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Learning Logical Lessons from Stories

Abstract. That stories may teach us some important lessons, e.g., about morals, is not new; what is a recent topic of discussion, however, is whether stories can be equally useful for logic. Can we learn something valuable about logical validity from stories? We address this problem in this paper. We first examine two opposing positions on that matter, with a positive and a negative answer to the question of whether stories may teach us something about logic. We shall then suggest that those positions both labor under the assumption that logic has a descriptive role aiming to correctly describing validity *simpliciter*. We argue that as a result of the use of stories in logic, such an assumption must be abandoned in favor of a more local view of logical consequence. The view makes sense of the use of stories in logic, and also accommodates the claim that the plurality of stories may be seen as leading us to no universally applicable logic at all.

Keywords: stories in logic; logical validity; logical pluralism; mathematical pluralism; logical methodology

1. Introduction

There is no doubt that *stories*—by which we mean basically fictional stories—can teach us a lot on some fronts, including knowledge about morals and society. A bit more controversially, some have claimed that fiction may be helpful also in empirical science itself and in our overall approach to knowledge (see the discussions in (Elgin, 1999, 2014)). The natural question that suggests itself is: can fictions teach us something concerning logic? It is with this question that we shall be concerned here. In order to address that question, it should be made clear that we have in mind the most common application of logic, which is logic as a means to determine what follows from what in arguments framed

in natural language. In that sense, can one learn something about what follows from what with some kind of help from stories?

One does not need to go far to find something that, at least *prima facie*, looks very much like lessons arising from stories concerning the validity (or invalidity) of famous logical principles. As is well-known, fictions are *incomplete*, in the sense that we have no reason to assume that every possible determinant of a character or of an event described in a fiction has to be either true or false. Consider this example (taken from [Haack, 1978](#), p. 72): did Sherlock Holmes have an aunt living at the Leamington spa? The stories about Sherlock Holmes tell us nothing about that. In that sense, the claims ‘Sherlock Holmes has an aunt living at the Leamington spa’, and ‘it is not the case that Sherlock Holmes has an aunt living at the Leamington spa’ seem to be lacking any reason for their truth, given the absence of any grounds for affirming any one of the sentences. Does that mean that the *law of excluded middle* (LEM) fail? Or maybe *bivalence* is to be abandoned instead? Answers to those questions vary, and it is not completely clear what role the Sherlock Holmes stories could have in grounding such eventual failures of LEM or bivalence.

But one needs not stop with troubles for excluded middle and bivalence. There are also the more intriguing cases concerning alleged *inconsistency without triviality*. In Gustave Flaubert’s *Madame Bovary*, the main character, Emma Bovary, is famously described as having black eyes in some passages, while in other passages she is described as having blue eyes, i.e. she is also described as not having black eyes. Once a contradiction is spotted, some may see it as a case in favor of the failure of the *law of explosion*, the logical law according to which everything follows from a contradiction. That is, from the set of claims Emma Bovary has blue eyes, Emma Bovary does not have blue eyes, one may not infer, *v.g.* that pigs can fly, so, not everything follows from a contradiction. What does that contradiction in *Madame Bovary* illustrates concerning what follows from what? Is it the case that the law of explosion may be seen as failing, just because the story seems to contain a non-explosive contradiction? Or maybe *Madame Bovary* is a case of trivial story? Are there logical lessons to be learned here about what is valid?

At first sight, two opposing kinds of positions are possible concerning these indications. First, one may take very seriously the idea that stories teach us something about what is actually valid, in the sense that stories are a tool for logical investigations. That positive view concerning the role of stories has been recently advanced and defended by Andreas

Kapsner (2019). According to Kapsner (2019, p. 134), “stories can cast doubt on or lend support to particular logical principles, and thus speak for or against whole classes of logics”. So, in a sense, stories are useful for the epistemology of logic; by investigating stories, one may actually discover that some principle is not valid (which means that the validity of the principle is refuted), or find some support for a given principle (which means that the stories may provide additional evidence for it).

On the other hand, one may consider that view as too quick, and, although granting that stories seem to obey a logic of their own, they still cannot teach us about *actual validity*. After all, validity, in the genuine sense, as supposedly investigated by logic, is not to be confused with what is *valid in a story*. That is, just as we are not licensed to claim that Emma Bovary *actually* had an affair with Léon Dupuis based on the fact that *in the story* Emma Bovary had an affair with Léon Dupuis, we are also not licensed to claims about what is *actually valid* based on some inferences that seem to fail or hold good *in the story*. That seems to be, in a nutshell, the view recently advanced by Graham Priest (2013, 2021).

Given the two opposing views, one may wonder whether something else could be said about the subject. The debate could go on attempting to find arguments for each of the disputant sides, and one may indeed find virtues and vices of each of the views. However, that is not how we plan to address the topic here. In this paper, we shall propose that what is actually valuable in such an examination of opposing views is that after getting rid of some problematic assumptions made by both sides, one may keep some of the commonalities of both views and use stories to achieve a better understanding of logic.

To put it in more detail, we shall point to the fact that both authors work under the assumption that logic has as its goal the investigation of *genuine validity* (or *validity simpliciter*; we shall use both interchangeably) understood as what is actually valid concerning inferences in natural language. Also, both views clearly suggest that each story seems to at least implicitly advance an account of what is *valid in that story*. What is not agreed upon is how such a commitment to a notion of validity inside stories impinges on genuine validity. We shall address that problem by exploring a suggestion of Newton da Costa, according to whom hypothetical models — which he took to be hypothetical scenarios, more or less like fictions —, can be used to promote the view that nothing is actually *genuinely valid*, while still it being the case that each context may have a logic of its own (for da Costa’s view, see his (1980), and

for further discussion, see (Arenhart, 2022a)). That will make room for us to learn some lessons from Kapsner and Priest, while resisting their claims concerning genuine validity.

The paper is structured as follows. In section 2, we present the account by Andreas Kapsner. According to Kapsner, we may learn about what is actually valid by investigating how stories contribute to delimiting the scope of application of certain logics. Then, in section 3, we present the opposing account by Graham Priest, according to whom stories cannot teach us about genuine validity. The claim is based on Priest's view about mathematical pluralism and the nature of justification of mathematical claims inside different mathematical theories (where 'different mathematical theories' indicate mathematical theories having different underlying logics). Stories and mathematical theories have a huge similarity according to Priest, so that some features of mathematics may be transferred to stories. In section 4, we advance da Costa's account on hypothetical models and suggest that it may be used to deal with fictions. The upshot of da Costa's views, when plugged to stories, is that the very idea of genuine validity, a notion of validity holding in every context, should go. Abandoning genuine validity will show us how to benefit from the best of Priest and Kapsner's approaches. We conclude in section 5.

