A Quality-Space Theory of Mental Qualities

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OVERVIEW

I. Two Concepts of Mental Quality
II. Quality-Space Theory and Consciousness

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I. Two Concepts of Mental Quality

- It’s standard in the philosophical literature to appeal to ostensibly pretheoretic *folk intuitions* about mental qualities as data that any theory must respect.
- Recent so-called experimental philosophy seeks to test claims about folk intuitions by eliciting commonsense judgments about the matters at hand, thereby validating or undermining such claims.
- But few ask whether such intuitions are actually pretheoretic—i.e., *theory neutral*.

Consider *quality inversion*—said to be a folk intuition that the mental quality you have on seeing something red might be the same, e.g., as my mental quality on seeing a green object.

- Such quality inversion would be *empirically undetectable*, so the intuition goes. And because this possibility is thought to *make sense*, it’s often taken to be a basic datum in theorizing about mental qualities.
- But the alleged intuition is hardly theory neutral (something surveys of folk judgments don’t address). Rather, it covertly embodies an *optional* assumption that favors some theories about mental qualities over others.
The tacit assumption is that we can know about mental qualities only by way of consciousness—by how one is aware, subjectively, of one’s own mental qualities.

The intuition about inversion requires this assumption because if we could know about mental qualities in any other way, the inversion would be detectable. And detectable inversion doesn’t affect how we theorize—cp. detectable color blindness.

This tacit assumption may seem inviting even independent of inversion: What could it be for a state to have mental qualities apart from one’s being aware of those qualities in the first-person way familiar from conscious experience?

Many theories—I’ll call them consciousness-based theories—encapsulate that idea, holding that we know about mental qualities solely by way of consciousness.

Relying just on an individual’s subjective, first-person access to mental qualities blocks these theories from saying much that’s informative about mental qualities.

But there is an alternative. We determine a creature’s ability to discriminate a range of perceptible properties—e.g., colors—by which stimuli the creature takes to match, or to be just noticeably different. And this uniquely determines a quality space for the relevant range of perceptible properties:
This quality space reflects how the creature perceives the relevant stimuli, regardless of how—or even whether—the creature is in any way aware of its own perceptions.

But to discriminate stimuli, a creature must be in states that vary in ways that reflect discriminable differences among stimuli. These states are qualitative states—states that vary in respect of mental quality: These differences in mental quality register parallel differences of perceptible property.

So the quality space that defines the perceptible properties a creature can discriminate will also map the mental qualities that enable those discriminations.

This quality-space (QS) theory of mental qualities relies just on one’s awareness of stimuli, not awareness of mental qualities. We don’t compare QSs and see that they match; we extrapolate to the mental QS.

Since QS theory explains mental qualities independent of their being conscious, it makes theoretical room for such findings as subliminal perception and blindsight.

And by accommodating the scientific study of mental qualities, the theory undermines the so-called hard problem and the alleged conceivability of undetectably absent qualities (“zombies”)—both of which rest on holding that we can know about mental qualities only by way of consciousness.
QS theory applies to all the *exteroceptive* modalities, as well as *bodily* sensations. And since it also applies to the spatial mental qualities that figure in perceiving *size, shape, and location*, it can handle proprioception and kinesthetic sensation. QS theory provides an account of all mental qualities—indeed of consciousness.

*We taxonomize mental qualities by relative location* in a quality space constructed from a creature’s ability to discriminate the corresponding perceptible properties.

So if there were an axis around which such a quality space were *symmetrical*, a creature couldn’t distinguish stimuli on one side of that axis from those on the other.

So any axis of symmetry in a quality space would hinder discrimination of perceptible properties—and would thus be *detectable*. QS theory shows that undetectable inversion of mental qualities can’t happen.

Such inversion is not simply impossible. Once we have a theory that accounts for mental qualities, we can see that such inversion is also *inconceivable*—since it’s incompatible with taxonomizing mental qualities by location in a quality space.

