



Sensing physical properties for subjective meanings: Putting Emergent Consumer Perceived Value (ECPV) into the marketers' toolbox

Laura J. Forsman^{1,2} · Harri Luomala¹

Received: 23 May 2023 / Accepted: 24 June 2024
© The Author(s) 2024

Abstract

Marketers need to understand consumers in both theory and practice to create offerings that are valuable to them. Hence, the marketing discipline has conceptualized consumers' subjectively perceived value in various ways, using multiple paradigms. Nevertheless, its constituents remain unclear. We argue that this is because the ontological and epistemological premises are both vague and narrow. Consequently, consumers' value perceptions are still difficult to study or manage. With the aim of making a conceptual leap, our paper is the first to apply a critical realist (CR) approach to the phenomenon. CR's stratified ontology and subjectivist/pluralist epistemology reconcile the positivist and interpretivist/constructionist paradigms, allowing the simultaneous existence of external socio-natural and internal subjective realities. Using these premises, we examine, from a marketer's perspective, how consumers perceive value, which is a subjective, phenomenological, and socially constructed act embedded in the natural world. Our CR theorizing deploys Bhaskar's (2010) RRREIC schema and includes a review of the extant subjective value conceptualizations (consumer perceived value, value-in-use, value-in-experience) and reproduction of the key mechanisms generating the phenomenon: meaning-making and sensory perception. Finally, we propose a novel conceptualization for Emergent Consumer Perceived Value formation (ECPV) as an open system. As its integral component, we introduce the concept of Sensory Value Affordance, explaining how consumers transform physical properties into subjective meanings. These conceptual tools cater especially to B2C managers and account for both the phenomenological and sociocultural as well as the corporeal and perceptual. Finally, we present broader implications for value research, the field of marketing, and society.

Keywords Value theory · Customer perceived value · Critical realism · Emergence · Open system · Meaning-making · Sensory perception · Goals · Sensory value affordance

Introduction

Amid tightening competition, B2C companies serve ever more discerning, demanding, and individualistic consumers. Hence, business success today requires increasing sophistication in comprehending consumers' subjective, multifaceted value perceptions. Interpretive/constructive

approaches have proven to be highly useful in achieving this (Tadajewski, 2006). The subjective experientiality of value perceptions was captured by Holbrook and Corfman (1985) in their early definition of consumer value as an "interactive relativistic preference experience ... characterizing a subject's experience with some object. The object may be any thing or event" (p. 40; Holbrook & Hirschman, 1982). Another early definition by Woodruff (1997) delineates customer value as the "customer's perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations" (p.142), thus factoring in subjectivity through the customer/consumer goals. Related conceptualizations of customer/consumer perceived value (CPV) (Holbrook,

✉ Laura J. Forsman
laura.forsman@helsinki.fi

¹ School of Marketing & Communications, University of Vaasa, Vaasa FI-65101, Finland

² Faculty of Agriculture and Forestry, Department of Food and Nutrition, University of Helsinki, FI-00014 Helsinki, Finland

1999; Woodruff, 1997; Zeithaml, 1988) were later followed by value-in-use (ViU) (Grönroos, 2008; Vargo & Lusch, 2008) and value-in-experience (ViE) (Helkkula et al., 2012a) in the service marketing literature, emphasizing the unique phenomenology of customer/consumer value. Despite the advantages of embracing the interpretive and social constructionist paradigms after breaking away from the dominance of the objectivist perspective (Zeithaml et al., 2020), the resulting philosophical multiplicity has obscured the conceptual understanding of consumers' value perceptions.

A scientific paradigm states the philosophical assumptions of the nature of reality (ontology) and the nature of knowledge of reality (epistemology) it follows. At present, the extant subjective value conceptualizations are deemed ambiguous and to lack clear constituents (Gallarza et al., 2011; Medberg & Grönroos, 2020; Zauner et al., 2015), which we attribute to ontological and epistemological issues. Additionally, for marketers a solely experience-focused approach remains too detached from consumers' social and physical realities, knowledge of which is crucial for designing profitable offerings. These deficiencies hamper the generation of new theoretical insights into consumers' value perceptions. Ultimately, they hinder the purpose of marketing: to create value for customers/consumers (AMA, 2017; Babin & James, 2010; Easton, 2002).

