

ORIGINAL ARTICLE

Is truth inconsistent?

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Abstract

A popular and enduring approach to the liar paradox takes the concept of truth to be inconsistent. Very roughly, truth is an inconsistent concept if the central principles of this concept (taken together) entail a contradiction, where one of these central principles is Tarski's T-schema for truth: a sentence S is true if and only if p , (where S says that p). This article targets a version of Inconsistentism which: retains classical logic and bivalence; takes the truth-predicate "is true" to pick out a property (and determine a non-empty extension relative to a given world); and holds that liar sentences exhibit a certain kind of indeterminacy in truth-value. Call such a view *Modest Inconsistentism* since it is somewhat more conservative in its outlook than various other forms of Inconsistentism. Such a modest view has its attractions: we retain the thesis that the liar sentence is meaningful; we get to respect the claims that there are truths and that there is a property of truth; we get to keep classical logic and bivalence; and, prima facie, no strengthened liar paradox is in the offing. The main aim in this paper is to show that Modest Inconsistentism, despite its initial attractions, is in deep trouble—because it does, after all, give rise to a strengthened liar paradox. We shall also

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see that there are related kinds of theory which are also subject to the same worry.

KEYWORDS

liar paradox, inconsistency theories of the liar, strengthened liar paradox, indeterminacy, higher-order indeterminacy, revenge problems

1 | INTRODUCTION

A popular and enduring approach to the liar paradox takes truth to be inconsistent. Better put, this kind of approach takes the *concept* of truth to be inconsistent. Call such a view *Inconsistentism*. Very roughly, the concept of truth is inconsistent if the central conceptual principles of this concept (when taken together) entail a contradiction, where one of these central principles is Tarski's T-schema for truth: a sentence S is true if and only if p, (where S says that p).¹ As conceived, Inconsistentism is a rather heterogeneous view, one not subject to a unified line of criticism.²

This article targets a prominent version of Inconsistentism which: retains classical logic and bivalence; takes the truth-predicate "is true" to pick out a property (and determine a non-empty extension relative to some world); and holds that liar sentences (and liar paradoxes) exhibit a certain kind of indeterminacy. To account for this last feature, a predicate "is determinately true" is introduced. This permits the following claim to be made: there is a false/invalid conceptual principle/rule for truth at large in the liar paradox, but it is indeterminate which principle (or rule) is to blame.³ Call this *Modest Inconsistentism* since it is more conservative than other forms of Inconsistentism.⁴ Such a view is attractive: the liar sentence is meaningful; there are truths and there is a property of truth; we keep classical logic and bivalence; and, prima facie, no strengthened

¹ If the concept of truth is inconsistent then one (or more) of the conceptual/constitutive principles of this concept is/are false (given classical logic). You might worry that inconsistent concepts don't make much sense because how could an inconsistent concept F determine a non-empty extension of the Fs? One way out of this predicament is to hold that inconsistent concepts can determine such an extension if they are sufficiently similar to a consistent concept. See Eklund 2002a for this general kind of answer. Furthermore, this kind of answer also addresses a potential self-undermining worry to the effect that if the concept of truth is inconsistent then it can't be used to theorise about itself (as we shall do in what follows). See Burgess (2013), Eklund (2014) for relevant discussion. See Scharp (2013b) for a different sort of answer.

² Candidate exemplars of Inconsistentism include Tarski (1944), Chihara (1979, 1983), Priest (1987, 2006), Eklund (2002a), Horwich (2005), Scharp (2007, 2013a, 2013b), Patterson (2009), Liggins (2019).

³ The *locus classicus* for bivalent theories of indeterminacy is McGee and McLoughlin (1995). See Greenough (2008) for a discussion of indeterminate truth.

⁴ The leading *candidate* exemplar of Modest Inconsistentism is the view of Eklund (2002a). (In §12 we will get to assess whether his view really is a genuine version of Modest Inconsistentism.) Eklund thinks that "is true" determines a non-empty set of truths even though he thinks that the concept of truth is inconsistent. Scharp (2007, 2013), claims that truth is an inconsistent concept. However, he does not claim that "is true" picks out a property (or determines a non-empty extension at some world/time); see Scharp (2021). Scharp is thus not one of my targets. Neither is Priest (1987, 2006) who counts as defending Inconsistentism, but not Modest Inconsistentism, since he rejects classical logic. Patterson (2009) defends a version of Inconsistentism, but not Modest Inconsistentism, since he defends the radical view that natural language is meaningless. The "radical restrictionism" of Liggins (2019) can also be seen as a form of Inconsistentism, but not Modest Inconsistentism. One close cousin of Modest Inconsistentism is the theory of the liar paradox developed by McGee (1990). This theory is not targeted here for reasons given later (see fn.15).

liar paradox is forthcoming. The main aim in this paper is to show that Modest Inconsistentism, despite its attractions, is in deep trouble—because it does, after all, give rise to a strengthened liar paradox, a paradox which (in part) exploits the notion of determinate truth. Furthermore, there is a related kind of theory which is also the target of the strengthened paradox to be developed. We shall return to consider this additional target at the end of §11. In the meanwhile, our focus will be on Modest Inconsistentism.⁵

You might think that it is to be entirely expected that the concept of *determinate* truth gives rise to a strengthened liar paradox such that Modest Inconsistentism should be able to take this paradox in its stride. After all, just as Modest Inconsistentism entails that the concept of truth is an inconsistent concept, if the concept of *determinate* truth gives rise to a paradox then this just shows that this concept is also inconsistent: at least one of the conceptual principles for determinate is false/invalid (given classical logic). So, this initial challenge goes, the main upshot of this paper is no surprise. However, this challenge misconceives the predicament that Modest Inconsistentism faces. The problem is not simply that the notion of determinate truth also gives rise to a further kind of liar paradox. *This* paradox is not, on its own, enough to generate trouble.⁶ Rather, a *different* troublesome strengthened paradox emerges after two further claims of Modest Inconsistentism are acknowledged.⁷ The first of these is: not only is it indeterminate just which of the two conceptual principles for truth are false/invalid (in the basic liar paradox), it is also, by parity of reasoning, indeterminate just which of the two conceptual principles for determinate truth are false/invalid in the version of the paradox which invokes determinate truth.⁸ The second further claim is: the basic claims of the proposed theory are all knowable and hence determinately true.