It *seems* conceivable only *in the absence of a suitable theory*, just as it would *seem* conceivable, in the absence of any theory, that water at sea level boils at 300º F. or that it’s a fundamental physical substance.
II. Quality-Space Theory and Consciousness

A consciousness-based theorist would reply that we know from phenomenology that qualitative states are *intrinsically conscious*. So no account can be right if it proceeds independently of consciousness.

Phenomenology does tell us about *mental appearances*—how our mental lives appear. And a satisfactory theory must do justice to those phenomenological appearances.

But we can do that just by explaining *why those appearances occur*. We need not also take the appearances to be *accurate*.

In particular, we needn’t take mental qualities to be *intrinsically conscious*—as long as we explain why they *seem* to be.

I’ll come back to that issue. But I’d like first raise a more general concern about the QS theory:

If mental qualities do occur without being conscious, *why are they ever conscious*?

If mental qualities are taxonomized just by relative location in a quality space, how *is it* that they sometimes occur consciously?

Let’s address this by asking first *what it is* for a mental state to be conscious. And it’s useful to approach that by asking how mental states that are conscious *differ from* mental states that are not.
No state is conscious if the individual that's in the state is wholly unaware of it. That explains how conscious states differ from states that aren't conscious: A state is conscious only if one is aware of it. But aware of it in what way?

I’ve argued elsewhere that the right way consists in having a thought that one is in the state—a thought that’s subjectively independent of inference and observation. But that specific theory won’t figure here.

Whatever the relevant kind of awareness, no qualitative state is conscious unless one is aware of that state—i.e., aware of oneself as being in a state that has the relevant mental qualities.

So given QS theory, a qualitative state is conscious only if one is aware of being in a state with properties defined by relative location in the relevant quality space. I’ll call that awareness of qualitative states a higher-order awareness (HOA).

Since mental qualities, e.g., for color, are fixed by the relevant stimuli, they presumably have exact shades. Nonetheless, we’re often aware of them in just a generic way—e.g., as generically red.

This would be hard to explain if mental qualities were intrinsically conscious. But the HOA theory readily explains it: The mental quality is always specific, but the HOA may represent it in a generic way.
We often can readily discriminate two very similar mental color qualities when they occur together, but can’t tell any difference when they occur in succession.

The combined HOA and QS theory explains this as well. Since we’re aware of mental color qualities in respect of comparative location in the color quality space, we can discriminate two qualities more finely when they’re both available to compare.

It seems subjectively that how we’re aware of our experiences accurately reflects their mental qualities—that those qualities are exactly as consciousness represents them. Can the combined QS and HOA theories explain this subjective impression?

Yes. Each subjective appearance is due to a HOA. Since there’s no subjective way to check the HOA, it seems subjectively to be the last word about each mental quality. The absence of any subjective check on the HOA results in its seeming subjectively as though it always represents its target mental qualities fully and accurately.

Still, our awareness of mental qualities is occasionally strikingly inaccurate.

In Grimes’s (1996) saccade change-blindness paradigm, participants are often unaware that a salient stimulus has changed from red to green. So when the stimulus is green, they’re actually aware of a green mental quality as if it were a red quality.
But how about the subjective appearance, mentioned earlier, that qualitative states are intrinsically conscious?

Typically we’re aware of the qualitative states but not also of the HOA; the HOA is typically not itself a conscious state. So when a qualitative state is conscious, one is typically aware only of the target qualitative state—and our subjective sense is that there is only one state.

Finally, HOAs make one aware of mental qualities in respect of location in a QS. So inverted and absent qualities are not conceivable even for mental qualities that are conscious, nor does a hard problem affect conscious mental qualities.

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Summary

Rejecting the unfounded assumption that we have access to mental qualities only by way of consciousness makes room for an informative QS theory of mental qualities—thereby undermining the hard problem as well as the sense that undetectable quality inversion and absence are conceivable.

Combining QS theory with a HOA theory of consciousness explains how some mental qualities come to be conscious—and does justice to various puzzling phenomena.