Chapter 4
Vasiliev and the Foundations of Logic

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Abstract  Nikolai Vasiliev offered a systematic approach to the development of a
class of non-classical logics, which he called “Imaginary Logics”. In this paper,
I examine critically some of the central features of Vasiliev’s approach to logical
theory, suggesting its relevance to contemporary debates in the philosophy of logic.
I argue that there is much of significant value in Vasiliev’s work, which deserves
close philosophical engagement.

Keywords  Vasiliev • logical pluralism • Revisability • a priori • negation

4.1  Introduction: Six Central Features of Vasiliev’s
Approach to Logical Theory

Nikolai Vasiliev’s approach to logical theory has a number of features. Six of them,
in particular, are worth highlighting: (a) *logical pluralism* (there is a plurality of
logics, depending on the subject matter under consideration); (b) *logical revisability*
(certain logical laws can be revised depending on the subject matter); (c) *logical
non-a priorism* (certain logical laws are empirically based); (d) *logical contingency*
(given the empirical nature of some logical laws, they are ultimately contingent;
in this context, issues regarding the scope of logic are also examined, with the
accompanying distinction between laws of objects and laws of thought); (e) *the
nature of negation* (negation is characterized via incompatibility; it is not just
difference, nor is it grounded on absence, and it is inferred rather than perceived);
and (f) *logical commitment* (why Vasiliev is not a dialetheist, after all).

In this paper, I will examine each of these features, and suggest the relevance
of many of Vasiliev’s proposals to contemporary philosophical reflection about
the foundations of logic. Although the terms I use to describe some of the views

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I attribute to him (such as logical pluralism, logical revisability, or logical non-a priorism) are not his, they are used to help contemporary readers appreciate the significance and originality of Vasiliev’s conception of logical theorizing.

It is, however, crucial not to overreach and read into Vasiliev’s writings more than the texts support. We cannot lose sight of the fact that we are dealing with texts that were written over one hundred years ago, before the full development of non-classical logics that would dramatically change our understanding of logic and its foundations. Vasiliev did not fully develop formal logical systems that exhibit the features he so clearly identified as needed in the foundations of logic. This does not diminish, by any means, the significance of his ideas. On the contrary, it shows that he had clear philosophical insights about how the field should develop. The fact that, in important ways, logic—in particular, non-classical logics—ended up evolving along the lines he suggested (namely, several systems of paraconsistent and constructive logics displaying the features he identified as relevant were eventually articulated) is a clear indication of how his overall vision for the foundations of logic was indeed on the right track. His approach deserves attentive study. (A thorough assessment of Vasiliev’s Imaginary Logic is provided in Raspa 2018).

4.2 Logical Pluralism

Although Vasiliev would not have formulated the view in these terms, logical pluralism is the view according to which there is a plurality of logics, depending on the subject matter under consideration. If we are reasoning about the actual world, then perhaps classical, Aristotelian logic is appropriate, since its logical constants reflect better certain features of the world, and the resulting logical consequence relation properly captures at least some of the inferential relations at stake. In particular, as will become clear, consistency constraints are in place when reasoning about the actual world. However, on Vasiliev’s view, if we are reasoning about possible (imaginary) worlds, then imaginary logics are appropriate, since they lack the consistency constraints that are needed to reason about what is actually the case.

For instance, according to Vasiliev, negation in Aristotelian logic is characterized in terms of incompatibility. ‘S is red’ is incompatible with ‘S is green’. Thus, if S is red, it is not the case that S is not green. No such incompatibility, however, is involved in imaginary logic. Since it deals with ideal objects only, it allows for the possibility that ‘S is P and not-P’. Moreover, given that imaginary logic is only concerned with propositions, rather than claims about reality, it has some flexibility that is typically unavailable for a logic constrained by features of reality. (We will return to all of these points below.) These considerations suggest the sense in which certain logics are more adequate than others to reason about certain domains.

Given Vasiliev’s stance on imaginary logic, it comes as no surprise that he considers logic as having a dual character (1912–1913/1993, p. 329): Some logical principles are unchangeable, irremovable, and absolute—those he considers to be formal principles of logic. Other principles, however, are changeable, can be abandoned, and are relative—he explicitly mentions the laws of non-contradiction.
and excluded middle in this context, and they will be called *logical laws*. So, the form of pluralism that emerges is one in which certain logical laws can be revised (in particular contexts), and thus, depending on the subject matter under consideration, different logical laws can be invoked. We have a domain-dependent form of logical pluralism: one in which a given logic is chosen in light of the features of the domain under consideration. On this view, different domains may call for different logics.

