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Paraconsistent vs. Contextual Solutions to Sorites

1. Introduction: Vagueness and faultless disagreement

When philosophers are asked to characterize vague predicates they usually mention borderline cases and tolerance. They say that the meaning of vague predicates is such that it does not determine precise extensions[1]. As a result there are objects (borderline cases) that neither clearly fall within the extension nor clearly fall within the antiextension of such predicates. Vague predicates also seem tolerant: a marginal change of an object in the relevant respect does not influence the application of a vague predicate to it. So for instance, if Mark is rich (for a New Yorker, say), then if he looses one dollar, he will still be rich and the term "rich" would still apply to him. As is well known it is this (seeming) tolerance that brings about the Sorites paradox. If we add the premise (the so called "tolerance principle") "If a man who has n dollars is rich, then a man who has $n - 1$ dollars is rich", to the uncontroversial premise "A man who has 10 billion dollars is rich", then – by *modus ponens* – we arrive at the unacceptable conclusion that a man who has 0 dollars is rich.

Some philosophers argue, however, that borderline cases and tolerance are not the only characteristic features of vague expressions. Crispin Wright (Wright 1995; 145) writes for instance:

"the basic phenomenon of vagueness is one of the possibility of faultlessly generated cognitively un-misbegotten-conflict".

He argues further that:

"[i]t is crucial to recognize that this phenomenon of permissible disagreement at the margins is of the very essence of vagueness, and that to leave it out of account is merely to miss the subject matter". (Wright 1995; 138)

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[1] This is the dominant view, but proponents of epistemic conceptions argue that vague predicates do have precise extensions, but we do not (and cannot) know where they lie.

Wright claims that speakers may unite in hesitation about borderline cases but they may also permissibly differ about them. Thus if John is a borderline case of a rich New Yorker, then *A* may claim that John is rich, *B* may claim that John is not rich and neither of them may be at fault.

Recently the notion of faultless disagreement has gained popularity, mainly in the literature concerning relativism. Max Kölbel in his paper "Faultless Disagreement" defines the title notion in the following way (2004; 54):

"A faultless disagreement is a situation where there is a thinker *A*, a thinker *B*, and a proposition (content of judgement) *p*, such that:

(a) *A* believes (judges) that *p* and *B* believes (judges) that not-*p*

(b) Neither *A* nor *B* has made a mistake (is at fault)".

He does not mention vagueness in this paper, but it seems to me that Wright is right that vague predicates also give rise to such disagreements. I would not go as far as claiming that it is a constitutive feature of vagueness, but it does characterize many uses of vague expressions. Speakers often apply vague predicates to their borderline cases. Since the meaning of such expressions does not dictate how borderline cases should be classified, speakers have some liberty as to what to do. Thus, it may happen that although *A*'s and *B*'s claims concerning a given borderline case seem contradictory, neither *A* nor *B* can be proved wrong. If indeed faultless disagreement is a characteristic feature of vague expressions an adequate conception of vagueness should provide an account of how such disagreements might arise[2].

It seems to me that out of the traditional (noncontextual) conceptions of vagueness the best equipped to account for faultless disagreement are paraconsistent solutions[3].

2. Paraconsistent solutions to sorites and faultless disagreement

2.1. Subvaluationism

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[2] Clearly epistemic conceptions (see above) are not fit to do this. According to epistemicists statements concerning borderline cases are either true or false, so out of the two sentences *Fa* and ¬*Fa* only one can be correct (even if we do not and cannot know which one). The notable exception is Wright's version of agnosticism. He claims that we should remain agnostic as far as the existence of sharp cutoff points is concerned (rather than argue – like other epistemicists – that such cutoff points exists but we do not know where they lie). Wright conception has been *designed* to deal with faultless disagreement.

[3] See however the previous footnote. The reason why I do not consider Wright's view in this paper is that I believe that vagueness is a semantic phenomenon which consists in the fact that vague terms have no sharp cutoff points. I therefore reject epistemic conceptions which either claim that such cutoffs exist or else remain agnostic about them.