2. Learning from stories: yes, we can!

As we mentioned, Kapsner (2019) has recently addressed the subject of whether stories could contribute to our investigations regarding logical consequence and validity. The idea is that stories could be used as a means of investigation of what is valid by either providing counterexamples to principles we deem valid, or, alternatively, by reinforcing that some principles must be valid. The approach is not made on a general basis, but rather on a case by case basis, in the sense that Kapsner considers some stories which seem to provide counterexamples to specific logical principles, while at the same time inducing other principles as holding in the story.

Kapsner considers two examples to advance the core of his argument for the usefulness of stories in logic. First, he advances the story of a certain Jones, who lived a calm and uneventful life, not being able to demonstrate throughout his entire life neither his courage nor his lack of

courage. The fact is that after such a life, Jones dies peacefully. Being dead, his body is cremated, the ashes spread in different places and we can no longer have a single clue as to whether Jones would have acted bravely or otherwise in any possibly dangerous situation. The question then is: was Jones brave? According to Kapsner, given the way the story was created, there is now no way to answer such a question.

To see how one could possibly learn anything about logic from this superbly anti-climatic story, consider this question: Was Jones, according to the story, a brave man? Or was he not brave? You might feel a certain reluctance to answer “yes” to either of these questions. More, you might even feel that someone who would answer either question in the affirmative would not have fully understood this story. Normally, we can not tell whether someone is brave or not until we watch them getting themselves into a dangerous situation. Only then will their bravery or cowardice become apparent. But as Jones is now dead and the story over, we will not come to observe him in such a situation.

(Kapsner, 2019, p. 137)

The point is that, assuming these quite verificationist demands on meaning — we must somehow see Jones in action in order to attribute him bravery or lack of bravery! —, Kapsner argues that a *first lesson* may be learned here:

First lesson: the law of excluded middle (LEM),¹ saying that A is the case or that A is not the case, for any sentence A, must be given up.

The fact is that the story was ‘deliberately constructed’ to provide for a counter-example to LEM (Kapsner, 2019, p. 138). If we concede the kind of approach to semantics that Kapsner is demanding, then, it seems clear that classical logic must be inadequate to represent the happenings in the story. Some logic allowing for the failure of LEM is more appropriate for describing what happens in the story and, given that logic is supposed to be completely general, this failure of LEM in the story is also a fact about validity itself.

Besides that failure of LEM, Kapsner also discusses what kind of logic would be appropriate for Jones’ case: not every logic failing LEM will do the job correctly. Intuitionistic logic, for instance, which does falsify

¹ We follow Kapsner’s terminology here and call such claim ‘LEM’; some would prefer to call it ‘the principle of bivalence’. As far as our point is concerned, this is a matter of choosing a terminology.

LEM, is not appropriate here. In fact, given the standard Kripke semantics for intuitionistic logic, the result will be that Jones was actually not brave (i.e., in any world where the sentence “Jones was brave” is evaluated, it receives the value false, because it cannot be verified; so, given the clause for the meaning of the negation, “Jones was not brave” ends up being true); in that sense, this logic has the wrong kind of semantics: it gives the wrong result. Instead, [Kapsner \(2019, pp. 142–147\)](#) argues that Nelson’s \mathbf{N}_3 is the more suitable logic for this case, so that the story can be seen as providing evidence in favor of a given logic too. In such a logic we may have truth-value gaps, which would account for Jones’ case.

One important point here concerns the kind of connection between stories and logic. If stories are going to teach us about genuine validity, then, the relation of logic and a story seems to be one where the story has some precedence over the logic, in the sense that one can have the story and, after that, investigate the kind of logic that fails or suits the story. However, at the same time, the creation of stories is not logically innocent: Kapsner has explicitly indicated that the Jones’ story was explicitly created to provide a counterexample to LEM; that is, it was designed with a specific purpose in mind. So, a logic or a class of systems of logic can also motivate a story where the logic(s) holds, and where the story is such that it can be used as counter-example to other systems of logic. Kapsner comes close to suggesting that one can use a logic in order to construct a story on the top of it:

I am not aware of any elaborate attempt to base a theory of fiction on a constructive logic. It would seem a worthwhile project to look into this, pointed to by the very etymology of *fiction*: It comes from the Latin verb *ingere*, which means *to shape, to mould, to make*, which is pretty close *to construct*. ([Kapsner, 2019, p. 145](#))

Observations to that effect are more explicit when Kapsner discusses the second story in his paper, which was not actually composed by him, but rather by Graham Priest. The story is none other than the now famous “Sylvan’s box” (see [Priest, 1999](#)). This story aims at motivating systems of logic that can deal with inconsistencies without triviality, that is, systems failing the rule of explosion. As Kapsner notes, “Priest wrote a blatant inconsistency into his story” ([2019, p. 145](#)).

The story, in a nutshell, goes as follows. After the premature death of Richard Sylvan, Graham Priest and a friend inspect Sylvan’s Nachlass. In the middle of Sylvan’s writings, they do find an incredible box: “[t]he

box was absolutely empty, but also had something in it” (Priest, 1999, p. 575). That is certainly the perfect example of an inconsistent object, and both friends (in the story) have mixed feelings about what to do with it. On the one hand, there is a huge temptation to present the box to the world; on the other hand, they both fear the destiny the box may have if it happens to fall on the wrong hands. To settle the issue, they decide that Priest will take the box with him, but also that the friend will bury the box in Sylvan’s garden. In the end, the box is buried, and also not buried; it was taken by Priest, but also not taken by him.

Priest argues that one must read the story in a paraconsistent way, that is, by rejecting the rule of explosion: “not everything happens in the story” (1999, p. 579). In the end of the paper, the reader is asked to answer some questions about the story, and, in particular, one finds questions concerning the inferences that can be legitimately drawn from the story: can one conclude that the box was shot to the moon? No, that is not what happens in the story! So, although some contradictions do obtain *in the story*, not everything is the case *in the story*. Straightforward use of classical logic to deal with the story would lead to misunderstandings; we need a paraconsistent logic here. As a result, the second lesson from stories is:

Second lesson: the law of explosion, to infer any sentence B from a pair of sentences $\{A, \text{it is not the case that } A\}$, must be given up.

The story seems to present evidence in favor of a paraconsistent logic (and against explosive logics in general). Kapsner goes even further and suggests that it would be very difficult to lead the readers to infer by using explosion. Readers will resist to infer anything from a contradiction. If classical logic were used in the story, then, in the questionnaire after the story, readers would have to answer ‘yes’ to questions like “can pigs fly in the story?” and “Is it the case that pigs cannot fly in the story?” (Kapsner, 2019, p. 149).