At this point it may be asked just how is it possible to change a logical law? (Although Vasiliev himself does not explicitly ask this question, it is one that is clearly raised by his work.) Presumably one would need a logic to implement any such change. After all, there should be a reason why the law in question is revised, such as some evidence to the effect that the law fails. But any such assessment of evidence requires a logic—or, at least, some laws of inference from the evidence to the failure of the relevant law. If the logic in question incorporates the law that is supposed to be revised, the logic is incoherent, given that, according to its own standards, it needs to be changed (for a discussion, see Field 2001, Chapter 13). No coherent logical system would generate this outcome. Alternatively, if the logic in question fails to incorporate the law, then strictly speaking there is no revision of logic, since the law was not part of the logic in the first place. Thus, rejecting it does not amount to a change in logic.

To illustrate the first horn, consider how using *modus ponens* one could conclude that *modus ponens* is violated. This could be done by offering a counterexample to this inference rule. But since the counterexample invokes *modus ponens*, if the evidence against it goes through, the argument that violates the inference should be questioned. Hence, we have incoherence and the accompanying impossibility of revising a logical law.

In response, note that it is perfectly possible to question the validity of *modus ponens*, for instance in the context of embedded conditionals (see McGee 1985), while still maintaining the rule in the context of ordinary, non-embedded, inferences. Vasiliev’s suggestion of how to revise the law of non-contradiction is similar in that it also restricts the use of this law: as will become clear, it applies to reality, but it need not go through in imaginary contexts, which may incorporate inconsistencies.

### 4.3 Logical Revisability

Since, as noted, the form of logical pluralism that Vasiliev provides emerges from the possibility of revising certain logical laws (in suitable contexts), the idea of logical revisability is crucial for his approach. There is a logic of the real, actual world and there is a logic of thought, which is involved when one considers imaginary worlds. Logical revision is in place since certain logical laws that are perfectly adequate to reason about the actual world are inadequate to reason about imaginary worlds. For instance, as pointed out, on Vasiliev’s view, imaginary worlds may contain contradictions, whereas no such contradictions are found in reality. (I will return to the issue of Vasiliev’s dialetheism below; as will become clear, I do not think he endorsed that view.)
Vasiliev (1912–1913/1993, pp. 329-330) acknowledges the difference between logical principles and laws of thought in the context of the dispute between Benno Erdmann and Edmund Husserl (in the former’s *Logic* and in the latter’s *Logical Investigations*; the relevant references to the works can be found in Vasiliev’s paper). Erdmann highlights the relativity of any laws of thinking, and what he takes to be the impossibility of proving the validity of logical laws for thought. After all, Erdmann argues, we are unable to think different kinds of thoughts that are foreign to us—and presumably, I would add, these alternative forms of thought may incorporate situations that may invalidate some logical laws, or would require different norms to regulate the scope and validity of these laws. Summarizing Erdmann’s argument, Vasiliev notes:

> We know, however, only our thinking and we can know only it. We cannot imagine thinking of another kind from ours. That is why we cannot prove the validity of our logical principles for any thinking, since any other kinds of thinking, except ours, are absolutely strange to us. Perhaps there is thinking which is subordinate to these principles. We do not know such thinking and so we can neither assert nor deny its existence. [...] Our thinking has developed from less complex form of imagination and we have no right to exclude possibilities of further sophistication which could require different norms. (Vasiliev 1912–1913/1993, pp. 329-330.)

In other words, the argument goes, given the fundamentally parochial nature of our own thinking, it is unclear which significance any alleged proof of the validity of the logical laws we invoke would have. If it is possible that there are alternative modes of thought that may undermine some of the laws we embrace, or that are regulated by different norms, any such proof would not fully establish the intended conclusion.

Vasiliev does not question Erdmann’s draconian restriction imposed on what we are, or are not, supposedly able to think. Why should our thoughts be so limited—or, at least, why should they be limited in the way Erdmann entertains? Moreover, presumably it is not enough simply to *assume* that there are such alternative systems of thought. One would need to provide good reasons to believe that such systems do in fact exist—or, at least, that they could. Otherwise, those who defend the unreviseability of logical principles can just deny the actuality, and perhaps even the possibility, of such rival systems. On their view, any such systems would be incoherent, since they deny logical truths. As a result, they are neither possible nor actual. Furthermore, an argument would also be needed as to why we cannot, even in principle, think of these rival systems of thought. Granting that such systems are possible, why is the sheer fact that we can entertain their possibility enough to undermine our own logical laws? Presumably we would also need to establish (or, at least, have good reason to believe) that the rival laws are true. Otherwise, it would be unclear why the situation Erdmann entertains is really different from just stating that the logical laws we adopt could be false in some hitherto unspecified circumstances. And to those who hold the unreviseability of logical principles, simply making this claim is not convincing at all.
In response, Husserl insists that Erdmann is engaged with a form of psychologism. He emphasizes that the laws of logic do not depend on any particular forms of thinking. As Vasiliev notes:

The laws of logic, according to Husserl, are not psychological, depending on one condition or another, on one or another essence of thinking. They are ideal truths, necessary for all judging beings independently of one or another structure of their real thinking. (Vasiliev 1912–1913/1993, p. 330.)

Logical principles, on Husserl’s view, are based on the very content of truth and falsity. They provide criteria to determine the correctness of any proposition. For Husserl, quite independently of one’s psychological make-up, those who deny such principles simply make a false claim.

Interestingly, Vasiliev offers a suggestive analysis of the disagreement between Erdmann and Husserl. He argues that both sides make the same mistake: they fail to specify the limits of what they assert. Erdmann, concerned with possible changes in thought, does not specify the limits to such changes. Husserl, concerned with the unchangeability of logical principles, similarly fails to specify the limits of this lack of change. On Vasiliev’s view, there are limits on both sides: certain logical principles remain unchanged (and presumably are unchangeable), while fundamental laws of thought (such as excluded middle and the law of non-contradiction)—understood in terms of their content rather than as psychological rules, which clearly they are not—can be revised and altered. As he insists:

Erdmann does not define the limits of the possible change of thinking, nor does Husserl define the limits of logic’s unchangeability, whereas this should and could be done. Thinking can change, but not everything in it is changeable; there are absolute logical truths, but not all logical truths are absolute. In general, things are not as bad as the absolute unreliability of thinking that Erdmann envisages, and not so good as the absolute unchangeability of logic that Husserl envisages. (Vasiliev 1912–1913/1993, p. 330.)

Thus, what Vasiliev advances is a middle ground between Erdmann’s radical unreliability of laws of thought and Husserl’s absolute unchangeability of logical principles. In the end, it is ultimately a matter of determining the proper scope of both logical principles and laws of thought (logical laws).

Given the distinction between these principles and laws, it may be argued that Vasiliev can still maintain, with Husserl, that logical principles are unrevisable—one just needs to identify properly which principles are logical and which are not (they may just be laws of thought). In fact, according Vasiliev, Husserl mistakenly included the laws of non-contradiction and excluded middle among the logical principles. Moreover, Vasiliev can also insist, with Erdmann, that laws of thought are changeable. The two logical laws just mentioned illustrate this situation, since there are contexts in which they fail. However, in contrast with Erdmann, Vasiliev would insist that, properly identified, principles of logic could not change.

Presumably additional distinctions could be drawn here. Certain revisable laws are not laws of thought, but perhaps laws of nature or empirical generalizations, which can be revised—at least in the sense that what was once considered a law of nature has its scope (that is, its range of validity or its domain of application) more
sharply defined in light of new scientific discoveries, and what was once considered
an empirical generalization may turn out to find some counterexamples. Newtonian
gravitational law is an instance of a principle that was once taken to be a universally
unrestricted law of nature, but eventually had its scope restricted: it fails for objects
that are too close to huge gravitational fields, or whose speed is close to that of light.
But, clearly, it is not a law of thought.

In this sense, by allowing for the revisability of laws of thought, Vasiliev can
be understood as advancing a certain conception of the proper scope of logical
principles and laws of thought and their interactions: laws of thought are fallible
laws of logic that are revisable (and perhaps have been revised), whereas principles
of logic are not open to such change. Perhaps we can take logical principles as those
that are ultimately involved with the most general features of the world, whereas
laws of thought engage with particular, restricted, patterns of reasoning.

But why should we consider logical laws as having anything at all to do
with thought or reasoning? To some extent, this is one of the key concerns that
Husserl raised against Erdmann when he charged Erdmann with psychologism.
Logic is basically concerned with relations of logical consequence. But this fact
is independent from the way in which these relations may turn out to be used in
particular applications, which, typically, do involve reasoning. In this way, there
need not have any psychologism in logic as a formal field. It is only in the context
of the application of formal logical laws that issues regarding modes of reasoning
and thought would emerge.

