



# Against metaphysics by fiat

Kaj André Zeller<sup>1</sup> 

Received: 29 May 2024 / Accepted: 30 July 2025  
© The Author(s) 2025

## Abstract

Ruth Chang believes that one can intrinsically resolve the question of whether a vague predicate  $F$  applies to its borderline case  $a$  through arbitrary stipulation—one can resolve it by fiat. First, I clarify what it is to intrinsically resolve a question by arbitrary stipulation. Next, I argue that Chang’s view is wrong. Cases that involve vagueness are cases of (what I’ll call) competing similarity. For this reason, for any borderline case  $a$  of a vague predicate  $F$ , we have intrinsic reason to classify  $a$  as  $F$  and intrinsic reason to classify  $a$  as not- $F$ . If we have such reasons, then we cannot intrinsically resolve the question of whether  $a$  is  $F$  by arbitrary stipulation. My conclusion has significant upshots: it undermines Chang’s case for parity as a fourth relation of comparability, and it suggests that supervaluationists ought to distance their view from Chang’s. Moreover, this paper makes progress on the so-called characterization problem of vagueness.

**Keywords** Vagueness · Stipulation · Borderline cases · Supervaluationism

## 1 Introduction

Imagine the following scenario: you’ve just started a strange new job where you’re required to categorize people as “bald” or as “not-bald” based only on the *metaphysical question* of whether they’re really bald—that is, you have to categorize solely on the basis of the relevant worldly (non-linguistic) and linguistic facts. For each person you encounter, you have extensive knowledge of the worldly facts relevant to whether they’re bald (you know, for instance, the number, length, and distribution of hairs on each person’s head), and you’re competent in using the predicate “bald.”

---

✉ Kaj André Zeller  
kaj.zeller@gmail.com

<sup>1</sup> School of Philosophy, Religion and History of Science, University of Leeds,  
Leeds LS2 9JT, UK

No extrinsic reasons (rewards, negative consequences, peer pressure, etc.) bear on your categorization choices. Here comes Herbert, a borderline bald man. What now?<sup>1</sup>

According to Ruth Chang, the correct answer to whether Herbert is bald is that it's indeterminate whether he is (i.e., it's neither true nor false that he is). Yet she claims that "resolution of this indeterminacy can be appropriately given by a coin flip" (2002a, p. 138). Importantly, Chang means by this not only that you can decide what to do with Herbert by fiat but that you can, as she calls it, "*intrinsically resolve*" the question of whether Herbert is bald through arbitrary stipulation (see, e.g., 2022a, p. 55). As I understand it, a question of the form 'Is *a* *F*?' is intrinsically resolved by a judgment if and only if there are conclusive intrinsic reasons for that judgment. Intrinsic reasons regarding such questions are facts bearing on how *a* stands to "*F*" (see Sect. 2).

Against Chang, I argue that such questions about borderline cases (such as Herbert) cannot be intrinsically resolved through arbitrary stipulation. Call this the *Changian view*: if *a* is a borderline case of *F*, the question of whether *a* is *F* can be intrinsically resolved by arbitrarily stipulating that *a* is *F* or that *a* is not *F*. The Changian view is a variety of what might be called the *metaphysics by fiat* view: the idea that one can intrinsically resolve the question of whether a borderline case *a* is *F* by fiat.<sup>2</sup> If the Changian view fails, as I'll argue, then this will have a significant bearing on the prospects for the successful defence of the metaphysics by fiat view. I am focusing on Chang because she is the philosopher who has given the most prominent defence of the metaphysics by fiat view recently.<sup>3</sup>

My argument against the Changian view is as follows. Borderline cases are cases of competing similarity: a borderline case *a* of a predicate *F* is both *F*-ish and not-*F*-ish. These competing similarities amount to intrinsic reasons for categorizing *a* as *F* and as not-*F*. I support this claim below with empirical evidence about the behaviour of competent speakers. I argue that if we have such reasons to categorize *a* as *F* and as not-*F*, we cannot intrinsically resolve the question of whether *a* is *F* through arbitrary stipulation. Therefore, we cannot intrinsically resolve the question on borderline cases through arbitrary stipulation.

Whether one can intrinsically resolve the question on borderline cases by fiat is important for several reasons. First, the distinction between cases that can and cases that cannot be intrinsically resolved by arbitrary stipulation is essential for Chang's case for what she calls "parity." According to Chang, arbitrary stipulation cannot resolve hard cases (e.g., whether a career is better than another), but it can resolve

<sup>1</sup> See Chang (2002a, p. 138; 2022a, p. 53; 2022b, pp. 402–405).

<sup>2</sup> According to Chang, the "metaphysical upshot" of arbitrary stipulation is that it can "close the matter" regarding borderline cases (2022a, p. 55). In borderline cases, arbitrary stipulation leaves no "resolutive remainder", which, she says, is a "metaphysical phenomenon" (ibid.). Her "metaphysical idea" is that the question can be resolved by fiat (ibid., pp. 55, 67). At times, Chang talks as if what's at issue is merely how to make practical "sorting decisions" (see, e.g., 2002b, p. 683; 2022b, pp. 402–404). But she's clearly not saying only that: "One can 'settle' the question in a pragmatic sense"—but then, she says, the metaphysical issue remains (2022b, p. 404). Also, Chang differentiates arbitrary stipulation from flipping a coin to determine what to choose (2022a, pp. 56–57) and claims that the "philosophically interesting question" is not about "neat decision-theoretic models" (ibid., pp. 65–66).

<sup>3</sup> Lewis (see, e.g., 1975, p. 141) and Burns (see, e.g., 1991, p. 183) might, for instance, also be advocates of the metaphysics by fiat view. See also the discussion of contextualism below.

borderline cases. She concludes that hard cases are not borderline cases but cases of parity, “a fourth value-relation beyond “better than,” “worse than,” and “equally good”” (2002a, p. 141).

Second, if a particular theory of vagueness *prima facie* entails Chang’s view, my critique of her view constitutes a problem for such a theory.<sup>4</sup>

Third, whether one can intrinsically resolve the question on borderline cases by fiat concerns the *characterization problem* of vagueness—the problem of saying what vagueness consists in (Wright, 2016). The characterization problem bears on questions about distinguishing genuine borderline cases from merely apparent ones. For example, Chang’s characterization seems to entail that there is no moral vagueness, given the plausible supposition that arbitrary stipulation cannot intrinsically resolve alleged moral borderline cases.<sup>5</sup>

This paper is structured as follows. Section 2 deals with the preliminary matter of the meaning of intrinsic question-resolution and gives an initial motivation for the Changian view. Section 3 discusses several candidate definitions of “stipulation” and their availability to the Changian view. Section 3.1 argues that for any borderline case *a* of a vague predicate *F*, we have intrinsic reason to classify *a* as *F* and intrinsic reason to classify *a* as not-*F*. Section 3.2 argues that a possible response on behalf of the defender of the Changian view—namely, that stipulation creates an outweighing first-order reason, or an exclusionary second-order reason—is unintuitive and unmotivated. Section 3.3 is a concluding summary.

## 2 Intrinsic question-resolution

What is meant by “intrinsic resolution”? Here’s how Chang defines this notion regarding an ‘Is *a* *F*?’ question. Intrinsic resolution is the “knowable application or lack of application of the predicate ... solely on the basis of facts about how the items relate” (2022a, p. 53; see also 2022b, p. 403). In our example, the question is whether Herbert, the borderline bald man, is bald. The “facts about how the items relate” are the facts bearing on “how Herbert stands to the word ‘bald’” (Chang, 2022b, p. 402). Some of these facts are worldly (e.g., the number, length, and distribution of hairs on Herbert’s head). Some of them are linguistic (e.g., what “bald” expresses and refers to). Chang explicitly talks about the application of a predicate on the *basis* of the facts bearing on how Herbert stands to the word “bald”. So, she apparently construes these facts to be *reasons* for one’s judgment. Let’s call the relevant facts the *intrinsic reasons* bearing on the question of whether Herbert is bald. In contrast, extrinsic reasons (rewards, negative consequences, peer pressure, etc.) have no bearing on whether “bald” applies to Herbert. I may, for instance, categorize Herbert as bald because I

<sup>4</sup> If the idea that we have intrinsic reasons for categorizing a borderline case *a* as *F* and as not-*F* presupposes a specific theory of vagueness, one could not raise a serious problem for a competitor of that theory based on the critique of the Changian view I will put forth in this paper. That would be begging the question. I think, however, that the idea is compatible with a variety of theories of vagueness. Most notably, it seems compatible with supervaluationism.

<sup>5</sup> For an argument for the existence of moral borderline cases, see Constantinescu (2014).

get a million dollars for doing so, but this reward has nothing to do with how Herbert stands to the word “bald”.