There is a further twist. As it turns out, Modest Inconsistentism is able to block the (new) strengthened paradox on offer by appealing to a species of higher-order indeterminacy. This only provides a temporary respite, however. A second version of this strengthened paradox invokes instead the notion of *absolute* determinate truth. Appealing to higher-order indeterminacy is, as we shall see, not a viable option with respect to this second version of the strengthened paradox.

⁵ The leading *candidate* exemplar for this additional target is kind of theory given by Horwich (1990, 1998, 2005). (In §12 we will get to assess whether this kind of theory really is subject to the strengthened paradox to be developed.) Horwich retains bivalence and classical logic but recommends suitably restricting Tarski's T-schema for truth. While Horwich thinks that the naïve, *ordinary theory* of truth (which includes the unrestricted version of the schema) is inconsistent, he does not take the *concept* of truth (which he takes to be fixed by the restricted version) to be inconsistent. Matters are a little complicated here because Eklund and Horwich disagree over what counts as the *concept* of truth. Eklund effectively claims we should identify the naïve, *ordinary theory* of truth with the *concept* of truth but distinguish these from the *meaning* of "is true". Horwich effectively claims we should identify the *concept* of truth with the *meaning* of "is true" but separate these from the *ordinary theory* of truth. For the purposes of this paper, I shall be neutral on this issue. For this reason, in what follows Horwich is not deemed to be defending an inconsistency theory of the concept of truth.

⁶ So, the problem is not that the Moderate Inconsistentist is just giving us more of the same—that the concept of determinate truth is also inconsistent. Rather, it's that once they commit to an inconsistent response to the liar paradox which involves determinate truth, they wind up making commitments which then generate a further strengthened paradox.

⁷ There is no such thing as *the* strengthened liar paradox (as some discussions tend to suggest). Each proposed solution to some liar-like paradox typically generates one or more solution-relative strengthened paradoxes (which then have to be addressed without generating some further toxic form of paradox).

⁸ It's for this reason that Modest Inconsistentism is not only an inconsistency theory of (the concept of) truth, but an inconsistency theory of (the concept of) determinate truth. Hence, Inconsistentism offers solutions to both the basic liar paradox and a version of the paradox which invokes determinate truth.

2 | THE BASIC LIAR PARADOX

Consider, then, a name “L” which names the following sentence:

L is not true.

Given this naming, we have the liar identity:

L = “L is not true”.

The shortest version of the basic liar paradox is as follows:

- | | | |
|-----|-------------------------------------------------------|---------------------------|
| (1) | “L is not true” is true if and only if L is not true. | T-schema for L. |
| (2) | L is true if and only if L is not true. | 1, substitution. |
| (3) | L is true and L is not true. | 2, given classical logic. |

All forms of Modest Inconsistentism reject 1, and then proceed to explain why we mistakenly thought 1 was true.⁹

This latter aspect of these responses need not concern us. Instead, we need to scrutinise an overlooked but important feature of Modest Inconsistentism: nothing has been said about which direction of the T-schema is to be rejected.

3 | THE OVERKILL CHALLENGE

You only need to reject one direction of the T-schema in order to block the paradox. To reject both directions is overkill. A maxim of minimal mutilation tells us that we should save what can be saved of classical semantics. That demands that sponsors of Modest Inconsistentism should reject one, and only one, direction of the T-schema. So, which direction should be rejected?¹⁰ We can put this challenge another way by considering a longer form of the paradox:

- | | | |
|-----|-------------------------|-----------------------------------------|
| (4) | L is true | Assume for reductio |
| (5) | “L is not true” is true | 4, substitution given the liar identity |
| (6) | L is not true | 5, Truth-Elimination |
| (7) | L is not true | 4, 6, reductio |
| (8) | “L is not true” is true | 7, Truth-Introduction |
| (9) | L is true | 8, substitution given the liar identity |

(Here, lines 7 and 9 rest on no assumptions at all.) Where a sentence S says that p, the T-rules are given as:

⁹ Eklund takes the conceptual principles of a concept F to be those principles concerning F which a competent user of the concept is (initially) disposed to accept in virtue of their competence. Hence, competence with the concept exerts what he calls “pull”, thus yielding a neat explanation as to why the principles used in a paradox involving concept F were initially taken to be so compelling. What about Horwich? He claims that the (consistent) concept of truth is fixed by our dispositions to assent to all the *non-paradoxical* instances of the various central principles concerning truth (such as Tarski’s T-schema). We are seduced into the paradox because we over-generalise and mistakenly apply these principles to liar sentences too. Horwich (1998, p. 43). See also his (2010).

¹⁰ This question is also highly germane to other theories of the liar paradox (such as that given by Scharp 2013a) who abandons the T-schema without telling us which direction is the faulty direction.

Truth-Elimination:

S is true

P

Truth-Introduction:

P

S is true

Now the Overkill Challenge becomes: where exactly does the above proof go wrong? In particular, since classical logic is not to blame, on the view in hand, is it the Truth-Elimination rule at line 6 which fails, or is it the Truth-Introduction rule at line 8?

We can glean Eklund's answer to this challenge via his remark that "it is likely that it is indeterminate just where the liar reasoning goes wrong. But still, somewhere there is an untrue assumption or invalid step." (2002b, p. 323). In other words, Eklund thinks that it is indeterminate which T-rule is invalid, and, likewise, it is indeterminate which direction of the T-schema fails.¹¹ What is the status of L given these claims?

4 | WHAT IS THE STATUS OF L?

Well, on the view in hand, the following conditional is determinately true: If T-Introduction is valid then L is true. By contraposition, the following conditional is determinately true: If L is not true then T-Introduction is invalid. By closure of determinate truth: If L is determinately not true then T-introduction is determinately invalid. However, since it is not the case that T-Introduction is determinately invalid (given the stance of the theory) then L is not determinately not true. On the view in hand, the following conditional is also determinately true: If T-Elimination is valid then L is not true. So, by contraposition, the following conditional is determinately true: If L is true then T-Elimination is invalid. By closure of determinate truth: If L is determinately true then T-Elimination is determinately invalid. However, since it is not the case that T-Elimination is determinately invalid (given the key stance of the theory) then L is not determinately true. Putting these two results together shows that L is neither determinately true nor determinately not true (false). Perhaps proponents of this kind of view would be happy to just make this claim from the outset. The little proofs just given show they must say this in virtue of: there being only one place where the proof fails, there being only two candidate steps under suspicion of guilt (step 5 to 6, or step 7 to 8), and it being indeterminate which of these steps is invalid.