Given his intention to provide a middle ground between Erdmann and Husserl,
Vasiliev acknowledges the changeability of certain laws (associated with laws of
thought) while keeping the stability of logical principles (associated with formal
principles of logic). So, since they are revisable, certain laws of logic turn out to be
laws of thought, whereas due to their stability, other principles are genuine formal
logical principles. The possibility of revising at least certain logical laws (namely,
laws of thought) is, thus, a crucial feature of Vasiliev’s approach to logic. But the
most general features of the world, being stable, do not change, and neither do the
corresponding logical principles.

It may be argued that if certain logical laws can be revised, they should not be
considered to be logical: only those principles that are stable enough can be consid-
ered logical ones. Vasiliev’s alternative to Erdmann’s and Husserl’s proposals, by
endorsing the distinction between logical principles and laws of thought, can be seen
as ultimately supporting this view. But since, according to Vasiliev, it is possible to
change certain laws of thought (that were once considered logical principles), there
is more flexibility on his view than in the far more traditional and rigid conception
that seems to have been endorsed by Husserl.
4.4 Logical Non-A Priorism

Besides allowing for the revision of certain logical laws (understood as laws of thought), Vasiliev also argues that some logical laws are empirically based. This is a form of non-a priorism about logic. Since certain logical laws are empirical, they could have been otherwise, and thus their negation is possible. This means that alternative logics, which deny some of these laws, can be advanced. Vasiliev calls these logics imaginary. On his view:

Since the law of contradiction is an empirical and real law, we can reason without it as well, and then we will get an imaginary logic. In fact, on empirical grounds I can arbitrarily build whatever imaginary objects and imaginary disciplines. I can create centaurs, sirens, griffins and imaginary zoology. I can create utopias, an imaginary sociology, or an imaginary history [...]. Empirical and real laws are about reality, but their opposite is always conceivable. (Vasiliev 1912/2003, p. 140; emphasis in the original.)

This is an important Humean point: the opposite of any empirical state of affairs is always possible. (The novelty with regard to Hume is the application of the insight to logic; Hume, presumably, did not think that logical principles were directly empirical, since they emerge directly from relations of ideas.) According to Vasiliev, empirical laws, despite the fact that they refer to reality, can be denied, and the result is something that is still possible, at least in the sense of something that can be imagined.

This raises the complex issue of the relation between conceivability and possibility. As it turns out, I do not think Vasiliev needs to take a stand on the controversial issue of whether conceivability is a guide to possibility (for a sample of different views on this issue, see Gendler and Hawthorne (2002)). It is significant that Vasiliev describes in terms of imagination the construction of all the objects that become possible once certain laws of logic are resisted. The process is not characterized as a form of conception. Imagination, in its proper formulation, is the capacity to form images, and only the content that can result from image making can be imagined. The capacity of making things up mentally by forming images, and without making any assumption about their existence, is a key feature of imagination. As a result, there are constraints on what is imaginable, given the constraints on what can be imaged. It is unclear, for instance, that we can imagine a geometrical object of precisely 357 sides, rather than one of 358. But, except for this crucial restriction, imagination is otherwise entirely unconstrained. In fact, it is not even constrained by consistency or completeness, as there can be images of inconsistent situations (a fork that has both two and three prongs) or incomplete ones (a bull for which it is indeterminate whether it has skin or not).

It is also important to distinguish imagination from conception, although they are sometimes confused. Conception is the capacity of forming concepts, and concepts are in no way restricted to images, although images can convey concepts. Despite our inability to imagine a 357-sided geometrical object, we have no difficulty to conceive of it, as long as we are in possession of the relevant concepts. All
kinds of things can be conceived, provided they respond to a concept. As a result, conception is differently constrained than imagination: constrained by the availability of concepts, not by images.

On Vasiliev’s view, one can think a contradiction, but not represent it (that is, in the terminology I adopted, one can conceive of a contradiction, but not imagine it). This allows for the development of imaginary logics, since one can then think independently of the law of non-contradiction. (I thank an anonymous reviewer for making this point.)

The fact that Vasiliev considers the objects that can be constructed by the negation of certain logical laws as imaginary clearly suggests that, on his view, these objects need not be taken to exist. Perhaps they do, perhaps they do not. Imagination does not discriminate between existent or nonexistent objects. And since we can imagine both, no commitment to the existence of what is imagined is required. This allows one to bypass altogether any metaphysical commitment to the existence of imaginary objects when they are being imaginatively entertained.

