

Proportional dispositional predicates

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Abstract

Ordinary disposition ascriptions (DAs) appear to form a semantically heterogeneous class of clauses some of which can be straightforwardly analyzed as possibility claims, and some of which resist a simple quantificational treatment. For example, while “The block is breakable” is true if the block breaks at a relevant possible world, for “The block is fragile” to be true it doesn’t suffice that the block breaks at one of the worlds that matter to the evaluation of the ascription, since the block could break accidentally and yet be sturdy. The contrast has been taken to indicate that sentences like “The block is fragile” don’t introduce mere existential quantification over sets of worlds, and should be represented as claims about sufficient ratios or proportions of worlds. However, recent work has suggested that by pairing the recalcitrant DAs with modified manifestation phrases, we can generalize the standard analysis of existential DAs to the problematic examples, and state a uniform characterization of DAs as claims of possibility. The paper discusses some counterexamples to the view that allegedly non-existential DAs are covert claims of fine-grained possibility, and sketches a hybrid account combining proportional quantification with fine-grained manifestations.

1. Introduction

Ordinary disposition ascriptions (DAs) are natural language clauses such as “The glass is fragile” and “The glass is breakable”. DAs appear to form a semantically heterogeneous class of clauses some of which can be straightforwardly analyzed as possibility claims, and some of which resist a simple quantificational treatment. For example, it seems uncontroversial that “ X is breakable” is true *iff* x breaks at one accessible world, where x is an object, X is a singular term denoting x , and “accessible” means featuring the contextual facts that need to be kept constant in modal space for the purpose of assessing the ascription (in this case, worlds where the physical properties of x are preserved).¹ By contrast, it seems incorrect to say that x breaking at one of the accessible worlds is sufficient for the truth of “ X is fragile”, for x could break at one of the accessible worlds and yet be sturdy. Clauses like “The glass is fragile” present therefore a challenge for the project of stating a uniform quantificational

¹ Throughout the paper, I’ll use double quotation marks to notate expressions in the object language, and capital-italic to notate metalinguistic variables for expressions in the object language. So, e.g., X is a variable for expressions denoting x , $\llbracket “X” \rrbracket$ is x , “ X is smart” is a set of object-language expressions predicating “is smart” of x , and $\llbracket “X$ is smart” \rrbracket is the proposition expressed by “ X is smart”. This simplified notation will do for our purposes.

analysis of DAs, and have been taken to suggest that some DAs irreducibly involve quantification over sufficient proportions or ratios of worlds.²

For simplicity, let the *Possibility View* be the view that in spite of the contrast we have described, DAs uniformly express possibility. By contrast, let the *Proportion View* be the view that DAs resisting existential analysis involve in fact quantification over sufficient ratios or proportions of worlds. In the current theoretical landscape, the Proportion View is in the minority, and Vetter (2014; 2015) is quite possibly its only explicit endorser. The *communis opinio* seems to be that while dispositional predicates like “fragile” do challenge the project of a homogeneous possibility-based semantics for DAs, we should try our best to deliver one, since talk of proportions of worlds would commit our apparatus to a mysterious quantificational mechanism somewhere between the universal and the existential, a mechanism hard to derive from familiar semantic primitives. Yet, desiderata aside, there is no clear consensus on the way the Possibility View might account for the contrast between simple possibility DAs like “The glass is breakable” and recalcitrant DAs like “The glass is fragile”.

In this context, Aimar (2019) has made an ingenious observation: it looks like the obstacles on the path towards a homogeneous semantics for DAs can be removed by associating the recalcitrant dispositional predicates with fine-grained manifestation verbs. Take “The glass is fragile”. This DA does resist a simple quantificational treatment if construed as the claim that the glass “breaks” at an accessible world, but not so if it’s understood as the claim that the glass “breaks *easily*” at an accessible world. Of course things aren’t fragile just because it’s possible that they break. But saying of something that it’s fragile *iff* it’s possible that it breaks easily sounds much more promising. Hence our way out: by regarding the recalcitrant DAs as possibility claims semantically tied to sufficiently fine-grained manifestation phrases, we can dissolve the *prima facie* difficulties of the Possibility View, and deliver on the desideratum of a uniform existential analysis of DAs.³

2 As is known, the phenomenon has a structural analogue in the realm of ability ascriptions. Suppose John is in front of a password protected laptop. The password is *ac9RafB6*. John intends to unlock the laptop but doesn’t know the password. He decides to give it a try anyway, typing the first string of letters and numerals he can think of. Now, there certainly is a possible world compatible with the context at issue where John types *ac9RafB6*. Does it follow that “John can unlock the laptop” is true? Not in the ability reading. If John has the ability to unlock the laptop, we expect him to reliably succeed unlocking the laptop, not merely to type the correct password at one of the accessible worlds. Hence, some account is in order as to how, assuming that “can” is a possibility modal, “John can unlock the laptop” may give rise to a reading where the ascription isn’t satisfied by an accidental manifestation. For discussion, see Mele (2003), Vihvelin (2004), Fara (2008), Hacquard (2010), Vetter (2013), Mandelkern et al. (2017), Maier (2018).

The aim of this paper is twofold. The first is to argue that fine-grained manifestation phrases don't make the Possibility View completely stable, despite the attraction of the proposal. The second is to present a hybrid account which combines fine-grained manifestations with the quantificational taxonomy of the Proportion View, and suggest that the resulting account may conjoin the virtues of its two parent approaches. In a nutshell, Aimar (2019) is right that we should consider a semantics for DAs that incorporates fine-grained manifestations. But even with this new resource at its disposal, the notion that allegedly proportional DAs can be reduced to expressions of possibility faces potential counterexamples. If the counterexamples are on the right track, the appeal to fine-grained manifestation phrases doesn't get the case for the Possibility View as far as one may initially have hoped for. But the suggestion remains relevant and well-taken. So perhaps we should cash on it in a different way: not to reduce the recalcitrant DAs to possibility claims, but to develop a middle-ground view that incorporates elements from both sides of the debate. Or so goes the hypothesis I'll describe.

To avoid confusion, keep in mind that the focus in what follows will be on the *semantics* of *ordinary* DAs. First, emphasis on "semantics": I won't be interested in what dispositions are (e.g., whether dispositional properties reduce to categorical properties, whether dispositions are graded possibilities, whether dispositionality is a *sui generis* kind of metaphysical possibility), but on the way we *talk* about dispositions (e.g., whether DAs are semantically akin to counterfactual claims, whether English construes dispositions as graded possibilities, whether dispositional talk is a *sui generis* semantic kind). Since the semantics of DAs is not guaranteed to reveal the correct metaphysics of dispositions, pay attention not to conflate the two subject matters, and remember that the *explanandum* of this paper is the former, not the latter. Second, emphasis on "ordinary": I won't be interested in the semantics of "technical" DAs such as "*X* is disposed to break", where "is disposed to" is a term of art hardly found in everyday linguistic production. I will instead concentrate, as one might put it, on "natural" or "lay" dispositional talk: ascriptions of fragility, usability, communicability, and so forth.