On the standard account of indeterminacy, indeterminacy precludes knowledge. For example, if a truth-bearer is indeterminate in truth-value, then it has an absolutely unknowable truth-value.¹² Accordingly, given Modest Inconsistentism, we can't know which T-rule fails, which direction of (1) fails, and which truth-value the liar sentence has.¹³

¹¹ Eklund's remarks seem to suggest that the rules of substitution and *reductio ad absurdum* are also under suspicion of guilt. That is puzzling since Eklund's overall idea seems to be that it is the concept of truth, and not classical logic, which is to blame for the paradox. See §12 for more on this.

¹² It will be assumed throughout that Modest Inconsistentism is committed to this standard account.

¹³ Is there a version of Modest Inconsistentism which does not invoke indeterminacy (to explain why we can't know where the paradox goes wrong and can't know the truth-value of the basic liar sentence)? Yes. A view of this kind would simply invoke the idea that such (irremediable) ignorance arises because of our limited powers of (conceptual) discrimination. On this view, the liar sentence has a determinate semantic value, and a determinate truth-value, but we can't know what that truth-value is. This epistemicist version of Inconsistentism does not, however, escape the general *shape* of the strengthened paradox to be developed. That's because "determinately" can be read as "knowably" in the paradox for determinate truth developed below.

5 | THE LIAR PARADOX INVOLVING DETERMINATE TRUTH

However, the claim that liar-sentences, and their ilk, are neither determinately true nor determinately false (but nonetheless either true or false) is contentious.¹⁴ Once Modest Inconsistentism introduces the notion of determinate truth we can construct a version of the liar paradox which involves this notion. Suppose “DL” names the sentence:

DL is not determinately true.

Given this naming, we have the D-liar identity:

DL = “DL is not determinately true”.

We can now run the following paradox:

(10)	“DL is not determinately true” is determinately true	Assume for reductio
(11)	DL is not determinately true	10, D-Elimination
(12)	DL is determinately true	10 substitution, D-liar identity
(13)	“DL is not determinately true” is not determinately true	11, 12, reductio
(14)	DL is not determinately true	13, substitution, D-liar identity
(15)	“DL is not determinately true” is determinately true	14, given D-Necessitation
(16)	Contradiction on 13, 15. ¹⁵	

(Here 16 rests on no assumptions.) Where a sentence S says that p, the two D-rules are:

D-Elimination:

S is determinately true
p

D-Necessitation:

$\vdash p$
 \vdash S is determinately true

¹⁴ Schiffer says (1996, p.330) of a paradox involving an inconsistent concept that even omniscient beings cannot know which element of an inconsistent (“glitchy”) concept is false. Furthermore, he takes indeterminacy to be the cause of this absolute ignorance. (See §12 where Schiffer’s view makes a brief appearance.) Horwich (1990, 1998, p.42) is a little unclear whether the notion of definite/determinate truth he introduces (to make sense of vagueness) is a fully non-epistemic notion in line with Eklund and Schiffer. It’s also uncertain whether he thinks liar sentences are neither determinately true nor determinately false. Horwich (2005) is more obviously subject to the worries to be developed since his introduction of grounded vs ungrounded truth can be taken to parallel the distinction between determinate truth and indeterminate truth.

¹⁵ I have adapted this proof from McGee (1990, p.221). McGee blocks this proof by rejecting the rule of D-Elimination. Since McGee thinks that there is a *determinately* invalid step then he isn’t subject to the objection to be developed. Does that mean that McGee’s theory is the best indeterminacy theory of the liar (which retains classical logic)? There is not space to pursue this issue fully, but two points are in order. Firstly, McGee needs to say more about why it is that the rule of D-Elimination fails (this worry was first raised by Priest (1992)). Secondly, it is a central feature of McGee’s response to the basic liar paradox that Truth-Introduction and Truth-Elimination are not valid under indirect proof (such as reductio). But this kind of response just runs into the Overkill Challenge: you only need to reject one of these rules (under indirect proof) to block the relevant form of the liar. So, which is it? McGee’s official line seems to be: both. But that is overkill. An indeterminacy solution to the liar (which retains classical logic) ought to reject just one of these rules. But which one? If no answer is available (in principle), then the best explanation for there being no answer, on such a theory, is: indeterminacy. That would bring a McGee style theory more into line with Modest Inconsistentism—at least with respect to the basic liar. But now a further worry emerges: how come the basic version of the liar (involving sentence L) is treated by taking it to be indeterminate which T-rule fails, but the version of the liar paradox using DL does not involve refusing to say which D-rule fails (because McGee takes D-Elimination to be determinately invalid)? In other words, what justifies a non-uniform treatment of the semantic paradoxes? If McGee’s theory is, given this constraint of uniformity, nudged in the direction of treating both kinds of semantic paradox via taking it to be indeterminate which T-rule, and which D-rule, fails then this theory becomes subject to the main problem to be developed below.

The rule of D-Necessitation captures the idea that whatever is rigorously provable on no assumptions is determinately true.

6 | THE OVERKILL CHALLENGE AGAIN

Modest Inconsistentism must address this version of the paradox by blaming one of the D-rules. That's because classical logic and bivalence are in good standing on this view, and the sentence "DL is not determinately true" is meaningful. So, the blame lies with the concept of determinate truth. Such a concept must be inconsistent if all forms of the liar paradox are to receive a uniform treatment: if the basic liar paradox shows that the concept of truth is inconsistent, then the version of the liar paradox involving determinate truth must, accordingly, show that the concept of determinate truth is inconsistent too. One of the conceptual principles for determinate truth is false, given classical logic. Now the Overkill Challenge re-emerges: it's overkill to reject both D-rules, so, which application of the D-rules fails?

Modest Inconsistentism yields the answer: we don't know. What explains the ignorance as to which T-rule fails in the basic liar case is that it is indeterminate which T-rule fails, and thus indeterminate whether the basic liar sentence is true. By parity of reasoning, Modest Inconsistentism must now say: it is indeterminate which D-rule fails in the above derivation. What does that show us about the status of DL?

7 | WHAT IS THE STATUS OF DL?

It is determinately true that: If the rule of D-elimination is valid then "DL is not determinately true" is not determinately true. By contraposition, it is determinately true that: If "DL is not determinately true" is determinately true then the rule of D-Elimination is invalid. By a version of closure for determinate truth, if "DL is not determinately true" is determinately determinately true then D-Elimination is determinately invalid. Since the consequent is false, according to the theory, then we have established that "DL is not determinately true" is not determinately determinately true. By substitution, DL is not determinately determinately true.