Thus, we seek to provide ontological and epistemological clarity for the study of subjective consumer value perception formation from the marketer's point of view. To do so, we adopt a critical realist (CR) approach, which has not yet been deployed in conceptualizing this phenomenon. CR's ontological and epistemological assumptions allow the existence of external reality without denying the existence of individuals' subjective worlds (Gorski, 2013; Lawani, 2021), thereby reconciling the positivist and interpretivist/social constructionist paradigms. Specifically, we deploy its lens to assess the ontological and epistemological assumptions (Sorrell, 2018) of existing subjective value conceptualizations and to develop a novel theoretically grounded mid-range formulation for the phenomenon. The proposed Emergent Consumer Perceived Value (ECPV) conceptualizes consumer perceived value formation as an open system. It resolves the ontological and epistemological tensions between the inherently subjective (phenomenological) worlds of consumers and the broad, generalized approach (constructed and objectivist) toward them taken by marketers. The literature currently lacks this kind of harmonizing CR conceptualization tailored for B2C marketers. Additionally, our approach is the first to operationalize physical properties as proxies for consumers' subjective meanings. Our paper also contributes to the development of more concise value theories with adequate stakeholder specificity.

It is structured as follows. First, we showcase how the critical realist approach grants ontological and epistemological precision to marketers in conceptualizing consumers' subjective value perceptions. Next, we conduct a CR-informed review (Okoli, 2015) of the extant subjective value conceptualizations in the literature. Then, following the interdisciplinary CR approach (Bhaskar, 2010; Danermark & Morgan, 2023), we pair concepts from extant subjective consumer value theories (goal-orientation, means-end structure, and terminal values) with theories concerning human meaning-making and sensory perception (perception-action cycle, life goals, affordance, Gestalt concepts from experimental phenomenology). As a result, we provide a holistic conceptualization for ECPV, describing its constituents, their functional relations, and its emergent nature. Additionally, we introduce the concept of Sensory Value Affordance as the previously missing link between the physical properties of the objective world and the value perceptions within the mind of the consumer. Finally, we discuss the implications of our conceptual propositions.

Critical realism and emergence as sense-making tools for grasping consumers' value perceptions

Critical realism as a reconciling philosophy of science

Although they often remain implicit, scientific paradigms and philosophies form the foundations for marketing theory development (Arndt, 1985; Easton, 2002; Johnson & Duberley, 2003). Critical realism is a recent scientific philosophical approach developed to tackle the seemingly unreconcilable tensions between positivism and interpretivism/constructivism (Fletcher, 2017; Lawani, 2021; Mingers, 2015). Its purpose is to find explanations for complex phenomena by framing and describing them through the intertwined physical and social mechanisms that cause them. Thanks to this promise, CR has become increasingly influential in marketing and management research, alongside other social and applied disciplines (Armstrong, 2019; Easton, 2002, 2010; Hu, 2018; Mingers, 2015; Ryan et al., 2012; Schoppek, 2021; Vanharanta & Wong, 2022; Waite, 2022; Wynn & Williams, 2012).

CR builds on both positivism and interpretivism/constructivism and posits the simultaneous existence of natural and social external realities. CR thus assumes that social reality exists collectively in the minds of people. However, this reality always takes place independently—and thus outside—of any particular human mind and is qualitatively different to “a simple aggregation of individual persons”

(Gorski, 2013, p. 662). This means that social actors have subjective information and knowledge in a given context, while also having to deal with “independent structures that constrain and facilitate these actors to carry out certain activities in that context” (Lawani, 2021, p. 321, see also Smith & Elger, 2014). The social structures comprise both material entities and artifacts as well as human persons and their agencies and intentions (Gorski, 2013).

Hence, a key premise of CR is that human social reality is emergent with ontological stratification (Easton, 2010; Gorski, 2013). Stratified ontology points to nested levels of reality, i.e., an “actual level” where the investigated events, phenomena, or outcomes occur, a “real level” comprising the generative mechanisms and structures (both physical and social) causing the emergence of the phenomenon at hand, and an “empirical level” referring to empirically experienced and observed accounts of the phenomenon (Easton, 2010; Fletcher, 2017; Lawani, 2021). Hence, the CR philosophy of science recognizes that different domains, (e.g., biological, cognitive, psychological, social, cultural, phenomenological, etc.) all compose reality, and that none of them—nor their causes on any one level—can be reduced to another level (Wikgren, 2005). In CR’s view of reality as an open system (Bhaskar, 2010), causality does not stem from a constant regular relationship between events in the natural world; instead, it derives from various “generative mechanisms,” i.e., powers and liabilities of objects, relations, and structures, both natural and social (Bhaskar, 1998; Gorski, 2013; Hoddy, 2019).