Again, in this story, there is an interesting methodological question concerning the priority of the story over its underlying logic, or of the logic over the story. Kapsner once again remarks that the story was written with the specific purpose to motivate paraconsistency, and that the same could be made for *any* logic, at least as far as Priest seems to regard his own move in producing the Sylvan box story:

[Priest] seems to suggest that for any logic whatsoever, a story could be told that would make it seem the only suitable logic for this story.

That is what he did with Sylvan’s Box for paraconsistent logic, and he suggests one could write a story to get the reader to reason along the lines of quantum logic. (Kapsner, 2019, p. 148)

Priest seems to indicate that any logic can be used to ground a story favoring it. Kapsner, however, does not believe one can make stories that motivate classical logic, and here he resists the conclusion that one could provide counter-examples to *any* logic. “Is there a story to be told to a paraconsistentist or a constructivist that would get him to reason classically about what is going on in the story?” (Kapsner, 2019, p. 148). He seems to believe that a classical logician cannot get a reader to infer according to the explosion rule in the presence of a contradiction, so that stories do tell against classical logic. A similar remark is made concerning the validity of LEM. It is suggested by Kapsner that we cannot produce stories that motivate a reader to infer according to LEM. Again, if Kapsner is right on those topics, classical logic is in trouble if the story-based strategy is to be useful to determine what is actually valid, and one does not fall prey to a sort of logical nihilism; the correct account of legitimate validity will have to be paraconsistent and paracomplete (ruling out classical logic of course; Kapsner suggests \mathbf{N}_4 is one such candidate, we come back to this issue in Section 4.4).

3. Learning from stories? No, we can’t

Graham Priest does not agree that stories can teach us something about what is actually valid. However, that is not exactly what one would take him to believe, at first, by a quick reading of the Sylvan’s box story. In fact, as Kapsner makes good use of the story created by Priest, it seems that even Priest believes that stories have something to teach us concerning the invalidity of explosion. That is even put in terms of some morals at the end of the story; the fifth morals extracted by Priest goes as follows:

Fifth Morals: “There are, in some undeniable sense, logically impossible situations, or worlds. The story describes (or at least, partially describes) one such” (Priest, 1999, p. 580).

If one takes validity to consist of truth preservation across all worlds or situations, then, of course, not only possible worlds or situations would have to be countenanced, but also some such impossible situations or

worlds² as described by the story. That is, stories would be seen as adding genuine situations to the stock of cases that logic must deal with, and given the wide variety of stories, some classical inferences get to meet their counter-examples in such stories.³

But it is not exactly clear that it is this kind of use that Priest had in mind with the Sylvan box case. One can also read it as having a more modest goal: it aims to prove that ‘paraconsistent reasoning’ does make sense, and that people may actually reason without triviality in inconsistent scenarios. That is different from saying that stories teach us about what is actually valid. Favoring that reading, there is also the fact that the questionnaire presented at the end of the story indicates whether the reader has inferred in the story in an appropriate paraconsistent way (as we have already briefly discussed in the previous section). The point centers on whether one may be induced to reason in a paraconsistent way in a story, and that is, at least *prima facie*, different from claiming that this would have any impact on how we reason outside of the story.

The background for one such reading is to be found in more recent papers by Priest; he has advanced an account of the subject, although he was not addressing directly the role of stories. To bring what is relevant to the center of the stage, we need to rely on a parallel between stories and mathematics established by Priest:

mathematics and fiction are very similar activities. Mathematical theories (practices) and stories are free creations of the human spirit, and we can invent whatever we like. Having done so, we may then follow the inferential rules in play, to discover more about the mathematical or fictional situation characterized [...]. One can, if one likes, think of mathematical assertions or fictional assertions as coming prefixed with a tacit ‘In the practice/story, it is the case that ...’, just as we can think of legal assertions as prefixed by ‘In such and such jurisdiction ...’. But of course, we are so used to operating certain practices, or of operating within a certain jurisdiction, that the prefix may become invisible to us. (Priest, 2013, p. 11)

² We use ‘situations’ and ‘worlds’ interchangeably here. The terms must be understood as neutral regarding the nature of such entities, and whether they are possible or impossible. Friends of impossible worlds, of course, quantify over such entities too when defining logical consequence. For further discussion, see (Berto and Jago, 2023). We would like to thank an anonymous referee for pressing us on this point.

³ Concerning this way of putting the problem, see also the discussion in (Omori and Arenhart, 2024).

That is, just as we may reason differently inside different mathematical theories (classical mathematics, intuitionistic mathematics, paraconsistent mathematics . . .), given that each mathematical theory is related to a specific practice of inferring according to certain rules, in a story we may use the inference rules holding *inside the story* to find out more about the story. However, the rules are creations of our spirit, just as pure mathematics is. Priest is very explicit about the relation between a practice of inferring according to the rules of a given theory, which gives us the internal standards of correction, and the variety of such practices:

There is a plurality of mathematical practices: category theory, intuitionist analysis and inconsistent calculus. Each of these is governed by a set of rules — including inference rules — and engaging in the practice means following the rules. The (institutional) point of following the rules is establishing (proving) certain — hopefully interesting — things within the rules of the practice. (Priest, 2013, p. 3)

Carrying this to stories, we have the consequence that there are different stories, each with its own *internal criteria of correction* when it comes to reasoning inside it. Given its more or less explicit rules of deduction, each mathematical theory establishes ‘truth in a given family of structures’. Priest puts the issue as follows: “[t]he criteria of truth are *internal* to the practice” (2013, p. 9) (emphasis in the original). Transposing that to stories, it may be said that each story has its internal criteria of truth too. One only needs to follow the internal rules to achieve further truths. In pure mathematics, each such theory is as good as any other; in fiction too. They do have different purposes, of course: to prove interesting theorems in mathematics, to tell an interesting story in the case of fiction.