So, here’s how I understand Chang’s notion of intrinsic resolution:

**INTRINSIC RESOLUTION** A question is intrinsically resolved by a judgment just in case there are conclusive intrinsic reasons for the judgment.

A reason or set of reasons for a judgment is conclusive just in case it decisively speaks in favour of that judgment and defeats all reasons against the judgment, even in their overall strength.<sup>6</sup> I think the above interpretation of Chang’s notion of “intrinsic resolution” is fair because it makes sense of two further claims she makes. First, she claims that after intrinsic resolution, the question does not remain (2022a, p. 54; 2022b, p. 404). Second, she claims that when a question is intrinsically resolved, there is no “resolutorial remainder” (2002b, p. 684; 2022a, p. 56).<sup>7</sup> I think the best way to make sense of these claims is to appeal to conclusive reasons. It’s sensible to say that a question remains after a judgment only if there are no conclusive reasons for the judgment. And it’s sensible to say that only when there were conclusive reasons for the judgment is there no resolutorial remainder—that is, persistently relevant reasons against judging the way one did. My interpretation above better captures what Chang seems to be saying than an alternative construal according to which a question is intrinsically resolved by a judgment just in case there are outweighing *pro tanto* intrinsic reasons for the judgment. Intuitively, when there are merely outweighing *pro tanto* reasons but these are not conclusive, the question remains and there’s a resolution remainder (“Yes, we have more reason to say “*a* is *F*”, but the reasons against judging that *a* is *F* are still relevant. So: Is *a* *F*?”).

Moreover, my interpretation of “intrinsic resolution” accommodates two basic intuitions about question-resolution. First, we can intrinsically resolve a question by knowingly providing the correct answer. Suppose the facts conclusively speak in favour of the judgment that it’s raining. Then you can intrinsically resolve the question of whether it’s raining by answering that it’s raining. Second, we can resolve a question by knowingly responding that it makes no sense. The question of whether fried eggs sound better than the number nine is absurd. You can intrinsically resolve the question by rejecting it as a bad question since there are intrinsic conclusive reasons for your rejection.<sup>8</sup> So, as Chang does not offer a more detailed account of intrinsic resolution, I’ll work with the plausible-seeming interpretation offered above.

Assuming with Chang that the correct answer to whether Herbert is bald is that it’s indeterminate whether he is (2002b, p. 683; 2022a, p. 53), you cannot provide

<sup>6</sup> My use of “conclusive reason” is rather in line with Raz’s use (1999, p. 27; 2011, p. 109) than with Dretske’s (1971).

<sup>7</sup> For Chang, “resolutorial remainder” is not a psychological phenomenon: “Resolutorial remainder is a state in the world, not in us” (2022a, p. 54).

<sup>8</sup> Millson (2021) further distinguishes between different forms of question-rejection. It might well be that some intuitions of advocates of the metaphysics by fiat view could be captured by a view according to which questions about borderline cases can be, in one form or the other, rejected.

the correct answer in the situation described above.<sup>9</sup> Nor can you reject the question (you're required to answer). But, according to Chang, there's a third option. You can intrinsically resolve the question of whether Herbert is bald by stipulating that he's bald or by stipulating that he's not. The main tenet of Chang's version of the metaphysics by fiat view, then, is:

THE CHANGIAN VIEW If  $a$  is a borderline case of  $F$ , the question of whether  $a$  is  $F$  can be intrinsically resolved by arbitrarily stipulating that  $a$  is  $F$  or that  $a$  is not  $F$ .

Chang believes that her version of the metaphysics by fiat view follows from supervaluationism.<sup>10</sup> Before explaining how supervaluationism might motivate the Changian view, note that alternative accounts of vagueness, such as Williamson's (1996) epistemicism—according to which it is, unbeknownst to us, either true or false whether a vague predicate applies—seem incompatible with the metaphysics by fiat view. According to epistemicists, the question of whether Herbert is bald has a determinate answer, after all. Moreover, note that Chang holds that stipulation can also resolve borderline cases even if vagueness is ontic (2022a, p. 53; 2022b, p. 403). She doesn't elaborate much on this somewhat unintuitive claim, so neither will I.<sup>11</sup>

Roughly, supervaluationists tell one of the following two stories. Call the concept that the word “bald” expresses *Baldness*. According to supervaluationism, *Baldness* has imprecise application conditions. There are some instances—like Herbert—where it's indeterminate whether *Baldness* applies. However, according to the supervaluationist, “bald” also has multiple admissible precisifications that can *sharpen* it. Here's the first story. One precisification of “bald” might express *Baldness*<sub>1</sub>, which represents the property *BALDNESS*<sub>1</sub>. Everyone with less than 1000 hairs on their head is bald<sub>1</sub>, and everyone with 1000 hairs or more on their head is not. Another might express *Baldness*<sub>2</sub>, which represents the property *BALDNESS*<sub>2</sub>. The extension of this precisification includes everyone with fewer than 1001 hairs on their head. Yet another precisification might express *Baldness*<sub>3</sub>, where everyone with less than 1002 hairs on their head is bald<sub>3</sub>. Let's say Herbert has 1001 hairs on his head. It's indeterminate whether he is bald; he's neither bald<sub>1</sub> nor bald<sub>2</sub>; he is bald<sub>3</sub>. Here's the second story. “bald” always expresses the concept *Baldness*. What happens when we sharpen “bald” is that we sharpen the concept *Baldness* so that under one sharpening, it represents the property *BALDNESS*<sub>1</sub>; on another, it represents the property *BALDNESS*<sub>2</sub>; and so on. The difference between those two stories—that between sharpening only the word and sharpening the word and the concept—does not matter for the following.

What matters is that, from a supervaluationist perspective, when we say that the predicate “bald” applies to Herbert, we might mean (a) that Herbert is in the exten-

<sup>9</sup> Chang also at times suggests that responding “It's borderline” can resolve the question “Is Herbert bald?” (see 2002b, p. 682).

<sup>10</sup> See Lewis (1970), Fine (1975), and Keefe (2000) for classic supervaluationist treatments of vagueness.

<sup>11</sup> Note that there's no decisive reason to believe that epistemicism or onticism are incompatible with the idea that borderline cases are cases of competing similarity.

sion of all admissible precisifications of “bald” or (b) that Herbert is in the extension of at least one admissible precisification of “bald”. One might express (b) by saying that it’s not true that Herbert is determinately bald, but that it’s true that he’s not determinately not-bald, or by saying that it’s not super-true but true according to at least one sharpening of “bald” that he’s bald. Egré et al. (2013) provide another way of expressing the difference between (a) and (b): Herbert isn’t *strictly* bald (as (a) is false), but he’s *tolerantly* bald (as (b) is true). This way of formulating the difference implicitly points to a motivation for the Changian view. Chang appears to believe that, if supervaluationism is correct, differing stipulative judgments about Herbert should be tolerated. That’s because there are admissible precisifications on which he counts as bald and others on which he counts as not-bald. As Herbert is both tolerantly bald and not-bald, we may arbitrarily stipulate. We thereby intrinsically settle the matter.

But is it really the case that the matter is intrinsically settled? While there is something “tolerant” about borderline cases, this doesn’t yet mean that we can intrinsically resolve the case by fiat. Maybe different ways of resolving the *practical* question about what to do with Herbert should be tolerated. But the intrinsic, “metaphysical” question of whether Herbert is bald (or applies to the term “bald”) is a different question. Let’s now turn to what Chang might mean by “stipulation”.

### 3 Stipulation

After having clarified what Chang seems to mean when she says that one can intrinsically resolve the question of whether Herbert is bald, we can now investigate what she might mean when she says that one can do so via stipulation. I’ll briefly discuss six candidate definitions of stipulation. The first three definitions appear to be non-starters. The fourth and fifth definitions also come with serious worries. Only the sixth definition initially seems to suit Chang’s purposes. However, I argue in the following sections that the model corresponding to the sixth definition does not seem to work for cases of vagueness.

#### 3.1 Non-starters

- i. *S stipulates that a is F =<sub>df</sub> S plans to act as if a is F*

Planning to treat Herbert as if he’s bald is a non-starter for Chang’s purposes. Whether I plan to act as if Herbert is bald doesn’t seem to bear on how Herbert stands to the word “bald”. Doing so would only resolve the practical question of what to do with Herbert; it leaves the question “Is Herbert bald?” intrinsically unresolved.<sup>12</sup>

- ii. *S stipulates that a is F =<sub>df</sub> S conditionally defines a as being F*

<sup>12</sup> For reasons of space, I will not discuss expressivism about borderline judgments (see MacFarlane, 2016; Williams, 2016).

