ORIGINAL RESEARCH



Taste Fragmentalism

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Abstract

This paper explores *taste fragmentalism*, a novel approach to matters of taste and faultless disagreement. The view is inspired by Kit Fine's fragmentalism about time, according to which the temporal dimension can be constituted—in an absolute manner—by states that are pairwise incompatible, provided that they do not obtain together. In the present paper, we will apply this metaphysical framework to taste states. In our proposal, two incompatible taste states (such as the state of rhubarb's being tasty and the state of rhubarb's being distasteful) can both constitute reality in an absolute manner, although no agent can have joint access to both states. We will then develop a formalised version of our view by means of an exact truthmaker semantics for taste assertions. Within this framework—we argue—our linguistic and inferential practices concerning cases of faultless disagreement are elegantly vindicated, thus suggesting that taste fragmentalism is worth of further consideration.

1 Introduction

It is natural to suppose that disagreement entails inconsistency. If Abiba thinks that rhubarb is a vegetable and Ibrahim disagrees with her on that, their beliefs (and claims) about rhubarb are mutually inconsistent: they put inconsistent constraints on reality. It is equally natural to think that inconsistency entails untruthfulness: if what Abiba believes about rhubarb is inconsistent with what Ibrahim believes, then not all of their rhubarb-related beliefs are true. And it appears that untruthfulness entails faultiness: if not all of Abiba and Ibrahim's rhubarb-related beliefs are true, then either Abiba or Ibrahim must be at fault about rhubarb.

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¹ This principle is called (T) in Kölbel's (2004, 56) seminal paper on faultless disagreement.

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This natural conception is based on three key principles: (a) disagreement entails inconsistency, (b) inconsistency entails untruthfulness, and (c) untruthfulness entails faultiness. If they are all true, disagreement entails faultiness. This conclusion sounds very plausible when at stake are factual matters, such as the issue whether rhubarb is a vegetable. But what if the disagreement concerns matters of taste? Suppose that Abiba sincerely asserts

(1) Rhubarb is tasty

and Ibrahim replies, equally sincerely,

(2) Rhubarb is not tasty at all: it's distasteful.

It appears that Abiba and Ibrahim are disagreeing. If so, the above natural conception entails that one of them is at fault about rhubarb. But this is a conclusion many philosophers would resist to—if anything, because there seems to be no non-arbitrary way to say who is at fault, or why.

To recap, if we adopt a very natural and plausible view, we must conclude that disagreement entails faultiness: if two parties disagree, then one of them is at fault. But this conclusion is implausible, assuming that (rational) disagreement about matters of taste is possible. For we have the strong intuition that, when matters of taste are at stake, two parties can disagree without any of them being at fault. Let us call this problem the *puzzle of faultless disagreement*.²

The debate about faultless disagreement has been very lively in recent decades, and several approaches to the puzzle are now available. The main aim of this paper is to explore a solution that departs quite radically from the most common ones. Before introducing the proposal, it is useful to briefly locate it in the logical space. In doing so, we assume that faultless disagreement is possible, and indeed quite common, and we ignore attempts to "dissolve" the puzzle by challenging this assumption (see, e.g., Boghossian (2006), Stojanovic (2007), Iacona (2008) Cappelen & Hawthorne (2009, 132), Buekens (2009, 2011), Horwich (2014)). Moreover, we restrict our attention to *basic* taste claims such as (1)–(2), as opposed to *refined* taste claims such as 'This 2015 bottle of Château Greysac is pleasantly well-balanced'. Whether and how our proposal can be extended to refined taste claims is a matter we leave to another occasion.³

³ The distinction between basic and refined taste claims is intuitively clear and has been discussed in the literature (see, e.g., Ferrari (2016)). Very roughly, basic taste claims are grounded in immediate, personal preferences and are not inferred from empirical observations and/or general principles. Moreover, they are typically not attached with high significance in controversies. We also leave to another occasion the problem of whether and how our proposal can be extended to other evaluative matters such as aesthetic or ethical issues.



² See Kölbel (2004) for an early formulation of the problem. For overviews, the reader can refer, among others, to Stojanovic (2007), Rosenkranz (2008), Buekens (2011), Schafer (2011), Wright (2012), Hou & Wang (2013), Hales (2014), Huvenes (2014), Davis (2015), Eriksson & Tiozzo (2016), Ferrari (2016), Zeman (2017, 2020).

Most solutions in the literature give up the first of the principles (a)–(c) mentioned above (and possibly the third, too). Let us call them *standard solutions*. According to standard solutions, disagreement does not entail inconsistency. Even though Abiba and Ibrahim disagree on whether rhubarb is tasty, Abiba's assertion of (1) is not strictly speaking inconsistent with Ibrahim's assertion of (2), either because neither of them is truth-apt, or because their truth does not pose inconsistent constraints on reality. Standard solutions include all brands of non-cognitivist, relativist, and contextualist approaches to matters of taste and faultless disagreement.

Standard solutions are not the only ones available. Alternatively, one can stick with principles (a) and (b) and give up principle (c). At least one among Abiba's and Ibrahim's assertion must be untruthful; still, it is possible that neither Abiba nor Ibrahim is at fault. Those who adopt such a non-standard approach are usually *objectivist* about matters of taste. Roughly, objectivists hold that predicates of personal taste express monadic properties, which an entity can instantiate independently of any specific standard of taste (see, e.g., MacFarlane (2014, Sect. 1.1)). Objectivism has many attractive features. It is simple. It does not require us to postulate any deep semantic divide between taste claims and factual claims. It supports strong pre-theoretical intuitions about taste claims, including the intuitions that some taste claims are true, that taste properties such as *being tasty* are no more relational than descriptive properties like *being a vegetable*, and that taste claims need not be (not even implicitly) about certain agents or gustatory standards (see, e.g., Wyatt (2018, 257)).