According to subvaluationism vague predicates admit of precisifications[4]. From among such precisifications some are admissible, namely those whose boundaries fall within the original penumbra of a given vague predicate. The truth-value of a vague statement is determined in such admissible precisifications. A statement is true, if it is true in some precisification and false, if it is false in some precisification. Since borderline statements are true in some admissible precisifications and false in some admissible precisifications, they are both true and false. In addition, the statements which are true in all admissible precisifications are considered determinately true and the statements which are false in all admissible precisifications are determinately false. But it is truth in an admissible precisification which is the primary notion, not determinate truth[5].

The Sorites paradox is solved by an appeal to equivocation: it is argued that the reasoning is not valid because it appeals to one meaning of a vague predicate in one premise and to another meaning of this predicate in the second premise[6].

In the subvaluation theory „validity” is defined as preservation of truth (as opposed to preservation of determinate truth). An argument is SbV-valid if and only if whenever the premises are true in some admissible precisification the conclusion is true in some admissible precisification. The sorites reasoning is invalid because it equivocates between (slightly) different meanings. One meaning of „heap” is assumed in the minor premise and another meaning is taken into account in the major premise. As Hyde puts it (1997; 650): „*Modus ponens* applied to equivocal premises fails to be truth-preserving, but this is hardly news”.

$$(p \rightarrow q, \ p) \not\models_{\text{SbV}} \quad q$$
$$\text{F T F} \quad \text{T} \qquad \text{F}$$

The borderline statement appearing as a categorical premise is true, hence the categorical premise is true, but that statement is also false, so the conditional premise is true (since it has a false antecedent). Thus both premises are true while the conclusion is false (since we assume here that q is the first clear negative case, which is false in all precisifications). Since vague statements

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[4] Subvaluationism has been proposed by Dominic Hyde, who credits Stanislaw Jaśkowski (1969) with the suggestion that paraconsistent logic may be used as an analysis of vagueness.

[5] Subvaluationism is a dual theory of supervaluationism which equates truth with truth in all precisifications (supertruth). Supervaluationism cannot account for faultless disagreement, and hence since the norm of assertion is supertruth, one cannot faultlessly assert borderline statements (which are neither supertrue, nor superfalse).

[6] Jaśkowski wrote: „Any vagueness of a term *a* can result in a contradiction of sentences, because with reference to the same object *X* we may say that „*X* is *a*” and also „*X* is not *a*”, *according to the meaning*” (Jaśkowski 1969; 144, my emphasis).

have different truth-values in different precisifications and precisifications are different interpretations of vague expressions, it might be argued that the fallacy of equivocation is committed[7].

Subvaluationism has no problem accounting for faultless disagreement. Since borderline statements are both true and false, A may say of a given borderline case "Fa" and B may say of the very same borderline case "$\neg Fa$" and both their utterances will be true. So, obviously it might be argued that neither of them is at fault and in fact both are right.

2.2. Dialetheism

Another paraconsistent solution to the sorites paradox has recently been proposed by Graham Priest (2010). His conception differs form subvaluationism in that it rejects the law of noncontradiction. In subvaluationism the law of non-contradiction is valid, because although both A and $\neg A$ may be true, they will never be true in the same precisification. Since the principle of adjunction fails ($A, B \not\models_{SbV} A \& B$), the law of noncontradiction is valid: $A, \neg A \not\models_{SbV} A \& \neg A$.

The logic proposed by Priest is dialetheist, i.e. it allows true contradictions, i.e. sentences that are straighforwardly true and false at the same time. Priest argues that the sorites is one of a group of the so-called inclosure paradoxes (2010; 70). He claims that the self-reference paradoxes as well as the sorites paradoxes have a form given by the inclosure schema, in which "a construction is applied to collections of a certain kind to produce a different object of the same kind. Contradiction arises at the limit of all things of that kind" (Priest 2010; 70). Logic suggested by Priest is paraconsistent rather than inconsistent, because its consequence relation is not explosive: it is not the case that "$A, \neg A \models B$" (*ex contraditione seguitur quodlibet*) is true for every A and B.