By “conditionally defining”, I mean “defining for the purposes of ...”. It’s natural to think that such definitions don’t intrinsically resolve questions because “for the purposes of” indicates that the definition is based on extrinsic reasons. So, conditionally defining Herbert as bald appears to be another non-starter.

iii. *S stipulates that a is  $F =_{df} S$  introduces the name “a” for every x that is F*

Sometimes, one might be able to resolve the question of whether *a* is *F* by introducing “*a*” as referring to every *x* that is *F*. (Did Jack the Ripper murder Mary? Yes, let’s call her murderer “Jack the Ripper.”) But it would be absurd to propose to introduce the name “Herbert” as referring to every man that is bald. Moreover, the question of whether Herbert is bald cannot be intrinsically resolved by coining a new term like “Schmerbert” or a new predicate like “schmald”.<sup>13</sup> Answering that Schmerbert is bald, that Herbert is schmald, or (worst of all) that Schmerbert is schmald leaves the question of whether Herbert is bald open.

### 3.2 The declaration model

An initially attractive thought is that stipulation should be modelled on the notion of “declaring”. By “declaring”, I mean an act that, if performed successfully, “brings about the correspondence between the propositional content and reality” (Searle, 1975, pp. 16–17). By appealing to such acts, defenders of the Changian view might claim that stipulation creates an intrinsic reason. Recall that an intrinsic reason is a worldly or linguistic fact that bears on a judgment. We are not changing the worldly facts about Herbert through stipulation. A stipulator is not a barber! The remaining option is that we can change the linguistic facts bearing on judgments about the truth or falsity of “Herbert is (not) bald”. How could stipulation change the relevant linguistic facts? A first idea would be:

iv. *S stipulates that a is  $F =_{df} S$  declares a to be F*

Declaring can only be successful if you have the necessary authority. Consider this case:

BALL GAME 1 I’m in charge of the rules of a ball game and the rules established so far do not determine whether a ball that lands straight on the goal line is a goal. By my authority, I declare that it’s a goal.

Plausibly, the question of whether the ball on the goal line is a goal is intrinsically resolved in BALL GAME 1. By my authority, I have created a linguistic fact bearing on “This is a goal”. Post-declaration, a ball that lands straight on the goal line counts as

<sup>13</sup> On the one hand, Chang states that “every proponent of vagueness agrees that an appropriate response to a borderline case is to stipulate a new predicate” (2002b, p. 686). Other passages also suggest what may be called the “introducing a new term model of stipulation” (e.g., *ibid.*, pp. 664–665). On the other hand, Chang writes that we can stipulate “without straying from the predicate” (2002a, p. 169), and that “the identity of the predicate remains” (2022a, p. 53).

a goal. However, if one excludes the possibility of linguistic dictators with absolute authority to precisify vague words at will, declaration as a way of intrinsically resolving the question on borderline cases seems dubious.

Next, consider this definition:

- v. *S stipulates that  $a$  is  $F =_{df}$   $S$  declares that the question of whether  $a$  is  $F$  is the question of whether  $a$  is  $F_x$  (where ' $F_x$ ' is an admissible precisification of  $F$ )*<sup>14</sup>

Besides the issue of authority just mentioned, there are two further worries regarding this option. First, suppose I declare that the question is “Is Herbert bald<sub>3</sub>?” and answer positively. There’s a nagging sense that then *that* question has been resolved—not the question of whether Herbert is bald. Moreover, it hasn’t been resolved by arbitrary stipulation but by knowingly giving the correct answer.

Second, if I declare that the question of whether Herbert is bald is “Is Herbert bald<sub>3</sub>?” and you declare it is “Is Herbert bald<sub>2</sub>?”, we seem to be in genuine conflict—yet Chang claims it could hardly be said that we disagree when we make opposing stipulations about Herbert (2002a, p. 138; 2002b, pp. 662, 685).<sup>15</sup> At the very least, we would disagree about how to stipulate and thus be forced into some sort of linguistic negotiation. Let me note that the idea that there’s genuine disagreement when I stipulate that  $a$  is  $F$  and you stipulate that  $a$  is not- $F$  is foremost a problem for Chang but not necessarily for all possible versions of the metaphysics by fiat view or even the Changian view. It is a problem for Chang because her distinction between borderline cases and “hard cases” hinges on the idea that the former are not cases of substantial disagreement. I leave the matter of whether defenders of the metaphysics by fiat view could make substantial progress by dropping this assumption there.

These worries notwithstanding, there is an approach in the vagueness literature that initially looks promising for the defender of the Changian view. Could stipulations be considered *context-shifting acts* that bring about the correspondence between the content of “Herbert is bald” and reality? At first, one might think so. After all, several contextualists—theorists who hold that what vague terms express or refer to is context-sensitive—endorse *response-dependence* regarding vague terms.<sup>16</sup> Following Greenough (2005, p. 174), the relevant notion of response-dependence is this: if  $F$  is response-dependent, then  $a$  is  $F$  iff a subject fully competent with “ $F$ ” judges that  $a$  is  $F$  under normal conditions. For our case: if, under normal conditions, a

<sup>14</sup> Chang at times gestures toward this view (e.g., 2002b, p. 686).

<sup>15</sup> This point might bear on significant issues. Consider the debate about moral vagueness (see, e.g., Schoenfield, 2016; Peterson, 2022). Suppose I stipulate that abortion-on-demand is morally permissible at the gestational age of 150 days, and you stipulate that it’s not. Surely, we would have a substantial disagreement. On Chang’s view, this means that abortion-on-demand at the gestational age of 150 days is not a borderline case of the predicate “morally permitted” (Compare her discussion of “weighty” comparatives (2002a, pp. 138–139). But if “stipulation” means “declaring what the question is”, her supposed distinction between borderline cases as cases of insubstantial disagreement and “hard cases” as cases of substantial disagreement collapses because opposing declarations seem to entail genuine conflict. Thus, at least in this way, one cannot construe a Changian argument against moral vagueness. For the same reasons, Chang’s case for parity as a fourth value-relation would be severely weakened.

<sup>16</sup> One can endorse response-dependence without being a contextualist, but usually, response-dependence theories regarding vague terms are contextualist theories.

competent subject judges Herbert to be bald, then, in virtue of this fact, Herbert *is* bald. Given response-dependence, the judgment of competent subjects should count as an intrinsic reason. Their judgment bears on, in fact *determines*, whether *a* is *F*.<sup>17</sup> Thus, the defender of the Changian view might suggest that stipulation is a context-shifting act that brings about the correspondence between the content of “Herbert is bald” and reality.

Unfortunately, this approach is not available to the defender of the Changian view. For the contextualist, the question “Is Herbert bald?” *independent of context* makes just as much sense as the question “Is tomorrow Tuesday?” *independent of context*. The latter question only has an answer when the relevant context is filled in—we need to fill in which day of the week it has been asked. Similarly, the contextualist about vagueness says that there’s no context-free answer to “Is Herbert bald?”. One couldn’t even raise the question of whether Herbert is bald independent of context. But while the contextualist might think that stipulation could bring it about that “Is Herbert bald?” has a definite answer, that isn’t a plausible interpretation of the Changian view. According to Chang, we *can* raise the question of whether Herbert is bald, and it *has* an answer: “The answer to that question is that it is indeterminate whether he is” (2002b, p. 683). As far as I see, Chang thinks that “It’s indeterminate” is (at least pre-stipulation) the *correct answer* to “Is Herbert bald?”.<sup>18</sup> In contrast, *prima facie*, the right response according to the contextualist is to *reject* context-free questions as bad questions. While a contextualist might also reply “It’s indeterminate” to “Is Herbert bald?”, this should be taken as a *corrective*—a placeholder for saying that asking whether Herbert is bald independent of context makes no sense. Whatever the merits of context-shifting acts as a model for resolution by stipulation, this does not appear to be Chang’s view, since she does not seem to think that we should issue correctives about questions of whether a predicate applies to a borderline case.

Even if one could reconcile Chang’s view with contextualism, stipulation, per se, would not be able to bring about context-shifting effects. To see why, consider the views of Raffman and Shapiro, the main defenders of response-dependence regarding vague terms. For Raffman, whether a borderline case *a* is *F* depends on whether we “see” *a* as *F*. According to Raffman, a category shift from *F* to not-*F* “consists in a shift of perspective” (1994, p. 50). It is like a Gestalt switch that we “undergo”: “What will or will not trigger a shift is not something to which we, as judging subjects, have access; so far as the subject is concerned, the shift simply occurs” (ibid., p. 53). But stipulation is a voluntary act. It’s not something that we undergo or that occurs to us. It’s something that we actively do. Thus, stipulation does not seem to be the right kind of response according to Raffman’s contextualism. At the very least, stipulation is a context-shifting act in Raffman’s theory only if it somehow brings about the equivalent of a Gestalt switch. It can’t change the context by itself. According to Shapiro (2006), whether a borderline case *a* counts as *F* in a conversation

<sup>17</sup> Chang often uses terms like “determining” when discussing stipulation (2002a, pp. 139–140, 150–152; 2002b, pp. 683–684; 2022a, pp. 56–57; 2022b, pp. 403–404).