In principle, different logics can emerge from the rejection of certain logical laws (or from not assuming that they hold in general). The denial of the law of non-contradiction (or the avoidance of assuming its validity) leads to a family of logics in which contradictions are possible or can be tolerated. These logics are, of course, paraconsistent. In turn, the denial of the law of excluded middle (or the avoidance of assuming it) generates a family of logics in which it is indeterminate, for certain objects, whether they have or lack certain properties. The resulting logics are then constructive. And, of course, both such laws can be denied (or avoided) simultaneously, thus allowing for the possibility of accommodating objects that are both inconsistent and incomplete, which produces a family of non-alethic logics.

As these instances illustrate, one need not assume that the laws in question are false. It is enough to consider them as not applicable in general. After all, despite having a more limited domain of application than previously thought, they may still be appropriate for certain domain of objects, such as those that are consistent or complete (or both).

### 4.5 Logical Contingency

Given the empirical nature of logical laws, they are ultimately contingent. Hence, their negation is still possible and can be entertained. Note that, on this view, we can entertain the negation of certain logical laws, although the resulting possibilities may involve contradictions. This is clearly the case when the negation of the law of non-contradiction is considered.

In this case, the underlying conception of possibility allows for inconsistencies. According to Vasiliev, we can entertain inconsistent scenarios: they are possible, despite being inconsistent; they are just non-actual. Logical laws depend on the subject matter, in the sense that different constraints on the adequacy of a logical law are given depending on the subject matter under consideration. The actual world has
consistency constraints due to its physical constitution; for instance, given the way material objects are, they cannot be both green and red all over. But such constraints need not be found in imaginary worlds.

Of course, this does not mean that the actual world could not have been different than it is. In principle, the actual regularities that govern the behavior of material objects could have been different in all sorts of ways; in which case reality would have been correspondingly very different as well. But the point is that, as things currently stand, there are constraints on reality that need not be in place when propositions about reality are assented to: such propositions can be inconsistent even though what they are about is not.

In fact, as part of his specification of the proper scope of logic, Vasiliev introduces just this distinction between laws of objects (reality) and laws of thought, emphasizing that the latter are not about reality, but only about propositions.  

On his view:

*the formal laws of thought apply to thought only, and not to reality; they apply to propositions, and not to objects.* They are laws about propositions and about propositions only. In contrast to the empirical changeability of things, the law of identity, e.g., establishes the logical constancy of concepts, i.e. of parts of propositions. It is a law about propositions and [it] tells absolutely nothing about objects. Exactly in the same way the law of absolute difference between truth and falsehood and the law of sufficient reason tell us about propositions only, and not about objects. Consequently, one should strictly distinguish between them and those real laws (about objects) they can easily be confused with. A formal law of propositions—e.g. the law of sufficient reason, “every proposition has to be justified”—should be distinguished from the “real” law of causality which says that “every phenomenon must have a cause.” A formal law such as “propositions should not contradict each other” should be distinguished from a real law such as “there is no contradiction within objects.” Thus, the real law of contradiction stands to the formal law of absolute difference between truth and falsehood just as the real law of causality stands to the formal law of sufficient reason. (Vasiliev 1912/2003, p. 140, emphasis in the original.)

As Vasiliev emphasizes, on his view, the (formal) law of non-contradiction is a law of propositions. In this sense, it is not a law about actual objects, but about thoughts.

It may be objected that thoughts are about objects (of various kinds), and in this indirect way, the law of non-contradiction becomes one about objects: actual objects, those that are referred to via the relevant thoughts. The distinction that Vasiliev intends to draw between objects and thoughts does not seem to be enough to secure that laws of thought are not concerned with reality, unless thoughts and propositions are entirely detached from it.

Presumably, what Vasiliev intends to highlight is the difference between what is *said* (thought, stated) about an object and whatever features the object has. Although no object can have inconsistent properties, *thoughts* (propositions, statements) about

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1 Note that Vasiliev uses the term ‘suzhdenie’, which, strictly speaking, means ‘judgment’, but Roger Vergauwen and Evgeny Zaytsev, the English translators of Vasiliev’s article on imaginary logic, preferred to adopt the term ‘proposition’ instead (see their note * on p. 132 of Vasiliev [1912/2003]). Thus, in the passages from Vasiliev’s work quoted below, one should not interpret ‘proposition’ in a heavily metaphysical way.
such objects can be in tension with one another. It is in this sense that laws of thought are not concerned with reality: they are concerned with what is said (thought, stated) about reality. Propositions about reality need not be consistent even if reality ultimately is.