Unfortunately, typical objectivist solutions run against another natural intuition. This is the intuition that, at least in some cases of disagreement about matters of taste, subject-independent reality does not provide any alethic advantage of one claim over another: from a neutral or objective perspective, there are no more reasons for taking one claim as true (or as false) than there are for so taking the other. Arguably, this intuition plays a key role in making non-objectivist proposals (such as relativism, contextualism, and various strands of non-cognitivism) so attractive. The approach we are going to explore here is a non-standard solution that retains all the attractive features of typical objectivism, but also preserves this key intuition.

We call our solution *taste fragmentalism*. Taste fragmentalism gives up principle (b): inconsistency need not entail untruthfulness. As we will see in detail in Sects. 3 and 4, our view allows for *dialetheias* about basic taste claims, for it posits that some taste claims are both true *and* false relative to the same point of evaluation. However, it differs from dialetheism as usually characterised, for it does not entail that there are *true contradictions*, thus preserving the Law of Non-Contradiction (Priest et al., 2022). Dialetheist solutions have been very rarely taken into the account in the literature and have attracted essentially no consensus. We will argue that, when it comes to the specific dialetheist approach we defend here, such

⁴ See Moruzzi & Coliva (2020) for a thorough analysis of the prospects of dialetheism in this area (see Sect. 5 for a rejoinder to one of their objections). See also Beall (2006).



a dismissive attitude is unjustified: taste fragmentalism is a worthy contender in the debate about basic taste claims and faultless disagreement.⁵

Let us dwell a bit more on this. Taste fragmentalists agree with dialetheists that reality is not globally coherent, namely, that two inconsistent claims can both represent reality correctly. This is because reality is constituted not only by "ordinary" states such as that of rhubarb's being a vegetable, but also by taste states such as that of rhubarb's being tasty, or distasteful. And it is perfectly possible that reality contains both the state of rhubarb's being tasty and that of rhubarb's not being tasty. However, and this is the fragmentalist aspect of their view, taste fragmentalists subscribe to a *local* principle of coherence: reality—even if globally incoherent breaks up into coherent fragments. The taste states of each fragment correspond to the sum total of the taste evidence that, in principle, can be accessed to by an agent (or by multiple agents, if they have exactly the same taste evidence). This means that, although reality contains incoherent pairs of taste states, no agent has epistemic access to one such pair at one time. In accordance with the so-called acquaintance principle for taste matters (see below, Sect. 3), we assume that we have epistemic access only to taste states of which we have (gustatory) experience. In order to know that rhubarb is tasty (or distasteful), we must have tasted rhubarb and found it tasty (or distasteful). In our example, Abiba has access to the state of rhubarb's being tasty, and Ibrahim, to the state of rhubarb's being distasteful. If Abiba and Ibrahim's disagreement is faultless, then both states are part of reality, for, by the above principle (c), one can only be faultless in believing something if that thing is true. However, since these states are incompatible with one another, they never constitute a single fragment, and so they are never jointly accessible. Hence, neither Abiba nor Ibrahim (nor any other agent) has access to both states. Indeed, having access to one state prevents them from having access to the other.

Let us look ahead. In Sect. 2, we offer a general introduction to the fragmentalist framework, and we explain under what conditions it can be applied to the case of

⁶ Rovane (2012) multimundialism is another attempt to vindicate faultless disagreement by admitting incoherent evaluative states. In particular, multimundialists 'deny that there is a single, consistent, and complete body of truths, and they affirm instead that there are many, incomplete bodies of truths that cannot be conjoined' (256). In this respect, there seems to be a certain affinity with our proposal. It is however difficult to assess how far this affinity goes, for Rovane offers only a broad-brush picture of her view, without articulating either the metaphysical details on how to understand the obtainment of incompatible states or the logical features of her notion of conjunction. Additionally, one may observe that whereas multimundialism is specifically designed to apply to evaluative states, fragmentalism is actually best understood as a quite general framework, whose applications—as we will see in Sect. 2—range across a number of philosophical topics. Yet another view that takes reality to contain incoherent evaluative states—called factual relativism—can be found in Einheuser (2008). However, as it is intended to be a version of relativism, the view crucially differs from ours: while we understand propositional truth in terms of absolute truth, factual relativism characterises it in terms of relative truth (more details in Sects. 3 and 4). Our view is also different from *content relativism* (Cappelen, 2008, 24), which allows gustatory standards, thought of as fixed in the context of interpretation, to enter into utterance content. In contrast, we deny that the contents at stake in taste disagreement include gustatory standards, however fixed (once again, further details will be provided in Sects. 3 and 4).



⁵ Hereafter, we shall omit 'basic' and take for granted that we are restricting our attention to *basic* taste claims and matters.

faultless disagreement. In Sect. 3, we shall provide an informal presentation of our approach, taste fragmentalism. In Sect. 4, we give a formalised version of the view, by providing an exact truthmaker semantics for taste claims. In Sect. 5, we discuss some possible objections to our proposal. Section 6 concludes.

2 Fragmentalism and Its Applications

Fragmentalism allows reality to be constituted by incompatible states of affairs, provided that they do not obtain together. States that are jointly compatible organise themselves, as it were, into internally coherent "fragments" of reality, that is, collections of states whose members obtain together. Thus, reality as a whole lacks metaphysical unity, for states that are not members of the same collection cannot obtain together. This view has been exploited in different fields of research: as a theory of time (Fine, 2005; Lipman, 2015; Loss, 2017; Iaquinto & Torrengo, 2022), as an interpretation of special relativity (Lipman, 2020) and quantum mechanics (Simon, 2018), and as a theory of modality (Iaquinto, 2020; Zhan, 2021).