> "An inclosure paradox arises when for some monadic predicates φ and θ, and a one place function δ, there are principles which appear to be true, or a priori true, and which entail the following conditions. (…)
>
> 1. There is a set Ω such that $\Omega = \{x : \varphi(x)\}$, and $\theta(\Omega)$ (Existence)

2. If $X \subseteq \Omega$ and $\theta(X)$,

(a) $\delta(X) \notin X$ (Transcendence)

(b) $\delta(X) \in \Omega$ (Closure).

(A special case of an inclosure is when $\theta(X)$ is the vacuous condition, $X = X$, and so mention

of it may be dropped.) Given these conditions, a contradiction occurs at the limit when $X = \Omega$.

For then we have $\delta(\Omega) \notin \Omega \wedge \delta(\Omega) \in \Omega$." (Priest 2010; 70)

Let us assume that P is a vague predicate and $a_0, \ldots, a_n$ is a sorites series of objects, such that a_0 is P and a_n is $\neg P$. Let $\varphi(x)$ be Px. Thus $\Omega = \{x : Px\}$ and $\theta(X)$ is the vacuous condition. Ω is a proper subset of $A = \{a_0, \ldots, a_n\}$, so we have the condition Existence. If $X \subseteq \Omega$ then there must be a first member of A which is not in X (since X is a proper subset of A). Let this be $\delta(X)$. Since $\delta(X)$ is not a member of X, we have the condition Transcendence. Now, either $\delta(X) = a_0$, if $X = \varnothing$, and so $P(X)$, or if $X \neq \varnothing$, $\delta(X)$ comes just after something in $X \subseteq \Omega$, so $\delta(X)$ has P (by tolerance). In both cases $\delta(X) \in \Omega$, so we have the condition Closure. The inclosure contradiction occurs at the limit when $X = \Omega$, for then we have $\delta(\Omega) \notin \Omega \wedge \delta(\Omega) \in \Omega$ (Priest 2010; 70-1). People who believe in the law of non-contradiction would conclude in this case that the contradiction shows that there is no totality of all P things[8]. Priest however – as a dialetheist – claims that this conclusion does not follow. What does follow is that such a totality has contradictory properties. In the sorites series the contradiction occurs because the first thing in the series which is not P (i.e. a_i) is still P.

$a_0 \ldots a_i \ldots a_k \ldots a_n$

$[- \quad - \quad P \quad - \quad -]$

$\qquad [- \quad - \quad \neg P \quad - \quad -]$

According to this solution *modus ponens* is not valid, because its application may result in a contradiction. Priest, however, argues that it is still an acceptable default inference, which might be used at the beginning and end of the sorites series but not in its middle.[9]

Since borderline cases are both true and false faultless disagreement can easily be explained. Since a_i is both P and $\neg P$, A's saying Pa_i and B's saying $\neg Pa_i$ are both correct. A and B disagree, but both are right.

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[8] Just as self-reference paradoxes demonstrate that there is, for instance, no totality of ordinal numbers. See Priest 2010; 71.

[9] Notabene because of higher order vagueness one never knows where the beginning end and the middle begins.

2.3. Subvaluationism, dialetheism and faultless disagreement

Therefore both paraconsistent solutions are capable of accounting for faultless disagreement. One problem that I see with Priest's account is that it seems to allow not only for a faultless disagreement between two different speakers but also for a faultless 'disagreement' between one speaker and himself. Since a_i is both P and $\neg P$ one and the same person is justified in saying "Pa_i" and "$\neg Pa_i$", and since the law of non-contradiction is not valid it cannot be said that this person is at fault. So, it might be argued that such a view is too permissive as far as faultless disagreement is concerned. We wanted to account for a situation in which two speakers differ faultlessly, but we ended up accounting for a case in which one faultlessly disagrees with himself. This latter situation is for many too hard to swallow. Subvaluationism does not face the same objection because it claims that "Pa_i" and "$\neg Pa_i$" can both be true, but never in the same precisification. And one might argue that a speaker who simultaneously utters "Pa_i" and "$\neg Pa_i$" uses "P" in two different meanings.

Priest claims that his solution is able to explain the intuitive lack of a sharp boundary between clear and borderline cases. Since statements concerning clear cases are true and statements concerning borderline cases are true and false, they share a truth value:

"Of course, they can have different truth values as well, but it is the identity of the truth values that makes us think that there is no significant change at this point". Priest 2010; 80.

