Reframing Qualia: Phenomenal Fields, Abstraction, and the Explanatory Gap

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Abstract

This paper develops a field-based account of phenomenal experience that challenges qualia-based approaches. Rather than treating qualitative features as intrinsically defined and independently specifiable, the analysis construes experiential differentiation as structured within a unified phenomenal field. On this basis, qualitative character is understood as the product of abstraction, that is, as the perpetuation of stabilized differences within ongoing experiential variation for purposes of identification, comparison, and communication. This framework provides a systematic reinterpretation of the relation between first-person and third-person perspectives as distinct modes of abstraction rather than as access to fundamentally different domains. It further explains pervasive features of experience such as variety and variation without appealing to discrete qualitative units. In this way, standard qualia-based thought experiments treat qualitative features as if they could be varied independently of the functional organization of the system. By contrast, the present account shows that this apparent independence results from abstraction, which yields qualitative features by isolating them from the field whose organization remains operative but is no longer taken into account. As a result, their independence cannot be coherently maintained. The resulting position relates qualitative and functional aspects of experience and clarifies the explanatory role of abstraction in discussions of the so-called explanatory gap.

Keywords: Consciousness, Phenomenal Field, Abstraction, Orientation, Qualitative Differentiation, Explanatory Gap, Fading Qualia

1 Introduction

The nature of "qualitative character" (or qualia) has long occupied a central place in debates about consciousness. It is widely taken to mark a point at which naturalistic explanation encounters a limit: even if functional, representational, or neuroscientific accounts explain cognitive access, behavioral control, or the integration of information, they appear unable to capture what experience *is like* (Nagel, 1974). This tension has motivated a range of positions. Some treat "qualitative character" as metaphysically fundamental or irreducible e (e.g., Block, 1995; Chalmers, 1995; Jackson, 1982, 1986; Kind, 2008; Nida-Rümelin, 1995; Nida-Rümelin, 2007), thereby preserving its distinctiveness at the cost of explanatory integration. Others seek to identify it with functional or representational states (e.g., Churchland, 1988; Lycan, 1996; Tye, 2006), securing theoretical continuity while leaving unclear why such states should be accompanied by experience at all. Still others reject the notion of qualia as intrinsically given features altogether (Dennett, 1991; Frankish, 2016).

More recent approaches increasingly emphasize the systemic organization of consciousness. Predictive-processing frameworks, for example, interpret experience in terms of hierarchical inference over sensory causes (e.g., Clark, Friston, & Wilkinson, 2019; Hohwy, 2013), while current work on neural and artificial systems investigates structural indicators of consciousness (Block, 2026; Butlin et al., 2026). Although these approaches shift attention away from isolated qualia toward organizational criteria, the question of "qualitative character" often remains unresolved. It is either treated as an additional feature requiring separate explanation or left aside as theoretically intractable.

This paper argues that this persistent difficulty is not merely due to incomplete explanation, but to how the problem is framed. More specifically, it arises from conceptualizing experience in terms of discrete qualities abstracted from ongoing experiential differentiation. On this view, qualities appear as independent entities that must either be reduced to, or reconciled with, functional organization. The present account rejects this starting point. Rather than treating individual qualities as independently given, this account understands them as abstractions from differentiations within the phenomenal field.

With this in mind, the paper develops a reinterpretation of the *explanatory gap* (Levine, 1983), commonly understood as the difficulty of accounting for what experience is like within scientific or functional descriptions. The paper argues that the apparent gap does not reflect a divide between different kinds of entities, but arises from distinct abstractions of experience that are subsequently treated as if they stood for experience itself. What are often taken to be qualitative features are, on the present account, products of abstraction from ongoing experiential differentiation. Once this is recognized, the apparent tension between experiential and functional accounts can be understood as arising from different perspectives introduced through abstraction.

The positive thesis developed here is that the differences through which experience is articulated cannot be separated from the organization in which they function. They are not independent features that could vary while everything else remains unchanged, but belong to the phenomenal field that enables orientation within a situation (Stegmaier, 2008, 2019). The impression that such independence is possible

arises only when these differentiations are abstracted from the field organization from which they arise. In this sense, "qualitative character" does not belong to experience as such, but results from abstraction.

The remaining paper is organized as follows. Section 2 reconstructs the canonical framing of qualitative experience showing how the notion of "qualitative character" is usually handled and why this leads to persistent theoretical tensions. It then clarifies the notion of abstraction, which is applied later on. Section 3 develops the transition from sensory variation to meaningful organization and argues against treating experience as composed of discrete elements or as a "container." Section 4 presents the core of the field-based account. It analyzes how experiential variety and continuous variation are structured and how stabilization gives rise to differences that serve orientation—drawing in part on Stegmaier's account—and examines how such stabilization underlies abstraction. It then addresses the role of form in relation to differentiation, while emphasizing its remaining contingency in the articulation of qualitative appearance. Section 5 draws the consequences of this analysis for the explanatory gap and for classical qualia-based thought experiments, showing how their intuitive force depends on assumptions that do not hold at the level of the phenomenal field. Section 6 concludes by summarizing the results, indicating how the present account relates to other approaches, and outlining directions for future research.

The present analysis is informed by phenomenological considerations and supplemented by conceptual reflection on abstraction and experiential organization. It proceeds from structures accessible in everyday experience—most notably the phenomenal field and the contrasts through which aspects of a situation stand out—and examines how the phenomena commonly associated with "qualitative character" appear within this organization. In line with Stegmaier's philosophy of orientation, the analysis focuses on structures that serve practical orientation without presupposing a specific metaphysical framework. In this respect, it draws on Heidegger's conception of phenomenology as making visible "what shows itself as it shows itself" (Heidegger, 1927/2001; Stegmaier, 2008, pp. 31-32). This discussion draws on ordinary perceptual situations and examples from the literature on abstraction in order to clarify how aspects of experience can be selectively stabilized and rendered into representational form for different purposes. The aim is to clarify how abstraction leads to what is usually regarded as self-evident entities in experience.