3 Aimar (2019) reports that Kratzer (1981; 2012; 2013) and Maier (2016) have suggested views in this vicinity. Though I won't be concerned with precedents and focus simply on the content of the proposal, it bears mentioning that Schwarz (2020) has offered an analysis of ability ascriptions which appears to pursue a very similar agenda. Approximating a bit, the idea is that transparent readings of ability modals arise through a contextual restriction on the interpretation of the embedded verb (roughly, \llbracket "Tim can *VP*" $\rrbracket = \llbracket$ "Tim can *VP MOD*" \rrbracket , where *VP* is an action verb phrase and *MOD* is a manner modifier supplied by the context; e.g., "intentionally"), and that, with this mechanism in place, we can make sense of the corresponding ability ascription under the orthodox assumption that "can" introduces mere existential quantification over a set of worlds. I'll focus on DAs in this paper, and leave ability ascriptions for another time.

For our purposes, there's no need to dwell on the exact boundary between the two categories. I expect the distinction to be clear enough conceptually speaking, and central cases will do.

The plan is as follows. Section 2 introduces the Proportion View and the Possibility View, and describes Aimar's "warm-up" argument for a Possibility View with fine-grained manifestations. Section 3 argues that the pattern motivating the argument faces potential counterexamples. Section 4 adds further data to the picture. Section 5 presents the hybrid account. Section 6 concludes.

2. Rescuing possibility

Let's start with getting clear about what the basic claims of the Possibility View and of the Proportion View are, about what's at stake in their competition, and about the attraction of adopting fine-grained manifestations as a means to establish the Possibility View. As was mentioned, some DAs clearly bear the semantic status of a possibility claim. For example, a single accessible world where the block breaks is sufficient for (1) to be evaluated true.

- 1) The block is breakable.

Now take (2).

- 2) The block is fragile.

Here the situation looks different. It doesn't seem to be the case that $\llbracket \text{"}X \text{ is fragile"} \rrbracket = 1$ iff x breaks at one accessible world. Suppose the accessibility relation in force for (2) selects all and only the possible worlds where the physical properties of the block are preserved. If so, there is an accessible world at which our block preserves its physical properties, is hit by some powerful force, and breaks. But clearly breaking at an accessible world under the impact of a powerful force doesn't settle the fragility of the block, which might be perfectly sturdy. In producing DAs like (2), speakers seem therefore to assert something stronger than the mere possibility of breaking at an accessible world. For comparison, see the distribution of judgments in (3).⁴

⁴ Unless otherwise indicated (e.g., the sentence is prefaced by a context description), the judgments reported are about felicity and infelicity in most contexts. For example, (3d) would be felicitous in a context where the block is protected by a sturdy armor. However, since masking contexts are the statistical exception rather than the norm, (3d) can still be predicted to sound degraded in most scenarios, which plausibly explains the feeling of oddness speakers get when

- 3)
 - a. ✓ The block is fragile and it is possible to break it.
 - b. # The block is not breakable and it is possible to break it.
 - c. ✓ The block is not fragile, and breakable.
 - d. # The block is fragile, and not breakable.

Faced with examples of this sort, one may be tempted to take the contrasts at face value, and simply conclude that the correct semantic treatment of DAs cannot be a chapter of the Possibility View. But its alternative, the Proportion View, incurs a considerable cost: it has to spell out how quantification over proportions of worlds operates, which in turn would seem to require a logical form for proportional DAs featuring an appropriate two-place operator or a mysterious “third” quantifier. It is true that modal statements like (3a) and (3c) raise challenges for classical analyses à la Lewis (1976; 1979) and Kratzer (1977). However, the thought goes, *ceteris paribus* the best solution would arguably be to generalize the treatment of modal clauses found in these frameworks to the recalcitrant ascriptions. If viable, the resulting account would not only secure a uniform treatment of DAs; it would also dispense the theorist from the requirement of giving an account of the emergence of proportional quantification to describe the workings of DAs like (2). No extra two-place operator, no obscure quantifier somewhere in between the universal and the existential: good-old existential quantification alone would do the job across the board.

But how? One immediate go-to would be to tighten the accessibility relation for the set of worlds over which the recalcitrant ascriptions quantify. The idea is that by placing increasingly more demanding constraints on the compatibility with the relevant state of affairs that a world has to satisfy in order to factor in the evaluation of DAs like (2), we may be able to chip away at the purported quantificational difference between possibility and proportional DAs, and have the latter satisfied if the disposition is manifested at one of the strictly accessible worlds. Intuitively, if the worlds that matter to the assessment of (2) are only those maximally compatible with the contextual specifics of the ascription, the observation that (2) seems to be committed to something modally more robust than possibility might no longer be a concern: as long as there’s one instance of breaking within the demanding set of accessible worlds, the ascription of fragility is satisfied.

reading (3d) out of the blue. To rate examples, I use the following scale: “✓” (felicitous), “?” (somewhat degraded), “??” (degraded), “#” (infelicitous).

There are, however, two problems with this hypothesis. The first, which for brevity I'm not going to comment on (see Schwarz 2020 for some discussion), is that it's unclear whether the strategy would deliver the proposed ockhamization, that is, succeed in demonstrating that under a strict accessibility relation allegedly proportional DAs behave like possibility claims. The second is that even if the ockhamization proved technically viable, and therefore demonstrated that the recalcitrant DAs are indistinguishable from possibility claims under a strict accessibility relation, there are concerns as to whether it would still provide descriptive purchase on what DAs like (2) are actually taken to mean in ordinary usage. When we say that some x is fragile, we usually don't just mean that nothing precludes the possibility of x breaking given the current state of affairs. We mean that x has properties that make it prone to breaking in multiple scenarios compatible or not with the assessment context. If your favorite porcelain dish is safe in the drawer of your NYC apartment, and you think about what would happen to it if it slipped out of your hands after bringing it with you to Paris, it makes sense for you to rely on this imagined scenario as a reason for saying that the dish is fragile in NYC, no matter the mismatch between the imagined scenario and the current state of affairs. At least in the assessment of DAs like (1) and (2), it's quite clear that the accessibility relation selected by speakers tends to preserve the physical properties of the object while licensing significant variation in external circumstances. Thus, even if under a demanding accessibility relation DAs like (2) were indistinguishable from possibility claims, that would prove that DAs like (2) *are* possibility claims only on condition that the accessibility relation actually selected by speakers corresponds to the demanding relation introduced by the theorist. Which looks like a problematic premise.

In sum, tightening the accessibility relation is not a particularly promising option to pursue the Possibility View. Is there another way? Here's where Aimar's (2019) suggestion comes in. Work on the semantics of DAs tends to assume a coarse-grained picture of manifestations, one on which, e.g., the manifestation of fragility is exhaustively captured by the unmodified verb "break". Instead, we should consider committing to a *fine-grained* picture of manifestations, one allowing the expressions denoting the manifestations of some dispositions to feature qualifications of their main verb. Aimar's (2019: 1672-1675) "warm-up" argument for the view is as follows.⁵ DAs are typically expressed in natural language by clauses like " X is V -able" and counterparts with related suffixes ("-ible"; "-ile").⁶ Assume