The same would apply to the transition from borderline cases to negative cases. Since borderline cases are P and $\neg P$, and negative cases are $\neg P$, again we do not perceive the change as significant[10]. Hence, the tolerance of vague predicates is satisfactorily explained.

Thus, both paraconsistent solutions not only solve the sorites paradox but also are able to account for faultless disagreement. However, the price for accepting such solutions is by many deemed too high. Enemies of contradictions would argue for instance that if the choice is between not having an account of faultless disagreements on the one hand and having such an account and allowing for contradiction on the other, then the former option is preferable. Let us then see

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[10] It seems that subvaluationists can provide a similar explanation of the lack of sharp cutoff points. Another advantage of Priest dialetheist account is that it provides a uniform solution to sorites and self-reference paradoxes.

whether we can do better than this. Contextual conceptions of vagueness promise to account for faultless disagreement without giving up on the law of non-contradiction[11].

3. Contextual conceptions of vagueness

You don't have to be a contextualist to argue that vague assertions[12] are often dependent on contextual factors such as salient comparison classes (e.g. Philip might be tall for a football player, but not tall for a basketball player). According to contextual theories of vagueness, however, such utterances are *doubly* context-dependent: firstly they depend on the external context (i.e. a comparison class, standards of comparison, paradigms etc.) and secondly on the internal context of discourse (in particular on previous utterances ascribing tallness in that discourse that have been accepted by the speakers)[13]. Contextual conceptions of vagueness[14] argue i.a. that:

1. borderline cases depend on external and internal contexts;

2. speakers have semantic license regarding borderline cases;

3. what is said is part of the context and at the same time changes the context;

4. the strong principle of tolerance should be replaced by its weaker version, such as e.g.:

(WT) It is not the case that: there is a context of utterance C and there is an x such that x and $x+1$ are *considered together as a pair by a single subject in C* and 'is F' (as used in C) is true of x and 'is F' (as used in C) is false of $x+1$ (see Åkerman, Greenough 2010).

Thus, for instance, Stewart Shapiro accepts a weaker principle of tolerance, which says: "Suppose a predicate P is tolerant, and that two objects a, a' in the field of P differ only marginally in the relevant respects (on which P is tolerant). Then if one competently judges a to

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[11] It should be noted that Shapiro, who proposes a conceptualist conception, suggestes at one point that the ultimate logic for vagueness should be paraconsistent. Greenough argues however that it is a puzzling claim, because one of the aims of contextualism is to show that apparent contradictions are not genuinely contradictory. See Greenough 2005; 170.

[12] By a vague assertion I'll understand here an utterance in which a vague property is ascribed to (or denied of) a given object (e.g. "Philip is tall", "Philip is not tall"), which is its clear or borderline case.

[13] See e.g. Shapiro 2006.

[14] The best known contextual conceptions of vagueness are Hans Kamp's (1981, *The Paradox of the Heap*, [w:] U. Mönnich (red.), *Aspects of Philosophical Logic*, Reidel, Dortmund, s. 225–77), Scott Soames (1999, *Understanding Truth*, Oxford University Press, New York), Diana Raffman's (1994, *Vagueness without Paradox*, „Philosophical Review" 103, s. 41–74 and 1996, *Vagueness and Context-Relativity*, „Philosophical Studies" 81, s. 175–92), Stewart Shapiro's (2003 and 2006) and Delia Fara's (2000, *Shifting Sands: An Interest-Relative Theory of Vagueness*, „Philosophical Topics" 28, s. 45–81).

have *P*, she cannot judge *a'* to not have *P*" (Shapiro 2003; 42). He also claims that vague terms are judgment-dependent in their borderline areas and accepts the open-texture thesis: "If *a* is a borderline case of *P*, then a speaker is free to assert *Pa* and free to assert not *Pa*, without offending against the meanings of the terms, or against any other rule of language use" (Shapiro 2003; 43). Moreover, he appeals to Lewisian notions of conversational score and rules of accommodation to account for the interchange between borderline utterances and the contexts in which they are made.