2 Framing the Analysis of Experience

This section introduces the conceptual framework as basis for the subsequent analysis. First, it outlines the canonical framing of qualitative experience that motivates contemporary discussions of qualia. It then clarifies the notion of abstraction employed in the present account. Rather than treating abstraction as the omission of properties from pre-given representations, the analysis understands it as a selective and situation-dependent transformation that yields representations for particular purposes. This conception will later be used to explain why first-person and third-person articulations of experience can both be valid while nevertheless resisting recombination.

2.1 Canonical Framing of Qualitative Experience

The terms "phenomenal experience" and "qualitative experience" are often used interchangeably. In what follows, however, we draw a distinction. By "phenomenal experience" (henceforth simply "experience"), we refer to the overall structure of what is consciously present for a subject, without presupposing that this structure is qualitatively differentiated. By contrast, "qualitative experience" suggests that experience is constituted by identifiable qualities, such as specific colors or sensations. In such cases, it is usually said that experience has "qualitative character."

Canonical formulations of experience in contemporary philosophy of mind converge on the idea that it involves a distinctive "what-it-is-like" aspect (Nagel, 1974) that resists functional or structural explanation. Since Nagel's influential formulation, this phrase has been widely taken to capture a distinctive subjective aspect of experience. However, how experience is to be understood in this respect remains open, and subsequent discussions have often articulated it in terms of qualitative features.

This tendency becomes evident in the knowledge argument developed by Jackson (1982, 1986), where the notion of qualia is used to account for what a subject comes to know when first having a new kind of experience. In the well-known case of Mary, who learns all facts about color vision yet allegedly acquires new knowledge upon first experiencing color, the argument suggests that experience involves an aspect that is not captured by a complete description. The formulation of this acquisition also invites the view that what is gained can be understood as an isolable element. Chalmers (1995) characterizes the subjectively felt aspect of experience as "qualitative character," which, according to his account, remains unexplained once all facts have been specified. In parallel, Block (1995) argues that any adequate theory must account for why systems with identical functional organization and behavioral profiles might nonetheless differ in whether and how experience feels, thereby reinforcing the apparent gap between functional description and qualitative experience as *residual explanandum*.

Taken together, these formulations establish a widely shared practice of articulating experience in qualitative terms, according to which "qualitative character" appears to exceed structural, functional, and neural accounts of consciousness and therefore remains unexplained within them.

In reference to the explanatory gap (Levine, 1983), a range of thought experiments has been developed, including absent qualia (Block, 1978), the inverted spectrum (Shoemaker, 1982), fading qualia and zombie scenarios (Chalmers, 1996). As Van Gulick (2017) emphasizes, these thought experiments aim to argue that systems which are functionally indistinguishable from normal human subjects could nonetheless differ in their "qualitative character," thereby suggesting that functional descriptions fail to capture what is essential to consciousness. Their force, however, depends on the assumption that qualitative experience, as thus conceived, can be explained independently of such descriptions.

To clarify what is at issue, a more fine-grained consideration of perceptual experience is required. Consider Mary in Jackson's (1982) example, who possesses complete propositional knowledge about the world but lacks any experience of color. What, then, does the acquisition of this color experience add? A surface that previously appeared

in varying shades of grey may now appear in a range of colors. However, these are not merely discrete instances of red, blue, or green, but experience exhibits a fluid range of tones, gradients, and mixtures. It is this variability that characterizes color experience and resists capture by simple classifications such as calling a surface "red." What is thereby revealed is not the presence of additional isolated elements, but the complexity of the experience itself. For this reason, even if further specification is possible, due to this fluidity, all descriptions of color experience remain necessarily incomplete.

This limitation reflects a more general feature of experience. To classify a surface as "red" does not simply overlook the variability present in experience; rather, it serves to render experience available for comparison and communication. This suggests that the representation of experience in qualitative terms involves a transformation in which variability is reduced and determinate differences are established, a process whose role and conditions require further analysis.

It should be noted that debates about experience are often framed as disputes over the existence or reality of qualitative features. However, as Speaks (2013) argues, such debates are better understood as concerning the theoretical and explanatory roles assigned to experience. The present analysis follows this line by not denying the reality of experience, but by examining how abstraction shapes the way we talk about experience. On this basis, the focus shifts from positing qualitative features as independent explananda to clarifying how experiential differentiation is organized.

It is also worth noting that the present account shares with enactive and ecological approaches an emphasis on the situated and action-relevant organization of experience (e.g., Gibson, 1979; Noë, 2004). However, it differs in explicitly addressing the notion of "qualitative character" by treating it as a product of abstraction.

2.2 Abstraction as Situational Transformation

The present account employs a notion of abstraction that differs from the standard conception according to which abstraction consists merely in the omission of features from a pre-given representation (Jones, 2005). Instead, abstraction is understood as a selective and situation-dependent transformation based on a plurality of abstraction practices that differ in terms of their purposes (Martínez & Huang, 2011).[1] On this view, abstraction can be understood as a transformation through which aspects of experience, objects, or situations are rendered into representational forms suitable for identification, comparison, and extension across contexts.

This implies that abstraction is not merely a matter of omitting features from an already determinate representation, but a transformative process. Different abstractions may render different aspects of the same situation depending on the purposes guiding them. As emphasized by Ruben (1966/2022), such abstractions can yield results that are locally coherent yet not fully compatible with one another.

Ruben illustrates this point with the example of two teachers discussing students who are formally enrolled at a school but do not participate in classes. In ordinary practice, both teachers can understand without difficulty what is meant when such

[1] There are various philosophers of science who have likewise refuted a reductive understanding of abstraction such as Carrillo and Martínez (2023); Gallegos Ordorica (2016); Knuuttila, Johansson, and Carrillo (2024); Nersessian (2002); Radder (1996, 2006).

individuals are described as students in one respect but not in another. However, once the situation is transformed into different procedures of determination, incompatibilities emerge. Let us consider the following situation. If the number of students is determined through enrollment records, one result is obtained; if it is determined through classroom participation, another result follows. Both determinations are valid relative to their respective procedures, yet the resulting representations can no longer be made fully consistent with one another. The tension arises because the abstractions isolate different aspects of the original situation while excluding the broader context in which these aspects were previously integrated.