According to Bhaskar (1989), science should identify and describe those hidden (or not readily observed) structures or elements, and their forces/capacities—the generative mechanisms—that ultimately produce effects. Yet, simultaneously, critical realists aim to avoid the challenges of interpretive approaches, such as pure phenomenology, that tend to ignore the existence of real social structures and systems (Easton, 2010; Gorski, 2013; Smith & Elger, 2014). According to CR, integrating these hidden elements into scientific explanations is vital, because regardless of whether individuals are conscious of social structures and systems, they nonetheless condition their goals and affordances, and thus behavior (Archer, 1995; Smith & Elger, 2014; Wikgren, 2005). Finally, CR also considers that both physical entities of the natural world as well as an individual’s ideas and knowledge (Peters et al., 2013) participate in the formation of social entities (social structures, systems, and concepts). In this regard, CR differs also from social constructivism, which views reality as a thoroughly social construct (Smith & Elger, 2014) maintained foremost through language (Gorski, 2013; Harré & Bhaskar, 2001). Taken together, these postulates result in CR’s “eclectic realist/interpretivist epistemology” (Easton, 2010, p. 119),

also characterized as a relativistic (Isaksen, 2016; Peters et al., 2013; Sorell, 2018; Wikgren, 2005) or pluralist (Syed et al., 2009) epistemology. Renouncing positivism, CR does make use of interpretivist methods, with some scholars even defining its epistemology as interpretivist (Bogna, 2020; Bygstad et al., 2016; Hoddy, 2019).

These philosophical foundations are highly relevant for disciplines dealing with people as unique social beings in physical surroundings, such as marketing. In these settings, the phenomenon and its related physical properties are observable, but the cognitive and social mechanisms at play cannot be seen and thus necessitate theory and abstraction (Danermark et al., 2002; Wikgren, 2005). From a marketer’s perspective, this is also the case with consumers’ value perceptions, which they base on both abstract phenomenological and socially constructed aspects as well as perceptually detected physical inputs.

Deploying critical realism in conceptualizing consumers’ value perceptions

To design better offerings, companies and marketers need to grasp how consumers’ holistic value perceptions are formed, exemplifying the kind of cross-functional challenges and research-practice gaps that CR can address (Syed et al., 2009). As a philosophy of science, CR seeks to deploy scientific theories without falling for the logical empiricist fallacy that reality can be captured perfectly by them (Bhaskar, 1998; Tadjewski, 2008). The aim is to produce analytical explanations of the causal/generative mechanism at play in the studied phenomenon as opposed to positivist statements of causality or thick empirical descriptions of instances (Fletcher, 2017). This leads to CR’s requirement of carefully describing the ontology and epistemology used in theorizing. Hence, CR scholars need to be mindful of the more than one level and domain of reality (stratification of ontology) and avoid the limitations of a single way of knowing based on preferred theories, methodologies, and implicit assumptions (pluralist and/or interpretivist epistemology).

These philosophical requirements are crucial for conceptualizing consumer value perception formation for two reasons. First, theorizing it adequately encompasses various levels of reality. Hence, its effective describing necessitates both deploying rationally justified theories and leaving room for interpretivist grasping of meanings. Second, this phenomenon involves various stakeholders (e.g., consumers, marketers, scholars) with distinct perspectives, interests, and ways of knowing (Danermark & Morgan, 2023). Thus, we posit that an approach following CR ontology and epistemology coupled with recognition of the boundary conditions (the subject, the observer, and the ontological placement and timing of the phenomenon) can tackle

the ambiguities facing extant subjective value perception conceptualizations. Furthermore, CR's interdisciplinary approach also provides means for unprecedented breadth and depth in identifying the constituents of this complex phenomenon.

In the development of our new CR-informed theory for consumers' subjective value perception formation, we adhere to Bhaskar's (2010, p. 4; cf. Isaksen, 2016) RRREIC schema for explanatory analysis. Table 1 describes its steps and presents a breakdown of its deployment in the current study. A central tenet in CR is retrodution (literally "moving backwards") as its logic of making inferences (Bhaskar, 2010; Easton, 2010; Isaksen, 2016; Lawani, 2021; Sayer, 1992; Wynn & Williams, 2012). It implies connecting the capacities of underlying mechanisms, i.e., structural components and their relationships ("real" level), to the emerging event/phenomenon in question ("actual" level) (Hoddy, 2019; Wynn & Williams, 2012).

RRREIC has often been deployed in a condensed form (Danermark et al., 2002; Hu, 2018; Steffansen, 2016; Waite, 2022). We choose to apply the schema in its totality but adjust it in line with the conceptual nature of our study. Firstly, our steps R1, R2, and R3 are intertwined and iterative, which is typical (Armstrong, 2019; Easton, 2010, p. 124; Hu, 2018; Lawani, 2020; Sayer, 2013, p. 24). As retrodution lacks clear specification (Fletcher, 2017; Isaksen, 2016; Waite, 2022), and in the absence of empirical data, we rely on past literature in our theorizing. Secondly, we consider the CR-informed theory-contending review (Okoli, 2015) as our step of Elimination. It also feeds the next step (Identification) by providing a synthesis of both the strengths and weaknesses of the reviewed extant conceptualizations of subjective value perception.

Our explanatory analysis commences with a critical realist resolution (R1) of consumers' subjective value perception formation. Here, we postulate three key aspects in the phenomenon in the light of the subjective value literature and Easton's (2010) synthesized CR views for marketing. Simultaneously, we conduct the redescription (R2) and retrodiction/retrodution (R3) of the three aspects.