Given a reduction principle for determinate truth (as applied to DL), namely:

(DD): DL is determinately true only if DL is determinately determinately true,

we get:

(17) DL is not determinately true.

Given substitution, 17 yields:

(18) "DL is not determinately true" is not determinately true.

Again, perhaps some sponsors of Modest Inconsistentism would be happy to claim both 17 and 18 from the outset. The little proof just given shows that they must make these claims (at least if DD is valid).

8 | THE STRENGTHENED LIAR PARADOX: VERSION ONE

Thus far, we have not done enough to isolate a genuinely troublesome strengthened liar paradox. That's because sponsors of Modest Inconsistentism can/should respond to the paradox involving DL by rejecting one (and only one) of the D-rules. Thus they have a response to the liar paradox which invokes determinate truth. A genuine strengthened liar paradox only emerges when we realise that sponsors of Modest Inconsistentism must also commit to their theory being determinately true. Why is that? Well, it's a kind of Moorean paradox to assert: My theory is true but it's not determinately true. Again, why is that? Since knowledge of the theory requires that the theory be determinately true then this Moorean assertion entails: My theory is true but I don't know that it is true. That's an unacceptable assertion (though theorists may differ as to just why this is so). So, those who accept Modest Inconsistentism must also commit to the theory being determinately true, and thereby commit to all the individual claims of the theory being determinately true.

If you find this reasoning a bit suspicious, think of the issue in another way: it's just part and parcel of the theory of indeterminacy in hand that bivalence is determinately true, that the law of excluded middle is determinately true, that *reductio ad absurdum* is determinately valid, that the rule of substitution is determinately valid, and even, that it's determinately true the liar sentence succeeds in expressing a proposition.¹⁶ The sponsor of this theory is already happy to include these *determinate* claims within their basic theory, so they should also include other claims such as: it's determinately true that the ordinary concept of truth is inconsistent. After all, they can easily derive this latter claim from the former set of determinate claims.

Given this, since one of the claims of the theory is 17, the proponents of this theory are thus committed to:

- (19) "DL is not determinately true" is determinately true.

(To stress: the claim 19 is not here being derived using D-Necessitation on 17. Rather, 19 is just part of the (broader) theory of Modest Inconsistentism because the claims of the theory are being proposed as known/knowable. If they are known/knowable then they are determinately true.) However, 18 and 19 contradict each other. We have thus found a genuinely troublesome strengthened liar paradox for Modest Inconsistentism. This strengthened paradox has three components: the liar paradox involving DL; a response to that paradox which has the upshot that DL is not determinately true; and the further commitment that all the claims of the proposed theory are determinately true.

9 | HIGHER-ORDER INDETERMINACY TO THE RESCUE?

Is there any wriggle room? To get to 17, the reduction principle DD was used: DL is determinately true only if DL is determinately determinately true. One response is to maintain that the modal logic for determinate truth should invalidate this principle on the grounds that the sentence DL admits of second-order indeterminacy which does not reduce to first-order indeterminacy. Here the idea is that DL is not determinately determinately true *and* not determinately not

¹⁶ While all instances of bivalence are determinately true this does not, of course, entail: L is determinately true or L is determinately not true. (Cf. "knowably true" where bivalence is knowably true even though its disjuncts may not be.)

determinately true. The upshot is that we have a new theory of the liar paradox in the offing.¹⁷ Once DD fails we cannot derive the problematic claims 17 (and thus 18) from the claim that DL is not determinately determinately true. Likewise we cannot derive the claim that DL is determinately true from the claim that DL is not determinately not determinately true.¹⁸ That would require the validity of the following reduction law: DL is not determinately true only if DL is determinately not determinately true. However this kind of reduction law is invalid given the possibility of higher-order indeterminacy.¹⁹ The result is that the strengthened liar paradox being proposed does not get off the ground.

10 | THE STRENGTHENED LIAR PARADOX: VERSION TWO

Let it simply be granted that we have yet to isolate a genuinely troublesome strengthened liar paradox for Modest Inconsistentism. Nonetheless there remains a higher-order version of a strengthened liar sentence which, together with some further features of Modest Inconsistentism, proves to be genuinely troublesome.

To see why, let's first define a notion of **determinate** truth in terms of determinate truth as follows:

S is **determinately** true =_{df} S is true & S is determinately true & S is determinately determinately true & S is determinately determinately determinately true & ...

Think of **determinate** truth as being *absolute* determinate truth. Now suppose “**DL**” names the sentence:

DL is not **determinately** true.

(Think of **DL** as saying of itself that it is not absolutely determinately true.) Given this naming, we have the **D**-liar identity:

DL = “**DL** is not **determinately** true”.

We can now run a version of the liar paradox which mirrors the proof given above for DL using versions of the Elimination and Necessitation rules for **determinate** truth:

D-Elimination:

S is **determinately** true

P

D-Necessitation:

\vdash P

\vdash S is **determinately** true.

¹⁷ It is common (though not universal) to claim that the phenomenon of vagueness automatically gives rise to higher-order vagueness (in the form of borderline cases to borderline cases). (See e.g. Fine 1975, Keefe 2000, Williamson 1999, Greenough 2003). However, it is not at all common to claim that a proper treatment of the semantic paradoxes requires positing higher-order indeterminacy (in the form of a weak modal logic, such as KT or KTB, for the modal operator “It is determinately true that” (and for the associated predicate functor “determinately”).

¹⁸ If it was part of the proposed theory that DL is determinately true then that would be problematic. That's because the theorist takes every claim of the theory to be known and hence determinately true. That would then yield the result that DL is *determinately* determinately true which then conflicts with DL exhibiting second-order indeterminacy.

¹⁹ In effect, the required logic doesn't validate either of the S4 and S5 schemas for determinate truth.

(Where again, S says that p.) The new proof then goes:

- | | | |
|------|------------------------------------------------------------------------|-------------------------------------------|
| (20) | “DL is not determinately true” is determinately true | Assume for reductio |
| (21) | DL is not determinately true | 10, D -Elimination |
| (22) | DL is determinately true | 10 substitution, D -liar identity |
| (23) | “DL is not determinately true” is not determinately true | 11, 12, reductio |
| (24) | DL is not determinately true | 13, substitution, D -liar identity |
| (25) | “DL is not determinately true” is determinately true | 14, given D -Necessitation |
| (26) | Contradiction on 23, 25. | |

(Here 26 rests on no assumptions.)