Fragmentalism has its original locus in the philosophy of time, where fragments play the role of instants of time (as in Fine (2005, 308–310)). Suppose that Socrates is seated and then standing. The fragmentalist will maintain that reality is irreducibly constituted by two incompatible states of affairs: the state of Socrates' being seated *and* the state of Socrates' being standing. But even though they both constitute reality, they cannot obtain together, for they are incompatible with one another. Therefore, there have to be (i) a fragment of reality whose members include the state of Socrates' being seated and (ii) a fragment of reality whose members include the state of Socrates' being standing. Since these states are jointly incompatible, and thus cannot obtain together, there is no fragment where the contradictory state of Socrates' being both seated and standing can obtain, and thus no fragment where a contradictory claim like 'Socrates is both seated and standing' is true (Fine, 2005, 282).

Our application of fragmentalism to the case of faultless disagreement preserves certain key features of the original application of fragmentalism to time, but before going on, it is very important to highlight two crucial differences between fragmentalism as a theory of time and taste fragmentalism. Firstly, we are not suggesting that, as a theory of time, fragmentalism has any advantage in treating cases of disagreement. Consider two speakers, Gorgias and Aristotle. Suppose Gorgias says 'Socrates is alive' in a given temporal fragment, while Aristotle says 'Socrates is dead' in a temporal fragment located some decades after the first one. Even granting that there is a sense in which Gorgias and Aristotle assert two inconsistent propositions, it is clear that they cannot be described as disagreeing on whether Socrates is alive. The application of fragmentalism to time is not apt to treat cases of disagreement. As we saw a few lines above, however, fragmentalism can be fruitfully interpreted in a variety of different ways, finding applications in fields of studies other than time. Its limitations in vindicating cases of disagreement when interpreted as a theory of time are not a feature of fragmentalism per se, but rather the consequence of one of its many possible applications.



Secondly, fragmentalism as a theory of time has been introduced to overcome some of the problems afflicting standard A-theories; it is not primarily aimed at vindicating all of our pre-theoretical intuitions about the nature of time (Fine, 2005, 286–307). To the contrary, we put forth taste fragmentalism because we think it is especially well suited to provide a general framework in which our linguistic, inferential, and evaluative practices appear perfectly sensible and rational. For instance, as we will see in detail, our proposal entails that a perfectly rational agent, having access only to a fragment of the totality of taste states, can take other people's taste claims as false and inconsistent (in the strongest possible sense) with theirs, while still maintaining that these people are faultless in making those claims. The agent can endorse a taste claim as a perfectly adequate description of reality and, at the same time, recognise that their opponents' stance is as well grounded on reality and evidence as theirs.

It is important to stress that in this paper, we do not take ordinary people as naïve fragmentalists. We do not claim that people implicitly believe reality to be fragmented in a globally incoherent totality of taste states. How an agent conceptualises other people's behaviour is likely to depend on contextual aims and interests. For instance, people may be insensitive to the reasons of their opponents and simply consider them as wrong. However, our hypothesis is that insofar as one attempts to accommodate their opponent's reasons while still maintaining that their own taste beliefs are true in an absolute sense (i.e., not just relative to their own tastes), something like the fragmentalist picture will emerge.

3 Outline of Taste Fragmentalism

Let us now introduce the key ideas behind taste fragmentalism. We think of reality as composed of states. We say that agents have (epistemic) access to a state to mean that they know that the state obtains. We let a *taste state* be a state involving a certain food or beverage and its evaluative taste properties (*tasty, distasteful*, and the like). Taste states are, intuitively, *evaluative* states, in contrast with *descriptive* states such as the state of rhubarb's being a vegetable. Let us stipulate that a speaker is *acquainted* with a certain taste state if, and only if, the speaker is aware that the state obtains because they experienced it. Our first thesis concerns the accessibility of taste states to agents:

⁸ Accessibility in this sense is an epistemic (knowledge) relation between agents and states (see also below, Sect. 4). It should not be confused with the relation of epistemic accessibility at play in Hintikka-style (Hintikka, 1962) epistemic logics, which holds between worlds and represents a form of epistemic indistinguishability.



⁷ As is customary in the literature, the view is phrased in terms of states only for ease of expression. Strictly speaking, our proposal is not committed to the existence of states as a distinct ontological category. State-talk can be replaced by one's preferred official idiom, as in Fine (2005, 268), where a proper 'in reality' operator is adopted. Other options might include Sider's (2011) 'metaphysical semantics' (an approach discussed in Loss (2018)), or a primitive notion of metaphysical grounding.

(i) Taste states are accessible to an agent *a* only if *a* is acquainted with them, that is, only if *a* is aware of them based on (some past or present) gustatory experience.

Thesis (i) is in line with the *acquaintance principle*, a widely debated thesis concerning knowledge and assertibility in matters of opinion. As applied to taste matters, the principle says that one can have justification for taste claims about a given food or beverage only if one has the appropriate kind of acquaintance with it. For reasons of clarity and uniformity with our proposal, here we prefer an alternative formulation of the principle, in terms of *correct assertibility* rather than justification (here and in what follows we assume that correct assertibility entails (absolute) truth) and acquaintance with *states* rather than things:

Acquaintance principle A taste assertion describing a taste state s is correct if and only if the speaker is acquainted with (and so has access to) s.

Note that our first thesis leaves open the possibility that not all of reality is accessible to a given agent, but only part of it. In particular, certain taste states are accessible only to certain agents, while other, incompatible ones are accessible only to other agents. But a speaker has access to a taste state only if the state obtains. If Abiba is acquainted with the state of rhubarb's being tasty, and Ibrahim is acquainted with the state of rhubarb's being distasteful, then both states obtain—that is, they both constitute reality. Thus, it is possible that agents have access to incompatible states and, as a consequence, that incompatible states constitute reality:

(ii) Different agents can have access to different, and mutually inconsistent, taste states, and if so these states all constitute reality.