Firstly, Easton (2010) emphasizes the role of meanings: "Critical realism acknowledges that social phenomena are intrinsically meaningful, and hence that meaning is not only externally descriptive of them but constitutive of them (though of course there are usually material constituents too)" (Easton, 2010, p. 122). Many scholars studying subjective value perceptions have also identified meanings as a relevant aspect (Akaka et al., 2014, 2015; Anker et al., 2015; Ballantyne & Varey, 2006; Edvardsson et al., 2011; Helkkula et al., 2012a; Overby et al., 2005; Macdonald et al., 2011, 2016; Peñaloza & Venkatesh, 2006). Hence, we argue that meaning-making is a generative mechanism

that consumers apply to form subjective value perceptions. Thus, when consumers "meaning-make" they conjure up subjective interpretations of an entity (situation/object/person/physical property) to understand and make evaluations of them in the context at hand. The generated meanings are both intrasubjectively idiosyncratic (i.e., phenomenological) and intersubjectively (i.e., socially) constructed. These meanings have to be understood, and for this reason a critical realist study always involves an interpretative or hermeneutic element (Easton, 2010; Mingers & Standing, 2017).

However, CR specifically provides an ontological grounding for the interpretivist way of knowing by attaching it to the context and the identified mechanism at play in meaning formation (Smith & Elger, 2014; Syed et al., 2009). Hence, in terms of theory development, there is a significant difference between the critical realist and interpretative approaches. Whereas CR accepts the possibility of knowing reality through causal analysis in a given context (Lawani, 2021), the interpretative approach rejects this idea and focuses instead on uncovering constructions produced by social actors (Easton, 2010; Smith & Elger, 2014). This distinction justifies CR's postulation of generative mechanisms as the second important aspect in our explanatory theorizing. Mechanisms reside at the deepest "real level" of the stratified ontologies and refer to the ways in which objects/entities/structures act and cause the emergence of events/phenomena on the "actual level," with a process of interpretation intervening between the two domains (Easton, 2010). The concept of mechanism crystallizes the idea of critical realism as a scientific philosophy. Mechanisms do not predict a phenomenon (like positivism) or expound it (like interpretivism), but explain frequently occurring, relevant causal patterns generating it (Elster, 1998; Wikgren, 2005). Also avoiding the pitfalls of positivism, CR thus recognizes that the foci of study are not on singular measurable elements or dimensions, but on causal analysis of factors and relationships that make things occur or emerge (Danermark et al., 2002; Wynn & Williams, 2012). Importantly, CR is interested specifically in those mechanisms that are considered "at least relatively enduring, and as such are given far more explanatory weight than within a constructionist ontology and epistemology" (Wikgren, 2005; see also Mingers & Standing, 2017). Accordingly, we consider the identification and elucidation of generative mechanisms a central tenet in explanative conceptualizing of consumers' subjective, multifaceted value perception formation.

Thirdly, as critical realists acknowledge that the reality of the natural world equals that of the social world (Elder-Vass, 2010; Wikgren, 2005), they posit the necessity of natural objects (among other kinds) having powers and susceptibilities in a CR account of a phenomenon (Easton, 2010). Thus, we consider that physical properties reside in

Table 1 Breakdown of the RRREIC schema (Bhaskar, 2010) deployed in the current study

RRREIC step		Procedure	Outcomes	Section
R1	Resolution of the complex event or phenomenon into its components	Postulating the key aspects involved in the phenomenon of consumers' subjective value perception formation/emergence derived from the preliminary reading of the literature on CPV and ViU/ViE conceptualizations and CR literature, Easton (2010) in particular	(1) Meanings, (2) generative mechanisms, (3) sensory perception	Deploying critical realism in conceptualizing consumers' value perceptions
R2	Redescription of these components in an (optimally) explanatory significant way	Stipulating the generative mechanisms as constituents of consumers' subjective value perception formation/emergence, with the specific generative mechanisms of meaning-making and sensory perception as necessary in the phenomenon	(1) Generative mechanisms of (2) meaning-making and (3) sensory perception, both directed by goals and forming individually emerging meanings	
R3	Retrodiction , i.e., tracing of the component causes to antecedently existing events or conditions & Retroduction , i.e., identifying possible mechanisms			
E	Elimination of alternative competing explanatory antecedents	Reviewing the extant conceptualizations in the subjective value literature according to CR-informed theory-contending review (Okoli, 2015): philosophical paradigm, structural character (concepts and their relations), theoretical components acting as explanatory mechanisms, handling of meaning-making and sensory perception as key elements, applied ontology and epistemology and boundary conditions	Identification of strengths : (1) phenomenology within service marketing, and (2) goal-orientation, (3) means-end structure, and (4) terminal values from CPV tradition / weaknesses : (1) ontological and epistemological ambiguity, (2) unclear boundary conditions, (3) vague delineations of the aspect of individually emerging meanings, and (4) oversight of the aspect of sensory perception	Subjective value conceptualizations, their paradigms, and explicative potential for marketers
I	Identification of the causally efficacious or generative antecedents	Formulating the premises for ECPV through immanent critique, judgmental rationalism, and interdisciplinary cross-examination of constitutive elements/concepts	Theoretically grounded and defined entities/concepts forming the identified generative mechanisms of meaning-making and sensory perception for ECPV conceptualization: phenomenology of perception, perception-action cycle (cognitive science), affordance (ecological psychology), life goals (Schwartz's system of basic values), models of value (means-end theory), Gestalt concepts (experimental phenomenology)	Premises for the Emergent Customer Perceived Value conceptualization
C	Iterative Correction of earlier findings in the light of an (albeit temporarily) completed explanation or analysis	Synthesizing the conceptualization for ECPV	A holistic explanation of the phenomenon of ECPV providing novel breadth and depth through its CR approach, including the concept of sensory value affordance	Conceptualizing emergent consumer perceived value