<sup>18</sup> Chang says that “even though there is an answer to the question of whether [Herbert] is bald—namely, that it is indeterminate whether he is, the question nevertheless admits of a resolution as to whether he is, and we can always resolve the question by arbitrary stipulation” (2022a, p. 53).

depends on whether the participants of the conversation mutually agree on whether  $a$  is  $F$ .<sup>19</sup> So, to resolve the question of whether Herbert is bald, my stipulation must be accepted which means that we're back to the issue that we lack the authority to precisify vague words at will. But the more general problem is that if we follow Shapiro, stipulation cannot, by itself, create an intrinsic reason—a fact bearing on how  $a$  stands to " $F$ ". As in Raffman's account, context-shifting could only occur as an effect of what stipulation might bring about.<sup>20</sup>

The general lesson is that for the contextualist a stipulation is, at best, an *instrument* for bringing about changes that result in our having reasons to classify things in accordance with the stipulation.<sup>21</sup> But now we departed from two central elements of the original Changian view: first, that "It's indeterminate" is the correct answer to the question of whether Herbert is bald, and second, that stipulation can itself intrinsically resolve that question. So, the strategy of appealing to stipulation as a context-shifting act seems unavailable to the defender of the Changian view.

In sum. Both of the definitions of "stipulation" I considered in this subsection come with serious worries, and contextualism appears unavailable to the defender of the Changian view. Despite its initial appeal, the declaration model thus doesn't seem to work for Chang.

### 3.3 The free-decision model

If stipulation is not something like declaring, it is mysterious how stipulation could intrinsically resolve the question of whether Herbert is bald. Despite this obscurity, I'd like to explore another model of stipulation based on the following definition:

vi.  $S$  stipulates that  $a$  is  $F =_{df}$   $S$  freely decides that  $a$  is  $F$

What I mean by "freely deciding" here is best shown by example.

**BALL GAME 2** You're in a ball game. As in **BALL GAME 1**, the rules do not determine whether a ball that lands straight on the goal line is a goal. In contrast to **BALL GAME 1**, this time the rules are settled. It's nevertheless up to you to categorize the case.

If we subtract all extrinsic reasons to decide one way or the other, we're left with nothing to base our decision on. We're facing a situation similar to what Poston (2014, p. 24) calls "empty symmetrical evidence". To be more neutral, let's call **BALL GAME 2** a case of *empty symmetrical reasons*—that is, a situation where we have no reason to judge that  $a$  is  $F$ , nor to judge that  $a$  is not- $F$ . If it is nevertheless up to us

<sup>19</sup> Perhaps somewhat misleadingly, Shapiro often uses "declaring" as a synonym for "mutually agreeing" and "context-shifting".

<sup>20</sup> The same response would apply to a defense of the Changian view grounded in Lewisian scorekeeping (Lewis, 1979), which is, after all, the framework that inspires Shapiro's approach.

<sup>21</sup> I take this to be a general diagnosis, though I do not have the space here to address every variant of contextualism. To mention just one more example: on Graff Fara's version (2000), the stipulation would need to effect a change that renders Herbert significantly balder than typical.

to categorize  $a$  as either  $F$  or not- $F$ , then the idea that the question of whether  $a$  is  $F$  might be intrinsically resolvable by arbitrary stipulation has some intuitive appeal—even if we cannot make sense of such stipulation with the declaration model. We're free to decide. There are simply no reasons to do anything else. In such absence of reasons, if our stipulative decision that "The ball on the goal line is a goal" generates even a minimal intrinsic reason, then we might have a conclusive reason to judge that the ball on the goal line is indeed a goal. BALL GAME 2 thus illustrates what could be called "stipulation as free decision" and, moreover, a situation in which stipulation, defined in this way, might potentially provide intrinsic resolution for a case of indeterminacy.

To be clear, the free-decision model is a mere sketch at best. Giving a substantive account of "stipulation as free decision" that is helpful for the Changian view is no easy task. Such an account still would have to make sense of the idea that stipulation can create a fact that bears on how  $a$  stands to " $F$ ". Otherwise, stipulation could not intrinsically resolve such questions. Nevertheless, the free-decision model remains the best available, insofar as it best captures what Chang seems to be after.<sup>22</sup> With this in view, let me outline the next steps of my argument.

The intuition that in cases like BALL GAME 2 one may potentially intrinsically resolve a case of indeterminacy via arbitrary stipulation rests on the assumption of empty symmetrical reasons. It's because we have nothing to base our decision on that it sounds sensible to say that the mere act of stipulating might create such a base. In Sect. 5, I will explore the option of dropping the assumption of empty symmetrical reasons, while still insisting on the Changian view. First, in Sect. 4, I'll argue that for cases of vagueness, the assumption of empty symmetrical reasons is false.

Here's the argument of Sect. 4 in a nutshell. In BALL GAME 2, we lack reasons to decide one way or the other, but we seem to have a reason to categorize Herbert as bald. Specifically, he is, as one might say, *baldish*: he seems bald; he's similar to clear cases of baldness; he's sort of bald.<sup>23</sup> At the same time, we have a reason to categorize him as not-bald: namely, he's not-*baldish*: he seems not-bald; he's similar to clear cases of not-baldness; he's sort of not-bald.<sup>24</sup> Plausibly, these are conflicting *intrinsic* reasons—facts that bear on how Herbert stands to the term "bald". Let me elaborate.

## 4 Borderline cases as cases of competing similarity

I'll now argue that there are intrinsic reasons to answer the question of whether Herbert is bald positively, and intrinsic reasons to answer that question negatively. Consequently, borderline cases are not cases of empty symmetrical reasons.

<sup>22</sup> Chang treats indeterminacy as a form of neutrality (2002a, p. 167). This suggests she has cases such as BALL GAME 2 in mind.

<sup>23</sup> If the degree of similarity to paradigm or typical cases of  $F$  passes a certain threshold, the case would be considered a clear case rather than a borderline case. Borderline cases are below the relevant thresholds.

<sup>24</sup> Among others, Wright (2001, p. 70) and Constantinescu (2014, p. 153) voice similar views. Also, compare Keefe (2000, p. 169): "'Tallish' works by picking out the borderline cases of 'tall'."

When we consider borderline cases, we typically *feel torn*. As Schiffer puts it, when confronted with a borderline case like Herbert, “our state of mind will be one of ambivalence, in that you will have some inclination to say that [the borderline case] is bald and some inclination to say that he’s not bald” (2020, pp. 156–157).<sup>25</sup> But it’s not only that ambivalence is a typical attitude towards borderline cases. The idea that it is *fitting* to be ambivalent about borderline cases has significant raw intuitive appeal. And the fittingness of being torn between two conflicting inclinations indicates that, far from lacking intrinsic reasons—facts that bear on how Herbert stands to the word “bald”—we seem to have *too many* such reasons for categorization decisions when confronted with borderline cases. So, if it is fitting to be ambivalent toward borderline cases, there are intrinsic reasons both to answer that Herbert is bald and to answer that he’s not bald. If there are such reasons, there’s a difference between Herbert’s case and BALL GAME 2. This means that when facing a borderline case, one cannot stipulate arbitrarily in the sense of making a “free decision” in the absence of reasons.

Now, couldn’t one maintain—as Chang seems to do—that instead of being ambivalent, it’s rather fitting to be a “confident stipulator” (2022a, p. 55)? As Keefe (2000, p. 26) puts it, the idea is that psychological observations about how we classify using vague predicates “do not settle the normative issue of how we should classify using vague predicates”. So we need to do more than appeal to the intuition that ambivalence is fitting regarding borderline cases to argue that there are intrinsic reasons for judging Herbert to be bald and for judging him to be not bald.

Consider the following quick argument, which does not appeal to ambivalence. Borderline cases come in degrees: something can be more or less borderline. These degrees plausibly correspond to how similar the borderline case is to clear cases. If you pluck hair after hair from a clearly not-bald man, he’ll be borderline bald at some point, but still appear somewhat not-bald. As more hairs are plucked, his degree of borderlineness changes: he becomes less similar to not-bald men, more similar to bald men, and so on. Plausibly, these competing similarities are intrinsic reasons—facts bearing on how Herbert stands to the word “bald”.

The idea that borderlineness comes in degrees is not accepted by everyone. “A case is either borderline or not, and that’s that”, someone might say.<sup>26</sup> Yet, this idea is a feature of—or at least something accommodated by—many leading theories of vagueness. Most naturally, degrees-of-truth theorists (e.g., Forbes, 1983; Smith, 2008)—according to whom borderline cases give rise to predications that are less than true to degree 1 and more than true to degree 0—would say that borderlineness comes in degrees. Then there’s Schiffer’s (2000) analysis of borderline cases in terms

<sup>25</sup> I here don’t need to commit to the view that ambivalence (or any other attitude) is essential for borderline cases, and especially not to the view that in order for *a* to be a borderline case of *F*, someone actually has to be ambivalent about whether *a* is *F*. Thus, Williamson’s argument (1997, p. 945) that ambivalence is not essential for borderline cases because there could still be borderline cases in an “opinionated macho community” is not relevant here.