By (ii), reality, as we conceive it, also involves evaluative states. This view is not meant to be inconsistent with a principle of global supervenience of a (moderate) physicalist sort, according to which all of reality (in our sense) supervenes on purely physical, descriptive states. For instance, all we say is consistent with the view that the state of rhubarb's being tasty supervenes on purely physical features of rhubarb, along with cognitive and perceptual features of humans. But regardless of one's stance on this point, it is important to stress that we posit no inherent, metaphysical difference between evaluative and descriptive states: the former are states in the same sense as the latter are, and both constitute reality in an absolute manner. The

We are not suggesting that taste states like rhubarb's being tasty are direct objects of acquaintance. Our framework is compatible with the idea that what we are directly acquainted with are states like rhubarb's causing such and such sensations of flavour in the mouth, and that, as a consequence of these gustatory experiences, we eventually have access to taste states like that of rhubarb's being tasty.



The principle owes its name to Richard Wollheim (1980, 233). Even if there is a sizeable debate on the overall aesthetic significance of the principle (see, e.g., Mothersill (1961), Tormey (1973), Goldman (2006), Smith (2007), Meskin & Robson (2015)), its plausibility is generally recognised when at stake are taste statements like (1). The principle is also discussed in semantics, with reference to the so-called acquaintance inferences; see Ninan (2014).

distinction is epistemological rather than metaphysical. Evaluative states differ from descriptive ones in that they are only epistemically accessible to us through (gustatory or analogous) experience, either present or past. Such a thin ideological commitment on the nature of states, we believe, is well suited to support (at least some of) the attractive features of objectivism mentioned in the introduction. For instance, it vindicates the intuitions that taste properties are no more relational than descriptive ones, and that taste claims (and states) are not about specific agents or gustatory standards.

By adopting (ii), we reject the idea that reality is *globally* coherent. What makes our proposal a form of fragmentalism, however, is the view that reality is organised in coherent parts, which we call *fragments*. Our third thesis connects the internal coherence of each fragment with the coherence of what each agent knows (under the hypothesis that agents tend not to believe—and thus, a fortiori, to know—contradictions).

(iii) The states a single agent has access to are always coherent, that is, they correspond to a fragment.

We will talk of *the* fragment that is accessible to an agent *a* as the sum of all and only the states that are accessible to *a*. Agents have access to both taste states (such as the state of rhubarb's being tasty) and descriptive states (such as the state of rhubarb's being a vegetable). We assume that fragments cannot disagree on descriptive states:

(iv) Different fragments may overlap (viz., have some state in common) and if a fragment contains a descriptive state, then no other fragment contains a state that is incoherent with it.

Theses (i)–(iv) concern reality and our epistemic access to it. Our next thesis is about propositional truth. Informally, we assume that the proposition that a certain state obtains is *true* [false] in a fragment if and only if that state obtains [does not obtain] in that fragment. We then express the idea that reality is constituted by states in an absolute manner through a notion of *truth* [falsity] in reality, to be characterised—in a subvaluationist fashion (see, e.g., Varzi (1997), Cobreros et al. (2013))—in terms of truth [falsity] in a fragment:

(v) A proposition is true [false] in reality (viz., absolutely true [false]) if and only if it is true [false] in at least one fragment.

Given that reality can be globally incoherent, (v) entails that the same proposition can be both true and false in reality. However, no inconsistent proposition (such as the proposition that rhubarb is both tasty and not tasty) is true. Indeed, such an approach preserves the validity of the Law of Non-contradiction, so departing from the standard logic of dialetheism, Priest's LP (see, e.g., Priest (1979)). This comes with no surprise, for as we stressed in Sect. 1, fragmentalism differs from dialetheism in the evaluation of true contradictions (more on this in Sect. 4). Moreover, even though both a taste claim and its negation can be true, no agent (not even us, the



authors of the theory) can correctly assert both of them. We will focus on the relation between truth in a fragment and correct assertibility in a few lines. However, it is helpful to anticipate the close tie between the two notions, which can be informally summarised by stating that an agent a can correctly assert a proposition p if and only if p is true in the fragment that is accessible to a. Let us note that, when this idea is taken seriously, it may happen that an agent knows that a taste proposition is true in a certain fragment, but, nonetheless, the agent cannot assert it. Abiba may well know that Ibrahim has access to the state of rhubarb's not being tasty, but she cannot assert, merely on these grounds, that rhubarb is not tasty. We will return to this point in Sect. 5.

Thesis (v) makes it explicit that our proposal is a form of objectivism about matters of taste. When two parties differ in matters of taste, not only does their disagreement concern the same content, but their conflicting assertions/beliefs must also be assessed relative to the same reality. Thus, the constraints that the truth of one party's assertions/beliefs would impose on reality are *incompatible* with the constraints that the truth of the other party's assertions/beliefs would. Therefore, our proposal takes the intuition that speakers disagree when they differ about matters of taste as seriously as possible, in accordance with the above principle (a) (Sect. 1).

It is worth taking a moment to note how radically the view we have presented thus far differs, metaphysically speaking, from contextualism and relativism. Unlike contextualists, we hold that disagreement about matters of taste does not involve any taste index, but only food items and taste properties. And unlike relativists, we hold that taste states do not obtain relative to a taste perspective, but they obtain absolutely speaking. When we say that taste states obtain in an agent's fragment, we do not mean that they obtain relative to the "taste reality" of the agent. Rather, we mean that they constitute the section (that is, the fragment) of reality that the agent is in a position to know. According to fragmentalism, there is no multiplication of reality in a plurality of perspectives that somehow contain states involving the same food items. There is a single reality, shared by food items and food tasters alike, and different tasters may have access to incompatible taste states involving the same food item.¹¹

Our last two theses concern the relation between truth, correct assertibility, and faultlessness.