Two main versions of contextualism may be distinguished: content-contextualism and truth-contextualism. Content-contextualism (aka indexical contextualism) argues that it is the content of the utterance "Philip is tall" that changes with the context, for depending on the context "tall" expresses different properties. The standard objection against content-contextualist theories is that they make genuine disagreement impossible (see e.g. Keefe 2007). Even if *A* says "Philip is tall" and *B* says "Philip is not tall", we cannot say that they contradict each other, because "tall" has changed its content between those utterances (since each utterance takes place in a (slightly) different internal context). As a consequence, if we represent what *A* said by *p,* then what *B* said doesn't amount to ¬*p* and their utterances are not contradictory.

Content-contextualism may be contrasted with truth-contextualism (aka nonindexical contextualism), which claims that it is the extension and not the content of vague expressions that changes with the context. "Philip is tall" has the same content no matter in which context it is uttered[15]. Nevertheless it may have different truth-values in different contexts (on this view "tall student" is like "US citizen": it means the same, but has different referents on different occasions (see Stanley 2003)[16]). According to truth-contextualism genuine disagreement is possible. If *A* says "Philip is tall" and *B* denies, then what *B* denies is the content of *A*'s utterance. In such a case we might say that *B*'s utterance "¬*p*" contradicts *A*'s utterance "*p*". However, it has been argued (Greenough 2005) that truth-contextualism is not able to account for faultless disagreement.

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[15] A hybrid indexical-nonindexical version of contextualism is also possible, according to which the content of a vague sentence changes with the external content, but once the external context is fixed, the only thing that changes with the internal context is the truth-value.

[16] The difference is that while "US citizen" changes its reference according to time, "tall" has different referents at different contexts even at the same time. The reason for this is that according to truth-contextualism the truth-value of utterances is evaluated in enriched circumstances of evaluation, which apart from a possible world (and time) contain e.g. an additional count-as parameter, which "fixes what things have to be like in order to *count as* having the property of tallness (or any other property) at a circumstance of evaluation" (MacFarlane 2007, 246).

4. The content of vague assertions

Greenough's argument is as follows[17]. Let *S* be "Philip is tall" and *C* – a fixed comparison class. Greenough argues that the speech act which consists in uttering *S* when Philip is clearly tall and the speech act which consists in uttering *S* when Philip is borderline tall are the same speech act. Moreover – assuming truth-contextualism – in both cases the same seems to be said. In clear cases as well as in borderline cases "where *S* says that *p,* what is said in asserting *S*, is that *p is true relative to C whatever the context*" (Greenough 2005, 173). Thus if Philip is a borderline case of tallness and I assert "Philip is tall" what I say is that Philip is tall relative to the fixed class *C* whatever the context. But then it seems that the same applies to the assertion of the denial "Philip is not tall". In borderline and clear cases alike, when I assert "Philip is not tall" I say that Philip is not tall relative to *C* whatever the context. This is why Greenough argues that truth-contextualism makes faultless disagreement in borderline cases impossible. Greenough notices also that it will not do to reply that what is asserted in borderline cases is that *p is true relative to C in the context of utterance* whereas that what is said in non-borderline cases is that *p is true relative to C whatever the context* (ibid.). Such a reply would entail that the same utterance has different contents depending on whether the case it concerns is borderline or non-borderline. Hence, truth-contextualism would lead to content-contextualism after all. Thus, we face a dilemma here: either we embrace truth-contextualism and agree that permissible disagreement concerning borderline cases is not possible, or we accept content-contextualism, but then *no* genuine disagreement is possible (see Greenough 2005, 173). Needless to say, neither option is appealing.

In what follows I'm going to suggest a way out of this dilemma. I'll argue that we should bite the bullet and claim that the speech act which consists in uttering *S* when Philip is clearly tall and the speech act which consists in uttering *S* when Philip is borderline tall – *pace* Greenough – are not the same speech act and they have different contents. This does not mean however that no disagreement is possible. The content of the former speech act is such that it allows for genuine disagreement, while the content of the latter is such that although it does not allow for genuine disagreement, it does allow for permissible disagreement.

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[17] Greenough uses – following Wright – the term permissible disagreement rather than faultless disagreement.

5. Vague assertions and personal taste predicates

Take a personal taste predicate like "salty" and consider two scenarios.