Now the Overkill Challenge re-emerges again: you only need to reject one of the **D**-rules in the proof, so which is it? Modest Inconsistentism yields the answer: we don't know. Again, what best explains this ignorance, according to this kind of theory, is that it is indeterminate which **D**-rule fails. What does that show us about the status of the sentence “**DL**”?

It is determinately true that: If the rule of **D**-elimination is valid then “**DL** is not **determinately** true” is not **determinately** true. By contraposition, it is determinately true that: If “**DL** is not **determinately** true” is **determinately** true then the rule of **D**-Elimination is invalid. By a version of closure for determinate truth, if “**DL** is not **determinately** true” is determinately **determinately** true then **D**-Elimination is determinately invalid. Since the consequent is false, according to the theory, then we have established that “**DL** is not **determinately** true” is not determinately **determinately** true. By substitution, **DL** is not determinately **determinately** true. Given a particular reduction principle for **determinate** truth (as applied to **DL**):

DD: DL is **determinately** true only if **DL** is determinately **determinately** true,

we can thus establish:

- (27) **DL** is not **determinately** true.

Given substitution, 27 yields:

- (28) “DL is not **determinately** true” is not **determinately** true.

Moreover, those who commit to this kind of Modest Inconsistentism must also commit to this theory being **determinately** true. How so? It's just part and parcel of the theory of indeterminacy in hand that bivalence is **determinately** true, that the law of excluded middle is **determinately** true, that reductio ad absurdum is **determinately** valid, that the rule of substitution is **determinately** valid, and even, that it's **determinately** true the liar sentence succeeds in expressing a proposition. The sponsor of this theory should already be happy to include these **determinate** claims within the basic theory, so they should also include other claims such as: it's **determinately** true that the concept of determinate truth is inconsistent. After all, they can easily derive this latter claim from the former set of **determinate** claims. If you are inclined to doubt this then recall that just as knowledge and knowability both require determinacy, knowledge and knowability should also require **determinacy**. That is, if the claims of the theory are knowable (as the theorist surely thinks they are) then these claims must be **determinately** true.

Think of the matter this way: when first encountering a strengthened liar paradox there are numerous suspects at large which may fall under suspicion of guilt.²⁰ These include the various elements of the strengthened liar proof, which in turn includes the various elements of one's own theory of liar sentences which contribute towards the generation of the new paradox. Solving a paradox involves eliminating suspects from the inquiry. The whole point of Modest Inconsistentism is to direct all suspicions of guilt entirely *away* from bivalence, classical logic, and so on, by directing all our suspicions *towards* the T-rules (or D-rules or **D**-rules). So, there is no scope for this theory to suspect that there is some indeterminacy (or **indeterminacy**) generated by the liar sentence in hand to be found lurking anywhere but in these rules. Consequently, the claims of Modest Inconsistentism should be taken to be **determinately** true. To think otherwise, is to offer some other (as yet unspecified) theory of the liar.

Given all this, since one of the claims of the theory is 27, the proponents of this theory are also committed to:

(29) "DL is not **determinately** true" is **determinately** true.

However, 28 and 29 contradict each other. As before, there are three components to this new version of the strengthened paradox: the liar paradox involving the sentence **DL**; the response to this paradox that it is indeterminate which **D**-rule fails in the proof; and, the commitment that all the claims of Modest Inconsistentism are known/knowable and hence not only determinately true, but **determinately** true.

11 | HIGHER-ORDER ABSOLUTE INDETERMINACY TO THE RESCUE?

This second version of the strengthened paradox is only bad news for Modest Inconsistentism if the reduction principle **DD** is valid for **determinate** truth, namely the principle: **DL** is **determinately** true only if **DL** is determinately **determinately** true. As it turns out this reduction principle is valid. To see why, suppose that

(30) **DL** is **determinately** true.

Given the definition for **determinate** truth given above, it follows that:

(31) **DL** is true and **DL** is determinately true and **DL** is determinately determinately true and **DL** is ...

And so it follows, by &-Elimination on the left conjunct that:

(32) **DL** is determinately true and **DL** is determinately determinately true and **DL** is ...

²⁰ Here, and throughout, I have exploited an attractive metaphor first given by Eklund (2002a) who speaks of finding the "culprit" in some paradox.

Since each conjunct is determinately true, it follows by a plausible infinitary principle of collection that:

- (33) It is determinately true that: **DL** is true and **DL** is determinately true and **DL** is ...

And given the definition of **determinate** truth, by substitution, it follows that:

- (34) It is determinately true that: **DL** is **determinately** true.

This straightforwardly entails:

- (35) **DL** is determinately **determinately** true.²¹

So, 30 entails 35. Thus, the relevant reduction principle **DD** is valid. The upshot is that any attempt to maintain that it is indeterminate which **D**-rule fails in the strengthened liar paradox for **determinate** truth issues in a contradiction—at least insofar as the main claims of that solution are **determinately** true (as the theorist must surely think they are given that they take these claims to be known/knowable).²²

This really is bad news for Modest Inconsistentism because it represents a new kind of strengthened paradox. Introducing indeterminacy to explain why we don't know where all the various forms of the liar paradox go wrong is thus an unworkable proposal because it fails to combat all relevant forms of the liar paradox. Maybe there is some further wriggle room to be found, but, in the meantime, if you wish to sponsor Inconsistentism with respect to the concept of truth then you should look beyond the modest version of the view scrutinised here.

Likewise, if you feel tempted by Horwich's theory of the liar paradox then the new strengthened paradox introduced above causes trouble for that kind of theory too.²³ This is because the arguments given above do not strictly depend on taking the *concept* of truth to be inconsistent (or on taking the concepts of determinate truth and **determinate** truth to be inconsistent). Rather, they simply depend on taking the naïve, *ordinary theory* of truth to be inconsistent (where this theory consists, at the very least, of Tarski's T-schema for truth). What's really at the heart of the trouble is thus not the *inconsistency* dimension to Eklund and Horwich's theories—since that just comes with the territory of taking classical logic and bivalence to be valid (and taking the liar sentence to

²¹ Here I am adapting a proof given by Williamson for why higher-order vagueness, specified in terms of a determinacy operator, ends up committed to a non-vague conception of **determinate** truth which validates **DD** (see Williamson 1994, pp. 160-61). Keefe (2000) proposes to rescue an indeterminacy theory of higher-order vagueness from this challenge by adopting a Tarski-style stratification of increasingly richer meta-languages to account for the ascending orders of higher-order vagueness/indeterminacy. The rough idea is that the notion of determinacy is unable to express its own vagueness/indeterminacy. Rather, we need to ascend to an essentially richer meta-language which contains a distinct determinacy operator (determinately*), which in turn requires an even richer meta-language if we are to properly express its vagueness/indeterminacy (and so on up the hierarchy of richer metalanguages). This kind of gambit is not open to Modest Inconsistentism since the whole point of that theory is to avoid a Tarski-style response to the semantic paradoxes.