The relevance of this conception of abstraction for the present analysis lies in the possibility that different articulations of experience may likewise result from selective transformations of a common experiential basis. The issue is therefore whether abstractions produced for different purposes can be expected to remain fully compatible once detached from the situations in which they arise. This point will become important in the later discussion of first-person and third-person descriptions of experience.

3 From Sensory Richness to Field Structure

3.1 Variety and Variation in Experience

From an evolutionary perspective, the complexity of sensory processing increases with the number and variety of sensory receptors. What becomes present in experience is therefore not raw input, but already organized. Nevertheless, the complexity of experience remains high. A white wall, for instance, does not appear as uniformly white, but exhibits a range of patterns and shades. As discussed in Jackson's example of Mary, what is gained is not merely the experience of a determinate color such as "red," but access to a structured multitude of chromatic differences that are ordinarily subsumed under such classifications.

The application of such labels already reflects a partial integration of this multitude. When articulations of the field are subsumed under the term "red," the multiplicity of what is present in experience is not eliminated, but overlaid with categories. In what follows, this unintegrated multiplicity will be referred to as the *variety* of experience.

A similar structure can be observed in other modalities. The sound of a passing car is not a simple, static event, but unfolds as a temporally extended acoustic stream. Although this stream is integrated into a coherent impression, its fine-grained modulations remain present within experience. These ongoing modulations will be referred to as the *variation* of experience.

Variety and variation are further modulated by shifts in perceptual focus and related activities, which increase the granularity of some aspects of experience at the cost of others. They are therefore not simply given, but dynamically structured: what becomes present varies in salience and resolution, and some aspects remain implicit unless attention is directed toward them.

In addition, the organization of experience cannot be understood solely in terms of what the environment provides. What becomes salient within experience is not only a matter of how sensory input is integrated, but also of what is relevant in

ongoing engagement. This reflects a broader phenomenological line of thought, most prominently developed by Merleau-Ponty (1945/2002), according to whom perception is not given as an aggregate of sensory inputs but as already structured in terms of significance and possible action. It is therefore not only variation in appearance that matters. What distinguishes my wooden desk from the wooden floor is not necessarily a difference in their sensory appearance—they may be made of the same wood—but their different roles within my engagement with the environment: I write on the desk and walk on the floor. At the same time, not everything that is present in experience contributes equally to such structuring; for example, the fine-grained texture of the wall may remain without specific significance.

This shows that this integration is not merely due to patterns of sensory similarity but that it is organized in terms of relevance for the organism. What becomes integrated depends on how variations matter within ongoing engagement, and the resulting units inherit this relevance. A unit is therefore relevant insofar as it opens up possibilities that matter for the organism. This gives the unit a meaning, where we use the term "meaning" in a preliminary sense to indicate that what is present in experience does not appear merely as a collection of sensory details, but also plays a role in how one finds one's way within a situation. For example, I perceive the desk as something to write on, in contrast to the largely meaningless variations in the wall changing with the light. A more precise account of this notion will be developed later.

In this sense, meaning provides orientation on how to cope with a situation. It reflects an intentional aspect of experience in that it structures what is given in terms of its relevance for the organism to deal with this situation. Moreover, meaning is relational and context-dependent. A tiger behind bars in a zoo may appear as an object of observation, whereas a tiger directly in front of me presents an immediate threat. Similarly, apples in a bowl may function as decoration in one context, but as potential food when I am hungry.

Coping with such variability requires a form of organization that maintains coherence across changing conditions—for example, even if the tiger is behind bars, I must remain aware of the potential danger should the situation change. Such variability and context-dependent roles cannot be captured if perceptual features are understood as independent elements with fixed identities. Instead, what is required is a structure in which sensory input is organized so that both variability and stability are preserved. This is what we describe as a "field" structure, which will be examined in more detail in the following section.

As already mentioned, there is an overlap of this view with enactivism and ecological psychology, which emphasize the action-oriented and situated character of perception, where what is given is already structured in terms of possibilities for engagement. More recent work has further developed this perspective by analyzing perception in terms of dynamically organized fields of affordances that guide skilled action and situational orientation (Kiverstein & Rietveld, 2015, 2018; Rietveld & Kiverstein, 2014). While these approaches differ in their theoretical commitments, they converge on the idea that perceptual organization is inseparable from the structured context in which action unfolds.

3.2 Against the Container Model

Although often left implicit, certain accounts of experience can be understood as presupposing what may be called a *container model*: experience is conceived as structured by objects to which experiential features are attached as discrete elements, regardless of whether these features are taken to be properties of mind-independent objects (quality externalism) or of intentional states representing such objects (quality internalism) (see, e.g., J. Campbell, 2002; Pace Giannotta, 2020, pp. 116-117).

In everyday perception, the organization of experience is not fixed: what appears as an object can emerge from its background or dissolve into it under changing conditions. For example, a person standing in the distance may gradually disappear in the fog: as their contours fade, one may still retain a sense of their location, but it becomes increasingly unclear which features belong to the person and which to the surrounding environment. Similarly, the white wall in my office presents a diffuse texture in which no particular unit stands out until, for example, a roughly filled drill hole attracts attention and becomes salient against the surrounding surface.

We can also consider the role of object boundaries. Such a boundary is not given independently, but is constituted in relation to its surroundings. In the case of the Kanizsa triangle, the apparent contour of a figure arises from the organization of the surrounding area rather than from any explicitly given boundary line. Conversely, in forms of camouflage, figures that would otherwise be identifiable dissolve into their environment when contrasts and boundaries are disrupted. In such cases, what previously appeared as a distinct feature is no longer available as such.