<sup>26</sup> Higher-order vagueness—a widely-accepted phenomenon—is not the issue here. The issue is whether borderline cases (at any order) can be more or less borderline.

of our ability to have a special, gradable type of partial belief about them.<sup>27</sup> Finally, supervaluationists can account for degrees of borderlineness by appealing to what may be called a *sharpening ratio*—that is, a “measure over admissible valuations” (Keefe, 2000, p. 100). To illustrate the idea, suppose the only admissible sharpenings of “bald” express *Baldness*<sub>1–3</sub> (or sharpen the concept *Baldness* so that it represents *BALDNESS*<sub>1–3</sub>). Herbert has 1001 hairs on his head, so he’s neither bald<sub>1</sub> nor bald<sub>2</sub>, but bald<sub>3</sub>. So, the sharpening ratio in that case would be 1/3. Now, if the sharpening ratio works out that way, then supervaluationists could hold that Herbert is, in a relevant sense, more not-bald than bald. In general, they could account for the intuitive idea that borderline cases are *F*-ish and not-*F*-ish via sharpening ratios. Among others, Keefe (2000, p. 171) supports this idea: “In this way, as on a degree theory, we [supervaluationists] can discriminate among sentences which are neither true nor false, rather than grouping them all together in an undifferentiated way.”

Despite its initial plausibility, one might deny that degrees of borderlineness correspond to how similar the borderline case is to clear cases. Chang writes that “appealing to a ratio of possible sharpenings ... is to appeal to something extrinsic to the facts about how Herbert stands to the word ‘bald’, such as ‘majority rule’” (2022b, p. 403; see also 2024, p. 275). As is intuitive, and as I will further argue below, similarity provides intrinsic reasons for classification. Consequently, what Chang says here amounts to the claim that if Herbert is 1/3 bald according to the sharpening ratio, he’s nevertheless not more similar to not-bald than to bald men. Whether in the minority or not, each admissible sharpening is equally acceptable. In that way, Chang could try to block the above argument for the conclusion that there are intrinsic reasons to answer the question of whether Herbert is bald positively and intrinsic reasons to answer that question negatively. While borderline cases come in degrees, these degrees do not correspond to how similar the borderline case is to clear cases, she might say.

But denying that borderline cases of vague predicates are cases of competing similarity is unconvincing. First, it’s simply highly intuitive that borderline cases can vary in their degree of similarity. Consider colours: within the borderline zone between yellow and orange, we’d naturally expect some colour patches to appear more clearly yellow than others. Indeed, sorites series typically involve a similarity-based ordering.

Second, competing similarity usefully differentiates vagueness from other sources of indeterminacy. In contrast to Fine (1975), I think a predicate like “nice<sub>1</sub>” (*n* is nice<sub>1</sub> if  $n > 15$ ; *n* is not nice<sub>1</sub> if  $n < 13$ ) is—even though “14 is nice<sub>1</sub>” is neither true nor false—not vague but underdetermined (or if you prefer, incomplete). Sainsbury (1996) claims that predicates such as “nice<sub>1</sub>” are not vague because they lack boundarylessness, and many have followed him in this judgment. Yet whether boundarylessness is a defining feature of vagueness is contested, among other things, because it is not clear whether boundarylessness is a consistent concept (Chang, 2002a, p. 163; Weatherson, 2010). The view that borderline cases of vague predicates are cases of competing similarity usefully distinguishes underdetermination-related cases from

<sup>27</sup> The argument above must not be confused with an argument for degrees-of-truth approaches or Schiffer’s (2000) analysis.

vagueness-related borderline cases: only the latter are cases of competing similarity. Herbert is baldish and not-baldish, but 14 is not nice<sub>1</sub>-ish and not-nice<sub>1</sub>-ish. Likewise, in BALL GAME 2, the ball on the goal line is not both goalish and not-goalish.<sup>28</sup> One possible diagnosis of the Changian view is thus that it conflates the distinction between underdetermination and vagueness.

However, I want to argue for more: similarity provides intrinsic reasons to answer the question of whether a borderline case *a* is *F* positively and intrinsic reasons to answer that question negatively. While this claim is, I think, already very plausible, I'll now present some empirical research to support this claim.

## 4.1 Discussion of the empirical evidence

Empirical research has established that how competent language users classify borderline cases is influenced by *order and contrast effects* (Kalmus, 1979; Hampton et al., 2005; Egré et al., 2013; Raffman, 2014; Stöttinger et al., 2016). It makes a difference whether you first encounter a clearly bald person, then a slightly less bald person, and so on, or whether you first encounter a clearly not-bald person, then a somewhat less not-bald person, and so on, until you face Herbert. And it makes a difference whether you see borderline cases next to other cases. These observations provide evidence that we are, as a matter of descriptive fact, guided by similarity when we categorize borderline cases. A straightforward explanation for this is that we believe (explicitly or implicitly) that we *should* be guided by similarity in classifying borderline cases and thus that we believe that there *are* intrinsic reasons for judging a borderline case *a* to be *F* and intrinsic reasons for judging a borderline case *a* to be not-*F*. Let me present the cited empirical studies in more detail.

The results of Kalmus (1979) and Egré et al. (2013) show the order effect of *enhanced contrast*. Subjects were either shown first a clearly orange patch, then a slightly less orange patch, and so on, until they reached a clearly yellow patch, or the other way around. To illustrate the results, suppose there are thirty colour patches, blending from clear orange (#1) to clear yellow (#30). If we start from #1, we might categorize #15 as yellow. But if we start from #30, we might already categorize #21 as not-yellow. We usually don't switch categories again after doing so. So, if we start from #30, patch #15, categorized as yellow before, will now be classified as not-yellow. The enhanced contrast effect has been replicated by Raffman (2014) and Stöttinger et al. (2016).

Raffman (2014) also observed another order effect: *hysteresis*. Again, imagine thirty colour patches, blending from clear orange (#1) to clear yellow (#30). Raffman reports that when the order of patches is reversed after competent language users shift categories, they tend to stick to their new categorization: if we are first shown #1, then #2, and so on, we will at some point switch categories to yellow but

<sup>28</sup> One might object that values like 14.9 are more similar to 15 than to 14. But then consider the predicate "über-nice<sub>1</sub>": *n* is über-nice<sub>1</sub> if  $n > 90$ ,  $40 < n < 45$ , or  $n < 10$ , and *n* is not über-nice<sub>1</sub> if  $85 < n < 89$ ,  $30 < n < 35$ , or  $0 < n < 5$ . Similarity intuitions regarding numbers like 50 or 25 will be less strong. Likewise, imagine a board game where there are squares, scattered randomly across the board, and it's undefined whether a token landing on one of these squares is a "win". Again, similarity intuitions about such cases of underdetermination will be much weaker than for cases of vagueness.

continue to apply that category, even when we're returning to the patches we already saw. Let's again say we switched at #15 to yellow. If we are then shown again #14, we tend to also categorize it as yellow, even though directly before we did not do so. Most subjects in Raffman's experiment stuck to their new category for more than one patch after the order was reversed. Raffman also notes that because the phenomenon of hysteresis is not restricted to the perceptual domain,<sup>29</sup> we have good reasons to expect hysteresis also in non-perceptual vague predicates like "bald".

Hampton et al. (2005) report a *contrast effect* for borderline cases. In their main experiment, subjects were presented with several colour patches on a spectrum. It was determined which colour patch the subjects individually categorized as in between opposing colours. After that, subjects were asked to categorize two colour patches side by side. When the in-between patch was seen next to increasingly clear cases, the probability of subsuming this in-between case under that category decreased. Only when the in-between patch is seen next to a very close patch is there a tendency to categorize both patches as the same colour. Let's say that patch #15 appears in between orange and yellow to you. If you see #15 next to #16, there's a relatively high probability that you claim both are yellow. If you see #15 next to #14, there's a reasonably high probability that you categorize neither of them as yellow. But the further away you move, the less likely you'll be to put both cases in the same category. Hampton et al. replicated the contrast effect for colour categorization with morphs presenting ambiguous pictures between a dog face and a cat face.

The phenomena of enhanced contrast, hysteresis, and the contrast effect observed by Hampton et al. are expected under the thesis that the *F*-ishness of a borderline case *a* constitutes an intrinsic reason to count *a* as *F* and the not-*F*-ishness of *a* constitutes an intrinsic reason to count *a* as not-*F*.