the natural world—on the “empirical level”—and play a role in the emergence of consumers’ subjective, phenomenological, and socially informed value perceptions on the “actual level.” Deploying retrodiction/retroduction, we further argue that the workings of the human senses comprise the mechanism by which the observable physical properties of consumers’ surroundings cause the emergence of a subjective value perception. Thus far, however, the role of this “hidden” mechanism has not been acknowledged in the study of the phenomenon. However, sensing properties of the physical natural reality is a crucial part of how consumers form conceptual value perceptions. Consequently, we propose that sensory perception is a necessary generative mechanism in conceptualizing consumers’ subjective value perception formation. Adhering to both phenomenology and ecological psychology, we define sensory perception as an active process grounded both in the body and mind, whereby the perceivers seek information about their surroundings guided by their goals through their sensory systems/modalities (Amazeen & Amazeen, 2017; Fuster, 1997; Gibson, 2015/1979; Koenderink, 2010; Wilson, 2012), most traditionally vision, hearing, olfaction, gustation, and touch (Colman, 2015).

Figure 1 shows how CR’s stratified ontology lays the multiperspective foundations for conceptualizing consumers’ subjective value perception formation. Firstly, the generative mechanisms (goal-based meaning-making and sensory perception) represent its underlying, structuring constituents on the “real level.” They cause the emergence of an individual’s subjective value perception on the “actual level.” Finally, those observable physical objects, properties, and structures of the human environment that are empirically experienced reside on the “empirical level.” Hence, a subjective value perception on the “actual level” emerges through the interpretations facilitated by the generative mechanisms. It consists of phenomenologically and socially

constructed individually “made” meanings that consumers create for themselves using their sensory perception.

Here, we relate meaning-making to Bhaskar’s (1998) view that the reasons motivating an actor’s intentional behavior serve as generative mechanisms (Wynn & Williams, 2012). Consequently, we stipulate that these motivational reasons are goals, and thus meaning-making is essentially anchored to them. Hence, we posit that a consumer’s idiosyncratic meanings forming subjective value perceptions emerge onto the “actual level” as the result of phenomenological and socially constructed meaning-making on the “real level,” where meaning-making is dependent on subjective goals motivating intentional behaviors. We thus delineate individually emerging meanings to be dependent on the consumer’s goals in a given social and physical context, essentially forming the subjective value perceptions. With this, we distinguish them from the general term “meaning,” which is now used in the consumer value literature without defining the points of reference that determine the actual significance and role of “meanings” within a consumer’s subjective value perception (see last column in Table 2).

The other generative mechanism necessary for the formation of consumer’s subjective value perception is human sensory perception. It performs the interpretation of physical properties residing on the “empirical level” into subjective, phenomenologically and socially constructed meanings occurring on the “actual level.” Thus, we propose that these two interrelated mechanisms cause the consumer’s subjective value perception to emerge on the “actual level.” In this dynamic process, the sensory perception mechanism both feeds and is affected by the meaning-making mechanism.

To conclude, in our steps R2 and R3, we have redescribed, traced, and identified the key components involved in consumer’s subjective value perception formation according to CR views on their plausible necessity (Sayer, 1992) and

Fig. 1 Deploying the critical realist approach to conceptualize consumers’ subjective value perception formation. Based on Fig. 1 in Hoddy (2019: 113)