These are not marginal phenomena, but reflect a systematic dependence on how experience is organized. What appears as a distinct feature stabilizes only insofar as the perceptual context supports its articulation, and may fail to do so when this organization is disrupted. This dependence is evident in the processual character of perception: it may take time for a coherent organization to emerge, and what initially appears indeterminate can, sometimes abruptly, resolve into a structured configuration. Such cases show that perceptual features are not given as fixed or independently identifiable elements, but arise through the organization of the experiential field.

A similar effect can be observed in certain forms of visual art. In Impressionist painting, the clear articulation of discrete objects is often weakened or absent. A landscape may be presented without sharply defined figures, relying instead on the viewer's ability to integrate patches of color into a coherent scene. What counts as an object is thus not directly given but relies on the viewer's capacity to integrate patches of color into a coherent scene.

Taken together, these cases show that the identity of perceptual features depends on the organization of experience as a whole. This places a constraint on accounts that treat experience as composed of stable, independently identifiable elements: if features can both emerge from and dissolve into their surroundings, they cannot be understood as prior constituents merely located within a container-like structure. Instead, what appear as elements must be regarded as articulations that are constituted through, and vary with, the organization of the experiential field.

To gain a better understanding of the field, a useful structural analogy from physics can be employed. It reflects the same structural point: what appears as a localized

entity is determined by the organization of the field in which it occurs. In quantum field theory, a photon is not an independently existing particle that subsequently enters a field, but an excitation of the electromagnetic field whose properties are defined only within that field and its boundary conditions (e.g., Peskin & Schroeder, 2019). These properties cannot be specified independently of the field that sustains them. Similarly, qualitative features of experience can be understood as differentiations within a phenomenal field rather than as items that could be specified in isolation. Just as a localized photon detection reflects the organization of the electromagnetic field, the qualitative feature of a perceived object reflects the organization of the experiential field. This comparison is intended as a structural analogy: it illustrates how locally identifiable features may depend on a global field that determines their possible forms and relations.

4 Field Structure and the Emergence of Qualitative Form

4.1 Variation, Field Structure, and the Emergence of Salience

In Section 3.2 we have argued that experience presents a continuously varying field, where we use the term "field" to describe a structured domain in which local articulations are not independently specifiable but depend on the organization of the whole. What is given is a multiplicity of sensory modulations—across modalities and over time—that do not initially form stable or clearly bounded units.

A useful way to characterize this organization is to conceive experience as a dynamic field in which patterns of variation continuously emerge and dissolve. What appears as a determinate aspect of experience is not an independently given element, but a temporary configuration within this ongoing flow. Like waves on the surface of the sea, such *formations* do not exist apart from the medium in which they arise; they are forms of the field itself.

Within this variation, certain aspects come to stand out while others recede. This standing-out is not fixed, but can be modulated in relation to situational demands. As shown by Merleau-Ponty (1945/2002), such organization is structured through the perceiver's active orientation within perspectives and horizons.

The *horizon* of experience delimits the range within which variation becomes available. Changes in the horizon involve a trade-off between overview and resolution, as the following example illustrates. When I look at a forest from a distance, it appears as a relatively homogeneous expanse; when I move closer, new variations emerge, and what previously appeared as uniform differentiates into trees, branches, and leaves.

As complement, the *perspective* determines how these variations are encountered. In a garden, for example, a visitor may notice benches and shaded spots, while a gardener is attuned to trees that need pruning or grass that requires mowing. These are not different sensory inputs, but different ways in which the same variation is made available within experience.

Within such modulated variation, certain formations come to stand out as *figures* against a background of experiential variation. The nature of such figures can be

clarified by analogy: just as a wave appears as a salient form in the rolling sea, figures emerge from the phenomenal field as formations that arise and recede. This standing-out can be described as salience. Shifts of horizons and perspectives enable agents to bring different aspects of a situation into salience. In this way, they contribute to the organization of experience (Stegmaier, 2019, pp. 49-50), while variation continues to unfold through these shifts.

Salience depends on stabilization. A figure that immediately disappears cannot become salient, and formations that are too fleeting pass without leaving a trace. Conversely, stabilization is available within experience only insofar as a formation stands out.

Such *formations* need not consist of fixed or sharply bounded elements. A surface, for example, may present itself through a shifting range of tones—depending on illumination, angle, or attention—as a reddish sheen. This appearance is not fixed and may vary continuously without yielding a clearly defined color. Nevertheless, it can function as a stable point of reference insofar as it remains sufficiently coherent. What is stabilized here is not a fixed property, but a distinction that persists across variation. The following section examines how such distinctions arise through processes of differentiation within this variation.

4.2 From Stabilization to Differentiation

So far, we have shown that stabilization allows formations within the phenomenal field to persist and become salient. Without such persistence, no aspect of the field could stand out long enough to be taken up. However, while stabilization and salience are necessary conditions for the structuring of experience, they do not yet explain how experience can guide action. The wave analogy illustrates this limitation: even where formations emerge and persist, a scene composed of largely indiscriminate waves would offer little basis for orientation.

However, the phenomenal field is not as undifferentiated as the wave. It exhibits a range of variety that reflects the diversity of sensory receptors. The central question, therefore, is how this variety and the stabilized formations identified so far come together so as to support differentiation within experience.

To address this question, it is necessary to distinguish variety from the dynamic variation introduced in the previous section. Variety refers to the coexistence of different possible appearances within the field, whereas variation concerns their ongoing change. A colorful summer meadow, for example, may exhibit a wide range of hues at a given moment and thus display variety without significant variation.

The epistemic role of variety lies in enabling recognition and comparison across situations. As Shoemaker (1991) argues, what are often described as qualia are invoked to explain this capacity. The present account locates its basis in the organization of stabilized differences rather than in intrinsically given qualitative properties.

Phenomenological cases illustrate the complexity of this task. Consider wine tasting or the timbre of a clarinet. Such experiences do not present fixed qualitative items, but unfold through subtle and shifting varieties—hints of fruit, acidity, dryness, or warmth; modulations of tone and resonance—none of which remain identical. One may hesitate whether a certain note or flavor is still present or has already faded. What

becomes evident is that such variety is not yet organized into clearly discriminable differences, but appears as a field of modulating appearances in which distinctions remain fluid and difficult to fix.