But nothing assures us that it is genuine validity that is involved in each such case; one should not confuse truth in a family of structures, or truth according to a practice, with *truth simpliciter* (Priest, 2021, p. 4945). As Priest puts it repeatedly, there is a difference between *truth in a structure* and *truth simpliciter*. In a nutshell, to be true in a structure is not to be confused with truth itself, which is not the model theoretic notion defined inside some set theory:

Model-theoretic validity is not truth-preservation in all interpretations. Different logics (intuitionist, classical, paraconsistent, etc) have different *kinds* of interpretations. Their model theories therefore provide an understanding of truth preservation in the appropriate kind of struc-

ture — the internal logic of the structure — not validity *simpliciter*. And if one really defines validity as truth-preservation in *all* interpretations then, given the plurality of formal logics on which mathematical structures may be based, the logic will amount, as near as makes no difference, to the null logic: no inference is valid. Such would clearly make validity useless for evaluating the validity of ordinary arguments, and so cannot be right. (Priest, 2021, pp. S4944–S4945)

By distinguishing between truth in a structure and truth *simpliciter*, Priest also distinguishes between validity in a class of structures and validity *simpliciter*. The latter is different than mere *validity according to all structures*, because, as Priest argues, if one requires truth preservation across all kinds of interpretations, one ends up with no logic (Priest, 2021, p. S4945). Given that this outcome is not acceptable, Priest rejects identifying validity *simpliciter* with truth preservation across all structures or interpretations.

Let us pause for a moment to make this point clear. We have been talking about truth in a structure, truth *simpliciter*, and truth in a fiction. Truth *simpliciter* and truth in fiction distinguish themselves from truth in a structure or interpretation because the latter is to be understood *as a mathematical representation of the former*. Discussing a possible worlds semantics in set theory, encompassing a set of worlds X , Priest comments:

It should be noted that an interpretation is simply a piece of mathematical machinery. In particular, X is any old set of objects. These are not to be confused with possible worlds themselves. We may naturally suppose, however, that there is one interpretation of the language which is in accord with the real. [...] That is why we can reason using modal logic about reality (not just actuality: actuality is just one world of the plurality of worlds). (Priest, 2016, p. 2651)

In a sense, the different structures mathematically available seem to generate way more situations than those that are real. As Priest comments in the quote above, one of the mathematical interpretations may supposedly be in accord with the real, but not all of them. Here, ‘real’ should be understood as involving more than just what is actual. In fact, in some places Priest claims to believe that there is a fact of the matter as to what is real concerning all the scenarios involved in defining validity:

Validity is determined by the class of situations involved in truth preservation, quite independently of our theory of the matter. This answer has

a certain ontological sting, of course. For, as I observed, the situations about which we reason are not all actual: many are purely hypothetical. And one must be a realist about these too. (Priest, 2006, p. 207)

Bringing these all together, the claim is as follows: there are real situations or scenarios that are involved in determining validity. These scenarios are represented mathematically by some family of structures F , and getting the logic right involves adopting the system of logic whose consequence relation is defined as truth preservation in the structures in F . This is the logical theory *describing* validity *simpliciter*. Different systems may require structures representing scenarios other than those represented by structures in F , failing to correctly describe what is actually legitimate. By considering such alternative families of structures, we may characterize consequence relations that can be the consequence relation of a practice or of a family of structures, but which still is not validity *simpliciter*. On the limit, by allowing all such structures to play a role in the definition of a notion of consequence, we end up with an empty logic.

So, coming back to the claim by Graham Priest, what we have is that we can actually determine a logic inside a given story, in a similar way that we determine a logic for a given mathematical theory. We represent such a logic by determining validity as truth preservation over some family of structures representing such scenarios. However, just as we must take care to claim that, say, excluded middle fails in intuitionistic mathematics, we must also be always careful to claim that excluded middle failed *in the Jones' story*. Those facts in no way contribute to the additional, different, claim, that excluded middle is not valid *simpliciter*. That happens because validity *simpliciter* is a matter of truth preservation in and appropriately determined set of scenarios, not truth in every scenario.

4. Where do we go from here?

4.1. Methodological considerations

One should begin by noticing that Priest takes a radical conclusion concerning the definition of validity as informed by the model theoretic approach, that is, validity as truth preservation in all structures (which would involve structures representing the scenarios described in the stories too, remember): there is *no* logic holding across all structures; given

the diversity of such structures, logical consequence would be empty. He sees this fact as a kind of confirmation that logical validity just cannot be *that*, because certainly there is something like logical validity, which is useful for evaluating ordinary arguments.

Kapsner came to a similar conclusion regarding the outcome of the impact of stories for validity, and he also refused to accept it:

it seems to be a fair question whether there can be even a single logic that can survive multiple story-based attacks. If there isn't, the project seems to point toward a logical pluralism that leaves unclear how any logic can be definitively ruled out by a fiction: The most that can be said that this is not the right logic for this particular fiction.

(Kapsner, 2019, p. 154)

The way Kapsner frames it has some implicit steps, though, which we believe can be put in the following terms: if *there were* no logic surviving multiple story-based attacks, then, no logic could handle all stories (no logic deals with validity *simpliciter*). However, that does not mean that stories would not have a logic; they would, but the best we could say in this case is that each story would have some proper logic, which would be the right one for it, and also that each story would have some logic that would not be right for it too. Something similar holds for pure mathematics in Priest's views, of course.

So, both Kapsner and Priest seem to point to the conclusion that if stories are allowed to contribute to the space of worlds or situations that logic must account for, there seems to be no logic holding for every story, or, no logic is general enough to describe validity in all situations, including fictions. Both authors resist this conclusion, each one based on different grounds. Kapsner rejects the idea that some logic will actually ground genuine stories, stories that will impinge on actual validity. Priest, on the other hand, reject the idea that genuine validity will have to deal with all such possibilities. Our point in this section is to argue that the mentioned conclusion should not be resisted. Once stories are part of the method of evaluation of validity, their lesson is that validity *simpliciter* evaporates, as Priest and Kapsner predict. The result, however, is not that we are left without logic, but, as Priest and Kapsner also point out, that each story has its logic. *Logic is a local matter*. The lesson was already learned by mathematicians. Why expect that logic would be different?

Before we face the arguments by Kapsner and Priest to resist the conclusion for an empty validity *simpliciter*, let us take advantage of the fact that the claim we are making here was already advanced, along different lines, by Newton C. A. da Costa, more than forty years ago, in his (1980). According to da Costa, one may develop counter-examples to principles of logic by devising hypothetical scenarios, which he called ‘hypothetical models’. ‘Hypothetical models’ is a broader category than stories, closer perhaps to thought experiments (and see again (Elgin, 2014) for stories as cases of thought experiments, and (Elgin, 1999, pp. 180–181) for further discussion; Elgin remarkably notes that “[j]ust as thought experiments are fiction in science, works of fiction are thought experiments in art” (Elgin, 1999, p. 181)). It is interesting to see that da Costa described the role of hypothetical models in lines that are quite similar to those that were later advanced by Kapsner:

The method of models is of such a great help in cases of clarifying some intricate conceptions, as well as a process to develop counter-examples, to grant that some positions we adopt, consciously or unconsciously, are devoid of reasons.⁴ (da Costa, 1980, p. 15)