On this view, the scope of logic involves both reality and thought, but there is a significant difference among these domains, as noted above: (formal) logical laws (laws of thought) are revisable, whereas principles of logic (ultimate features of reality) are not. Presumably, underscoring this distinction is the assumption that reality, in its basic constitution, is unchangeable, whereas propositions and thoughts about it are perspectival, context dependent, and revisable. This is a familiar metaphysical picture that has animated philosophical conceptions at least since Plato. But it is, as is well known, problematic in a number of ways. It posits a fundamental, basic reality, which supposedly remains constant in light of a variety of changes in the appearances, and which prompt changes in propositions about reality. But it is unclear how exactly one can secure knowledge of a reality conceived in these terms, given that one’s access to reality is always perspectival, context dependent, and revisable. This is, of course, a familiar concern: epistemological worries have always been rampant when one is confronted with a platonist ontology.

But perhaps Vasiliev can still maintain the distinction he intends to draw, without giving it an unnecessary platonist twist. What matters to him is just to highlight the fact that revisable logic laws are laws of thought (or propositions), whereas whatever reality turns out to be (whether it is just something ontologically independent from our statements and thoughts or something metaphysically more robust) has a permanence and stability that our thoughts and propositions lack. There is no need to assume any particular conception of reality (this issue can be left entirely open) in order to make this distinction. Understood in these terms, the scope of logic is still extremely broad, covering both thought and reality, while one can still acknowledge the presence of significant differences between them.

4.6 The Nature of Negation: Incompatibility

Given that the revisions in logical laws that Vasiliev considers all depend on negation (the laws of non-contradiction and excluded middle provide clear instances), it is not surprising that Vasiliev paid special attention to the nature of this connective. On his view, classical (Aristotelian) negation is based on the (primitive) notion of incompatibility (and Vasiliev focuses, in particular, on predicate negation):

*The law of contradiction expresses the incompatibility between an assertion and [its] negation. A cannot be non-A. No object contains a contradiction, [i.e.] allows us to at once make an affirmative and a negative proposition (about it).*

But if we ask ourselves what in fact negation is, we can define it only in one way: negation is *that which is incompatible with affirmation*. We call ‘red’ the negation of ‘blue’ and say that a red object is not a blue one, because red is incompatible with blue. Where there is no incompatibility, we are not allowed to speak about negation. (Vasiliev 1912/2003, p. 132; emphasis in the original.)
Interestingly, in the examples Vasiliev discusses above, incompatibility is understood as a *relation* among actual objects. It is in virtue of the incompatibility between certain states of affairs that there is no contradiction among the objects in question.

But why is it the case that there is no contradiction among actual objects? In order to state the claim at issue (namely, that there is no contradiction in the actual world) one needs negation. And since negation is based on incompatibility, it rules out the possibility of inconsistent actual objects. But this seems to beg the question against those who claim that there are contradictions in the actual world (true contradictions), such as dialetheists (Priest 2006a, b). On their view, certain incompatible states of affairs do obtain. Moreover, it may be argued, incompatibility *presupposes* negation. A is incompatible with B as long as A and B does not (or cannot) obtain. Thus, the primitive Vasiliev assumes ends up being questionable: it is just too close to what it is supposed to define.

Of course, every theory has its own primitives, and in principle one could adopt a primitive notion of incompatibility to express negation. But one needs to be careful in order not to assume without argument answers to precisely those issues that are under debate. It is clearly problematic simply to take sides, without independent support for the position adopted, on contested issues that are approached differently by those who defend conflicting ways of characterizing the relevant domain.

Vasiliev has a clear understanding of the negation he intends to formulate, and correctly notes that negation is not just difference. It is something understandably stronger. As he stresses:

*Thus, in the case of a simple difference we cannot speak about negation.* When we think about something that is not blue, we think about something red, white, orange, etc., which is all that which is incompatible with blue, but we do not think about something dry, and dry can in no way be called the negation of blue. (Vasiliev 1912/2003, p. 132; emphasis in the original.)

This is an intriguing passage. After all, Vasiliev seems to restrict the negation of a predicate only to those items in the same category, so that negation only applies to the same kind of predicates (color predicates, in the case he explicitly considers), and fails to apply—as a negation of predicates of *that* kind—to predicates of a different kind (such as predicates regarding the level of humidity, in the example above). This provides a semantic restriction on negation that is typically not found in contemporary model-theoretic analyses of negation, in which the negation of a predicate is understood in terms of the anti-extension of the relevant predicate, independently of its kind.