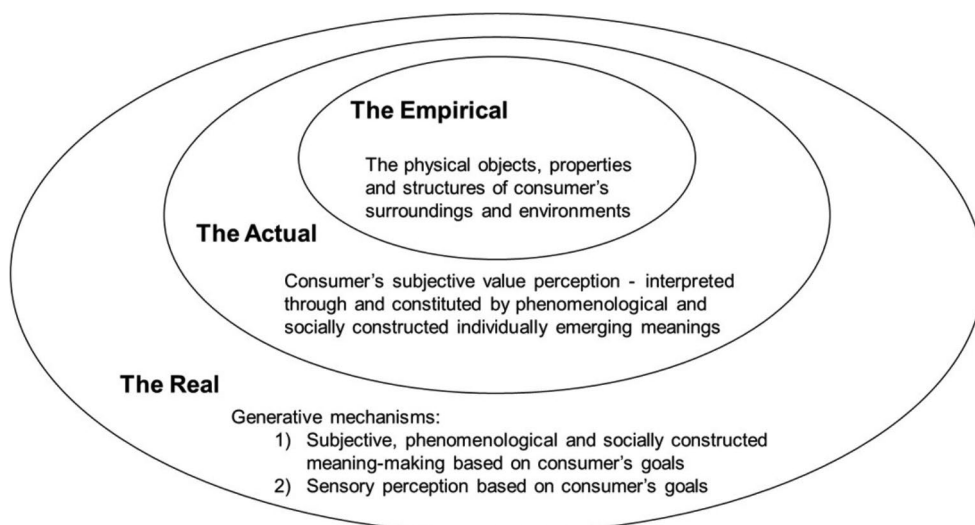


Table 2 CR-informed review of subjective value conceptualizations in customer/consumer marketing literature

Conceptualization	Literature	Conceptualizing articles	Philosophical paradigm	Definition of conceptualization	Structural character & explanatory theories and mechanism(s)	Boundary condition <i>WHO</i>	Boundary condition <i>WHERE</i>	Boundary condition <i>WHEN</i>	Role of sensory perception	Role of meanings
Dimensional conceptualizations of CPV	CPV	Holbrook and Hirschman (1982), Sethi et al. (1991), Holbrook (1999), Sweeney and Soutar (2001)	Positivist	An interactive relativistic preference experience (Holbrook, 1999)	Positivist dimensions (often bundled into categories) no theoretically defined mechanisms	Marketers as observers of CPV phenomenon / customers as performers	Objectivist external world where consumers reside	Outcome-oriented and static	Part of the “experiential and hedonic” (Holbrook & Hirschman, 1982)	Part of the “experiential and symbolic” (Holbrook & Hirschman, 1982)
Hierarchical means-end conceptualizations of CPV/VIU	CPV, SDL	Zeithaml (1988), Woodruff (1997), Overby et al. (2005), Macdonald et al. (2016)	Realist	Perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer’s goals and purposes in use situations (Woodruff, 1997)	Interrelated positive dimensions on three hierarchies means-end chain theory, consumer goals, and meaning-making dependent on cultural context defined implicitly as mechanisms	Marketers as observers of CPV phenomenon / consumers as goal-oriented beings	Objectivist external world where consumers reside as beings with subjective goals	Outcome-oriented and static (Zeithaml, 1988) / activity (comparison) and outcome-oriented (Woodruff, 1997)	Absent	What a product/service attribute, consequence, or desired end-state symbolizes to a consumer (Overby et al., 2005)
Value-in-use	SDL	Vargo and Lusch (2004, 2008, 2011, 2017), Vargo et al. (2008), Gummerus (2013), Akaka et al. (2014, 2015)	Social constructionist/critical realist	Value creation process: value co-creation and determination by the customer / value outcomes: subjective and result of sense-making (Gummerus, 2013)	Process and outcome, where the outcome is of phenomenological nature no theoretically defined mechanisms	Value ecosystem and all its participants, incl. marketers / customers, scholars as the observers	Co-constructed world where all ecosystem stakeholders reside as beings with their own epistemology	Both dynamic (value co-creation) and static (value outcomes) (Gummerus, 2013)	Absent	Part of value co-creation: shared or overlapping (e.g., symbolic meanings of value for particular resources ... utilitarian or hedonic or both ... based on past experiences (Akaka et al., 2014)
Value-in-use	SL	Grönroos (2008, 2011), Grönroos and Voima (2013), Grönroos and Gummerus (2014), Medberg and Grönroos (2020)	Interpretive (phenomenological) / social constructionist	Situation in which value emerges for or is created by the customer in a temporally fluctuating, accumulating experience process during use (resource/outcome integration) (Grönroos & Voima, 2013)	Process and outcome, where both are of phenomenological nature no theoretically defined mechanisms	Customers as phenomenological beings, marketers as their observers	Customers’ Lifeworlds according to their own ontology and epistemology observing according to their own social constructionist ontology and epistemology	Temporal, accumulates over time through experiences during usage (Grönroos & Voima, 2013) / dynamic and longitudinal, processual (Medberg & Grönroos, 2020)	Absent	Present, not defined
Value-in-experience	SDL	Helkkula and Kelleher (2010); Helkkula et al. (2012a, b)	Interpretive (phenomenological)	An individually intrasubjective, socially intersubjective, context- and situation-specific phenomenon that is both lived and imaginary, constructed based on previous, current, and imaginary future experiences. It is temporal and emerges from individually determined social contexts (Helkkula et al., 2012a).	A phenomenological experience practices (theory of practice) defined as an explanatory theory, i.e., “part of experience” (Helkkula et al., 2012b)	Customers as phenomenological beings, marketers as their observers	Customers’ Lifeworlds, especially the social context, where they live according to their own ontology and epistemology	Temporal, based on previous, current, and imaginary future experiences	Absent	Meaning emerges from individuals’ everyday lived experiences and is prioritized in some form by those individuals. (Helkkula et al., 2012a)