²² The worry also emerges if it is claimed that it is **indeterminate** which **D**-rule is invalid. That's because the following reduction principle is also valid: if **DL** is **determinately** true then **DL** is **determinately determinately** true (cf. Williamson 1994, pp.160-61).

²³ Recall from fn.5 that Horwich (2005) was not deemed to be sponsoring Modest Inconsistentism as such because he does not take the *concept* of truth to be inconsistent. However, he does sponsor a bivalent, indeterminacy theory of the liar—making his theory (prima facie) subject to the strengthened paradox on offer. (See the next section for a twist however.)

express a proposition). What is at the heart of the trouble is a certain kind of indeterminacy theory of the (basic) liar sentence whereby (1) this sentence is taken to be neither determinately true nor determinately false *and* (2) it is indeterminate just where the (basic) liar proof goes wrong.²⁴ Modest Inconsistentism is just one version of this kind of view. Horwich's theory of the liar is another version. In other words, it is not only Modest Inconsistentism which is in trouble but similar indeterminacy views in the vicinity.²⁵

12 | THE CLASSICAL VIEW AND THE ANTI-CLASSICAL VIEW

There are two remaining worries to address. The first of these is: does anybody really sponsor Modest Inconsistentism? Here the worry is that although it was claimed above (in fn.4) that Eklund's theory of the liar paradox is a *candidate* exemplar of Modest Inconsistentism, his view, when properly articulated, doesn't turn out to be a *genuine* version of Modest Inconsistentism. The second worry to address is: is Horwich's theory of the liar really subject to the new strengthened paradox on offer? Although it was claimed (in fn.5) that Horwich's theory is also in trouble, there is some scope to think his theory evades the objection. The nub of both these worries, then, is that, for all that has been shown, some as yet undefended approaches to the liar are unworkable—the lingering suspicion being, of course, that it is no surprise that no-one has bothered to defend such problematic views.²⁶ Let's see what these concerns amount to by turning first to Horwich's theory.

Horwich (1990, 1998, 2005) is explicit that the liar sentence is not determinately true. Likewise, he is explicit that classical logic and bivalence are valid. However, he does not explicitly commit to the claim that it is indeterminate which T-rule fails in the basic liar paradox. Likewise, he does not explicitly commit to the claim that it is indeterminate which direction of the T-schema fails. Absent such explicit commitments, his view escapes the strengthened liar paradox developed above. Or so goes the worry.

In reply, however, it is also to be noted that Horwich is *not* explicit that both T-rules are (determinately) invalid; *nor* is he explicit that both directions of the T-schema are (determinately) invalid. He merely states that the T-schema is to be suitably restricted to combat the liar paradox. At best, then, we can merely interpret Horwich as being committed to: *either* the claim that one (and only one) T-rule fails but it is indeterminate which, *or* to a somewhat less modest view whereby both T-rules (and both directions of the T-schema) are (determinately) invalid. Call this disjunctive view *The Classical View* since classical logic and bivalence are retained either way.

It is now that the Overkill Challenge returns once more. Furthermore, we can tighten up this Challenge a bit further. The kind of overkill at play emerges because it is simply not necessary to reject both T-rules. Rejecting one is enough to block the derivation. Furthermore, the rules are independent in the sense that rejecting one of them provides absolutely no reason to think that the other must be rejected too. In fact, rejecting one of them provides *some* reason not to reject the other because, other things being equal, a solution must preserve what can be preserved of classical semantics. Thus stated, it might seem that the Overkill Challenge simply amounts to the worry that the solution does more than it strictly needs to—that it does not properly obey a Maxim of Minimal Mutilation. Arguably, we can all agree that this Maxim is not always easy to

²⁴ See fn.15 as to why not all classical indeterminacy theories take this shape.

²⁵ Thanks to a referee for getting me to see this point.

²⁶ Thanks to a referee for pressing me on this point.

apply, especially since it's not always easy to see when the "other things being equal" clause is met. The worry now is that it's hard to convict Horwich's theory of a problematic species of overkill. In response, it's important to note that The Overkill Challenge in hand has two parts: You have given no reason to think that both directions of the T-schema fail; and, Minimal Mutilation gives you (some) reason not to reject both directions of the T-schema. The first part of the Challenge is enough to undermine the less modest version of The Classical View (that is, the right disjunct of this disjunctive view).

To see why this is so, consider the standard, familiar, account of solving a paradox whereby (at the very least) you are required to isolate a single culprit and, furthermore, give good reasons for thinking that this culprit is invalid or untrue (despite the fact you were initially disposed to accept the culprit). A less discussed feature of solutions to paradox is that this culprit may well turn out, upon further inspection, to be a conjunction of claims. Moreover, it may well be that the best that one can do in terms of offering a solution (given that one's theory is not yet fully refined or fully specific) is to reject the conjunction but not take a stand on the truth-value of each conjunct. Fine. That is solution enough (at least for the time being). But that merely means that, pending further argument, you should be neutral concerning which disjunct is not true and neutral as to whether both conjuncts of the conjunction are not true. Any theory which isolates the T-schema as the single culprit (which is exactly what Horwich does) but then proceeds to claim that both directions of the T-schema are invalid *and* does so without giving any reason why both rather than just one of the conjuncts is invalid is to give a theory with no evidential support. Such is the real nub of the Overkill Challenge. The result is that Horwich's view faces a dilemma: either it is subject to the strengthened liar paradox advanced in the text above or his theory contains entirely unmotivated claims. Either way, it, and The Classical View, should not be accepted.