Regarding enhanced contrast. Plausibly, someone who classifies patch #15 as yellow when traversing from #1 to #30 but classifies it as not-yellow when traversing from #30 to #1 would appeal to #15's yellowishness *as a reason* to judge "Patch #15 is yellow" in the first case, and to #15's not-yellowishness (orangeishness) *as a reason* to judge "Patch #15 is not yellow" in the second case.

Regarding hysteresis. Plausibly, someone who first classified #14 as not yellow but then classifies it as yellow after having classified #15 as yellow, would appeal to #14's not-yellowishness (orangeishness) *as a reason* to judge "Patch #14 is not yellow" at first, and then, after the switch, would appeal to its yellowishness *as a reason* to judge "Patch #14 is yellow". In particular after the switch, it's plausible that one would appeal to the similarity to #15 which one classified as yellow.

Regarding contrast effects. Plausibly, someone who sees the in-between patch #15 next to the slightly more yellow #16 and classifies #15 as yellow would appeal to the yellowishness of #15 *as a reason* to judge "Patch #15 is yellow". The contrast effect observed by Hampton et al. shows that by varying which cases one contrasts in-between cases with, one can make similarities more or less salient, and that our judgments vary accordingly. This implies that we judge borderline cases based on similarity.

<sup>29</sup> See, e.g., Oliva et al. (1992), Tesser and Achee (1994), Van Der Maas et al. (2003).

Recall that an intrinsic reason is a fact that bears on how  $a$  stands to “ $F$ ”. If the  $F$ -ishness of  $a$  constitutes an intrinsic reason to count it as  $F$  and its not- $F$ -ishness constitutes an intrinsic reason to count it as not- $F$ , the behaviour of the subjects is *reasonable*. We have no cause to believe that the subjects in the experiments of Kalmus (1979), Egré et al. (2013), Raffman (2014), and Stöttinger et al. (2016) were behaving irrationally. So, the empirical evidence speaks in favour of the thesis that the  $F$ -ishness of a borderline case  $a$  constitutes an intrinsic reason to count  $a$  as  $F$  and the not- $F$ -ishness of a borderline case  $a$  constitutes an intrinsic reason to count  $a$  as not- $F$ .

Defenders of the Changian view might, despite this evidence about the way competent language speakers handle borderline cases, still insist that the mere fact that we categorize borderline cases on the grounds of similarity doesn’t mean it’s reasonable to do so. That’s fair enough. But if Chang wants to defend an error theory according to which ordinary people systematically approach borderline cases irrationally, she owes us a defence of such a view. Absent such a defence, the default position should be that there’s no such systematic error.

Before moving on, note that my interpretation of the empirical studies is consistent with a contextualist interpretation of the data. One could claim that the studies are evidence for the thesis that what vague terms such as “yellow” or “bald” express or refer to is context-sensitive. Here is, for instance, a contextualist interpretation of the effect of enhanced contrast. When we classify patch #15 as yellow when traversing from #1 to #30 but classify it as not-yellow when traversing from #30 to #1, we do so because the context of traversing from #1 to #30 makes it the case that #15 *is* yellow, and the context of traversing from #30 to #1 makes it the case that #15 *is not* yellow. However, this contextualist claim is not in conflict with the claim that we could reasonably appeal to #15’s yellowishness when judging “Patch #15 is yellow” and to #15’s not-yellowishness (orangeishness) to judge “Patch #15 is not yellow”. Recall that above I argued that the Changian view is incompatible with contextualism. Even if this were not so, it wouldn’t help a defender of the Changian view to appeal to a contextualist explanation of the data.<sup>30</sup>

## 5 Skewed and equibalanced borderline cases, first- and second-order reasons

If I’m right so far, the defender of the Changian view is in a delicate position. We have intrinsic reasons to categorize Herbert as bald and intrinsic reasons to categorize him as not-bald. Nevertheless—so the Changian view goes—we can resolve the question of whether he’s bald via arbitrary stipulation.

To show how vulnerable this position is, I need to introduce a distinction. If  $a$  is a *skewed borderline case* of  $F$ ,  $a$  is more similar to  $F$ s than to non- $F$ s or more similar

<sup>30</sup> Many thanks to an anonymous reviewer for *Synthese* for prompting me to clarify this discussion.

to non- $F$ s than to  $F$ s with respect to  $F_{\text{ness}}$ . If  $a$  is an *equibalanced borderline case* of  $F$ ,  $a$  is as similar to  $F$ s as to non- $F$ s with respect to  $F_{\text{ness}}$ .<sup>31</sup>

Suppose Herbert is a skewed borderline case. Let's say he's more not-baldish than baldish. Without further intrinsic reasons for the judgment that Herbert is bald, there are stronger intrinsic reasons for judging that Herbert is not bald. It might be that this uneven balance of reasons amounts to there being *conclusive* intrinsic reason for the judgment "Herbert is not bald" or it might be that it merely amounts to there being more *pro tanto* intrinsic reason for the judgment "Herbert is not bald" than for the judgment "Herbert is bald". I'm not committing to any view here. But we can safely ignore the former option for our purposes. If being skewed toward non-baldness provides a conclusive intrinsic reason for the judgment "Herbert is not bald", stipulating "Herbert is not bald" would be superfluous and stipulating "Herbert is bald" would be inappropriate.<sup>32</sup>

Consider then this case:

**SKewed AND CONTRARY:** That Herbert is more not-baldish than baldish amounts to there being merely more *pro tanto* intrinsic reason for the judgment "Herbert is not bald" than for the judgment "Herbert is bald". I stipulate "Herbert is bald".

In **SKewed AND CONTRARY**, stipulation would have to provide a reason strong enough to flip the scales from there being more *pro tanto* reason for the judgment "Herbert is not bald" to there being sufficient reason for the judgment "Herbert is bald". This seems too much to shoulder. Similarity is, phenomenologically speaking, a particularly strong categorization reason. 'Similarity reasons' feel much more basic, immediate, and primitive than 'stipulation reasons'. They have a phenomenal force that arbitrary stipulations lack: similarities draw, pull and push us and this is *beyond our control*, but whether we follow stipulations *depends on us*. Maybe for these reasons, a sentence such as "Yes, Herbert seems more not-bald than bald but I stipulate that he's bald and so I say he's bald and so there's no more question as to whether he's bald" has a somewhat bizarre ring to it.

Next, consider this case:

**SKewed AND ACCORDINGLY:** That Herbert is more not-baldish than baldish amounts to there being more *pro tanto* intrinsic reason for the judgment "Her-

<sup>31</sup> This distinction has analogues in theories that account for degrees of borderlineness: equibalanced borderline cases could, e.g., be those that yield a predication with a truth value or sharpening ratio of 0.5, or for which it's fitting to hold a vagueness-related partial belief of 0.5. While accepting degrees of borderlineness supports accepting skewed borderline cases, the idea that borderline cases can be skewed does not necessarily imply degrees of borderlineness. In a sorites series from yellow to orange, we'll encounter borderline cases that are more similar to clear cases of yellow than to orange cases, and then later on borderline cases that are more similar to clear cases of orange than to yellow cases. Whether that's best accounted for by degrees of borderlineness is another matter. Many thanks to an anonymous reviewer for *Synthese* for urging me to clarify this distinction.

<sup>32</sup> Some might argue that if there's an uneven balance of reasons amounting to conclusive intrinsic reason for the corresponding judgment, the case can't be genuinely borderline. While I believe that borderline cases could exhibit such skewed balances, I don't take a definitive stance on this issue here.

bert is not bald” than for the judgment “Herbert is bald”. I stipulate “Herbert is not bald”.

Maybe, when the intrinsic reasons already speak in favour of a judgment, stipulation *in accordance with that judgment* could provide the additional reason necessary for intrinsic resolution. But this would *not* align with the Changian view, according to which we can intrinsically resolve borderline cases via *arbitrary* stipulation.

Defenders of the Changian view might now retreat to this position: the question of whether *a* is *F* can be intrinsically resolved by arbitrary stipulation only if *a* is an equibalanced borderline case of *F*. At times, Chang seems to consider doing so. Without much argument, she says that it’s her opponents who need to bring forth “special arguments to explain why arbitrary resolution would not be permitted” in such cases (2022a, p. 67; see also 2022b, p. 403).<sup>33</sup> On the contrary, I think the burden of proof lies on her.

Consider this case:

EQUIBALANCED: Herbert is as baldish as he is not-baldish: there is equal intrinsic reason for the judgment “Herbert is not bald” as for the judgment “Herbert is bald”. I stipulate “Herbert is bald” (or “Herbert is not bald”).