Table 2 (continued)

Conceptualization	Literature	Conceptualizing articles	Philosophical paradigm	Definition of conceptualization	Structural character & explanatory theories and mechanism(s)	Boundary condition <i>WHO</i>	Boundary condition <i>WHERE</i>	Boundary condition <i>WHEN</i>	Role of sensory perception	Role of meanings
Value formation resulting into ViU	CDL	Heinonen et al. (2010, 2013), Heinonen and Strandvik (2015)	Interpretive	Customers' emerging behavioral and mental processes of interpreting, experiencing, and integrating offerings in their everyday lives/businesses, with either positive or negative outcomes. (Heinonen & Strandvik, 2015)	Process and outcome, where both are of phenomenological nature no theoretically defined mechanisms by their observers	Customers as beings /helicopter perspective on customers deployed by their observers	Customers' subjective ecosystems where they live according to their own ontology and epistemology	Longitudinal, dynamic, situational experience, based on consumer's accumulated experiences in her life (Heinonen et al., 2013) / both outcome- and process-oriented, extending over time, customer-specific and socially constructed (Heinonen & Strandvik, 2015)	Absent	Absent
Emergent Consumer Perceived Value formation	EC PV	Current paper	Critical realist: stratified ontology and subjectivist/pluralist epistemology	ECPV emerges caused by intertwined generative mechanisms of meaning-making and sensory perception, which facilitate the comparison an individual makes between ad hoc appearances (rendered by the physical properties she picks in her physical surroundings as sensory value affordances) and the diagnostic Gestalts in her a priori models of value dependent on her goals and the context at hand	ECPV formation is an open-system phenomenon with an emergent outcome occurring through two intertwined / marketers as observers of ECPV	Consumers as goal-oriented, social, logical beings	A stratified reality, marketers and consumers sharing objectivist physical surroundings / consumers live according to their own epistemology in their Lifeworlds embedded in the natural world, and marketers observe them according to their own epistemology	Simultaneously longitudinal and temporal, dependent on consumer's previous life experiences as well as the ad hoc socio-cultural and spatio-temporal context at hand	The mechanism of sensory perception as an individual's act of interpreting physical properties into appearances that are part of the individually emerging meanings, which are contingent on her subjective goals, including life physical and social context. Also, itself influences meaning-making / Constituent of the ECPV, consisting of the concepts of sensory value affordance, appearance, and models of value – and their relationships.	The mechanism of meaning-making as an individual's act of interpreting entities (situation/object/person/physical property) in her Umwelt (phenomenological, socially constructed, and spatiotemporal) into individually emerging meanings that form the perceived value, which are contingent on her subjective goals, including life goals, in the given physical and social context. Also, itself influences meaning-making / Constituent of the ECPV, consisting of the concepts of sensory value affordance, appearance, and models of value – and their relationships.

significance as possible causal structures (Bhaskar, 1998; Lawani, 2021; Easton, 2010). Thus, we have stipulated that meaning-making and sensory perception are the generative mechanisms in the emergence of consumer’s subjective value perception. We will provide a further retroductive unpacking of the dynamics of meaning-making and sensory perception in the “Identification” step of our explanatory analysis in the section “Premises for the Emergent Customer Perceived Value conceptualization.” However, before that, we conduct the preceding step of “Elimination” in the following literature review.

Subjective value conceptualizations, their paradigms, and explicative potential for marketers

Marketing scholars representing different backgrounds have developed several conceptualizations for understanding consumers’/customers’ subjective value perceptions. Drawing from CR, we examine their potential for providing explanations for the phenomenon, which is vital for marketers. This establishes our step of “Elimination” within the RRREIC schema. Here, we apply immanent critique (Bhaskar, 2010; Isaksen, 2016, 2018) for assessing the internal coherence and explanatory adequacy of the conceptualizations.