Scenario 1.

Imagine first that we take a glass of water, add five spoonfuls of salt to it and stir thoroughly. I take it the resulting mixture is a clear case of saltiness. We try it and say (predictably) "It's salty". What is the content of our speech act? It seems that when we say that the water is salty, what is said in asserting it, is that *that the water is salty* is true whatever the context. What we mean by it is that the water is salty *simpliciter*, not just salty for us. It is so salty that we cannot imagine someone finding it not salty, so we expect everybody to agree with our judgment. If someone else tries it later and says "It's not salty" we will be thoroughly puzzled. We will understand him as asserting that the water is not salty whatever the context and we take the content of his assertion to directly contradict what we have previously asserted. In such a case the disagreement would be genuine (even if hard to imagine). If we heard that someone judges the water not to be salty, we would probably question the state of his taste buds (or maybe suspect that he comes from a very different culinary background). After all the water is salty to such a degree that we cannot envisage someone who will not find it so.

Scenario 2.

Now imagine that we take a glass of water and add one teaspoonful of salt to it. Again, we stir it thoroughly in order for the salt to dissolve. I assume that the resulting mixture is a borderline-case of saltiness. We are asked to decide whether the water is salty or not. Let's imagine that we find it salty-ish, and since they are pressing us for a definite answer we decide to take the plunge and call it "salty". So we assert "The water is salty". What is the content of our assertion this time? Clearly the content of such a speech act is not the same as in the previous scenario. We do not want to assert that *that the water is salty* is true whatever the context. We decided to call it "salty" in the present context, but the decision wasn't obvious. If another person claimed that the water is not salty we would not be particularly puzzled. We can easily see this time that someone might find the mixture not salty. We would not jump to the conclusion that something is wrong with that person's taste. So it seems to me that the content of our speech act in this case is just that *that the water is salty* is true relative to the given context. We say "The water is salty" but

what we really mean is that the water is salty-to-us, not salty *simpliciter*. Even though we judge it salty, we fully expect someone to question our judgment. Thus, in this case when *A* says "The water is salty", what he means in fact is "The water is salty-to-me". Similarly for *B*: if he says "The water is not salty" he means "The water is not salty-to-me".

"Salty" is a personal taste predicate but it is vague as well. I suggest that we interpret normal everyday usage of all vague predicates (such as "tall", "rich" etc.) in the same manner. That is for every vague predicate *F*, when someone says "*a* is *F*", where *a* is a clear case of *F*, his utterance says that *a* is *F simpliciter*[18] (whatever the context), whereas when someone says "*a* is *F*", where *a* is a borderline case his assertion says merely that *a* is *F*-to-him. The place in which the change of content occurs changes with the context and cannot be precisely determined.

The content of all assertions concerning clear cases is the same, which makes room for genuine disagreement in such cases. What about disagreement in borderline area, however? Since "salty" has a different content in *A*'s mouth than it does in *B*'s, one might object that *A* and *B* are not disagreeing after all. The property that *A* ascribes to the mixture is not the same property that *B* denies of it, so when *A* utters "The water is salty", and *B* utters "The water is not salty", *A* says that *p,* while *B* says that *q*. Thus one might be tempted to conclude that in such a case there is no disagreement and *A* and *B* are merely talking past each other. On the other hand however, one might contrast the case in which *A* says that *a* is salty to him while *B* says that *a* is not salty to him with the case in which *A* says that *a* is salty to him and *B* says that *a* is, for instance, green. In the former case there is a feeling of disagreement, which is lacking in the latter case[19]. More importantly, one might appeal here to the arguments used by Dan López de Sa (2007; 276) in his defense of a certain form of moral contextualism. López de Sa argues that in cases in which speakers are dissimilar, their utterances „*a* is good" and „*a* is not good" will not be contradictory, but in normal discourses, whose participants accept similar systems of values, such utterances will be regarded as contradictory:

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[18] I ignore here relativisation to comparison classes.