5 The presentation is my responsibility.

6 Note "typically". For example, "toxic" is dispositional but doesn't feature a dispositional suffix. Also, note that "-able", "-ible", and "-ile" produce dispositional adjectives only when the compound has a compositional morphology and hasn't become idiosyncratic. For example, while "-able" does produce the dispositional adjective "alterable" when

that in the semantics there's a function f that pairs every dispositional predicate with a (voiced, inflected) manifestation phrase (MP) such that $\llbracket\text{"}X \text{ is } V\text{-able"}\rrbracket = 1 \text{ iff } \llbracket\text{"}MP\rrbracket(x) = 1$, whether at one accessible world or at a proportion of the accessible worlds – which is the bone of contention. For example, the MP of “ X is communicable” is “is communicated”: the communicability of x is manifested at worlds where $\llbracket\text{"is communicated"}\rrbracket(x) = 1$. Assume, further, that while f pairs possibility DAs with simple MPs, it pairs the recalcitrant DAs with *modified* manifestation phrases (MMPs) branching into a verb and a grain or manner modifier. Thus, while the manifestation phrase associated to “ X is breakable” is the simple MP of (4a), the manifestation phrase associated to “ X is fragile” is the MMP of (4b).⁷

- 4) a. $f(\text{"}X \text{ is breakable"}) = \llbracket\text{"}_{VP} \llbracket\text{"}_{V} \text{ breaks}\rrbracket\rrbracket$
 b. $f(\text{"}X \text{ is fragile"}) = \llbracket\text{"}_{VP} \llbracket\text{"}_{V} \text{ breaks}\rrbracket \llbracket\text{"}_{ADV} \text{ easily}\rrbracket\rrbracket$

It's an attractive assumption: ordinary intuitions about the meaning of “fragility” do seem to involve, at some level, breaking easily rather than just breaking, and do seem to imply that the tendency to break easily is what sets fragility apart from mere “breakability”. For illustration, see (5).

- 5) a. ✓ The block is breakable, so it is possible to break it.
 b. ✓ The block is fragile, so it is possible to break it easily.
 c. # Something is breakable only if you can break it easily.
 d. ✓ Something is fragile only if you can break it easily.

Now consider the following DAs with the dispositional predicate under negation.⁸

combined with “alter”, it does not produce a dispositional adjective when combined with “commend”. In present-day English, “commendable” is a listeme whose standing meaning, the deontic “being worthy of praise”, cannot be recovered from the meaning of its morphemic parts (which would return the obsolete “capable of being praised”).

7 Recall that Vetter (2015) too appeals to modifiers in her semantics for proportional DAs. But she suggests the following analysis (again, the phrasing is my responsibility): $\llbracket\text{"}X \text{ is fragile"}\rrbracket = 1 \text{ iff } \llbracket\text{"}_{can \text{ easily}} \llbracket\text{"}_{break}\rrbracket\rrbracket(x) = 1$, with single square brackets to disambiguate attachment. The key difference is that in Vetter's account the modifier is attached to the modal, whereas on the suggestion we're considering the modifier is attached to the manifestation phrase. In Vetter's framework, therefore, there are no fine-grained manifestations. The modifier simply makes explicit that the clause on the right side of the biconditional introduces quantification on a ratio of worlds.

- 6) The block is not breakable.
- 7) The block is not fragile.

The situation is as follows. The prediction of the Possibility View is that by having MMPs into our semantic toolkit, we should be able to offload the *prima facie* quantificational difference between (6) and (7) to the grain of the manifestations associated to the respective DAs, and allow “*X* is fragile” to be true *iff* within the subset of worlds selected by the accessibility relation there’s at least one at which $\llbracket \text{“}X \text{ breaks easily”} \rrbracket = 1$. The thinking is condensed below, with subscript “ext” abbreviating that the ascription introduces simple existential quantification.

Possibility View

- i. $\llbracket \text{“}X \text{ is breakable”} \rrbracket = 1 \text{ iff } \llbracket \text{“breaks”} \rrbracket_{\text{ext}}(x) = 1$
- ii. $\llbracket \text{“}X \text{ is fragile”} \rrbracket = 1 \text{ iff } \llbracket \text{“breaks easily”} \rrbracket_{\text{ext}}(x) = 1$

So, on the Possibility View *cum* MMPs, (6) and (7) should be evaluated true by an ordinary speaker if there is no accessible world where the block breaks and breaks easily, respectively. By contrast, on the Proportion View, only (6) is true on condition that there is no accessible world where the block breaks, whereas (7) should be understood to assert absence of breaking at a sufficient ratio of the accessible worlds. The thinking is in turn condensed below, with subscript “spr” abbreviating that the ascription introduces quantification on a proportion of worlds.

Proportion View

- i. $\llbracket \text{“}X \text{ is breakable”} \rrbracket = 1 \text{ iff } \llbracket \text{“breaks”} \rrbracket_{\text{ext}}(x) = 1$
- ii. $\llbracket \text{“}X \text{ is fragile”} \rrbracket = 1 \text{ iff } \llbracket \text{“breaks”} \rrbracket_{\text{spr}}(x) = 1$

To test the predictions, let us add a conjunct to (6) and (7). We obtain (8) and (9).

8 Throughout the paper, I’ll sometimes rely on negation to ensure that the readings that matter to the argument can be accessed with ease. Note that Aimar’s own argument relies on sentences featuring parallel uses of negation, so the choice should be dialectically fair. And even in the unlikely event that the results I’ll describe were a figment of the way I’m using negation, that wouldn’t make the discussion moot. It would show that we can get to interesting data by moving negation around in a way that ordinary parlance would regard as perfectly natural. Thanks to an anonymous reviewer for pressing to make this explicit.

- 8) # The block is not breakable, but it can break.
- 9) # The block is not fragile, but it can break easily.

Both sentences would readily be evaluated as infelicitous in most contexts.⁹ But this is excellent news for the Possibility View. A plausible explanation for the infelicity of (8) and (9) is that in both cases we're dealing with conjuncts that make incompatible modal claims. This is quite clear in (8), of which both the Possibility View and the Proportion View would say is degraded because it asserts, of the same entity, that it doesn't break at any of the accessible worlds, and that it breaks at one of the accessible worlds. Now let's turn to (9). For the Proportion View, "The block is fragile" is semantically equivalent to the claim that the block breaks at a sufficient proportion of the accessible worlds. Hence, "The block is not fragile" should be semantically equivalent to the claim that the block doesn't break at a sufficient proportion of the accessible worlds. That some *x* doesn't break *simpliciter* at a ratio of the accessible worlds doesn't entail that *x* doesn't break easily at any of the accessible worlds. Thus, it should be possible to assert without contradiction that *x* doesn't break at a relevant proportion of the accessible worlds, *and* that in one of the worlds *x* breaks easily. In other words, if "The block is not fragile" were semantically equivalent to the claim that the block doesn't break at a sufficient proportion of the worlds, its conjunction with a possibility clause asserting that the block breaks easily at one of the worlds should pose no problem. Interestingly, by the Proportion View, (9) would seem to do precisely that: conjoin the claim that the block doesn't break at a proportion of the worlds, with a possibility clause asserting that the block breaks easily at one of the worlds. And yet, (9) is degraded. If we couple this with the assumption that infelicity is due to the fact that the sentence is making incompatible modal claims, the DA of (9) cannot be semantically equivalent to the claim that the block doesn't break at a proportion of the accessible worlds: it has to be equivalent to the claim that the block doesn't break easily

9 Recall fn. 4. For illustration, here's a context where the parallel would be less clear. Suppose some physicists have invented a laser that, pointed at glass objects, covers them with an invisible coating that makes them exceptionally resistant to common breaking techniques. In a context with a glass, the laser pointed at it, and a group of speakers discussing the impact of common breaking techniques on the glass, one could felicitously assert "The glass is fragile, but it cannot break easily", whereas "The glass is breakable, but it cannot break" would remain odd. Again, examples of this sort are compatible with the claim that (8) and (9) would be evaluated as infelicitous in most contexts, since they build on specific contextual conditions: in this case, the presence of a device that mimics sturdiness.

at any accessible world, for this is the only way the right conjunct can contradict the left one. We can sum the thinking up as follows.