- (vi) A consistent proposition is *correctly assertible* [rejectable] by an agent a if and only if it is true [false] in the fragment that is accessible to a.
- (vii) An assertion [rejection] of a proposition made by an agent a is faultless if and only if the proposition is correctly assertible [rejectable] by a.

From (v)–(vi), it follows that a proposition is correctly assertible by some agent only if it is true in reality. However, by (i), (v), and (vi), not all true propositions are

¹¹ Those who are acquainted with the literature in the metaphysics of time may have noticed that these differences parallel the differences between fragmentalism on the one hand and internal and external relativism on the other hand. See Fine (2005, 278–284) for all the details.



correctly assertible by all agents. Indeed, our approach to faultless disagreement is based precisely on the view that some true propositions can be both correctly assertible by some agents and correctly rejectable by others, at the same time and with reference to the same reality. In cases like these, from (vii), it follows that both parties in dispute are faultless, even though one party's assertions/beliefs put constraints on reality that are inconsistent with those put by the other party's assertions/beliefs. By the same token, even though both parties are perfectly justified in pursuing their own views and rejecting their opponent's, they are also justified in thinking that the other party is as justified and faultless as their own party is.

4 Models and Semantics

We now propose a formalised version of taste fragmentalism by means of an exact truthmaker semantics (see Fine, 2017) for taste assertions. In exact truthmaker semantics, the notions of (exact) truth and falsity are recursively defined relative to *states*. Like Fine, we take the notion of a state's being *coherent* (possible) as primitive, and we assume that states can be either coherent or incoherent, *tertium non datur*. For simplicity, we disregard matters of tense and only focus on tenseless states, viz., we ignore those states (if any) that obtain at some times but fail to obtain at other times.

A modalised state space is a triple $(S, S^{\Diamond}, \sqsubseteq)$, where S is a non-empty set of states, S^{\Diamond} is the set of all coherent states in S, and \sqsubseteq is a binary improper parthood relation on S.¹² We require that \sqsubseteq be a partial order on S. A state s is said to be the fusion of states s_1, s_2 ($s = s_1 \sqcup s_2$) if s is the smallest state having s_1 and s_2 as parts.¹³

We assume that states come into two, collectively exhaustive and mutually exclusive kinds, namely, *descriptive* and *evaluative* states. Descriptive states are states about which faultless disagreement can never arise, such as the state of gold's having atomic number 79. Evaluative states are states about which faultless disagreement can arise. The only examples of evaluative states we shall consider in this paper are taste states such as the state of rhubarb's being tasty or that of potato chips' being distasteful. We assume that the fusion of an evaluative state with any other state is itself evaluative.

A maximal coherent state (MCS) is a state m such that, for any state s, either s is part of m or $s \sqcup m$ is incoherent. Two MCSs m, m' are said to be descriptively equivalent when, for any descriptive state $s \in \mathcal{S}$, $s \sqsubseteq m$ if and only if $s \sqsubseteq m'$. We let a reality r be a fusion of descriptively equivalent MCSs.

A reality space \mathcal{R} is a modalised state space $(\mathcal{S}[r], \mathcal{S}[r]^{\Diamond}, \sqsubseteq)$ such that $\mathcal{S}[r]$ is the smallest set of states that includes reality r and is closed under parthood (viz., if

¹³ More formally, $s = s_1 \sqcup s_2$ if and only if $s_1 \sqsubseteq s$ and $s_2 \sqsubseteq s$, and, for any $s' \sqsubseteq s$, s' overlaps (has some part in common with) either s_1 or s_2 . See, e.g., Varzi (2019, Sect. 4.2).



¹² This definition is based, with minor modifications, on Fine (2017). Differently from Fine, we require that S^{\Diamond} contains *all* the coherent states in S (as opposed to being merely a set of coherent states in S). Nothing of philosophical importance depends on this further requirement, which we adopt only to make some subsequent definitions simpler.

 $s \in \mathcal{S}[r]$ and $s' \sqsubseteq s$, then $s' \in \mathcal{S}[r]$). As above, $\mathcal{S}[r]^{\Diamond}$ is the set of all coherent states in $\mathcal{S}[r]$. The elements of $\mathcal{S}[r]^{\Diamond}$ are called *fragments* (of r). We let $f, f' \ldots$ vary over fragments.

Language \mathcal{L} is a modal propositional language encoding a distinction between descriptive atoms p, p' ... and taste atoms t, t' ...

An exact truthmaker (falsemaker) of a sentence ϕ is the smallest state that verifies (falsifies) ϕ . Certain states are thought to play the role of exact truthmakers and/or falsemakers for atoms. For lack of a better sobriquet, we call these states *basic*.¹⁴ We remain neutral as to whether the role of an exact falsemaker of an atomic sentence α can be played by any basic state incompatible with the truth of α , or whether special duty, negative states are required to do the trick.

A reality model is a pair $\mathcal{M}_{\mathcal{R}} = (\mathcal{R}, \mathcal{I})$, where \mathcal{R} is a reality space $(\mathcal{S}[r], \mathcal{S}[r]^{\Diamond}, \sqsubseteq)$ and \mathcal{I} is an interpretation function that maps each atom α in \mathcal{L} to a pair $(|\alpha|^+, |\alpha|^-)$ of subsets of $\mathcal{S}[r]$. Intuitively, $|\alpha|^+$ is the set of α 's exact verifiers and $|\alpha|^-$, the set of α 's exact falsifiers. We require that $|\alpha|^+$ and $|\alpha|^-$ include evaluative states if, and only if, α is a taste atom. Moreover, we impose that:

- (a) for any atom α , for some $s \in \mathcal{S}[r]$, either $s \in |\alpha|^+$ or $s \in |\alpha|^-$;
- (b) if $s_1 \in |\alpha|^+$ and $s_2 \in |\alpha|^-$, then $s_1 \sqcup s_2$ is incoherent.