Eklund's theory of truth faces a rather different kind of dilemma. To see why, we first need to be clearer on whether Eklund really does sponsor Modest Inconsistentism. In particular, we need to ascertain whether he believes that the liar paradox does not just bring the T-rules and T-schema under suspicion of guilt but also includes classical logic and bivalence in the pool of suspects. Since Eklund is absolutely explicit that it is indeterminate where the liar paradox is to be faulted, then we now have two interpretations of Eklund's view on the table. The first is, of course, Modest Inconsistentism whereby it is indeterminate which T-rule is valid (and indeterminate just which direction of the T-schema fails); and yet bivalence and classical logic are both valid. The second, far less moderate, view is that it is indeterminate which T-rule is invalid *and* it is indeterminate which logical rules of inference are invalid—in both the basic liar paradox and any strengthened form of this paradox.²⁷ Call such a view *The Anti-Classical View*. This view does not take classical logic and/or bivalence to be invalid. Rather, in the face of the liar paradox, it opposes any endorsement or rejection of classical logic and bivalence. That is, this theory demands that we should stay firmly neutral because it is indeterminate whether bivalence holds, and it is indeterminate whether classical logic is valid. You should think of this view, in Eklund's hands, not as an inconsistency theory of *truth*, but as an inconsistency theory of *truth or logic (or both)*.

How does a theory of indeterminacy pan out on such a view? On a theory of indeterminacy which validates classical logic and bivalence, the basic liar sentence is either true or false but it is indeterminate which. On this view, there is a single culprit in the proof, it is just indeterminate

²⁷Strictly speaking, one might also bring further assumptions/premises under suspicion of guilt such as the assumption that the liar sentence expressed a proposition, the reasoning takes place with a single context of use such that "is true" does not change in extension as the reasoning proceeds, and more. The criticism to be developed below applies equally well to this even less moderate form of Inconsistentism.

which logical rule of inference or which T-rule is to blame.²⁸ Likewise, the liar sentence is either true or false, it is just indeterminate which. The Anti-Classical View *must* be neutral as to whether such a theory is correct since it is neutral as to whether classical logic and bivalence are valid. Such neutrality is enforced by the indeterminacy at large.

On a truth-value gap conception of the indeterminacy at large in the proof, it is also indeterminate which rule of inference or which T-rule is to blame. On this kind of view, however, there is no single culprit. There is no fact of the matter as to whether each classical rule of inference is valid; and, likewise, there is no fact of the matter as to whether the T-rules are valid. Put in terms of truth-value gaps, it is neither true nor false that these rules are valid. What is the status of the liar sentence on this kind of view? It is neither true nor false. The Anti-Classical View *must* also be neutral as to whether such a theory is correct since it is neutral as to whether classical logic and bivalence are valid. Again, such neutrality is enforced by indeterminacy.

Given this, The Anti-Classical View now becomes the view that it is indeterminate which rule of inference/T-rule is invalid in the liar proof *and* it is indeterminate whether this indeterminacy is to be modelled by keeping bivalence or by positing truth-value gaps.²⁹ That might seem like a very peculiar view but the basic idea is that the liar paradox exhibits a kind of *absolute* conceptual (or theoretical) stalemate. The rules of inference and the T-rules are symmetrical in the sense that we can't single one out for blame—they are equi-culpable, as it were, in the derivation of the paradox. This isn't because of our limited powers of (conceptual) discrimination. The various elements of the proof are not merely epistemically symmetrical in the sense that we don't/can't know whether they are valid/true. Rather, it is because of indeterminacy: it is thus metaphysically impossible to isolate a single culprit. Does this view have a sponsor? It does. It is (more or less) the theory of paradox offered by Schiffer (1996, 1998, 2003). In fact Schiffer gives this view a further dimension because he alleges that we have two basic options in such cases of absolute conceptual stalemate: we can either revise or replace the concept of truth and/or the logical concepts at large; or, if there is no suitable revision or replacement or revision in the offing, we must (somehow) learn to live with this indeterminacy-induced stalemate. You can think of this latter option as being a kind of palliative conceptual care.³⁰

With respect to the liar paradox, then, does Eklund sponsor Moderate Inconsistentism or does he sponsor The Anti-Classical View (in something like the guise given by Schiffer)?³¹ There are various places where Eklund can be naturally read as blaming the concept of truth for the liar paradox but without thereby blaming any logical concepts.³² There are other places where he is

²⁸ You could (or even should) treat this culprit as a kind of faux culprit—taking one for the team, as it were. That way, there is still a kind of collective guilt at play: each rule of inference/T-rule is collectively responsible for the paradox.

²⁹ There are, of course, other non-classical models of indeterminacy such as the dialethic model which preserved bivalence but reject bi-exclusion—the principle that no proposition can be both true and false. Priest (1987) is the *locus classicus* of such a view. The argument to be given also goes through if we include such models in the mix.

³⁰ These are what Schiffer (1996, 1998, 2003) calls the weak vs strong unhappy face responses to paradox, respectively. (A happy-face solution, in contrast, is one where we can isolate a single culprit.)

³¹ Eklund (2002a, 2019) is explicit that he sponsors a form of Moderate Inconsistentism with respect to the Sorites paradoxes. Schiffer (1998, 2003) sponsors a far less moderate form of Inconsistentism with respect to the Sorites because certain inferences of classical logic are also brought under suspicion of guilt. Both types of views allege that we cannot know where the cut-off in the Sorites series falls because of indeterminacy.

³² “[...] the culprits of the [liar] argument are steps which rely for their validity on the assumption that all instances of the disquotation schema are true. (We can go from the supposition that X is not true to the claim that X is true and vice versa in the liar argument only if we assume that the relevant instances of this schema are true.) [...] the culprits I have considered

open to the possibility that the logical rules of inference should also fall under suspicion of guilt.³³ For our purposes, we don't need to take a stand on how best to interpret Eklund here. Rather, we can simply pose him a dilemma: either he sponsors Moderate Inconsistentism (in which case the strengthened liar paradox given earlier causes trouble) or he sponsors The Anti-Classical View and so is subject to a further, different, kind of revenge problem.

To see how this revenge problem pans out, let's pose some preliminary questions (and some natural, though increasingly problematic answers) for The Anti-Classical View:

Q: Is your view just a form of absolute Quietism whereby no real solution to the liar paradox is being offered. After all, we can all see what generates the paradox (in the canonical formulation of the proof). Your solution is just to point out the symptoms of the malady. No real cure is being offered.

A: It could be seen as one form of Quietism, but a principled form. It's not merely a recapitulation of the symptoms of the liar paradox but rather, in addition, a diagnosis that no curative treatment is in the offing. That's important news. We should simply stop looking for a single culprit. We shall never find one. The elements of the proof are all equi-culpable in the generation of the aporia. That symmetry reflects (or even gives rise to) the fact that it is indeterminate which rule or premise is untrue/invalid. We should instead pursue a palliative strategy of living with the absolute stalemate generated by the puzzle. (Or, perhaps, we should suitably revise or replace one or more of the offending concepts.)³⁴

Q: But is not The Anti-Classical View also subject to the strengthened liar paradox levelled against Modest Inconsistentism above?