[19] MacFarlane, who argues against faultless disagreement, distinguishes various senses of "disagreement" among which are "doxastic non-cotenability" and "preclusion of joint accuracy". Two beliefs are non-cotenable, if a person who holds one could not come to hold the other without revising her existent beliefs. MacFarlane argues that „although we can concede that doxastic non-cotenability is a kind of disagreement, we can now see that it is not going to give us everything we might have wanted in a notion of disagreement." (MacFarlane, unpublished) For that preclusion of joint accuracy is needed: two people who disagree can't both be right. However, he also writes that „one mark of disagreement is to generate disputes", and clearly a dispute can arise if one person says of a borderline case that it is *P*, while the other person says that it is not *P*.

utterances of (say) '*a* is good' and '*a* is not good' could in effect not contradict each other, in virtue of their speakers being relevantly dissimilar (…), but in ordinary, non-defective conversations participants would presuppose that they are all relevantly similar (…), and hence it will indeed be common ground in the conversation that utterances of (say) '*a* is good' and '*a* is not good' would contradict each other (Lopez de Sa 2007, 276).

The same might be said concerning the ascriptions of other vague predicates. Namely one can observe that when we apply predicates such as "salty", "tall" or "bald" to their borderline cases, we presuppose that, since others are similar to us, they will judge those cases in a similar way. Strictly speaking the assertions „*a* is tall" and „*a* is not tall", where *a* is a borderline case of tallness (and the standards of comparison are fixed), are not contradictory, but due to the presupposition that their utterers are relevantly similar and so disposed to judge in a similar way, they will be regarded as such. (It is important to notice that a draw an analogy between vague predicates and predicates of personal taste, but not any predicate of personal taste would do. The predicate I use is special in a sense that we expect people to have similar standards for saltiness. In the case of a predicate like "tasty" this expectation is much weaker.)

Thus the claim that there is a disagreement present in such cases might be defended. Clearly such disagreement is permissible. The ways in which *A* and *B* arrived at their borderline verdicts "The water is salty" and "The water is not salty" are perfectly legitimate. There are no language rules that prescribe what to say in such cases and speakers may decide for themselves whether to apply a given vague predicate or not (see e.g. Shapiro's open texture thesis (2006)). Thus, I conclude that in borderline area we have permissible disagreements, which are admittedly very weak, but are disagreements nonetheless. The content of assertions concerning borderline cases changes with the speaker, which precludes genuine disagreement, but allows for (a form of) permissible disagreement.

6. Conclusion

My solution weds context-contextualism with truth-contextualism and salvages both genuine and permissible disagreements just where we want them. The view proposed is partly content-contextualism because it argues that the content of a given vague predicate changes with the cases in the sense that it is different for non-borderline and borderline cases. This is not full-blooded content-contextualism, because the content does not change with each change of context. The change occurs only when we move from the clear cases to the borderline region. Truth-

contextualism is needed because we do not want precise and fixed once-and-for-all boundaries of the extensions of "*F*" and "*F*-to-me". Thanks to truth-contextualism we might say that the place where the change occurs will differ from context to context.

It is perhaps worth stressing that my account does not assume that we could not apply a vague predicate in its 'absolute' sense to a borderline case. Of course, we could. But if we do this, what we say is that the given borderline case is *F simpliciter*, i.e. *F* whatever the context, and hence no permissible disagreement is possible. The existence of permissible disagreements over borderline cases is evidence that speakers usually do not apply to them vague predicates in their 'absolute' senses.

Since for clear cases "*F*" means "*F simpliciter*", "*a* is *F*" and "*a* is not *F*" are contradictory. There is no permissible disagreement in those cases. Out of the two people who say "*a* is *F*" and "*a* is not *F*" only one can be right. For borderline cases "*F*" means "*F*-to-me", hence when two people say "*a* is *F*" and "*a* is not *F*" respectively they need not *genuinely* disagree. Their disagreement is *faultless* however and they both might well be right. Their disagreement is a disagreement as long as presuppositions concerning speakers' similarity in relevant respects are in place. Hence, permissible disagreement in borderline cases turns out to be rather weak. This does not have to be a drawback, however. What we want to explain is how it is that people may faultlessly utter opposite opinions concerning borderline cases. My account explains this data, and adds that in such cases the seeming disagreement is not a deep discrepancy, which also accords well with the common usage of vague predicates[*].

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