In particular, hypothetical models serve as counter-examples to principles that were considered to have the status of necessary truths for a long time in our tradition, like the so-called ‘three basic laws of thought’: the laws of non-contradiction, excluded middle, and identity. Applying the method requires that hypothetical scenarios are envisaged where different logics apply, and, also, where different logics fail to apply. The major examples of application of the method by da Costa are three, one for each of the so-called ‘fundamental laws of thought’ (see da Costa, 1980, Chap. 2, Sect. 4):

1. Schrödinger logics: these are logics where the principle of identity does not hold (see French and Krause 2006, chap.7-8 for further developments). The motivation here comes from considerations by Erwin Schrödinger about the possible lack of identity conditions for quantum objects (see French and Krause 2006, chap.3 for historical details). That effect is obtained by positing that the expression ($t = t$) is simply not a formula for some terms t ranging over quantum entities. The plan is that, actually, in quantum mechanics, one cannot speak meaningfully about the identity of quantum entities. As a result, one may contemplate

⁴ All the translations of da Costa 1980 are ours.

a hypothetical scenario where identity is absent for some entities, but still there is a logic for the context.

2. Semiography: this is the name of a hypothetical science that deals with “the constructive study of symbolic configurations” (da Costa, 1980, p. 142); that is, it deals with symbols and the expressions that may be constructed with them by providing actual concatenations of the symbols. In this ‘science’, a symbolic configuration exists if and only if it can be constructed, in the specific sense of being actually written. This goes in a parallel with existence in intuitionistic mathematics, and da Costa argues that this context would require intuitionistic logic. Also, excluded middle fails, because one cannot assert that any configuration whatever has a property unless that property has been exhibited for the configuration by constructing it. Notice that semiography was invented by da Costa for the purpose of illustrating that some context could need intuitionistic logic (without having to rely on intuitionistic mathematics).

3. Wittgenstein’s world: this is roughly a world where time changes as soon as some proposition of the language describing the world changes from truth to false or from false to truth. So, for instance, time changes whenever a proposition p changes to $\text{not-}p$, and $\text{not-}p$ changes to p . Now, by describing the truth value of propositions in longer intervals of time one finds that, inside such longer intervals, both a proposition and its negation may be the case (because each of them is the case in some subinterval). The description of this world requires that one uses a paraconsistent logic, given that some contradictions may be the case (the law of non-contradiction fails), while not everything is the case actually. Again, this scenario was invented, and endowed with a weird notion of time, just for the sake of illustrating that a world could be paraconsistent.

Each such story is created to illustrate the fact that some scenarios do need non-classical logics, and the mere possibility of such a necessity serves for the purpose of indicating that no logic can deal with all of the possibilities. The morals da Costa draws from such scenarios is called by him *the norm of relativity* (da Costa, 1980, p. 124): basically no logical principle P can be considered absolutely valid; there is always one logic, with some possible application (even if the application is to account for a hypothetical scenario), where P fails. The hypothetical models advanced by da Costa are not stories of fiction, but the cases of fiction, such as the stories of Jones and Sylvan’s box, are clearly cases of hypothetical

models, and reinforce the method for the purpose of boosting the norm of relativity (see the discussions in [Arenhart, 2022a](#)).

Now, back to Kapsner and Priest: how do they resist the norm of relativity? They do so based on different reasons concerning the role of stories for logic. Let us check each case.

4.2. Resisting Kapsner’s resistance

As we have seen, Kapsner suggests that it could possibly happen that no logic holds for all stories, but he resists it. Besides arguing that Nelson’s system \mathbf{N}_4 is the best possible candidate to account for both Jones’ story and Sylvan’s box, he argues that *classical logic* cannot be motivated by a story, in the same sense that a paraconsistent logic can be motivated by Sylvan’s box. If that is really the case, classical logic does not count as correctly characterizing logical consequence. To resist that claim, one is pressed to find a story where a reader is *induced to reason according to classical logic*. More precisely, one should, in case one is a classical logician, provide for a story where a reader could be induced to reason according to the rule of explosion: from a contradiction, the reader would be led to infer any proposition whatsoever ([Kapsner, 2019](#), p. 149). Is such a story possible?

The obvious way to meet the challenge is by just putting forward one such story. But Kapsner doubts this can be done in a reasonable way. First, if it is to work for its purpose, it must be convincing to the point that the arbitrary conclusion is not merely stated, but it actually leads the reader to infer an arbitrary conclusion from a contradiction:

We want a story that makes logicians and laymen alike infer classically. No layman reading the story would take those statements to be conclusions of the former contradiction. The reason is simply that one cannot make statements be taken as consequences of each other simply by writing them in sequence. ([Kapsner, 2019](#), p. 150)

And there is another problem. Although one may write in the story things like ‘the box was buried and taken away, thus, it follows that it was shot to space’, no reader would agree that the claim that the box was shot to space *follows logically* from the previous contradictory claims. There is a sense in which one may read those things, but resist the claim that the conclusion follows from the premises. This is a case of *imaginative resistance* in logic. Typically, imaginative resistance occurs

in fiction when the reader refuses to play along with the story, mostly in cases where deviant moral judgments or divergent sense of humor are forced into the reader (possibly by a narrator). As an example, one may read, as a part of the story, that innocent people are randomly assassinated by a group of individuals, but one will resist to accept that this was a good thing, in case this is claimed in the story. In logic, the same happens, according to Kapsner, when it comes to claims that a statement like ‘Sylvan’s box was sent to the space’ follows from ‘Sylvan’s box was buried in Sylvan’s garden and also taken away by Graham Priest’ (or any other case of use of explosion).

He [the reader of one such story] might accept all that happens factually, but when it comes to judging what follows from what, he will insist on doing the inferring for himself and reject any inferential moves the narrator makes that he wouldn’t accept to be valid outside of the story, as well. (Kapsner, 2019, p. 152)

As a result, it is very unlikely that classical logic can be induced on readers by any kind of story. That would suggest that at least one logic cannot be induced (or, a whole family of logics cannot be induced: those accepting explosion), and classical logic seems to be out of the game for validity *simpliciter*: if Kapsner is right that explosion cannot be motivated, the correct logic has to invalidate explosion. Put in other words: if there were a story using classical logic, one could, in fact, cast a shadow of doubt on the claim that explosion is not genuinely valid after all, because it would hold in at least one story. Given that such a story is missing, the invalidity of explosion ends up counting as a kind of fact about validity. But is Kapsner right here? Let us address the problems as they were presented.