Isn’t EQUIBALANCED similar enough to BALL GAME 2 to argue that my arbitrary stipulation might intrinsically resolve the question of whether Herbert is bald? No. There’s nothing you stipulate *against* in BALL GAME 2. In contrast, even though the competing similarities of Herbert clearly fail to provide conclusive intrinsic reasons in EQUIBALANCED, Herbert still *is* similar to the bald and the not-bald. Competing similarity doesn’t simply vanish in equibalanced cases. Thus, you are stipulating *against* an intrinsic reason when you stipulate that Herbert is bald. So, stipulation would have to provide strong enough reasons to defeat the equibalance and create a conclusive intrinsic reason for judgment. But not all equibalance is easily destabilized.<sup>34</sup> Intuitively, an equibalanced borderline case is rather like a weighted pendulum at rest than a pencil standing on its tip—we’d need a big rather than a small “push” to destabilize it. To corroborate this intuition, suppose Herbert and Harry are both equibalanced borderline cases of baldness. I stipulate that Herbert is not bald but don’t stipulate anything regarding Harry. If stipulation could intrinsically resolve the question of whether Herbert is bald, I would thereby have somehow “destabilized” the balance of reasons for Herbert. But intuitively, Herbert is still like Harry: they both remain

<sup>33</sup> Chang accepts something in the vicinity of my notion of skewed borderline cases: “Herbert might be “closer” to being bald than to being not bald” (2002b, p. 681).

<sup>34</sup> Makins (2023) argues for a distinction between the *balance* and the *weight* of reasons. “The weightier one’s reasons when evaluating alternatives”, he writes, “the less sensitive this evaluation will be in response to new reasons, so the stronger those new reasons will have to be in order to break a tie” (2023, p. 13). To use a phrase common in the literature, my view is that equibalanced borderline cases are “sweetening-insensitive”: a weak reason in favour of one judgment cannot “break the tie” or “destabilize” the balance. In comparison to the strength of similarity reasons, stipulation reasons are too weak to tip the scales.

stably “in balance”. The standard view should thus be that equilibrated borderline cases are intrinsically unresolvable.<sup>35</sup>

If you don’t share this intuition, note that we implicitly assumed right now that we can be *certain* that Herbert is an equilibrated borderline case of baldness. But this assumes a lot. In practice, we would not be able to locate the exactly-balanced cases. In BALL GAME 2, one might find it intuitive that a weak reason could become sufficient. But because we never know whether a borderline case is equilibrated, we’d need more than a weak reason to resolve borderline cases. It would have to outweigh the reasons on any epistemic possibility, and so we would be back to the problems regarding the skewed cases.

Here’s a final attempt at defending the Changian view. Maybe, stipulation creates a *second-order reason*—a “reason to act for a reason or to refrain from acting for a reason” (Raz, 1999, p. 39). I have intrinsic reasons to judge that Herbert is not bald: I could judge that he is bald based on his similarity to the non-bald. When I nevertheless stipulate that Herbert is bald, I create a second-order reason to refrain from judging Herbert to be not bald for the (first-order) reason that he’s similar to the not-bald. This results in conclusive intrinsic reason for judging that Herbert is bald post-stipulation. Or so the thought goes. I have three replies.

First reply. The existence of second-order reasons is controversial (Clarke, 1977; Whiting, 2017; Gur, 2018). A key concern is that it seems impossible to act on a second-order reason—that is, to act for a reason *for a reason*. The corresponding challenge for defenders of the Changian view, then, is to show that it’s possible to refrain from judging that Herbert is not bald for the reason that Herbert is not-baldish for the reason that one stipulated that Herbert is bald. Worse still, the challenge appears especially pressing for defenders of the Changian view because they cannot appeal to what is arguably the most state-of-the-art model of acting on second-order reasons—namely, the one proposed by Keeling (2024). Keeling argues that acting on a second-order reason involves treating a first-order reason as an appropriate or inappropriate *kind* of reason. The added difficulty for defenders of the Changian view stems from the fact that the intrinsic reasons for categorizing Herbert as bald and as not bald are of the *same kind*. Both are similarity reasons. On Keeling’s model, acting on the stipulation that Herbert is bald involves treating the first-order reason—that Herbert is not-baldish—as an inappropriate kind of reason. But then the first-order reason that Herbert is baldish should likewise be considered inappropriate since it is of the same kind. At this point, all first-order reasons appear to have been ruled out. This, in turn, seems to render it impossible to act on a reason for a reason—since it is unclear what the relevant first-order reason could be. Therefore, it is doubtful that appealing to second-order reasons would dialectically advance the Changian view.

Second reply. Second-order reasons have an impact on *ϕ-ing-for-a-reason*, not directly on *ϕ-ing*. So, my stipulation that Herbert is bald could only directly resolve the second-order question “Should I judge that Herbert is bald for the reason that he’s not-baldish?”. For one, Chang seems to say that we can directly resolve the first-order question “Is Herbert bald?” based on how we stipulate (2024, p. 276). But the

<sup>35</sup> At least by judgments of the type ‘*a* is (not) *F*’. However, the question might be intrinsically resolvable via rejection.

weightier issue is that it's not clear whether a resolution of a second-order question entails a resolution of the corresponding first-order question. According to Raz, when there's a conflict between what we ought to do according to our second-order reasons and what we ought to do according to our first-order reasons, "we are faced with two incompatible assessments of what ought to be done" (1999, p. 41). This incompatibility suggests that after resolution of a second-order question, the first-order question may remain intrinsically unresolved.<sup>36</sup>

Third reply. If stipulation could create a reason to refrain from judging that Herbert is not bald based on Herbert's not-baldishness, his similarity to the non-bald would cease to matter post-stipulation. We might understand this as an 'eliminating' of reasons. But the quality of *F*-ish-ness and not-*F*-ish-ness would not disappear after stipulation. Consequently, there *is* still reason to categorize Herbert as bald and to categorize him as not-bald post-stipulation. One might then appeal to a weaker sense where the similarity reasons 'survive' but are made *irrelevant*. But, as said, similarity appears to provide strong categorization reasons that cannot be rendered irrelevant so easily. What's more, as Kiesewetter (ms) argues, a strong first-order reason can defeat a weak second-order reason. Therefore, I see no reason to assume that similarity reasons cease to matter post-stipulation.

## 6 Conclusion

I argued that the following view is false:

THE CHANGIAN VIEW If *a* is a borderline case of *F*, the question of whether *a* is *F* can be intrinsically resolved by arbitrarily stipulating that *a* is *F* or that *a* is not *F*.

I argued in Sect. 3 that what I called the "declaration model" of stipulation doesn't seem to work for defenders of the Changian view. I then proposed a rough sketch of an alternative: the "free decision model". There's some intuitive pull to believe that in cases of empty symmetrical reasons, one might intrinsically resolve a case of indeterminacy via arbitrary stipulation. However, I have argued in Sect. 3.1 that borderline cases are not cases of empty symmetrical reasons. There are both intrinsic reasons to answer whether Herbert is bald positively and intrinsic reasons to answer that question negatively. One motivation for this claim is that being ambivalent about borderline cases is fitting. Another is that borderline cases come in degrees, and those degrees plausibly correspond to competing similarities. Moreover, the idea that borderline cases are intrinsically cases of competing similarity has two explanatory merits. First, there are underdetermination-related cases of indeterminacy, and the absence of competing similarities in such cases explains the difference between underdetermination and vagueness. Second, the above-cited empirical evidence

<sup>36</sup> It's instructive that we might regret  $\phi$ -ing when not- $\phi$ -ing is what we ought to do according to our first-order reasons, but we  $\phi$  because  $\phi$ -ing is what we ought to do according to our second-order reasons. For a discussion of regret in such conflicts, see Whiting (2017).

gives us robust reasons to believe that we treat borderline cases as cases of competing similarity. The idea that borderline cases intrinsically are cases of competing similarity is a straightforward explanation for why we do so. I then argued in Sect. 3.2 that claiming that stipulation creates an outweighing first-order reason or an exclusionary second-order reason appears unintuitive and unmotivated. This ultimately renders the idea that we can intrinsically resolve whether a non-absolute borderline case  $a$  is  $F$  by arbitrarily stipulating that  $a$  is (not)  $F$  unconvincing. At least Chang's version of the metaphysics by fiat view fails.

If I'm correct, Chang's case for parity is severely weakened. Chang argues that arbitrary stipulation cannot resolve hard cases. She believes this supports the view that such cases are not borderline cases but cases of parity. If I'm right, it does not.

Moreover, proponents of theories of vagueness that *prima facie* seem to entail the Changian view might want to consider whether they actually want to support this view. The worries I expressed here might, for instance, motivate supervaluationists to argue that the sharpening ratio expresses not only degrees of borderlineness but also degrees of similarity. To me at least, such a version of supervaluationism would seem more intuitive and better suited to explain recent experimental findings than the version that Chang proposes.

Finally, this paper makes progress on the characterization problem of vagueness. Borderline cases can easily be confused with other cases of indeterminacy that might be resolvable via arbitrary stipulation. Sometimes, introducing a name or declaring might do. Sometimes, one might be able to "freely decide". However, vagueness-related indeterminacy is a different beast.