This difficulty becomes apparent when contrasted with more determinate cases. To describe a bottle as green, for example, involves a relatively stable differentiation that can be readily identified and re-identified across contexts. In contrast, the distinctions involved in wine tasting require sustained attention and repeated comparison in order to become articulable at all. The task is therefore not merely to register variation, but to stabilize differences within it such that they can be taken up as distinguishable features.

This variability resembles the occurrence of vagueness discussed by Everett (1996). Based on a Sorites argument, he points out that such vagueness should not be understood as arising from language or concepts, but within experience itself. Perceptual appearances often fall within ranges rather than exhibiting fixed values: a color may appear between blue and green, a taste may shift gradually across nuances.

These considerations point to a structural requirement for experiential differentiation. Mere variety, as in the limiting case of undifferentiated noise, does not suffice: it lacks the stability required for distinctions to be taken up and re-identified. Conversely, stabilized salience alone, as illustrated by the relatively uniform formations of waves, also remains insufficient: even where patterns persist, they may fail to support discrimination if they do not exhibit sufficient internal articulation. Differentiation within experience arises from modulations only where variety and variation are integrated and stabilized for selective uptake. It is this integration that enables modulations to become available as distinguishable features.

As emphasized by Shoemaker, the epistemic role of experience depends on the ability to register similarities and differences. The present account locates this capacity not in intrinsically given qualitative properties, but in the integration of variety and stabilization within the phenomenal field. Differentiation thus arises neither from salience nor from variety alone, but from their coordination within a structured field in which differences persist and can be selectively taken up. The following section examines how such differentiated differences become informative and guide orientation.

4.3 From Differentiation to Orientation

With the establishment of differentiation, however, the question of how experience guides action remains open. We therefore have to proceed from discrimination to orientation in the sense of Stegmaier, who describes orientation as the "achievement of finding one's way" in a situation "without having searched for anything specific" (2019, p. 3).

Stegmaier's account develops within the same phenomenological tradition as Merleau-Ponty's. Orientation is not a matter of representing a situation, but of establishing bearings within a field of relevance. Perspectives and horizons articulate this relation (2019, pp. 43–48). By adjusting perspective and horizon, agents can "*figure* out" what is relevant.

Central to this process is the formation of provisional points of reference within experiential variation, which Stegmaier characterizes as temporarily stable footholds

(*Anhaltspunkte*). Orientation, he notes, "needs something lasting and stable ... but only as far as it needs them and only for a limited time" (2019, p. 55). These footholds reflect the role of stabilization in enabling orientation: they are sufficiently distinct and persistent to support discrimination, yet remain adaptable to changing conditions.

Given their provisional character, the coherence among footholds becomes decisive. Within the phenomenal field, footholds do not stand in isolation but support or exclude one another. Stegmaier captures this context-dependent stabilization in terms of *Passungen*, that is, locally achieved "fits" between footholds that indicate how well they cohere (2008, pp. 256–263; 2019, pp. 62–65). Such fits allow orientation to remain flexible while maintaining sufficient structure for action and underscore that experience is organized holistically.

In a similar way, Millikan (1995, 2004) explains the connection between discrimination and action by drawing on Gibson's (1979) concept of affordance. According to this view, aspects of a situation are not only encountered as differentiable features, but also afford possible activities.

This can be illustrated by a simple example. The surface of an apple may exhibit a shifting reddish sheen under changing illumination. What matters for orientation is not the fixation of a determinate color, but that the appearance becomes sufficiently distinct to support a practical distinction—for instance, between an edible and a rotten fruit. Footholds thus depend on stabilized differentiation, but acquire their significance only within a broader context of use.

In his own discourse of how differentiated features guide action, Stegmaier (2008, p. 157) draws on Bateson's (1972) characterization of information as a "difference that makes a difference." In this notion difference appears in two different roles. The first difference (difference_1) refers to what becomes discriminable within the phenomenal field—for example, the reddish sheen of the apple. The second difference (difference_2), by contrast, concerns how this difference guides action—such as deciding whether to eat the apple or discard it.

Recent work in ecological and action-oriented approaches converges with this relational understanding of information (van Dijk & Kiverstein, 2020). Rather than locating information in sensory patterns or fixed correspondences, these approaches emphasize that information arises within ongoing organism–environment coordination. Sensory variations become informative only insofar as they are taken up in activity and contribute to navigating a situation.

This perspective clarifies the relation between difference_1 and difference_2. A stabilized difference as such does not yet constitute information; it becomes informative only insofar as it acquires a functional role within a system of action. Information in this sense is thus not an intrinsic property of isolated elements, but a relational feature of a dynamically organized field.

This provisional character of stabilization also introduces a constraint on orientation. One might assume that increasing the precision of differences_1 would enhance the capacity for action. However, this is not the case. If differences_1 are too strongly differentiated, they may not remain stable long enough and fail to yield appropriate differences_2 across the changing situation; if they are too weakly differentiated, they might not yield sufficiently specific differences_2 for action (Riss, 2025).

Since stabilization is always provisional, what counts as a reliable differentiation at one moment may lose its adequacy in another. The effective stability of differences thus lies not in their sensory constancy, but in the persistence of the differences$_2$ they make—that is, in their capacity to sustain orientation across changing conditions.

A related convergence can be found in Dewey's conception of experience, as reconstructed by Stuhr (1979). Dewey characterizes experience as an ongoing activity in which a qualitative unity persists despite variation in its constituent aspects, forming a whole of organism and environment. Within such experience, qualities are not detachable properties but features of this unified engagement. While developed in a different framework, this view parallels the present account in locating qualitative features within the organization of experience as a whole rather than in isolated components.

Taken together, these considerations show how differentiation becomes operative within orientation. Stabilized differences provide the basis for discrimination, but only through their integration into a system of mutually supporting footholds do they become informative and action-guiding. The phenomenal field thus constitutes the medium in which differences are not only maintained but also coordinated in ways that enable an agent to find its way within a situation.