- P1. (8) is infelicitous because its DA and its left conjunct make two at-odds possibility claims.
- P2. The modal the right conjunct of (9) is equivalent to the modal in the right conjunct of (8).
- P3. The right conjunct of (9) is a possibility claim. [P1, P2]
- P4. For (9) to be infelicitous, it should make two at-odds claims with the same modal profile.
- P5. For (9) to be infelicitous, its DA should be a possibility claim. [P3, P4]
- P6. (9) is infelicitous.
- C. The DA of (9) is a possibility claim. [P5, P6]

And so are, retrospectively, those of (7) and (2).

It bears noting that Aimar (2019) doesn't present the "warm-up" argument reconstructed above as something that establishes the Possibility View in any conclusive way. She presents it as a reason to consider shifting away from the view that DAs are counterfactual claims (Manley and Wassermann 2007; 2008), and states that what the argument shows is merely that "there is reason to think that DAs simply express possibility" (Aimar 2019: 1675), since (9), (7) and (2) are paradigm examples of the kind of recalcitrant DAs one might take to be irreducible to claims of possibility. Her analysis then complements the "warm-up" argument with a substantive argument combining the claim that (what I've been calling) the Proportion View faces difficulties accounting for the gradability of DAs (her main target is Vetter 2015), and the claim that the Possibility View has the resources to get gradability right. You might thus be wondering: if the "warm-up" argument is just supposed to show that the strategy we're discussing deserves consideration, why bother reconstructing it in such detail? Because irrespective of the way the comparison is introduced in Aimar's setup, pairs like (8) and (9) have to reliably match in felicity to warrant the thesis that the appeal to MMPs licenses a uniform analysis of DAs. In other words, the argument is right that the comparison between (8) and (9) renders a Possibility View with modified manifestations an attractive option, but the stability of the view remains contingent on the absence of counterexamples featuring recalcitrant DAs that resist reduction to their

fine-grained possibility counterparts. So it makes sense to ask how robust and steady across comparisons the parallel between (8) and (9) really is, for if it broke down in a sufficient number of close counterexamples, the proposal would face an empirical challenge. Besides, no worries: we will return to gradability in Section 5.

3. A closer look

So let's take a closer look at the parallel. Under the reconstruction above, the heuristic momentum generated by the comparison between (8) and (9) rests on the conjunction of (P1), (P2), (P4), and (P6). (P6) is robust: (9) is in fact an odd statement to make in most contexts. (P1) can be granted: though there might be alternative explanations,¹⁰ it seems appropriate to think that (8) fails because its DA and its left conjunct make two at-odds claims with the same modal profile. The same goes for (P4): since (8) and (9) are built on the same structural blueprint, it stands to reason to expect that in order for (9) to be judged infelicitous, the sentence should be perceived as making two contradicting claims with same modal profile, on par with (8). But what about (P2)? How safe is the premise that the right conjunct of (9) is modally equivalent to the right conjunct of (8), and, by extension, the premise that the right conjuncts of (8) and (9) are both possibility claims?

As per (P2), the parallel can be taken to suggest that the DAs involved simply express possibility on condition that the constructions in the right conjuncts do. Thus, on condition that in the reading that underlies the judgments at stake, both “but it can break” and “but it can break easily” introduce mere existential quantification over the relevant set of worlds. However, notice (10).

- 10) a. # The block is not breakable, but it may break.
- b. ? The block is not fragile, but it may break easily.
- c. # The block is not breakable, but it could break.
- d. ? The block is not fragile, but it could break easily.

This isn't what we expected. If the right conjuncts of (8) and (9) were both claims of possibility, we would expect infelicity to uniformly carry over to (10a, c) and (10b, d). However, (10b) and (10d) have

10 Example: we should distinguish between *bona fide* semantic anomaly and pragmatic infelicity (e.g., Magidor 2013), and say that (8) triggers a feeling of oddness because the sentence is pragmatically infelicitous, not because it's semantically anomalous. I won't explore this option.

improved.¹¹ As a result, the premise that the right conjuncts of (8) and (9) are both possibility clauses suddenly looks up for debate. And so does the argument that the parallel between (8) and (9) is naturally explained by the view that the DAs in their left conjuncts are both possibility claims.¹²

But wait. I have granted that (8) fails because its two conjuncts make contradicting modal claims, and that the pattern in (10) is consistent with the assumption that the right conjunct of (8) expresses possibility. So we're still reasoning under the premise that that (8) fails because its conjuncts make at-odds claims of possibility. I also have granted that (8) and (9) are both infelicitous. Now, by questioning (P2), I'm expressing uncertainty about the premise that (9) is infelicitous because its DA and its right conjunct make two contradicting claims of possibility. Then why is (9) infelicitous?

Interestingly, there are viable explanations of the pattern which can be pursued within the view that the DA of (9) introduces quantification over a ratio of worlds. Here's one. Assume (P1), (P4) and (P6), but discard (P2). The conjuncts of (9) are connected by "but". The connective gives (9) a topic-comment structure which leads the listener to expect the right conjunct to make an intensionally adequate follow-up on the left conjunct (see, e.g., Umbach 2005). The violation of information-structural constraints of this sort is rejected by speakers unless contexts supplies the appropriate background. For example, a sentence like "Bill is great but there are several unobserved stars in the sky" sounds odd unless it's uttered a context where the assertion of the right conjunct is relevant to an assessment of the truth of the left conjunct, or can be used to drive home a conversationally salient point. Something like (11) would do.

- 11) [*Context: in previous discourse, two speakers have established that either there is only a handful of unobserved stars in the sky and therefore Bill is a good dancer, or there are several unobserved stars in the sky and therefore Bill is a bad dancer*]

11 They'd improve even upon replacing the negated DA with some positive counterpart: e.g., "? The block is sturdy, but it could break easily". Which suggests that the improvement isn't a confound due to the presence of negation.

12 *Objection.* These are underhand tactics, since "may" and subjunctive "could" may be forcing a context-shift mid-sentence that populates the modal base with worlds that are incompatible with those that mattered sentence-initially to the assessment of the DA. Of course (10d) sounds better than (9), but this doesn't tell us anything about the Possibility View, since mid-sentence we're implicitly switching to a reading where the intrinsic properties of the block are no longer fixed. *Reply.* I'm not sure about the intuition. In any case, the contrast persists even if we're explicitly instructed to keep the intrinsic properties of the block constant. Suppose we are in a possible world W where a block of concrete possesses its intrinsic properties essentially. At every world where it exists, the block necessarily has the same intrinsic properties it has in W. In W, it would still make sense to say "The block is not fragile, but it could break easily".

✓ Bill is great but there are several unobserved stars in the sky.