Vasiliev also argues that what grounds negation cannot be the absence of a property, given that, on his view, there is no perceptual access to an absence. (I should note that, in this context, he explicitly speaks of predicates rather than properties. But I take it that he meant the latter not the former since, presumably, it is not the absence of a linguistic item that grounds negation, but some feature of the world.) On his view,
we cannot speak about negation in the case of the simple absence of a predicate [property]. What does it mean that a given object $A$ does not have the predicate [property] $B$? I cannot convince myself of this in a direct way, since we have no sense of absence, i.e. [we have] no means to convince ourselves directly, via perception, of the absence of a predicate [property]. I can only be convinced in a mediate way, by comparing my perception, or conception, of the object $A$ with the predicate [property] $B$. (Vasiliev 1912/2003, p. 132; emphasis in the original.)

Moreover, Vasiliev notes, perceptual absence of a given property is, in general, not sufficient for negation:

*But the simple absence of the predicate [property] $B$ in my perception or conception of the object $A$ cannot serve as a logical ground for a negative proposition. Suppose I have never noticed in a person any sign of moral nobleness. This would (by itself) not constitute a logical reason to call him ignoble. I can call him/her ignoble with sufficient reason only then if I know that some of his/her acts are incompatible with moral nobleness.* (Vasiliev 1912/2003, p. 132; emphasis in the original.)

Although the point does go through when we are considering moral nobility, it does not generalize. Suppose you enter a room. The whole room is visible to you. Suppose no one is there. You can see that Pierre is not there: no one resembling Pierre (or anyone else for that matter) is visible in the room. Thus, you perceive an absence, and this seems sufficient for you to assent to the negative proposition that Pierre is not there (see Sartre 1943/156, Chapter 1, section 2, and Priest 2006a p. 62).

Finally, according to Vasiliev, negative propositions about perceptions of our world, which are not an expression of the incompatibility between predicates, are inferred, not given directly. As he insists:

*All negative propositions about objects and perceptions of our world are obtained as inferences derived from propositions about the incompatibility of two properties. I cannot see in a direct way that a given object is not white. We have no negative perceptions, as e.g. the perception of [being] “not white.” I can have only definite positive perceptions of e.g. red, blue, black, etc . . . . When I assert that a certain object is not white, I have undoubtedly made an inference. I saw that a certain object was red, and I have inferred—knowing that red cannot be white—that the object was not white. Here we are dealing with an inference, namely with a syllogism of the first figure: what is red cannot be white (major premiss). This object is red (minor premiss). Therefore, this object is not white (conclusion).* (Vasiliev 1912/2003, p. 133.)

On this view, the negation of ‘$S$ is $P$’ is, thus, inferred: it presupposes a logic! But if negative propositions are only inferred, we run the risk of facing an infinite regress. ‘Red cannot be white’ is a premise in the argument to the effect that this red object is not white. How is such a premise established? Presumably we will need a negation to support it. But if negative propositions can only be inferred, we will need an additional negative premise to support the initial premise, and we are off to a regress.

In response, it may be argued that it is the incompatibility between red and white that supports the premise that ‘red cannot be white’. As Vasiliev argues:

A negative proposition such as “$S$ is not $P$” has two aspects. The first is a formal one: a negative proposition states the falsehood of the affirmative one, of “$S$ is $P$.” The second is a material one: a negative proposition is based upon the incompatibility of predicates;
it is either a proposition of incompatibility or a consequence of such a proposition. One
should accurately distinguish between these two aspects. The formal aspect manifests [the
fact] that the truth of a negative proposition implies the recognition of the falsehood of the
affirmative one, but it leaves open the question on what grounds we can ascertain the truth
of negative propositions. The material aspect gives an answer to this question. Therefore,
the formal aspect manifests the properties of negation; the material aspect manifests the
grounds for negation. While preserving the formal aspect, we can change the material one
and then obtain a different kind of negation. (Vasiliev 1912/2003, p. 135.)

However, in this case, we would have a negative perceptual proposition, ‘red cannot
be white’, that is not inferred. After all, ‘red is not white’ is defined by ‘red and
white are incompatible’. Thus, despite being a negative proposition, no inference
is ultimately involved in this case. But this conflicts with Vasiliev’s doctrine that
negative proposition are inferred. As Vasiliev emphasizes:

Only our affirmative propositions about objects and facts are immediate, that is, based on
perception and sensation; the negative ones are always inferred. (Vasiliev 1912/2003, p.
135.)