A: No. The Anti-Classical View can avoid this strengthened paradox because this paradox is developed using classical rules of inference. Since these classical rules are, on the view in hand, neither determinately valid nor determinately invalid then they cannot be deployed against The Anti-Classical View.

Q: But don't you make the positive claims that the basic liar sentence, L, is not determinately true and that the strengthened liar sentence, DL, is not determinately determinately true?

seem to be the obvious ones." (Eklund 2002a). And: "The disquotation schema also constrains the semantic value of 'true' in that although the disquotation schema is not valid, this schema should come out as close to valid as possible, given other constraints", (2002a). (If Eklund were offering The Anti-Classical View, he would not be in a position to claim that the disquotation schema is not valid because because the culprit may well be some logical rule of inference on that kind of view.) "A number of theorists, including myself, hold that the liar paradox and related semantic paradoxes show the ordinary concept of truth to be in some sense inconsistent" (Eklund 2014).

³³ "A complication regarding inconsistency views is that the inconsistency should be seen as the joint inconsistency of the principles governing the concept of truth with other principles, for example those governing logical concepts: it is not the concept of truth taken individually that is inconsistent." (2014). Likewise in his (2002a), while Eklund argues that classical logic and bivalence can be preserved in the case of the Sorites, he does not give an argument that they are to be preserved in the case of the liar. (Though, equally, he does not argue that we should be neutral as to whether they are to be preserved.)

³⁴ Eklund (2014, 2019) opposes (plausibly, to my mind) the revision or replacement of "is true" on the grounds that "is true" still picks out a non-trivial extension. In this respect, he contrasts with Scharp (2013) who thinks "is true" does not have an intension, and so is a highly degenerate predicate. So, if Eklund does, after all, sponsor The Anti-Classical View (for the liar), it looks like the palliative conceptual care option is his only option. However, it's important to note that Eklund's version of The Anti-Classical View (if he indeed accepts such a view) should not only take "is true" to have an *indeterminate* extension, but should also take a host of logical predicates (e.g. "is a valid conditional", "is a valid rule of inference") to have indeterminate extensions too. This is a different kind of degeneracy, but one which may well require revision or replacement of one or more of the offending concepts/predicates. (Indeed, the degree of degeneracy at large reveals itself in the revenge problem to be developed below.) So, if Eklund does sponsor some form of The Anti-Classical View he may well need to countenance the possibility of revision or replacement on these alternative grounds.

A: Yes. But the theory does not deploy parts of the reasoning used in the liar paradox (or the paradox involving DL) to generate these insights (as was done in the text above).

Q: But don't you use deductive reasoning, in various forms, and in various places, to (help) generate these insights? Indeed, isn't your whole theory of indeterminacy developed by using the very principles of classical logic which you take to be neither determinately valid nor determinately invalid?³⁵

A: Yes, but the reasoning may well be (classically) valid since it is not being claimed that classical logic fails.

Q: Sure, but indeterminacy precludes knowledge, including logical knowledge. You thus can't *know* that the classical rules of inferences are valid. So, you can't use any closure-like principles (whereby from known premises, and known validities, one can derive a known conclusion) to expand one's knowledge of the important, relevant features which you say the liar sentence has. That means that, *by your own lights*, you don't know that the basic liar sentence is not determinately true. You are then committed to asserting the abominable conjunction: My theory is true but I don't know that it is. Worse still, doesn't your theory commit you to saying that it is impossible to know your own theory?

It's here that sponsors of The Anti-Classical View might try out any number of gambits to avoid or mitigate the revenge problem in hand. A comprehensive critical survey of the (many) potential replies lies beyond the scope of the present paper.³⁶ Instead, it is enough to have got where we have got to: Horwich's theory of truth faces a troubling dilemma; candidate sponsors of Modest Inconsistentism (e.g. Eklund) face a different troubling dilemma. On the left horn of both dilemmas is the main problem posed in this paper: a new kind of strengthened liar paradox. On the right horn of Horwich's dilemma, there is the problem that any attempt to avoid this strengthened paradox by taking *both* T-rules (and both D-rules or both **D**-rules) to be invalid is entirely unmotivated. On the right horn of Eklund's dilemma, there is the problem that any attempt to avoid the worries which beset Modest Inconsistentism by plumping for the far more radical theory given by The Anti-Classical View brings with it a further highly troubling revenge problem.³⁷ These are not knock-down arguments, of course, but they do show that candidate proponents of Modest Inconsistentism, or indeed those attracted to Horwich's theory of truth, have some considerable work to do in order to fully specify and stabilise their respective positions.

³⁵ One of these classical rules (in sequent calculus form) is the (structural) rule of assumptions, namely, from the null-sequent infer: $A \vdash A$. That's a pretty basic and ubiquitous inference to fail to endorse. Other rules under suspicion of guilt include: substitution, reductio, conditional proof, the structural rule of cut, the structural rule of transitivity, and more.

³⁶ One option worth mentioning (since it picks up the thread in fn. 34) is: could or should Eklund convert to some form of Conceptual Engineering whereby the indeterminacy-induced degeneracy at large can be combatted by revising or replacing one or more of the (collectively culpable) concepts at work in the liar paradox? Arguably not, because the revenge problem in hand is also directed at such a view. That's because in order to work out that some logical concept could be suitably revised or replaced, you have to *knowingly* establish that this concept is an equi-culpable element of the proof—and thus has an indeterminate extension. But this indeterminacy undermines logical knowledge too. So, you can never knowingly establish the necessary preconditions for a successful revision or replacement. Whether this revenge problem applies to other implementations of The Anti-Classical View (e.g. Schiffer 1998 on the sorites) is a little moot. If the metalanguage for such an implementation is also open to indeterminacy (as it surely is because of higher-order vagueness) then the same general kind of revenge problem will also get a grip.

³⁷ On this second horn, Eklund's Inconsistency theory of the liar takes a radical turn. Far more radical than the "radical" view given by Liggins (2019) who is not subject to the revenge problem in hand. And perhaps nearly as radical, in its own way, as the Inconsistency view of truth developed by Patterson (2009) whereby the predicate "is true" (and all of language) is meaningless. One main headline of the overall discussion then becomes: there is no plausible *and* moderate inconsistency theory of truth.

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