By the Proportion View, DAs featuring the predicate “fragile” assert that the block breaks at a sufficient ratio of the accessible worlds. So by asserting “The block is not fragile”, one asserts that the block doesn’t break easily at a ratio of the accessible worlds. Because of the requirement of intensional symmetry, the listener expects the right conjunct of (9) to be intensionally on par with the left conjunct, and hence to say something about the ratio of worlds that the preceding conjunct has characterized as non-breaking worlds. The right conjunct of (9) is consistent with this option.¹³ As a result, the right conjunct of (9) itself is interpreted as making a claim about a ratio of worlds. *This* is responsible for (9)’s infelicity. The two examples are indeed infelicitous because they make at-odds claims with the same intra-sentential modal force, but the parallel is shallow: (8) is infelicitous because its two conjuncts make at-odds possibility claims (roughly, $\sim\llbracket\text{“breaks”}\rrbracket_{\text{ext}}(\llbracket\text{“the block”}\rrbracket) \& \llbracket\text{“breaks”}\rrbracket_{\text{ext}}(\llbracket\text{“the block”}\rrbracket)$), whereas (9) is infelicitous because its two conjuncts make at-odds claims about a ratio of worlds (that is, $\sim\llbracket\text{“breaks”}\rrbracket_{\text{spr}}(\llbracket\text{“the block”}\rrbracket) \& \llbracket\text{“breaks easily”}\rrbracket_{\text{spr}}(\llbracket\text{“the block”}\rrbracket)$).

4. More data

I’ve argued that the parallel between (8) and (9) informing Aimar’s “warm-up” case for a Possibility View *cum* MMPs becomes less stringent in a counter-comparison where, if the DAs involved were expressing simple (im)possibility, we would expect matching infelicity to emerge with unaltered force. I’ve suggested, further, that the advocate of the Proportion View may be able to offer an explanation for why both (8) and (9) sound semantically degraded. If all this is correct, it should suffice to show that

13 Note that what the hypothesis needs at this stage is simply that the right conjunct of (9) licenses a reading that asserts something stronger than a claim satisfied by an accidental manifestation, which is orthogonal to the lexical semantics of “can”. I mentioned the point in fn. 2 in connection with the “can” of agentive abilities, and it helps to reiterate it here. Suppose a chemist giving a lecture on solid-state reactions says “Reactions can take place between two solids”. It would be odd to consider the chemist’s statement satisfied as soon as we can detect a lone chemical reaction taking place between two solids. The chemist is clearly trying to inform us of a deeper regularity. Does this show that “can” is lexically wired to contribute, in the right environments, something stronger than existential quantification? Maybe. Or maybe not: the modal could contribute plain and simple existential quantification turned into something stronger via some downstream association with an operator like *Gen*. But again, what the line of thinking I’m describing requires isn’t a full-fledged theory about how these non-accidental readings may square with the assumption that “can” can only introduce existential quantification. It’s the more neutral intuition that these readings are common interpretive currency, and that we can read the right conjunct of (9) in a similar fashion.

while comparing (8) and (9) can be understood to give heuristic momentum to the Possibility View, the implication can be challenged by a rival story. Now let's see if we can draw a less tentative lesson from the examples we've been dealing with.

We obtained (10a-d) by feeding the right conjuncts of (8) and (9) with modal expressions saliently associated with a reading of possibility. Consider a reinforced version of the experiment which replaces the modals with a construction that unambiguously introduces existential quantification over the relevant worlds.

- 12) # The block is not breakable, but it is possible for it to break.
- 13) ✓ The block is not fragile, but it is possible for it to break easily.

(12) is odd in most contexts. Unless the discourse or the extra-linguistic situation supply the adequate repair, a natural reaction on the listener's part would be "But wait, haven't you just told me it's not breakable?". Instead, (13) doesn't sound degraded. It allows for consistent follow-ups assenting to the conjunction of lack of fragility with possible ease of breaking. For example: "That's true, the block is far from fragile; but I guess that doesn't mean it cannot break easily". If "The block is not fragile" were semantically equivalent to the negation of the claim that there's an accessible world at which the block breaks easily, its conjunction with the claim that the block breaks easily at one of the worlds should result in the same kind of inconsistency that generated infelicity for (12). This is not the result we seem to be presented with. Which suggests that the negative DA of (13) cannot be semantically equivalent to the claim that the block does not break easily at any of the relevant worlds. It has to be such that it can be conjoined without obvious contradiction with a possibility claim asserting that the block breaks easily at one of the relevant worlds. But the only way the negative DA of (13) could be consistent with a possibility claim asserting that the block breaks easily at one of the relevant worlds, is if it amounted to the negation of a proportional clause asserting breaking (easily) at a ratio of the worlds. Here is then a counterargument.

- P1. The DA of (12) is a possibility claim.
- P2. The DA of (13) is either a proportional claim or a possibility claim.
- P3. The right conjuncts of (12) and (13) are overt possibility claims.

- P4. If the DAs of (12) and (13) were both possibility claims, (12) and (13) should both be infelicitous.
- P5. (12) is infelicitous; (13) is felicitous.
- P6. The DAs of (12) and (13) aren't both possibility claims. [P3, P4, P5]
- C. The DA of (13) is a proportional claim. [P1, P2, P6]

And so are not, retrospectively, those of (7) and (2). For comparison, see (14).

- 14) a. # The block is not breakable, but Sue can break it.
- b. ✓ The block is not fragile, but Sue can break it easily.

Out of the blue, (14b) invites an inference that Sue possesses an unusual physical prowess or some secret breaking device, and the sentence is evaluated as felicitous relative to that inference. None such inference can come to the rescue in (14a). Similarly, witness the contrast in (15).

- 15) a. ✓ We have finally discovered that there is one way to break this block: it's breakable after all!
- b. ?? We have finally discovered that there is one way to break this block easily: it's fragile after all!

Or the pattern in (16). For example, while the DA in the relative clause of (16a) triggers a presupposition colliding with the proportion-flavored embedding clause, (16b) looks fine.

- 16) a. # The glass Mary knew was not breakable could be broken in a few ways.
- b. ✓ The glass Mary knew was not fragile could be broken easily in a few ways.
- c. # The glass Mary knew was not breakable broke.
- d. ✓ The glass Mary knew was not fragile broke easily.

Three comments are in order at this juncture. First, notice that the counterargument is no longer heuristic, at least in intent. While the reasoning described in Section 2 was merely aimed at offering a reason to believe that a paradigm recalcitrant DA could be characterized as a possibility claim, the

conclusion we're dealing with now is that there is a DA irreducible to a claim of possibility. Were the argument successful, it would be logically sufficient to rule out the hypothesis that DAs uniformly express possibility.

Second comment. One might object that the readings that give rise to the counterargument are idiosyncratic, and that the contrasts are a byproduct of tacit contextual assumptions that conceal a deeper parallel. For example, the rejoinder might have it, the contrast between (12) and (13) isn't teaching us that fragility and breakability ascriptions have different modal profiles. It merely indicates that listeners preferentially access a reading where the DAs involved are relativized to a salient context that breaks the symmetry (say, contexts where there is an exceptional breaking device at hand, like a missile, a hydraulic press, a drill with a diamond bit).¹⁴

In reply, two observations. The first observation is that the asymmetry between (12) and (13) persists even if we prime speakers to assess the DAs relative to an open-ended landscape of possible scenarios. (17a) and (17c) need an assist from context to work.¹⁵ By contrast, (17b) and (17d) sound fine out of the box.

- 17) a. ?? Under certain conditions, things that are not breakable can break.
- b. ✓ Under certain conditions, things that are not fragile can break easily.
- c. ?? Even things that are are not breakable can break.
- d. ✓ Even things that are not fragile can break easily.