**Acknowledgements** I am grateful to David Killoren for encouraging me to submit this paper and for many insightful discussions throughout its development. I thank Robbie Williams for many detailed comments that significantly improved the paper. I am also indebted to Nick Makins and Rach Cosker-Rowland for very helpful feedback and discussion. Thanks as well to Bart Smith-Johnson and Tiago Carneiro da Silva for valuable discussion and input. I also thank a number of anonymous referees for their thoughtful and constructive suggestions that significantly helped to improve this paper.

**Author contributions** The author is solely responsible for all aspects of the manuscript.

**Funding** The author did not receive support from any organization for the submitted work.

**Data availability** Not applicable.

## Declarations

**Competing interests** The author declares no competing interests.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Burns, L. C. (1991). *Vagueness: An investigation into natural languages and the sorites paradox*. Springer Netherlands.
- Chang, R. (2002a). *Making comparisons count*. Routledge.
- Chang, R. (2002b). The possibility of parity. *Ethics*, 112(4), 659–688. <https://doi.org/10.1086/339673>
- Chang, R. (2022a). Are hard cases vague cases? In H. Andersson, & A. Herlitz (Eds.), *Value incommensurability: Ethics, risk. And decision-making*. Routledge.
- Chang, R. (2022b). How to avoid the repugnant conclusion. In J. McMahan, T. Campbell, J. Goodrich, & K. Ramakrishnan (Eds.), *Ethics and existence* (pp. 389–429). Oxford University Press. <https://doi.org/10.1093/oso/9780192894250.003.0015>
- Chang, R. (2024). What's so hard about hard choices? *Erasmus Journal for Philosophy and Economics*, 17(1), 272–286.
- Clarke, D. S. (1977). *Exclusionary Reasons Mind*, 86(342), 252–255.
- Constantinescu, C. (2014). Moral vagueness. In R. Shafer-Landau (Ed.), *Oxford studies in metaethics, volume 9* (pp. 152–185). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198709299.003.0007>
- Dretske, F. I. (1971). Conclusive reasons. *Australasian Journal of Philosophy*, 49(1), 1–22.
- Egré, P., De Gardelle, V., & Ripley, D. (2013). Vagueness and order effects in color categorization. *Journal of Logic Language and Information*, 22(4), 391–420. <https://doi.org/10.1007/s10849-013-9183-7>
- Fine, K. (1975). Vagueness, truth and logic. *Synthese*, 30(3–4), 265–300. <https://doi.org/10.1007/BF00485047>
- Forbes, G. (1983). Thisness and vagueness. *Synthese*, 54(2), 235–259.
- Graff Fara, D. G. (2000). Shifting sands: An interest relative theory of vagueness. *Philosophical Topics*, 28(1), 45–81.
- Greenough, P. (2005). Contextualism about vagueness and higher-order vagueness. *Aristotelian Society Supplementary Volume*, 79(1), 167–190. <https://doi.org/10.1111/j.0309-7013.2005.00131.x>
- Gur, N. (2018). *Legal directives and practical reasons*. Oxford University Press.
- Hampton, J. A., Estes, Z., & Simmons, C. L. (2005). Comparison and contrast in perceptual categorization. *Journal of Experimental Psychology: Learning Memory and Cognition*, 31(6), 1459–1476. <https://doi.org/10.1037/0278-7393.31.6.1459>
- Kalmus, H. (1979). Dependence of colour naming and monochromator setting on the direction of preceding changes in wavelength. *The British Journal of Physiological Optics*, 33(2), 1–9.
- Keefe, R. (2000). *Theories of vagueness*. Cambridge University Press.
- Keeling, S. (2024). Responding to second-order reasons. *Philosophy and Phenomenological Research*, 109(3), 799–818.
- Kiesewetter, B. (2026). (manuscript). Exclusionary reasons and the balancing view of ought. Provisionally forthcoming in: *Oxford Studies in Metaethics*, Vol. 21.
- Lewis, D. K. (1970). General semantics. *Synthese*, 22(1–2), 18–67.
- Lewis, D. K. (1975). *Languages and Language* (Vol. 7). University of Minnesota Press. Minnesota Studies in the Philosophy of Science.
- Lewis, D. (1979). Scorekeeping in a Language game. *Journal of Philosophical Logic*, 8(1). <https://doi.org/10.1007/bf00258436>
- MacFarlane, J. (2016). I—Vagueness as indecision. *Aristotelian Society Supplementary Volume*, 90(1), 255–283. <https://doi.org/10.1093/arisup/akw013>
- Makins, N. (2023). The balance and weight of reasons. *Theoria*, 89(5), 592–606.
- Millson, J. A. (2021). Accepting & rejecting questions: First steps toward a bilateralism for erotetic logic. In M. Cordes (Ed.), *Asking and answering: Rivalling approaches to interrogative methods. Asking and answering. Rivalling approaches to interrogative methods*, Tübingen. Narr Francke Attempto.
- Oliva, T. A., Oliver, R. L., & MacMillan, I. C. (1992). A catastrophe model for developing service satisfaction strategies. *Journal of Marketing*, 56(3), 83–95. <https://doi.org/10.1177/002224299205600306>
- Peterson, M. (2022). Abortion is neither right nor wrong. *The Journal of Value Inquiry*, 56(2), 219–240. <https://doi.org/10.1007/s10790-020-09773-y>
- Poston, T. L. (2014). *Reason and explanation: A defense of explanatory coherentism*. Palgrave Macmillan.
- Raffman, D. (1994). Vagueness without paradox. *The Philosophical Review*, 103(1), 41. <https://doi.org/10.2307/2185872>
- Raffman, D. (2014). *Unruly words: A study of vague Language*. Oup Usa.

- Raz, J. (1999). *Practical reason and norms*. Oxford University Press.
- Raz, J. (2011). *From normativity to responsibility*. Oxford University Press.
- Sainsbury, R. M. (1996). Concepts without boundaries. In R. Keefe, & P. Smith (Eds.), *Vagueness: A reader*. MIT Press.
- Schiffer, S. (2000). Vagueness and partial belief. *Nous*, 34(s1), 220–257. <https://doi.org/10.1111/0029-4624.34.s1.22>
- Schiffer, S. (2020). Quandary and intuitionism: Crispin Wright on vagueness. In A. Miller (Ed.), *Logic, language, and mathematics* (1st ed., pp. 154–174). Oxford University Press. <https://doi.org/10.1093/oso/9780199278343.003.0007>
- Schoenfield, M. (2016). Moral vagueness is ontic vagueness. *Ethics*, 126(2), 257–282. <https://doi.org/10.1086/683541>
- Searle, J. R. (1975). A taxonomy of illocutionary acts. In K. Gunderson (Ed.), *Language, Mind and knowledge* (pp. 344–369). University of Minnesota Press.
- Shapiro, S. (2006). *Vagueness in context* (Vol. 76, pp. 471–483). Oxford University Press. 2.
- Smith, N. J. J. (2008). *Vagueness and degrees of truth*. Oxford University Press.
- Stöttinger, E., Sepahvand, N. M., Danckert, J., & Anderson, B. (2016). Assessing perceptual change with an ambiguous figures task: Normative data for 40 standard picture sets. *Behavior Research Methods*, 48(1), 201–222. <https://doi.org/10.3758/s13428-015-0564-5>
- Tesser, A., & Achee, J. (1994). Aggression, love, conformity, and other social psychological catastrophes. In R. R. Vallacher, & A. Nowak (Eds.), *Dynamical systems in social psychology*. Academic.
- Van Der Maas, H. L. J., Kolstein, R., & Van Der Pligt, J. (2003). Sudden transitions in attitudes. *Sociological Methods & Research*, 32(2), 125–152. <https://doi.org/10.1177/0049124103253773>
- Weatherston, B. (2010). Vagueness as indeterminacy. In R. Dietz, & S. Moruzzi (Eds.), *Cuts and clouds: Vagueness, its nature and its logic*. Oxford University Press.
- Whiting, D. (2017). Against second-order reasons. *Nous*, 51(2), 398–420.
- Williams, J. R. G. (2016). II — Vagueness as indecision. *Aristotelian Society Supplementary Volume*, 90(1), 285–309.
- Williamson, T. (1996). *Vagueness*. Routledge.
- Williamson, T. (1997). Reply to commentators. *Philosophy and Phenomenological Research*, 57(4), 945. <https://doi.org/10.2307/2953813>
- Wright, C. (2001). On being in a quandary. Relativism vagueness logical revisionism. *Mind*, 110(437), 45–98. <https://doi.org/10.1093/mind/110.437.45>
- Wright, C. (2016). On the characterization of borderline cases. In G. Ostertag (Ed.), *Meanings and other things* (pp. 190–210). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199684939.003.0011>

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.