The role of (a) is that of avoiding atomic truth-value gaps, while the role of (b) is that of avoiding *undesirable* atomic truth-value gluts, i.e., preventing atoms from being both true and false relative to a *coherent* state.

Now we are in a position to define the notion of a sentence ϕ 's being exactly verified [falsified] in model $\mathcal{M}_{\mathcal{R}}$ by a state s, in symbols $\mathcal{M}_{\mathcal{R}}$, $s \vDash \phi$ [$\mathcal{M}_{\mathcal{R}}$, $s \vDash \phi$] (see Fine, 2017, 563):

- $(i)^+$ $\mathcal{M}_{\mathcal{R}}, s \vDash \alpha \text{ if } s \in |\alpha|^+;$
- $(i)^ \mathcal{M}_{\mathcal{R}}, s \dashv \alpha \text{ if } s \in |\alpha|^-;$
- $(ii)^+$ $\mathcal{M}_{\mathcal{R}}, s \vDash \neg \phi \text{ if } \mathcal{M}_{\mathcal{R}}, s \vDash \phi;$
- $(ii)^ \mathcal{M}_{\mathcal{R}}, s = \neg \phi \text{ if } \mathcal{M}_{\mathcal{R}}, s \models \phi;$
- $(iii)^+ \quad \mathcal{M}_{\mathcal{R}}, s \vDash \phi \land \psi \text{ if, for some } s_1, s_2, \mathcal{M}_{\mathcal{R}}, s_1 \vDash \phi, \mathcal{M}_{\mathcal{R}}, s_2 \vDash \psi \text{ and } s = s_1 \sqcup s_2;$
- $(iii)^ \mathcal{M}_{\mathcal{R}}, s \dashv \phi \land \psi$ if either $\mathcal{M}_{\mathcal{R}}, s \dashv \phi$ or $\mathcal{M}_{\mathcal{R}}, s \dashv \psi$.

Truth in a reality model $\mathcal{M}_{\mathcal{R}}$ is defined as exact truth in some fragment of r (viz., in some state in $\mathcal{S}[r]^{\langle i \rangle}$):

¹⁴ We refrain from calling them 'atomic', for this might suggest that basic states are mereological simples, while we want to skip any specific commitment about their ultimate mereological structure.



(T) ϕ is true in $\mathcal{M}_{\mathcal{R}}$ if and only if, for some $s \in \mathcal{S}[r]^{\Diamond}$, $\mathcal{M}_{\mathcal{R}}, s \models \phi$.

Consistent falsity in $\mathcal{M}_{\mathcal{P}}$ is defined in a similar way:

(CF) ϕ is consistently false in $\mathcal{M}_{\mathcal{R}}$ iff, for some $s \in \mathcal{S}[r]^{\langle}$, $\mathcal{M}_{\mathcal{R}}$, $s = \phi$.

Given that not all false sentences are consistent, and that inconsistent sentences are exactly verified by incoherent states, inconsistency in $\mathcal{M}_{\mathcal{R}}$ can be defined with reference to the set of all incoherent states in $\mathcal{S}[r]$, viz., the set-theoretic difference between $\mathcal{S}[r]$ and $\mathcal{S}[r]^{\Diamond}$:

(I) ϕ is inconsistent in $\mathcal{M}_{\mathcal{R}}$ iff, for some $s \in \mathcal{S}[r] \setminus \mathcal{S}[r]^{\Diamond}$, $\mathcal{M}_{\mathcal{R}}, s \models \phi$.

These definitions ensure that no inconsistent sentences are true in any reality model $\mathcal{M}_{\mathcal{R}}$, but they leave open the possibility that sentences involving taste atoms are both true and false in some $\mathcal{M}_{\mathcal{R}}$.

The notion of truth [falsity] in a reality model $\mathcal{M}_{\mathcal{R}}$ is understood as a *global* notion of truth [falsity]. Metaphysically speaking, this is intended to capture the idea that states, whether evaluative or not, constitute reality in an absolute manner. In a fragmentalist setting, however, global truths are not *intersubjective* truths—that is, they are not truths upon which knowledgeable agents are bound to agree. Intuitively, to be intersubjectively true is to be true no matter what (maximal) fragment is considered (we will come back to this notion in Sect. 5). Formally:

(IS) ϕ is intersubjectively true [false] in $\mathcal{M}_{\mathcal{R}}$ if and only if, for all MCSs $m \in \mathcal{S}[r]^{\Diamond}$, $\mathcal{M}_{\mathcal{R}}$, $s = \phi$ [$\mathcal{M}_{\mathcal{R}}$, $s = \phi$] for some state $s \sqsubseteq m$.¹⁵

Thus far, we have defined notions of truth [falsity] that are relative to a state and/ or a model. However, in our account, faultless disagreement is not just a matter of truth (or falsity) but also of correct assertibility (and rejectability). Correct assertibility depends both on truth and on the context: intuitively, a true sentence can be correctly assertible or not, depending on who is asserting it and on their epistemic situation. In order to define correct assertibility, we need to complicate the underlying models a little bit.