The second observation is that the non-parallel seems to persist even if we specify a context that should reinstate matching judgments if “*X is fragile*” were synonymous with the claim that it's possible for *x* to break easily. For example, take (18).

- 18) [*Context: Physicists have filled a special room with a newly discovered gas that breaks every object. Prior to the discovery of the gas, the block was not breakable*]
- a. # Thanks to the gas, the block can break; but it's not breakable.

14 Thanks to Simona Aimar for an exchange on this point.

15 For example, they would work in a context where the participants to the conversation have stipulated that something counts a non-breakable if it wouldn't break upon exposure to the level of stress that mankind is currently capable of inflicting on an object, but then think of what an alien civilization that has reached the technological singularity would be able to do. For cases in this spirit, see Spencer (2016).

- b. ✓ Thanks to the gas, the block can break easily; but it's not fragile.

(18a) remains odd: among other things, it makes the listener wonder how one can coherently ascribe lack of breakability to the block after introducing the special room. (18b) looks good – and does so regardless of the context involved, which should plausibly elicit a judgment of infelicity if fragility were semantically equivalent to the possibility of breaking easily.

Third comment. Suppose you accept that the data we've considered aren't good news for the Possibility View under the specific premise that "fragility" is semantically equivalent to the possibility of "breaking easily". You might think that what this shows isn't so much that the Possibility View faces potential counterexamples, but that the specific premise does. Put differently, maybe what the data indicate isn't so much that there are issues with the Possibility View *per se*. They might just indicate that the endorser of the Possibility View should set the grain of the manifestation in a different fashion, and tie the relevant ascription to a different MMP: say, "breaking under [or "with"] little force" instead of "breaking easily", where what counts as little force is determined by context.¹⁶ See (19).

- 19) ✓ The block is fragile, so it is possible for it to break under little force.

Yet, the results appear mixed. On the one hand, contrasts like the one observed in (15) become less stringent (indeed, (20b) might be completely felicitous).

- 20) a. ✓ We have finally discovered that there is one way to break this block: it's breakable after all!
b. ? We have finally discovered that there is one way to break this block with little force: it's fragile after all!

On the other hand, there are downsides. To start, there's an issue of generality. Insofar as the theory we're looking for is supposed to illuminate a *semantic* tie between the DA and the relevant MMP (hence, an aspect of the standing lexical properties of "fragile"), we would expect the MMP concerned to allow us to make sense of fragility ascriptions across contexts and kinds of breaking. "Breaking easily" is agnostic enough about breaking conditions to stand a chance of doing that, since it doesn't

¹⁶ Thanks to an anonymous reviewer for inviting me to address this point.

suggest much about the specifics of the breaking involved and can be precisified by context in lots of different ways. By contrast, “breaking under little force” looks like a non-starter when it comes to making sense of breaking events like the one described in (18), where many ordinary speakers wouldn’t deem the block-breaking gas to apply any “force” on the block. In addition, following Vetter (2015), we can rely on soft-spot cases to elicit intuitions that put pressure even on this version of the account. Suppose some engineers have built a steel bridge connecting the two sides of a valley with modest winds. If the valley winds hit the bridge at some complex combination of locations, at some complex combination of times, and at some complex combination of modest speeds, the bridge will suffer from mechanical resonance and collapse. The engineers don’t ignore this potential vulnerability, and admit that the combination may occur.¹⁷ However, the probability that it does is exceedingly low, low enough to justify the construction of the bridge. In this context, the probability that the bridge breaks under little force is accepted as nonzero. Thus, the engineers are effectively accepting the existence of an accessible world compatible with the current state of affairs where the bridge collapses under little force. Should they then say that the bridge is fragile? That’s not obvious. As a matter of fact, it seems possible for the engineers to felicitously say the following.

- 21) ✓ It is possible that the bridge breaks under little force, but it’s certainly not fragile.

Naturally, there are many other fine-grained manifestation phrases one might consider using in place of “breaking easily” and “breaking under little force”. But the fact that these two natural candidates face the potential counterexamples I’ve tried to describe should place a dialectical burden on the overall approach itself. In reply, one could conjecture that instead of committing to a model where the recalcitrant DAs are context-insensitively tied to a stable MMP featuring a context-sensitive modifier, we should contemplate an alternative where context supplies the MMP itself. In some contexts, something semantically counts as fragile if it’s possible that it breaks easily; in others, if it’s possible that it breaks under little force; and so on. As things stand, a proposal along the lines of $\llbracket \text{“}X \text{ is fragile”} \rrbracket = 1 \text{ iff } \llbracket \text{Some MMP supplied by context} \rrbracket_{\text{ext}}(x) = 1$ is a live theoretical option, with a disclaimer: contextual supply “all the way down” would keep the existential analysis on the table at the cost of

¹⁷ This is important. If in the described context the breaking scenario were simply ignored due its low probability, one could say that the negated fragility ascription below doesn’t trigger infelicity because the “far-fetched” world where the breaking combination occurs is implicitly excluded from the set of worlds relative to which the ascription is assessed. Instead, it seems to succeed even if the possibility is taken into consideration.

curtailing its semantic depth, since it would yield the claim that the MMPs relative to which the DAs at issue are assessed, are not set upstream by the lexicon. Before a proposal of this sort can be considered, one should perhaps show, first, that we can't settle on more informative alternatives, and second, zero in on a sufficiently precise version of the account that places the right restrictions on the range of MMPs that context can supply upon presentation of a specific DA.

Time to take stock. The judgments we have reviewed seem to differ from those that should obtain if the introduction of MMPs did suffice to warrant the claim that all DAs are possibility claims. The recurring problem is the following: even after granting that dispositional predicates are semantically associated to fine-grained manifestation phrases, we can still identify DAs whose behavior seems to lack the signature features of a possibility claim. MMPs do manage to discharge on manifestations some of the explanatory burden generated by the perceived difference between possibility DAs and the recalcitrant ones. But it's unclear whether they get the Possibility View to the finish line.

5. A hybrid view

So far, I've made my case that MMPs don't settle the case for a uniform reduction of DAs to claims of possibility. Despite the assist from fine-grained manifestation phrases, we still encounter contrasts that go in the direction of the mixed taxonomy of DAs endorsed by the Proportion View. However, as I've repeatedly emphasized, Aimar's (2019) plea for fine-grained manifestations remains valuable, and seems to be onto something independently good to have in one's semantic toolkit. So what if, instead of using it to secure the Possibility View, we use it to develop a middle-ground hypothesis that combines elements from both sides of the debate? The job of this Section is to turn this programmatic comment into a more explicit proposal, and describe why it might deserve consideration.

As we've seen, the Proportion View and the Possibility View are committed to the following.

Proportion View

- i. $\llbracket \text{"X is breakable"} \rrbracket = 1 \text{ iff } \llbracket \text{"breaks"} \rrbracket_{\text{ext}}(x) = 1$
- ii. $\llbracket \text{"X is fragile"} \rrbracket = 1 \text{ iff } \llbracket \text{"breaks"} \rrbracket_{\text{spr}}(x) = 1$

Possibility View

- i. $\llbracket \text{"X is breakable"} \rrbracket = 1 \text{ iff } \llbracket \text{"breaks"} \rrbracket_{\text{ext}}(x) = 1$
- ii. $\llbracket \text{"X is fragile"} \rrbracket = 1 \text{ iff } \llbracket \text{"breaks easily"} \rrbracket_{\text{ext}}(x) = 1$

Now take the suggestion that the semantics of the recalcitrant DAs runs on MMPs, and plug it into the proportional proposal. We obtain the following hybrid story.