The perspective remains at the level of experience itself. The next step introduces a different perspective: it examines how abstraction transforms these stabilized and functionally integrated differences into determinate features—what are commonly treated as qualities.

4.4 Abstraction and the Emergence of Qualities

Footholds enable orientation by structuring what is given in terms of possible action. In this sense, they are inherently *meaningful*. This meaning is not located on the side of a subject or an object taken in isolation, but belongs to the way in which the field is organized such that differences matter for ongoing engagement. What is here described as meaning corresponds to what was earlier characterized as the intrinsic relevance of differences for orientation; the present step makes this structure explicit.

This structure can be described as intentional in a minimal sense: internal differentiation within experience (difference$_1$) is organized such that it serves engagement with the environment (difference$_2$). However, this should not be understood as a relation between independently given entities. What counts as something (difference$_1$), or what is relevant within a situation, depends on the organization of the field as a whole. Meaning, in this sense, is field-dependent: it arises only within a structured context in which differences can be stabilized and taken up in further experience.

In this way, difference$_1$ and difference$_2$ jointly articulate the role of such stabilized formations without being independently specifiable. Meaning is not an additional property, but the way in which these differences function to mediate between agent and environment (van Dijk & Kiverstein, 2020). Meaning thus comprises a subjective pole (difference$_1$) and an objective pole (difference$_2$) within a unified field structure.

Drawing on the notion of abstraction introduced in Section 2.2, the familiar ambiguity of meaning and information can be reconsidered. We distinguish between meaning for a subject and the meaning of an object, as well as between information for an agent and information understood as objective fact. These distinctions correspond

to first-person and third-person perspectives, respectively. On the present account, both perspectives involve abstraction, each defined by the selective exclusion of aspects that are incompatible with and irrelevant for its respective aim. This exclusion of the situation concerns its concrete variability, not the underlying field organization that makes abstraction possible.

First-person description is taken to preserve the singularity of experience, for example in characterizations of what it is like to hear "the sound of a clarinet." In this sense, experience is approached in terms of variety and variation in their immediacy. In attempting to capture how experience appears "here and now," first-person abstraction organizes it in terms of difference$_1$, while excluding difference$_2$, which would relate the experience to its functional consequences.

This has an important consequence for accounts that appeal to purely singular, immediate qualities. While such accounts emphasize what is given "here and now," the very act of referring to or identifying such features presupposes a level of generality that exceeds any strictly singular occurrence. As Hegel argues in his analysis of sense-certainty (1807/1977), attempts to fix the purely immediate inevitably transform it into something universal. The resulting abstraction stabilizes subjective character at the cost of disregarding its functional embedding.

By contrast, third-person abstraction is oriented toward the functional characterization of experience in terms of observable outcomes. For example, in the scientific investigation of color, efforts are made to produce stable instances of "redness" under controlled conditions, minimizing variety and variation. This involves a focus on difference$_2$—that is, on the differences a given state makes in terms of observable reactions or effects—while excluding difference$_1$ as situationally and subjectively variable. The resulting abstraction stabilizes functional relations at the cost of abstracting from experiential variety and variation.

This contrast is evident in the case of color: within scientific contexts, "redness" is related to physical parameters such as wavelength, whereas in philosophical discussions of qualia it is tied to what a subject reports as red. These articulations reflect different ways in which experiential differentiation is rendered for distinct explanatory aims. The apparent tension between first-person and third-person accounts of experience can thus be traced to differences in abstraction, rather than to a division within experience itself.

This also clarifies the status of the phenomenal field. Its role is not merely descriptive, but explanatory: abstraction presupposes a basis from which aspects are selectively articulated. If this basis were compositional, the results of abstraction could, in principle, be recombined without loss. The fact that different abstractions instead yield partially incompatible yet systematically related articulations indicates that experience is organized as a holistic field rather than as a set of independently specifiable elements.

4.5 The Form of Qualitative Differentiation

The transformation described in the previous section gives rise to what are commonly described as qualities: the manifestation of seemingly determinate, intrinsic features of experience. What abstraction presents as a fixed quale corresponds, at the level of

experience, to a stabilized difference that has been detached from the context in which it originally functioned.

This also constrains how qualitative features can be understood. What appears as a determinate quality is not given independently, but depends on the stabilization of differences across an evolving situation. This excludes the view that qualitative features are primitive constituents of experience.

A familiar objection arises at this point. Even if experience is variable, it presents itself in specific and recognizable forms—the way red looks, the timbre of a clarinet, the taste of a wine. These qualitative forms are often treated as if they could be identified independently of the context in which they occur. However, the qualities that we relate to them are themselves problematic: they are difficult to grasp (e.g., Albertazzi & Poli, 2014, in the case of color appearance) and exhibit cultural variability (e.g., Jameson, 2005). For the present argument, these complications can be set aside, as the analysis operates at the level of the phenomenal field rather than at the level of such determinate attributions.

The present account suggests a different interpretation. Once differentiation is preserved in experience beyond immediate stimulus–response articulation, it must take on a form in which it can persist, be compared, and guide further engagement. Qualitative form is therefore not an additional feature, but the mode in which stabilized differences remain available. In this sense, form can be literally understood as the *in-formation* of differentiation.

The notion of form does not depend on abstraction, but characterizes the organization of the phenomenal field itself. For variation to give rise to differentiation, it must already exhibit structured patterns through which aspects can stand out in relation to one another. These patterns are what is here described as forms. They are not the result of abstraction, but the condition under which abstraction becomes possible.

However, the specific form this takes is not uniquely determined by function. It is constrained by sensory domains and by the requirements of discrimination and persistence, but within these constraints there remains leeway. Empirical findings on perceptual adaptation support this point (Clifford et al., 2007; Kohn, 2007; Tregillus & Engel, 2019): qualitative appearance can shift while differentiating capacities remain intact. What is preserved is not a fixed sensory core, but the stability of distinctions that continue to guide behavior.