The first problem concerns the challenge of presenting a story in which classical logic is induced. Let us forget for a moment that Kapsner focuses on a very small fragment of it consisting of explosion. Is there a story to be told for classical logic? In order to address this problem, it suffices to follow da Costa and Priest, for whom there is a wider sense of story at work, and where stories and mathematics have some similarity.⁵ If one grants such a similarity, then, one has a perfect example of a context that requires its readers to use classical logic, namely *classical*

⁵ For further discussion of the role of mathematics in logical methodology, see (Shapiro, 2014; Caret, 2021; Arenhart, 2021).

mathematics. Sure, it is not a finished story, it is constantly being written for quite some time now, but it certainly illustrates use of classical reasoning. So, if one is not limited to explicitly fictional stories strictly speaking, classical logic may be seen as the required form of reasoning in classical mathematics (or, if one does not like classical mathematics, one may mention intuitionistic mathematics, which requires intuitionistic logic and also allows for explosion).

One could disagree that this is actually a story, perhaps by denying the similarity between stories and mathematics. That would still allow one to point to classical mathematics as an example of use of classical logic. One need not believe that logics can have positive evidence in their favor only when a *fictional* story for them is found; in fact, as da Costa suggested, the method of hypothetical models is a tool to take our logical beliefs to the limits and test them, but it is not the only place to find logic in action. So, even if stories are not that similar to mathematics, the fact that some logics cannot be induced by a story is not a knock-down argument against them, in case they have a mathematics to rely on.

That would account for the major difficulty raised by Kapsner. But in case one is looking for a fiction to motivate classical logic, there is also something to be said. Kapsner's requirement that classical logic needs to be motivated by a story where precisely explosion is in focus may be too restrictive of the kind of story that needs to be produced. Classical logic could be motivated by stories of other kinds, even if explosion is not actually employed (in a consistent story, for instance). That would clearly open the gates for more stories motivating classical logic.

The second point concerns the actual use of explosion. According to Kapsner, if a story is to induce it, it must be actually used by logicians and laymen alike, or that is what is being demanded. People must naturally reason according to it. That demand can be met if one considers mathematics similar enough to stories. In the case of mathematics, and the case of trained logicians, they clearly use explosion in many equivalent forms to prove things like the uniqueness of the empty set in basic set theory, and many other propositions that require the so-called proofs by vacuity, among many others. So, the challenge may be easily met on those fronts, with people actually using explosion for meaningful purposes. But what can we say about the laymen and imaginative resistance?

We shall address this point from a different perspective on Section 4.4, but here, there is something to be said. The fact is that the

laymen may offer a too varied source of intuitions about many topics, and we believe that appealing to those intuitions would just make things more confusing. To begin with the case of explosion, consider the laymen facing an explicit contradiction in fiction. Would they accept that a contradiction may be regarded as true outside of the fiction? Probably no one would accept that a box may be buried and not buried at the same time. The laymen would certainly raise suspicious to glutty paraconsistent logics too, coming from imaginative resistance. But the fact is that this is not definitive evidence for or against any kind of theoretical enterprise, which are not grounded on a pool of opinions. The laymen would also fail the famous Wason selection task (even some logic students do fail it), and that is no evidence that the laymen have got it right. Furthermore, if we shift that strategy to other fields of mathematics and physics, the issue gets more complicated. Consider the tension between folk physics and actual physics, the conflict between our expectations and the mathematical recommendations in the Monty Hall problem, and so on. There is a sense in which the appeal to the laymen cannot be effective against some theories; such appeal has no epistemic entitlement to decide such issues. It is not clear why this should be different in logic.

So, all of the objections by Kapsner may be resisted. One may, after all, legitimately motivate classical logic. In a sense, this is not a definitive argument, given that Kapsner may always point to a different logic that may not be so induced. However, we believe that the above considerations do resist the worries raised by Kapsner.

4.3. Resisting Priest's resistance

Let us now consider the views advanced by Priest, discussed before. Differently from Kapsner, Priest acknowledges that different contexts—which include different stories and different mathematical theories—may indeed have different underlying logics, with validity restricted in each case to the context where the underlying logic grants the internal standard of justification. However, Priest refuses to agree that validity *simpliciter* is *relative* to a given logic in a given context. Notice that that move does not block the norm of relativity; it just empties the norm of its interest for logic, because the norm is now seen to hold as trivially true, but in an uninteresting way. According to this view, there is still one correct logical theory, the one that describes validity *simpliciter*.

Also, as we have seen, Priest refuses to take all of the huge variety of structures as relevant for characterizing such a logical theory. Doing that would lead to no logic at all, and validity *simpliciter* must be different from that. Let us check how can one resist such a view.

We begin by putting the scenario in clear terms. As required by Priest, validity *simpliciter* is defined as truth preservation, by which is meant *simple truth preservation*, not truth in a structure. But that is not all there is to validity, because that would just amount to material consequence. As we have mentioned, Priest (2006, p. 207) emphasizes that one also needs a *modal component* to logical consequence: if the premises *were* true, the conclusion *would* also be true. Or: it is not possible that the premises were true, and the conclusion was false. The challenge now amounts to determining the scope of the quantifiers involved in the definition. Using a more metaphysical terminology to illustrate the same point: the challenge now concerns determining what kind of worlds (possible and eventually impossible, remember) are available to evaluate simple truth for premises and conclusion. Certainly, by being a realist about all such situations, Priest is committed to the claim that there is an objectively determined space of such worlds/situations. Those situations, as we mentioned, are assumed to be described by the correct logical theory, with the corresponding mathematical structures representing each such situation. Also, this mathematical description involves just *a proper subset* of all mathematically definable structures, given that allowing all such structures to play a role in the definition of logical consequence would deliver the empty logic, as claimed by Priest. The problem is that the empty logic would be useless for evaluating arguments that are framed *in ordinary language*. As a result, the correct logical theory must use only a subset of such structures, and it must determine such structures in such a way as to describe the real facts about the worlds or situations.

So, in a nutshell, Priest is suggesting that we treat some of the structures as privileged, because they correctly describe the objective scenarios/situations.⁶ Logical validity is concerned only with them. All other mathematically available structures are just a kind of surplus mathematical structure, existing only inside some set theory. But now consider the following similar argument: one cannot take logical validity to be

⁶ Given his arguments for dialetheism, he takes that correct logic to be **LP**, the logic of paradox, see (Priest, 2006).

defined as truth preservation across all structures, because that would result in the empty logic, and the empty logic is useless to judge about the validity of inferences made in the context of intuitionistic mathematics. Also, consider the same argument, just changing “intuitionistic mathematics” by “classical mathematics”. In each case, the desire for a useful logic indicates that the set of possible structures used to characterize validity must be selected in a specific way, if it is to be useful for the intended application; notice that all of such applications involve cataloging what should count as correct reasoning in a given kind of scenario. Clearly the empty logic is useless for all of them, but what is required in each case is a specific logic, different in each scenario of application; after all, we want to be able to determine when an inference in intuitionistic mathematics proves its point, and when it fails to do so — *mutatis mutandis* for classical mathematics (and, for that matter, in paraconsistent mathematics). What Priest is doing is selecting one of such scenarios, *viz.* cataloging what counts as valid arguments framed in ordinary language, as a privileged application, and considering this as the only scenario where truth is involved.

