". But first a little more about story-telling and hypothesizing.

A story based on Homer's *Odyssey*, Book Six, could begin with the words "Once upon a time, there was in Phaeacia a princess, Nausikaa. Like all other princesses, Nausikaa knew rather little about the work of a household, such as the washing of clothes. But one day the goddess Athena, anxious as ever about the welfare of the man she cared most about among mortals, namely Odysseus, who had been shipwrecked at the shore, decided to put an idea into Nausikaa's mind ...." Gradually such a story constructs a narrative space in which we can answer the question "who is Nausikaa, what is she?". Just as the story mimics reality, so the name "Nausikaa" mimics an ordinary proper name. Or, as Frege puts it in "Comments on Sense and Reference" (1892–1895) (see *Posthumous*



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*Writings* 1979: p. 124), the name 'Nausikaa' *tut so, als benenne er ein Mädchen, und damit sichert sich einen Sinn*. This is to say the name behaves as if it named a young woman and, in this way, the name secures a sense for itself. Rather than abandon the idea that to understand a name is to know what object it stands for—is to possess the sort of conception of its bearer that is associated with that name and by which one answers the question 'which object does the name stand for?'—and rather than abandon the idea that the sense of a name is the mode in which it presents *its bearer*, the referential model has to be extended for the cases of hypothesis and story-telling by carrying the *als ob*, the as-if, *into the semantic itself*. The idea was carried a step further (without, it must be said, any adherence to the Frege–Russell view of existence) by Gareth Evans in the *Varieties of Reference* (Oxford, 1982, see page 369):

> "The general idea is that someone who utters [a negative existential] should be likened to someone who makes a move within a pretence in order to express the fact that it is a pretence. He is not like someone who tries to prevent a theatre audience from being too carried away by jumping up on the stage and saying: 'Look, these men are only actors, and there is no scaffold or buildings here—there are only props.' Rather, he is like someone who jumps up on the stage and says: 'Look, Suzanne and the thief over there are only characters in a play, and this scaffold and these buildings are <really> just props.' The audience must be engaged, or be prepared to engage, in the make-believe, in order to understand what he is saying."

Here, let it be noted, the intervention precisely depends on the speaker's going along with the narrative of the play, on his going along with the dramatic presentation itself, but then and there, *in mediis rebus*, making a comment on something in the play. It is in this kind of place that we see the utility of the word "character" and the phrase "not really"—and the point of using "really" in the case where a story, play or hypothesis is turning out to be true. These are the devices by which, once we involve ourselves in make-believe, we control our participation in it. It is noteworthy how natural it was for J. G. Galle, when he reported back to Le Verrier on the success of his hypothesis, to say "the planet whose position you indicated *really exists*". The name "Neptune" has served its probation. Of course, "Vulcan" will fail its probation. Strictly on the terms of make-believe, however, as if the name were out on parole, we can go on using it. To make sense of the negative existential we have no alternative but to use it.



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On the view of these things that the Frege–Russell doctrine demands, narrating and hypothesizing and make-believe are essential activities for creatures like us. Even "really" and "not really" don't *disentangle* us from storytelling and hypothesizing. However concerned we are to talk in an austere fashion about reality and only reality, there are questions we must ask which can only be answered by commented storytelling or commented hypothesizing. However serious we want it to be, human life is *full* of storytelling, guessing, supposition, exploration …. Sometimes we do not even know till afterwards which of these we were doing. Given how much make-believe has to be undertaken in the name of the concern that we have with reality, it is scarcely surprising that we should rely upon it to secure the sense of some of the things that we say fully seriously, under the austere constraints of "really" and "not really".