We let an *epistemic model* $\mathcal{M}_{\mathcal{E}}$ be a triple $(\mathcal{M}_{\mathcal{R}}, \mathcal{C}, \mathcal{E})$, where $\mathcal{M}_{\mathcal{R}}$ is a reality model, \mathcal{C} is a nonempty set of *contexts* (which, for our purposes, can be identified

¹⁵ This notion of intersubjectivity is formally very close to the notion of objectivity introduced and discussed by Flocke (2021). Flocke maintains that more than one possible world is actual and characterises objective truths as propositions that are true in all actual worlds. If we replace *actual worlds* with *obtaining MCSs*, what we get is essentially (IS)'s definiens. However, Flocke's metaphysical presuppositions are very different from ours. She adopts an ersatzist conception of possible worlds, and she understands the view that more than one world is actual 'as meaning that no world is the uniquely correct abstract representation of how things are' (73). In contrast, we understand the view that more than one MCS obtains as meaning that incompatible maximal states are all part of a more comprehensive, globally incoherent reality.



with agents $a_c, a'_c \ldots$), and \mathcal{E} is a mapping from contexts in \mathcal{C} to fragments in $\mathcal{S}[r]^{\Diamond}$. Intuitively, $\mathcal{E}(a_c)$ represents the greatest fragment f of reality that is epistemically accessible to the agent a_c . As mentioned above, we assume that an evaluative state s is part of $\mathcal{E}(a_c)$ only if a_c is acquainted with s.

The notion of a sentence ϕ 's being *correctly assertible in an epistemic model* $\mathcal{M}_{\mathcal{E}}$ and in context a_c is defined as follows:

(A) ϕ is correctly assertible in $\mathcal{M}_{\mathcal{E}}$, a_c iff $\mathcal{M}_{\mathcal{R}}$, $s \models \phi$ for some $s \sqsubseteq \mathcal{E}(a_c)$.

As for the corresponding notion of correct rejectability, we make the simplifying assumption that all inconsistent sentences are correctly rejectable for all agents. Based on this assumption, we can say that a sentence ϕ is correctly rejectable by an agent when either ϕ is inconsistent or is exactly falsified by some state accessible to the agent.

(R) ϕ is *correctly rejectable* in $\mathcal{M}_{\mathcal{E}}$, a_c if and only if either ϕ is inconsistent in $\mathcal{M}_{\mathcal{R}}$, or $\mathcal{M}_{\mathcal{R}}$, $s \dashv \phi$ for some $s \sqsubseteq \mathcal{E}(a_c)$.

Definitions (A) and (R) allow us to provide necessary and sufficient conditions for the faultlessness of acceptance (assertion, belief) and rejection:

(F) An acceptance [rejection] of ϕ in model $\mathcal{M}_{\mathcal{E}}$ and in context a_c is *faultless* if and only if ϕ is correctly assertible [rejectable] in $\mathcal{M}_{\mathcal{E}}$, a_c .

One might find these conditions on faultlessness too demanding. But notice that our aim here is not to offer an *analysis* of the notion of faultlessness; rather, we aim to show that, in our proposal, both parties in a dispute about matters of taste can be faultless in the strong sense of their claims' being both true and justified. If so, they can be faultless also in weaker senses.

Before considering some objections to our proposal, let us spend a few words on how this formal framework connects with the informal picture outlined in the previous section. In an exact verification setting, one can safely identify the proposition expressed by a sentence ϕ with the ordered pair ($|\phi|^+$, $|\phi|^-$) of the sets of its exact verifiers and falsifiers (see Fine, 2017, 565–566). Assuming that (1) ("Rhubarb is tasty") is exactly verified only by the state of rhubarb's being tasty and exactly falsified only by the state of rhubarb's not being tasty, the content of (1) will be ({rhubarb's being tasty}, {rhubarb's not being tasty}). When we say that the disagreement between Abiba and Ibrahim pivots around the same content, we mean that Abiba accepts, and Ibrahim rejects, that very content. These opposite attitudes are equally faultless because they are equally well rooted in reality: Abiba's acceptance is grounded in her acquaintance with the state of rhubarb's being tasty, and Ibrahim's

¹⁶ Arguably, some further condition on \mathcal{E} is needed, if agents are to be taken as minimally rational. For instance, we might want to require that, for any agent a_c , if two states s_1, s_2 are both in $\mathcal{E}(a_c)$, then their fusion is itself in $\mathcal{E}(a_c)$. We leave these complications to another occasion.



rejection, in his acquaintance with the state of rhubarb's not being tasty. Both states obtain in an absolute manner and both are "absolute": they involve no agents, or personal taste indices, or perspectives, or the like.

5 Objections and Replies

Let us consider again the above definition of faultlessness:

(F) An acceptance [rejection] of ϕ in model $\mathcal{M}_{\mathcal{E}}$ and in context a_c is *faultless* if and only if ϕ is correctly assertible [rejectable] in $\mathcal{M}_{\mathcal{E}}$, a_c .

Based on this definition, it appears that a conflict might ensue about what an agent can justifiably reject. Let p be the proposition that rhubarb is tasty, and let us suppose that Ibrahim, who rejects p, recognises that Abiba is faultless in asserting it. Assuming Ibrahim is aware that Abiba's faultlessness entails the truth of p, he can infer that p is true. However, Ibrahim is not in a position to correctly accept p—indeed, he is actually in a position to correctly reject p. Therefore, it appears that, assuming Ibrahim recognises that Abiba is faultless, both the following are true:

- (A) Ibrahim is in a position to infer *p* from propositions he accepts;
- (B) Ibrahim is justified in rejecting p.

But how is it possible that both (A) and (B) are true? That is to say, how can Ibrahim be justified, and rational, in rejecting a proposition that he can recognise to be a consequence of propositions he accepts?

We agree that the conjunction of (A) and (B) is puzzling. However, in our view, the puzzlement is bound to disappear as soon as we have a closer look at our actual epistemic practices. Let us see how.

Arguably, one intuitively thinks of the conjunction of (A) and (B) as untenable because one takes the following principle for granted:

Acceptance of consequence (AC) If proposition in the by an assistance of the consequence (AC) and the consequence (AC) is a support of the consequence (AC).

If propositions $p_1, ..., p_n$ are correctly assertible by an agent a, and a recognises that proposition p follows from $p_1, ..., p_n$, then p is correctly assertible by a.