But selecting the study of the validity of arguments framed in natural language as the single target for the proper application of correct logical theorizing has a serious drawback: once a canon L is determined for such a goal, all uses of deviating logical theories for evaluating the validity of reasoning in *different contexts* are deemed as simply wrong according to the standards of L . Let us make that point clearer. Suppose L_1 is (at least for the time being) the system codifying *validity simpliciter*, the notion of validity that incorporates truth preservation. Once logical systems L_2 and L_3 deviate from L_1 , they do accept as valid some inferences that are invalid according to the correct standard, L_1 , or, perhaps, they characterize as invalid inferences that are valid according to L_1 . That is a simple result of the fact that such systems are different, and that L_1 was elected as the correct one. But then, such a choice of L_1 as correct will have an impact even in contexts where people seem to be legitimized to inferring according to the rules of systems such as L_2 or L_3 , *and there are such cases*. Let us illustrate: suppose L_1 is **LP**, the logic of paradox, L_2 is intuitionistic logic, and L_3 is classical logic. Once **LP** is adopted as the correct logic (let us assume for the sake of argument), intuitionist logic and classical logic fail in correctly characterizing validity. That means that intuitionistic mathematicians will be evaluating reasoning by the incorrect canon of inferences when they use intuitionistic logic to judge

inferences *in intuitionistic mathematics*; and classical mathematicians will be evaluating reasoning incorrectly too when they use classical logic to evaluate reasoning *in the context of classical mathematics*. But that seems clearly problematic, given that in those specific domains, it seems that different logics (i.e., different from **LP**) are actually required to evaluate the inferences that are made. Those domains, as Priest himself recognizes, have their own internal logic, which is used to judge the adequacy of reasoning inside those practices. Still, if we are to accept the initial claim that there is a privileged theory about validity, we should acknowledge that at least in one of those contexts people have been using incorrect theories about validity. The trouble is that there is a double standard operating: on the one hand, different mathematical practices may be seen as having their own internal logic, and on the other, there is the conflicting claim that only one logic describes validity correctly. Wouldn't it be better to accept an alternative explanation that the empty logic is useless, but still one can use differently defined theories for different contexts, so that the evaluation of arguments in ordinary language could count as just another non-privileged context?

If we are to concede that people may reason correctly according to different standards in different contexts, without a privileged logic, we will be led to the view that logic is a local matter, a conclusion that both Kapsner and Priest want to resist, but which is precisely implied by da Costa's norm of relativity. A possible way to avoid that view and enforce on us one single logic is the following: as Priest argues, the idea that different contexts could have different logics may lead one back to a general logic for validity *simpliciter* or validity for ordinary reasoning when we take the intersection of the different logics, looking for *the common core* of such logics. Against the local view of logic advanced by da Costa, for instance, he claims the following:

suppose, for example, that reality is fragmented into the macro and the micro physical levels. Note that we need to be able to reason about both of these at the same time—for example, concerning the interaction between entities of the two domains. What logic, i.e., machinery of truth preservation, do we use? Presumably the logic which is the intersection of logics for the two fragments. (Priest, 2021, p. S4944)

Now, while it may be the case that some domains may have a common core logic, that is no longer the case when one takes stories into account, or when one considers different mathematical theories, and when one

attempts to define a notion of logical consequence covering a huge variety of such contexts. As Priest did recognize, once one does take the common logic for all of such contexts into account, there is barely anything left for logical consequence. So, the move cannot be used as an attempt to establish a common logic for all contexts. Anyway, the idea of finding a common logic for distinct domains requires that we always have occasions to reason across them, which is not obvious. We do not do that with classical and intuitionistic mathematics, for instance.⁷ So, that move is not going to work, except in some specific cases where the two candidate logics are in some relation of containment of their logical consequence.

Of course, still one could insist on the selection of one logic as privileged on some claim that there is something special about the canonical application, i.e., the application of logic to evaluate reasoning in natural language. In other words, one may distinguish the study of valid inferences in classical or intuitionistic mathematics from the study of valid inferences in natural language, with genuine validity being identified only with the latter. Clearly, there is a sense in which such mathematical contexts do seem to indicate the kind of rules that are followed inside themselves, while the situation for ordinary reasoning is at best opaque. But are such highly theoretical practices so at odds with ordinary reasoning that they could be considered as irrelevant or not useful to the discussion of validity? Our view is that they are actually so important (given their relevance for mathematics and science), that they deserve even more attention than any logic describing validity in ordinary reasoning (whatever that may be, see (Smith, 2011) for a discussion). In that sense, logicians do concentrate much more on those specialized practices than in ordinary reasoning, and they seem to be right in doing so. As a result, if ordinary reasoning could be judged by a notion of validity that is amenable to logical study, we could see it just as another branch of application of logic, as *just one more context*, among others. One could believe that, just as in some jurisdictions one has the hidden implicit prefix ‘in the jurisdiction . . .’, and in a given mathematics one has an implicit prefix ‘in the practices of this community . . .’, in ordinary reasoning there is also one such prefix, or even more than one, given the

⁷ See also the discussion in (Shapiro, 2014, p. 123) and (Caret, 2023, pp. 8–9); the limits of the claim that there is always such common logic for any two domains is further investigated in (Goßens and Tedder, 2023), where interesting counterexamples are given.

variety of the reasoners in natural language and their shared beliefs, like ‘in the context of ordinary reasoning . . .’.

As a result, the idea that validity *simpliciter* is a privileged notion of validity among other merely technical notions of validity (for mathematics, for stories) is leading to trouble. It causes difficulties with the notion of logical generality, while at the same time creating tension with the idea that some applications of logic for the same purpose of codifying valid inferences are more legitimate or important than others. Let us now bring together some of the lessons these discussions have brought us concerning logic as a local matter.

4.4. The lessons

Let us now try to wrap up the consequences of the discussion so far, and check what kind of view of logic results from such lessons, if any. Remember that while Kapsner was willing to accept that stories have something to teach to logic — they offer more scenarios/situations to be considered when evaluating validity —, one may still have a logic that encapsulates validity *simpliciter*, because not all logics can be motivated by such stories, not every story concerns a legitimate possibility. At least classical logic cannot be so motivated, says Kapsner. Priest, on the other hand, agreed that different logics may operate in different stories, and that this includes even classical logic, but he refused to agree that this has anything to do with validity *simpliciter*; the latter is really about a special class of models, the ones concerning truth *simpliciter*. We have seen that both approaches are problematic.