## VI

So this is where you end up if you start where Frege and Russell started but try to do justice to sentences of the form 'TW exists'. On this view, there are good names whose determinate significance is owed to a thing—owed, rather to a conception of a thing which is corrigible by the thing and answerable to that thing. And then there are signs that *mimic* those signs. The determinacy of the sense of these signs is owed to their imitating the standard conditions of determining-which. These are fictional names. Finally, there are suppositional names whose significance is supposition-bound until they are shown to be as good as ordinary names. In the meanwhile, they're on sufferance or on probation—just good enough for certain uses. It is true that, in the intended sense, some of them have no proper future. We may have to use them, though, to describe why they have no proper future. The only long term future for "Vulcan" coming from Le Verrier's mouth was for us to record his failure to repeat the triumph that he had had before with "Neptune". The name's good enough for *those* purposes. Well enough for those purposes, we can understand it. All that those purposes require is that the name should serve the second of the two purposes, namely that of concept-word, which we find Frege describing in the passage of 'Concept and Object' that we began by rewriting.

## VII

The account of proper names we have supplied to the renewed Frege–Russell position keeps necessity at bay at the same time as



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insisting strongly on the validity (without truth at all worlds) of all applications of EG where the term $t$, which is to be existentially generalized upon, has been properly supplied with the sense of a singular term. But what about the case where $t$ is a variable?

The argument is sometimes made that the open sentence $xRx \rightarrow xRx$ holds in all domains including the empty domain. By the acceptance of EG, however, (the argument continues), we shall end up with

$$(xRx \rightarrow xRx) \rightarrow (\exists y)(yRy \rightarrow yRy).$$

But the consequent is not true in the empty domain; and so much the worse (it is said) for EG.

I reply that, rather than modify EG, it might be better to note that, if we interpret $xRx \rightarrow xRx$ as saying that for all $x$, $xRx \rightarrow xRx$, then on these terms our conclusion ought to be:

$$(\forall x)\ (\exists y)(yRy \rightarrow yRy),$$

which *is* true in the empty domain. Why then must EG as such be suspect? If the empty domain is not to be ignored, then surely it is better, as Wilfrid Hodges urges, to focus the consideration of the problem on the exact formulation of the whole collectivity of meaning rules and inference rules.[6]

## VIII

At this point, having given a thought to the empty domain, it may be as well to say something in conclusion about Williamson's modal claim and the problem of contingency.

Consider the following inference:

$$\begin{array}{l} \forall x\ (x = x) \\ x = x \\ (\exists y)\ (y = x) \\ \hline (\forall x)\ (\exists y)\ (y = x). \end{array}$$

The conclusion is true in all domains including the empty one. Since it holds no matter what, we shall be tempted to advance to the modal contention:

[6] See pp. 56–60 and pp. 107–10, especially p. 110, remark 6, in Wilfrid Hodges, (1983), "Elementary Predicate Logic" in D. Gabbay and F. Guenther (eds.), *Handbook of Philosophical Logic*, Vol. I, pp. 1–131, Chapter 1. D. Reidel.



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$\Box\ (\forall x)\ (\exists y)\ (y = x)$.

But how much does this commit us to? It says that, whatever world you pick, anything you choose in that world will have something identical with it. It does not tell us, unless we already concur with an extra postulate deriving from Ruth Barcan, that, whatever object you take, all worlds will furnish something identical with it:

$(\forall x)\ \Box(\exists y)\ (y = x)$.

Williamson gives reasons of his own to affirm even this, and he draws conclusions of his own from it about the best framework in which to study the semantics of modal logic. Lacking Williamson's special concerns and commitments, however, what should we think about it?

Suppose we read statements of existence in the new way that becomes possible with the elimination, as in Section III, of the lambda term. In that case we may become open to be persuaded in the following way that $(\forall x)\ \Box(\exists y)\ (y = x)$. Take any object at all. It's surely not contingent, given that object, that the object has something it's identical with. It couldn't fail to have something identical with it. Why then fight against the conclusion that everything that exists necessarily exists? Perhaps Williamson is right.

On the Frege–Russell view, this argument trades on an incorrect view of existence (however correct a view the argument represents of "ticking over" in Austin's sense). On the correct view of existence, Frege–Russell will say, the question about contingency is this: given any object at all, can it be contingent that something answers to the individual concept of that thing? Answer: Yes, it can. There is no difficulty (no difficulty we have not already treated) in the idea that such a concept might have been empty. That was the point against the Ontological Argument.

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