Hybrid View

- i. $\llbracket \text{“}X \text{ is breakable”} \rrbracket = 1 \text{ iff } \llbracket \text{“breaks”} \rrbracket_{\text{ext}}(x) = 1$
- ii. $\llbracket \text{“}X \text{ is fragile”} \rrbracket = 1 \text{ iff } \llbracket \text{“breaks easily”} \rrbracket_{\text{spr}}(x) = 1$

The Hybrid View converges with the Proportion View and the Possibility View on the analysis of possibility DAs, but differs from both in dealing with the recalcitrant ones. On the Proportion View, to assert “*X* is fragile” is to assert that *x* breaks *simpliciter* at a ratio of the relevant worlds. On the Possibility View with fine-grained manifestations, it’s to assert that *x* breaks easily at one of the worlds. On the Hybrid View, it’s to assert that *x* breaks easily at a ratio of the worlds. Hence our middle-ground hypothesis, which accepts the Proportion View’s claim that the recalcitrant DAs are irreducible to existential claims while incorporating the Possibility View’s appeal to MMPs.

Why should one take the Hybrid View to be worthy of consideration? For a start, because it’s a new option in logical space that combines, or at least tries to combine, the best instances of its two parent approaches. Because it’s consistent with the contrasts we have examined in the earlier parts of this paper.¹⁸ Because it’s intuitive: (22a) and (22b) are paraphrases of the analysis of “*X* is breakable” and “*X* is fragile” offered by the new approach, and both sound perfectly fine.

- 22) a. \checkmark If something is breakable, it means there is at least one possibility for it to break.

18 For illustration, here’s how the Hybrid View would respond to the parallel between (8) and (9). Assume that $\llbracket \text{“}X \text{ is not breakable”} \rrbracket$ rules out breaking at all of the accessible worlds, whereas $\llbracket \text{“}X \text{ is not fragile”} \rrbracket$ rules out breaking easily at a ratio of the accessible worlds. (9) has a topic-comment structure which leads the listener to expect the second conjunct to make an intensionally adequate follow-up on the truth of the preceding conjunct. Because of the requirement of intensional symmetry, the interpreter expects the right conjunct of (9) to be intensionally on par with the left conjunct, and hence to quantify on proportions of worlds. The right conjunct of (9) licenses this option. As a result, the right conjunct of (9) is interpreted as requiring breaking easily at a sufficiently large ratio of worlds. This is responsible for (9)’s infelicity. (8) is infelicitous because its conjuncts make at-odds possibility claims about mere breaking, whereas (9) is infelicitous because its conjuncts make at-odds proportional claims about breaking easily.

- b. ✓ If something is fragile, it means there are many possibilities for it to break easily.

In the remainder of this Section, however, I wish to concentrate on a more specific point. As you may recall from Section 2, one key motivation to shift away from the Proportion View and move towards a Possibility View *cum* MMPs is, according to Aimar (2019), that the former is unable to account for constructions such as “*X* is more fragile than *Y*”. I wish to suggest that by incorporating MMPs, the Hybrid Proportion View can inherit the theoretical virtues of fine-grained manifestations and improve on its chances of producing a viable take on gradability.

To start, let’s see how the “basic” Proportion View would address gradability. The proposal is that $\llbracket \text{“}X \text{ is more } V\text{-able than } Y\text{”} \rrbracket = 1$ iff $\llbracket \text{“}MP\text{”} \rrbracket(x) = 1$ in more accessible worlds than $\llbracket \text{“}MP\text{”} \rrbracket(y) = 1$, with MP being a simple manifestation phrase. See (23).

- 23) $\llbracket \text{“}X \text{ is more fragile than } Y\text{”} \rrbracket = 1$ iff the ratio of accessible worlds where $\llbracket \text{“}breaks\text{”} \rrbracket(x) = 1$ is greater than the ratio of accessible worlds where $\llbracket \text{“}breaks\text{”} \rrbracket(y) = 1$.

On the Possibility View, the way to go is instead to appeal to fine-grained manifestations and discharge the gradability of the DA on the gradability of the modifier component of the MMP. Practically speaking, we should analyze “*X* is more fragile than *Y*” as in (24).

- 24) $\llbracket \text{“}X \text{ is more fragile than } Y\text{”} \rrbracket = 1$ iff $\llbracket \text{“}breaks \text{ more easily”} \rrbracket(x, y) = 1$.

Now consider the following scenario.¹⁹

Martian Block A Terrestrial block and a Martian block have the same physical properties. The Terrestrial block breaks if it’s hit with a steel hammer, and breaks if it’s hit with an iron hammer. The Martian block behaves just like the Terrestrial block. However, the Martian block has an extra

19 A variation on *R-Bulls and G-Bulls* from Aimar (2019: 1684-1685), to whom I’m also indebted for the description of the objection below. Wildman (2020) discusses a similar scenario involving venomous snakes, and uses it to make an analogous objection that Vetter’s (2015) account leads to counterintuitive evaluations of potentiality degree-talk.

alien property: being hit by an iron hammer causes the Martian block to disappear before it has a chance to break.

Question: is the Terrestrial block more fragile than the Martian block? The Proportion View seems committed to saying “yes”. The accessibility relation fixes the modal base at the subset of possible worlds which preserve the properties of the blocks described in the scenario. The Martian block breaks when it’s hit by a steel hammer, but disappears when it’s hit by an iron hammer. By contrast, the Terrestrial block breaks both when it’s hit by a steel hammer and when it’s hit by an iron hammer. So the ratio of accessible worlds where the Terrestrial block breaks is greater than the ratio of accessible worlds where the Martian block breaks, and, by (23), \llbracket “The Terrestrial block is more fragile than the Martian block” $\rrbracket = 1$. However, this isn’t a good result. It’s true that the Terrestrial block breaks at a larger ratio of accessible worlds, but this doesn’t necessarily indicate that it’s more fragile. After all, it’s physically wired to break in response to the exact same range of stresses as the Martian block. MMPs allow instead for the required flexibility. By (24), for “The Terrestrial block is more fragile than the Martian block” to be true, “The Terrestrial block breaks more easily than the Martian block” should be true. However, the truth of “The Terrestrial block breaks more easily than the Martian block” isn’t settled: it depends on the reading of “more easily”. There is at least a plausible reading on which to break “more easily” than something else is to break in response to a broader range of stresses absent confounding conditions (e.g., the alien property of the Martian block). Under this reading, the answer to the question “Is the Terrestrial block more fragile than the Martian block?” isn’t necessarily positive. Hence, a Possibility View *cum* MMPs is not committed to saying that the Terrestrial blocks are more fragile than the Martian blocks.

This is a much better result. However, the discharge that generates the improved result isn’t a prerogative of the Possibility View. As best I can tell, the improvement really has to do with the adoption of MMPs, and can be replicated outside the framework as long as the theory we’re dealing with adopts gradable manifestations. In other words, the improved analysis of *Martian Block* isn’t viable on condition that we buy into the notion that DAs simply express possibility, but on condition that our semantics incorporates fine-grained manifestation phrases with a modifier part that guarantees the flexibility we need. The Hybrid View does precisely that, and here’s how a hybrid treatment of *Martian Block* might look like.