Our plan is to keep what is not problematic in each of such approaches, which will result in a confirmation of the norm of relativity, as a consideration of our discussion of the view of Priest indicates. Following Kapsner, we allow that different stories may teach us something about validity *simpliciter*: stories do add to the space of situations that a general logical consequence would have to account for, if there was such an account. However, contra Kapsner, we have argued i) that even classical logic may be seen as the underlying logic for some quite reasonable stories, and ii) there is no limit to how far that offering of counterexamples may go, so that one may end up without a useful logical consequence that could account for every story. Validity *simpliciter*, when stretched to the limit, reaches a breaking point. That is also the conclusion that da Costa and Priest advance, each on his own terms, so

that the notion of logical validity *simpliciter*, if that is understood as the absolutely general logical consequence underlying every context, is empty. However, that is not how Priest sees it. He sees validity as a more restricted matter, defined in terms of a selected collection of situations. As we have seen, that could make logic a local matter. Stories hold or fail in specific classes of structures defining validity for those structures. However, Priest resists the conclusion by suggesting that validity *simpliciter* is concerned not with truth preservation in every structure, but with preservation of truth *simpliciter*, which is truth preservation inside a special class of structures, the ones correctly describing the objective situations. That protects validity *simpliciter* from collapsing due to the method of stories. However, as we have argued, that view faces difficulties; it has some hard times explaining the success of uses of logic for reasoning in diverse mathematical contexts.⁸ Accounting for the varied practice of inferring in different mathematical theories would make it difficult to motivate a specific class of structures as giving rise to the single notion of validity that is correct. As we have suggested, singling out correct reasoning in natural language as a field of application for logic as a context of logical application at best defines *another local notion of logical consequence*, among many others. In the end, logical consequence must be something local, unless one wants it to be nothing at all.

With this result, as it is clear, what must go is the idea that there is something named ‘validity simpliciter’, something in the wild awaiting for our theories to describe it, that would be the privileged subject matter of logic (see again [Smith, 2011](#)). What the use of stories as a methodological tool for logic teach us is that this idea seems misguided; validity is not something like an independent object awaiting to be described. Rather, it is a theoretical notion defined by us for specific theoretical purposes. This should not surprise us. The fact that the consequence relation is a theoretical notion developed for some specific purposes is also a lesson from the history of the discipline. Frege and Russell, for ones, were not concerned directly with every aspect of natural language when developing their pioneer systems (see also [Burgess, 1992](#)). Rather, they idealized a formal language without features that were not relevant for the study of mathematics (like temporal and deontic aspects), and

⁸ As a referee pointed out, it is not obvious that non-classical logics are required for empirical science, so that we restrict ourselves to diverse mathematical theories, which are acknowledged to require different logics (see the discussion in [Shapiro, 2014](#); [Caret, 2021](#); [Priest, 2013, 2021](#)).

abstracted away other features that could cause trouble for such an enterprise, such as empty names or sentences without truth values. Those are precisely some features that we now know how to add to the logic developed by Frege and Russell, for dealing with different aspects of natural language and argumentation. But doing that requires that we have different purposes in mind.

Once some epistemic aim is settled, we may use logical tools to develop a system for reaching those aims. As far as fictions are concerned, we may tailor fictions to favor some logics in detriment of others, that is, we construct a story having in mind some specific system of logic by focusing on some salient features of the system (contradictions that do not explode, apparent failure of LEM, logics for vagueness, systems allowing empty names...) and we use those features as ingredients to shape the story. We construct a logical model of the deductive behavior in the story, and induce the story to behave as the pre-established logic. There is no reason to wonder that some logics suit some stories. Justification for a system of logic being the correct logic for a story is built-in the construction of the story, it is sort of ‘put there by hand’ (see also [Arenhart, 2022b](#)). To make that point clear, consider the Sylvan box story. As Kapsner clearly stated, Priest crafted the story with an explicit contradiction in it. It was created with the purpose of illustrating a scenario where a contradiction would be present without triviality. The justification for the use of a paraconsistent logic is built-in, in the sense that a non-explosive inconsistency was deliberately written in the story. It is not as if the story was written, and only afterwards one discovered that it requires paraconsistency. No, paraconsistency was there right from the start.

To put it in other words, the fact is that creating such stories already requires logical ingenuity (and the same holds clearly for da Costa’s examples mentioned before). One somehow shapes a story to suit a given logic. Such stories cannot really teach us something about a notion of validity that is awaiting to be discovered, but rather require that we already understand quite a lot about validity, while at the same time contributing to improve our understanding of logic as a field of knowledge. That is, in order to construct such stories, one already needs to be logically informed, and not attempt to be informed about logic by such stories. Our intuitions are of no help in this case, because given the highly specialized nature of logic, there are not naive intuitions about it that can be found by investigating such stories. Just like Hodges remarked

about computation, that “[w]ork like Turing’s has a power of *creating* intuitions. As soon as we read it, we lose our previous innocence.” (Hodges, 2009, p. 489) The same happens to logic; once touched by logical theory, one loses logical innocence, for better or for worse. Stories cannot help us access our naive intuitions about logic; rather, they are relying heavily on our non-naive knowledge about logic available beforehand.

As a result, given these internal criteria of correction for systems of logic, what must be given up is both the idea that only one logic is correct, that one single theory can describe the facts about validity, and also, something which comes along with this, the idea that logic is general. If logic is to deal with every scenario (possible or impossible), we are left with barely no logic. If logic deals only with some such scenarios (only with the ones relevant for some kind of context), again, logic is not general, and logic loses its role in describing inferences in many contexts where it is actually applied (so that one such account cannot keep in touch with actual practices). Better, then, to embrace the idea that logic is a local matter.

5. Conclusion

We have dealt with the problem of what can logicians learn from stories. Two distinct positions were analyzed: Andreas Kapsner suggests that we can learn something valuable about validity; Graham Priest suggests that validity has nothing to do with stories. We have taken something from both positions. Logic is empty if stories are allowed to increase the range of possibilities to be accounted for; at the same time, logic cannot be saved as dealing with a special notion of validity by confining it to some of the structures/stories and calling them the intended ones. The result is that logic is a local matter, it applies in many different contexts by offering distinct notions of consequence. That is more in tune with the fact that logic is a technical discipline with many facets, and stories contribute to remember us that it should not be reduced to one single purpose.

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