Principle (AC) sounds very reasonable. However, if we assume the acquaintance principle (see above, Sect. 3), then (AC) is not generally true. For by the acquaintance principle, we can recognise that a taste proposition follows from propositions we accept and still not be in a position to correctly assert it. This is bound to happen in a number of cases, no matter whether our proposal is correct or not. Suppose that Abiba's twin brother, Jock, has never tasted rhubarb but knows he has the same gustatory preferences as her, who notoriously accepts *p* (the proposition that Rhubarb is



tasty). Jock can recognise that p follows from propositions he accepts. Still, by the acquaintance principle, p is not correctly assertible by Jock.

Of course, our proposal requires us to give up a stronger principle than (AC), for we think agents can correctly *reject* propositions they recognise to follow from propositions they accept:

Non-rejection of consequence (NRC)

If propositions p_1, \ldots, p_n are correctly assertible by an agent a, and a recognises that proposition p follows from p_1, \ldots, p_n , then p is not correctly rejectable by a.

However, once the validity of (AC) is given up, it is unclear why we should still regard the validity of (NRC) as non-negotiable.

Let us further elaborate on this point, while also taking into account the notion of global truth (Sect. 4). Suppose that Ibrahim believes that Abiba is faultless. Based on our definitions of faultlessness and truth in reality, he can infer that (it is true in reality that) rhubarb is tasty. However, by the acquaintance principle, Ibrahim cannot correctly assert that rhubarb is tasty, nor is he in a position to believe it. In our proposal, speakers are permitted to move from a local notion of truth to the global one even in matters of taste: Ibrahim is allowed to infer, from the fact that (1) ('Rhubarb is tasty') is true in Abiba's fragment, that (1) is true in reality. However, in accordance with the acquaintance principle, correct assertibility is only permitted when the state at stake is included within the speaker's fragment, thus preventing Ibrahim from correctly asserting (1).

The fragmentalist framework is thus able to reconcile three key intuitions concerning our example of faultless disagreement. First, Ibrahim, being acquainted with rhubarb and having found it distasteful, is fully entitled not only to assert that rhubarb is distasteful, but also to regard his assertion as an indisputable, absolute truth. Second, he is equally entitled to regard Abiba's assertion, which genuinely contradicts his own, as enjoying a similar status of absoluteness, thus making the conversation completely faultless. Third, the absolute truth of his opponent's words is not enough for him to correctly assert that rhubarb is tasty. ¹⁷

A second concern about rejectability is subtler (see Moruzzi & Coliva, 2020, 72–73). In general, when we accept a certain proposition, we are justified in rejecting its negation because the truth of a proposition excludes the truth of its negation. But if so, why suppose that Ibrahim is justified in rejecting Abiba's view, p, given that the truth of Ibrahim's own view does not ultimately exclude the truth of p?

Our reply is that what justifies Ibrahim in rejecting p is not its falsity $per\ se$ but, rather, the fact that Ibrahim has access to a falsemaker for p. The rejection of propositions, as well as their acceptance, is justified based on what states the agent has access to—in other words, on what is true, or false, in the fragment of reality that is available to the agent. It is not justified based on global falsity (falsity in reality).



 $^{^{17}}$ Thanks to an anonymous reviewer for helping us be clearer on this point.

A third, related worry concerns the faultlessness desideratum. Assuming that all that has been said is correct, it appears that Ibrahim is justified in regarding Abiba's epistemic situation as epistemically sub-ideal. After all, Ibrahim is in a position to recognise that Abiba's assertion is false, and it is reasonable to assume that holding a false view is epistemically blameworthy at some level. This assumption can be expressed in terms of the following, alethic constraint on faultlessness:

(ALC) If a proposition *p* is false [true] in reality *r*, then an assertion [rejection] of *p* made by an agent *a* in *r* is not faultless.

But if Ibrahim is justified in regarding Abiba's situation as epistemically sub-ideal, then it appears that the faultlessness desideratum (which entails both parties are in a position to acknowledge the other's faultlessness) must go.

Our reply is that if a fragmentalist worldview is adopted, then there is little reason to think that (ALC) holds across the board. For if proposition p is true in some fragments and false in some others, then, by (ALC), it is simply impossible to have any faultless doxastic attitude towards p. This strongly suggests that, once fragmentalism is taken seriously, (ALC) sets too-high standards of faultlessness and must be abandoned. Of course, this is not intended to be a knockdown argument against (ALC). Admittedly, one might wonder whether to reverse the argument and claim that, in the absence of independent reasons to abandon (ALC), it is taste fragmentalism that must be abandoned, for it sets too-low standards of faultlessness. In the context of an exploratory paper, however, the argument is enough to show that (ALC) is not sacrosanct.

A reasonable fragmentalist replacement for (ALC) involves the notion of *intersubjective* truth rather than that of *global* truth (see above, Sect. 4):

(ALC') If a proposition p is intersubjectively false [true] in r, then an assertion [rejection] of p made by an agent a in r is not faultless.

Constraint (ALC') is perfectly consistent with our above definition of faultlessness (F)—in fact, when suitably rephrased in terms of sentences and models, it entails the left-to-right direction of (F), for no sentence intersubjectively false [true] in $\mathcal{M}_{\mathcal{R}}$ is correctly assertible [rejectable] in any context in $\mathcal{M}_{\mathcal{E}}$.

6 Conclusion

In this paper we have articulated taste fragmentalism in some details and tried to defend it from some natural objections. Space limitations prevented us from taking into account still other possible issues related with our position. They also prevented us from discussing in detail its relations with its main rivals. However, given the preliminary nature of this paper, we hope we convinced the reader that taste fragmentalism is worth of further consideration in the debate about matters of taste and faultless disagreement.



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Declarations

Conflict of interest The authors have no conflict of interest to declare that are relevant to the content of this article.

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