These considerations should make clear that, although Vasiliev’s account of
negation provides a number of suggestive ideas, it also faces some difficulties, and
additional developments are needed to make it work in the end.

4.7 Logical Commitment: Non-dialetheism

Vasiliev is not a dialetheist. According to the dialetheist, there are true contradic-
tions, statements of the form ‘A & not-A’ that are true (Priest 2006a, b). However,
for Vasiliev, no contradictions are true, since the actual world is consistent, and
inconsistencies are only found in imaginary worlds that do not exist. According to
him:

the law of contradiction applies to the world of objects, and implies that contradictions
cannot be realized in them, i.e. that in no object can contradictory predicates be realized,
[that] there cannot exist at the same time grounds for [both] affirmative and negative
propositions [about them]. (Vasiliev 1912/2003, p. 137.)

Incidentally, Graham Priest concurs with the assessment of Vasiliev’s non-
dialetheism. On his view:

Perhaps the best way to see Vasiliev’s philosophical originality is as anticipating modern
logical pluralists [in a footnote, Priest remarks: “Like da Costa (1997)”], who argue that
different kinds of objects require different logics, depending, perhaps, on empirical features
of the objects in question. (Priest 2000, p. 144.)

The connection with Newton da Costa 1997’s logical pluralism is quite apt. As noted
in the beginning of this paper, Vasiliev does embrace a form of logical pluralism that
is sensitive to the domain of objects to which logic is applied.

Furthermore, to the best of my knowledge, Vasiliev did not consider what is,
arguably, the strongest argument for dialetheism: the Liar paradox. It is possible
that, had he considered the Liar, he may have developed a different attitude toward dialetheism. However, given that, as we saw, Vasiliev just assumed that the actual world is consistent (unfortunately, thus begging the question against dialetheism), it seems safe to say that he was not a dialetheist.

It is worth noting that Vasiliev’s non-dialetheism coheres very well with the remaining features of his approach to the foundations of logic. Given his distinction between unchangeable logical principles and revisable laws of thought, it was natural for him to place the law of non-contradiction among the latter rather than the former, given its revisability. However, this means that, by allowing this law to change, Vasiliev also made it not about the world, but, as we saw, about thought.

Of course, the dialetheist will insist that there are true contradictions about thought as well (for a number of examples, see Priest (2002)), and perhaps even the Liar is among them (as long as thought is understood in terms of content rather than as a psychological process). Vasiliev, nevertheless, seems to be drawing a line between reality (the proper scope of logical principles) and what is made up by us (the scope of laws of thought, including imagination, which, of course, need not be constrained by reality). Given that, for the dialetheist, true contradictions are concerned with reality rather than what is fictional or imaginary, also in this respect Vasiliev is not a dialetheist: the contradictions he allows for are not true, they do not describe reality, but are only an expression of thought.2

If possible (or impossible) worlds and mere possibilities similarly lack any ontological import (they are not taken to exist), then any contradictions they may harbor also do not lead to dialetheism. After all, none of these contradictions are true, given that none of the entities in question exist. Also for this reason, Vasiliev does not seem to endorse dialetheism.

4.8 Conclusion

Several of Vasiliev’s views about the foundations of logic are significant and, in outline, quite right. This includes logical pluralism, logical revisability, logical non-a priorism, and logical contingency. Needless to say, each of these views is quite controversial, but each also seems to be perfectly defensible (see, for instance, da Costa and Bueno (2001), Bueno and Colyvan (2004), and Bueno and Shalkowski (2009, 2013).

2It is not surprising that Vasiliev’s idea of imaginary logic(s) could, in principle, be used as logics of fictional discourse, in which inconsistencies are sometimes found. In this context, it would be worth comparing Vasiliev’s and Alexius Meinong’s approaches, and the similar attitudes they seem to adopt toward fictional entities. In both cases, a domain of objects is introduced, and inconsistencies are allowed for fictional (imaginary) objects. In both cases, the actual world is consistent, and fictional objects do not exist. Several logics of fiction are possible based on Vasiliev’s and Meinong’s writings, with their own philosophical motivations (for some discussion, see Arruda (1977) and Jacquette (2015)). But this is a task for another occasion.
However, some of his doctrines about negation turn out to be problematic. In particular, the claims that negation is not grounded on absence, and that it is inferred. Other features of Vasiliev’s views were not fully developed, such as the use of imaginary logic as the basis for fictional discourse. All of this shows that there is much of interest and relevance in Vasiliev’s thought, and much to be developed further. It pays off to study his work carefully.

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