Non-comparative fragility ascriptions like “ X is fragile” are assessed on the basis of whether x “breaks easily” at a sufficient ratio of the accessible worlds. By contrast, comparative fragility ascriptions like “ X is more fragile than Y ” are assessed on the basis of other whether x “breaks more easily” than y at the accessible worlds. For the “The Terrestrial block is more fragile than the Martian block” to be true of *Martian Block*, the Terrestrial block should “break more easily” than the Martian block at the accessible worlds. Whether that’s the case depends on the reading of “more easily”. In the context of *Martian Block*, there is a plausible reading of the comparative modifier on which some x counts as “breaking more easily” than y iff x breaks at a larger ratio of the accessible worlds where masking conditions are absent and x and y are subject to the same stress event. This is just unpacking in our hybrid framework the intuition tracked by (24): in a scenario like *Martian Block*, we evaluate the comparative fragility ascription by comparing the ease of breaking of the objects concerned, which in turn, based on our hybrid analysis of non-comparative fragility ascriptions, can be modeled as a matter of comparing occurrences of breaking at the accessible worlds where there are no masking conditions and the two blocks are subject to the same stress. Thus, in order for “The Terrestrial block is more fragile than the Martian block” to be true of *Martian Block*, the Terrestrial block should break at a larger ratio of the accessible worlds where breaking-masking conditions are absent and the Terrestrial block and the Martian block are subject to the same stress event. However, masking conditions are present: being hit by an iron hammer causes the Martian block to disappear. Hence comparative fragility cannot be settled, which is the result we wanted to obtain: as soon as we incorporate MMPs, it seems we can replicate the explanatory purchase they afford on gradable DAs even if the base semantics for non-comparative DAs adopted by our framework doesn’t pursue the existential ockhamization of the Possibility View.

6. Conclusion

I have presented data suggesting that the adoption of MMPs doesn’t settle the dispute over the semantics of DAs in favor of the Possibility View, and that even with fine-grained manifestations in the picture, we can still identify DAs that resist being analyzed as claims of possibility. However, the case for fine-grained manifestations is independently attractive. Accordingly, I have sketched a hybrid account combining the quantificational taxonomy of the Proportion View with MMPs, and suggested that the proposal may allow us to conjoin the strengths of its two parent approaches.

One last point needs commenting, though. In Section 2, I acknowledged that the Possibility View would dispense the theorist from the requirement of spelling out a method to carve out sufficiency ratios or proportions of worlds (relative to contexts) to capture the assessment of DAs like (2). Under the Hybrid View ratios make a comeback, and so does the urgency of an account of how claims about them may manage to emerge from the nuts and bolts of our semantics. I'm not underestimating the magnitude of the issue: determining how proportional DAs manage to introduce quantification over ratios of worlds, and what the mechanisms that fix the relevant ratios in contexts are, is a genuine outstanding problem. However, this is no objection to the hybrid hypothesis I've sketched, nor does it turn it into an empty promissory note. After all, proportional expressions are routinely regarded as a tractable explanandum in linguistic theory, and at least on the linguistics side of the aisle there is no shortcoming of grammars for phrases like "most of the Fs" or "between 60% and 70% of the Gs" (e.g., Hackl 2009). Instead of taking the pessimistic stance that the correct reaction to the problem is to reject by default the approaches that generate it, maybe we should just keep looking for a solution.

To conclude in such a constructive spirit, let me blueprint an account of quantification over ratios of worlds that takes the Hybrid View as its starting point. The thinking is inspired by Maier's (2018) "options" for agentic abilities. Distinguish *accessible* possibility and *real* possibility.

Accessible possibility An entity *e* has an *accessible* possibility to ϕ iff $e \phi$ s at least at one of the accessible worlds.

Real possibility An entity *e* has a *real* possibility to ϕ iff $e \phi$ s at least at one of the worlds in the subset of the accessible worlds compatible with the state of affairs at issue.

Intuitively, real possibilities inform a realistic description of the changes that are "actually" available to an entity at each world in the modal base. Suppose *W* is a duplicate of the actual world where at the time of writing this sentence, on my desk there's a glass protected by an indestructible armor. Assume also that we're dealing with an assessment context where, as in typical fragility ascriptions, the modal base preserves the physical properties of the object under discussion. At *W*, it's both accessibly possible and really possible that the glass is moved to another location. It's accessibly possible that the glass is moved because being moved is compatible with the properties of the glass. And it's really possible that the glass is moved because in all worlds where the glass sits on my desk protected by its indestructible

armor, it can be moved. However, at W , it's only accessibly possible that the glass breaks. It's accessibly possible that the glass breaks because there are accessible worlds where the glass has preserved its physical properties but is not protected by its indestructible armor. But it's not really possible that the glass breaks, for in all accessible worlds compatible with the state of affairs at issue the glass will be protected by an indestructible armor. Now, assume that possibility DAs like “ X is breakable” are semantically associated to accessible possibilities, whereas DAs like “ X is fragile” are semantically associated to real possibilities. Next, take the operator *Gen* (e.g., Carlson 2011), and have it deliver proportional quantification by introducing a typicality condition across accessible worlds. If we feed these resources within the Hybrid View, we can suggest the following.

- 25) a. $\llbracket \text{“}X \text{ is breakable”} \rrbracket = 1$ iff there is one accessible world where x breaks.
 b. $\llbracket \text{“}X \text{ is fragile”} \rrbracket = 1$ iff the accessible worlds in the modal base typically feature a real possibility that x breaks easily.

On this hypothesis, the way to go is to combine existential quantification with the operator *Gen* to make sense of the modal profile of proportional DAs, and pack into the analysis the distinction between accessible and real possibility to do the *labor limae*. For example, take the contrast between (12) and (13), rewritten for convenience as (26) and (27).

- 26) # The block is not breakable, but it is possible for it to break.
 27) ✓ The block is not fragile, but it is possible for it to break easily.

It's impossible to say without inconsistency that there is no accessible possibility for some x to break and that there is an accessible possibility for x to break. Instead, it's possible to say without contradiction that across the accessible worlds there generally is no *real* possibility that x breaks easily, and that there is an *accessible* possibility for x to break easily. Hence the contrast. Or take the example of the glass protected by the indestructible armor. There is no real possibility that the glass breaks easily, since the subset of the modal base relevant to the assessment of real possibilities features exclusively worlds compatible with the state of affairs at issue. Hence, exclusively worlds where the glass is inside the armor. But across the entire space of the accessible worlds (where the physical properties of the glass are preserved, but in many of which the glass won't be protected by the armor)

there generally will be a real possibility for the glass to break easily. Hence the glass is fragile. Is the glass also breakable? Of course, because there's an accessible possibility that it breaks, and we can do justice to the intuition that there is a non-dispositional reading of "The glass is not breakable" which is true of the armor-worlds by having the sentence range on the real possibilities available to the glass.

This is just a tentative blueprint, of course, but I hope it goes to show that a hybrid approach of the sort we've been considering may produce interesting results. The view that recalcitrant DAs like "The block is fragile" irreducibly speak of something stronger than mere possibility may well raise urgent questions, but it could also generate valuable insights if supplied with the adequate instruments.²⁰

²⁰ Many thanks to Simona Aimar and Barbara Vetter for discussion on an earlier draft. All errors are mine.

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