This also allows a more precise understanding of the status of variation in qualitative form. Not every modulation in appearance becomes salient in experience. Some variations remain without consequence for orientation, while others alter how differences can be stabilized and taken up in further activity. The boundary between these cases is not fixed in advance. A change in qualitative form matters precisely insofar as it affects the functional role that a difference can play within the organization of experience.

This can be illustrated by familiar cases. Variations in color perception may leave the capacity for discrimination and coordination largely intact, as in ordinary differences of shading or adaptation. In such cases, the underlying organization is preserved despite changes in appearance. By contrast, more substantial alterations—such as color vision deficiencies—modify the range of distinctions that can be drawn and

thereby affect orientation. What appears as a difference in form is, in such cases, already a difference in function. The same holds more generally: where variation in qualitative form has systematic consequences for discrimination, salience, or action, it becomes part of the functional organization rather than remaining a merely *contingent* feature.

For this reason, the distinction between form and function cannot be drawn as a strict separation. Qualitative forms are constrained by their role in stabilizing differences, but not uniquely determined by it. Within these constraints, variability is possible; beyond them, deviation transforms the organization itself. The contingency of qualitative form is therefore always relative to a preserved functional context. This also explains why differences in appearance can be significant in some cases but negligible in others, without requiring a sharp boundary between the two.

Qualitative form is therefore shaped not only by current function but also by prior organization and history. It can be understood as an evolutionary achievement: a way of preserving differentiation in a form that supports flexible engagement. This implies contingency without arbitrariness. Qualitative forms are constrained by embodiment and organization, yet not uniquely determined by them.

This perspective dissolves the residual explanandum associated with qualia. The intuition that "qualitative character" requires special explanation arises from treating its specific form as either strictly necessitated or entirely independent of function. Once form is understood as a historically shaped realization of stabilized differences, this dichotomy loses its force.

Focusing on the particular forms of qualia is therefore akin to explaining a peacock by appeal to the detailed pattern of its feathers: salient and real, yet not fundamental to understanding the organization that makes such features possible.

Qualities can thus be understood as stabilized differences that have become available under conditions of abstraction. What appears as a determinate quale is not a basic constituent of experience, but the result of persisting a dynamically maintained distinction. Its apparent discreteness reflects not the structure of experience itself, but the outcome of abstracting from its variability and situational role.

In summary, qualitative forms articulate differences within the phenomenal field in a contingent manner rather than as fixed elements of experience. Through stabilization within a continuously varying field, such articulations can become footholds for orientation. Abstraction, in turn, transforms these articulated differences into representations available for comparison and communication.

5 Consequences for the Explanatory Gap and Thought Experiments

5.1 Reinterpreting the Explanatory Gap

Based on the preceding analysis, we can now reconsider a central problem in the philosophy of mind: the so-called explanatory gap between physical or functional descriptions and what is commonly described as "phenomenal character."[2]

[2]We retain the term "phenomenal character" here to engage with the existing debate. On the present account, however, this term does not designate an additional feature of experience, but reflects a way of

As commonly formulated, the explanatory gap arises from an apparent separation between physical or functional description and what experience is like for a subject. On the present account, this separation is not given in experience itself, but results from abstraction: stabilized differences are taken out of the field structure in which they are originally present and treated in isolation. What is encountered within a situationally organized field is thereby reconstructed either in terms of the functional organization of perceptual and neural processes or as an isolated feature of experience considered in itself.

These abstractions do not yield perspectives that could subsequently be recombined. Each produces an abstraction that is not reversible: once the field structure is left behind, it cannot be recovered from the results of the transformation. Each abstraction absolutizes one side of what is originally given. The third-person reconstruction fixes stabilized differences in terms of perceptual and neural organization and thereby abstracts from the situated character of lived experience. The first-person abstraction isolates what it is like for the subject and thereby omits the object-directed moment through which experience is oriented across situations. Abstracting away the field structure, both abstractions do so in different ways and with different consequences. The phenomenal field itself is neither mere subjective experience nor objective processes, but the ongoing articulation through which experience and situation are united into one lived system.

From this perspective, the explanatory gap does not point to a missing connection between two independently given kinds of description. Rather, it reflects the prior abstraction in which what is treated as separate has already been detached from its common basis. The resulting difficulty is therefore misconceived: it is not a matter of connecting two sides, but of returning to the field of experience from which both arise. The apparent gap is thus an artifact of this abstraction.

The alternative proposed here therefore does not attempt to bridge the gap within its usual terms. Instead, it redirects attention to the level prior to abstraction, where experience is organized as a field of continuously varying differences that are stabilized for orientation. What later appears as a qualitative feature or as an objective determination corresponds, at this level, to a distinction maintained within a situationally structured whole.

This perspective also clarifies the persistence of the explanatory gap. The gap arises not merely from incomplete knowledge, but from treating the results of abstraction as theoretically primary. Once first-person and third-person accounts are understood as partial transformations of a more fundamental field-structured organization of experience, the problem is reformulated. The central task is no longer to reconcile two isolated descriptions, but to explain how experience becomes articulated as a dynamically organized phenomenal field.

5.2 Fading Qualia and Related Cases Reconsidereds

The fading qualia argument (Chalmers, 1996, pp. 253–263) is designed to test whether what is commonly described as "qualitative character" can vary independently of

describing it that becomes problematic once stabilized differences are treated as intrinsically determined units.

functional organization. It imagines a gradual replacement of neural structures by functionally equivalent technical components, such that all capacities for discrimination, report, and action are preserved while experience is supposed to fade.

If qualities are understood as stabilized differentiations within a phenomenal field, it is not coherent to assume that the organization underlying phenomenal articulation could remain preserved while experience gradually fades. The disappearance of qualitative differentiations would finally result in a breakdown of distinctions and, consequently, of function. The assumption exceeds what such scenarios can establish. Distinctions appear as qualities only insofar as they contribute to ongoing engagement with a situation. Once this dependence is taken into account, the scenario loses its footing.

The analysis of the present account is compatible with other recent criticism. Mogensen (2025) argues that the fading qualia scenario conflicts with structural features of consciousness, in particular its vagueness at the boundaries and the holistic organization of the processes underlying it. A gradual fading of experience, while all capacities remain unchanged, sits uneasily with such coherence. The present account complements this critique by locating the difficulty at the level of phenomenological organization.

The same point becomes decisive when considering preservation across different physical realizations. What matters is whether the organization that sustains orientation, salience, and continuity is preserved. Modification in qualitative form, as discussed in Section 4.5, does not by itself amount to a change in experience. Forms can vary within limits without affecting the role of stabilized differences. Where such change of form does affect orientation, however, it becomes a modification of the organization itself.

There is therefore no boundary at which qualitative form could vary freely while remaining without consequence. Either the change of form is irrelevant to orientation, in which case the field persists, or it alters orientation, in which case the organization changes. A complete disappearance of qualitative articulation would dissolve the phenomenal field itself, since the field exists only through ongoing differentiation within experience. The fading qualia scenario presupposes a stable field from which qualitative character could gradually withdraw, but it is precisely this assumption that cannot be sustained.

This also clarifies the case of artificial or non-human systems. If experience depends on the presence of a functionally organized field rather than on specific qualitative forms, then variation in such forms does not in itself undermine its attribution. The relevant question is whether the organization required for orientation is realized, not whether familiar qualitative forms are preserved.

The same point extends to other qualia-based thought experiments, such as absent qualia, inverted qualia, or philosophical zombies (Block, 1995; Tye, 2006; Van Gulick, 2017). These cases likewise depend on the idea that what is described as "qualitative character" can be specified independently of the organization of experience. If qualitative differentiation is integral to the maintenance of a field, the space of possibilities they presuppose is correspondingly restricted.

A related line of criticism targets the assumption that qualitative aspects of experience can be specified independently of its broader experiential embedding. N. Campbell (2000), for example, argues that visual qualities are ordinarily associated with affective tone and motivational significance. Since these affective dimensions are not freely recombinable with arbitrary qualitative contents, the plausibility of standard inversion scenarios is weakened: a systematic inversion of color experience would not preserve the affective and evaluative roles that visual qualities normally play. This non-recombinability directly challenges the assumption that such aspects could vary independently of the organization of experience. Although Campbell develops this point in terms of affective embedding rather than field structure, his analysis converges with the present account in highlighting the dependence of experiential differentiation on its integration within an organized whole.

6 Conclusions

This paper has developed a field-based account of phenomenal experience that reorients the role traditionally attributed to qualia. Rather than treating qualitative features as independently specifiable elements, the analysis has understood qualitative differentiation as arising within a structurally and functionally organized phenomenal field. What is explanatorily primary is therefore not isolated qualitative features, but the organization of experience itself.

The central claim is that the notion of "qualitative character" results from abstraction rather than constituting a basic ingredient of experience. Qualitative features arise through the stabilization of differences within ongoing variation and persist only insofar as they contribute to orientation within a situation. This has two consequences. First, qualitative aspects of experience cannot be specified independently of the organization in which they function, since their identification already presupposes relations extending across instances. Second, the explanatory task shifts from accounting for qualia as such to explaining how a phenomenal field is organized such that qualitative differentiation can guide orientation, discrimination, and engagement.

By treating experiential differentiation as field-structured and qualitative features as products of abstraction, the present account accommodates the pervasive variety and continuous variation of experience, as well as holistic effects such as context-sensitivity and interference[3], without appealing to intrinsically discrete qualitative units. Whereas qualia-based approaches tend to treat qualitative character as composed of independently specifiable elements, the present account explains these phenomena through the organization of the phenomenal field itself.

Within this framework, classical qualia-based thought experiments take on a revised role. Cases such as fading qualia, inverted spectra, or absent qualia do not establish the independence of qualitative features, but presuppose it by varying them independently of field-level organization. Once this presupposition is made explicit, the space of possibilities these scenarios support becomes correspondingly constrained.

[3]By interference we refer to overlapping articulations within the field that affirm or attenuate each other and whose effects cannot be decomposed into independently identifiable elements (see Riss (2025)), as in the case of impressionist paintings where individual color patches do not determine a specific object but jointly give rise to a coherent scene.

The resulting position rejects both the view that consciousness is constituted by intrinsically defined qualitative elements and the view that functional description can dispense with qualitative articulation altogether. Qualitative differentiation has explanatory significance only within the organization of a phenomenal field. The apparent opposition between subjective and functional approaches can therefore be understood as arising from different abstractions of a single organized structure of experience.

In this respect, the present analysis converges with John Dewey's view that qualities are neither independent elements nor merely subjective additions, but features of an integrated engagement of organism and environment.

The analysis also suggests a distinction between qualities and objects. Qualities arise from the stabilization of differences within a field, whereas objects integrate such differences into structures of relevance and use. Objecthood thus builds on differentiation while adding a further dimension of organization in relation to possible engagement.

The present account bears a systematic relation to teleosemantic approaches (Millikan, 2004). In particular, Bateson's notion of information as a "difference that makes a difference" resonates with attempts to ground content in function and use. However, this connection has not been developed here and remains a topic for further work.

The account relies on a specific notion of abstraction as a transformation that renders context-dependent differentiations into forms suitable for identification and comparison. While central to the argument, this notion has not been developed in full generality. Its relation to broader accounts of abstraction in philosophy of mind and cognitive science therefore remains to be clarified (see, e.g., Ambrosio & Sánchez-Dorado, 2024).

Finally, the present analysis has focused on the structural conditions under which qualitative differentiation becomes possible, rather than on the dynamic processes through which consciousness is established and maintained. Future work should investigate how factors such as attention, embodiment, and action modulate the stabilization of differences within the field. This points toward productive connections with embodied and enactive approaches, as well as with empirically informed models of perception and cognition. More generally, the framework invites further exploration of how different systems realize phenomenally articulated fields, and how variations in embodiment and environment shape the organization of experience.

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