For this purpose, we conduct a CR-informed theory-containing literature review, which Okoli (2015) defines as theory-mining for extending and adapting extant theory. This involves finding answers to the questions: (1) What is the structural character of the conceptualizations, i.e., how do they define the relations between the key concepts? (2) Do they propose the existence of theoretical components acting as generative mechanism(s)? (3) How well can they deal with the notions of meaning-making and sensory perception identified as key elements in the phenomenon? We also

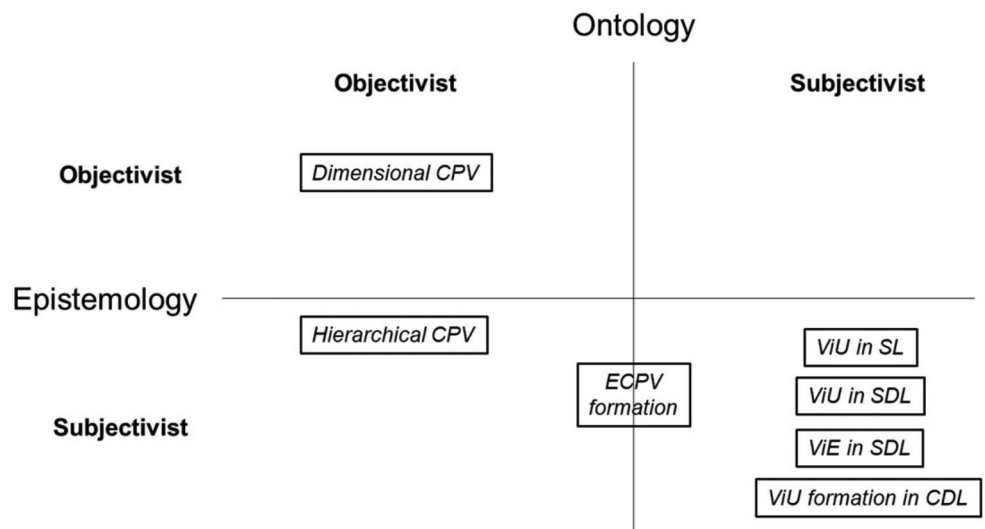
identify their ontological and epistemological assumptions and analyze their boundary conditions (Busse et al., 2017; Whetten, 1989), referring to who perceives value, who observes the phenomenon of value perception formation, where the phenomenon takes place, and when the phenomenon happens. Regarding the boundary condition of “who,” we make a distinction between the one who perceives the value and the one who observes this, in line with how the conceptualization assumes these two key stakeholders. The summary of the review is presented in Table 2. Finally, we also organize the conceptualizations according to their ontological and epistemological positions in Fig. 2.

Dimensional and hierarchical conceptualizations of CPV

The early research on subjectively experienced value was positivist. The first conceptual development was a shift from a unidimensional construct with rational/cognitive components to a multidimensional characterization (Zeithaml et al., 2020). It resulted in conceptualizations simply determining different dimensions for customer perceived value (CPV) (Gallarza et al., 2011; Holbrook, 1999; Sánchez-Fernández & Iniesta-Bonillo, 2007; Zauner et al., 2015; Zeithaml et al., 2020). They focused on revealing the emotional and social dimensions of CPV, which until then had generally been ignored. During this period, the mechanisms producing the subjective value outcomes on the different dimensions were not theorized.

Holbrook’s typology (1999) is one of the most prominent examples, consisting of eight value dimensions: efficiency, excellence (quality), play, aesthetics, esteem, status, ethics, and spirituality. Sweeney and Soutar (2001) developed a four-dimensional scale of the CPV construct as a general model for various purchase situations, comprised of a functional value dimension of quality and price, and

Fig. 2 The ontological and epistemological positions of subjective value conceptualizations. Based on Fig. 8.1 in Johnson and Duberley (2000: 180)



the emotional and social value dimensions. In their seminal paper, Holbrook and Hirschman (1982) also enumerated the “sensory” component as part of the “experiential and hedonic” aspect.

However, adhering to the philosophical paradigm of objectivism/positivism (Zeithaml et al., 2020), these dimensional models lack thorough consideration of subjective meanings embedded in value perceptions. Hence, their boundary conditions assume marketers (*who observe*) observing the phenomenon of CPV performed by consumers (*who*) in an objective external world (*where*). These premises lead scholars to capturing consumers’ value experiences “objectively” and placing them into the dimensional frameworks as a static outcome (*when*).

Within the CPV literature, the individually defined meanings were better grasped by hierarchical conceptualizations based on the hierarchical means-end chain theory (Gutman, 1982; Woodruff, 1997; Zeithaml, 1988). They acknowledge that CPV is stored in memory at several levels and is contingent on a person’s goals and socially constructed terminal values. Woodruff (1997) also theorized that a priori learnings and memories act as mental yardsticks in its formation. A social-constructionist culture-based iteration of the means-end model by Overby et al. (2005) considered meanings as a property of consumer value arising from culture as a shared context. They define meanings as “what a product/service attribute, consequence, or desired end-state symbolizes to a consumer” (Overby et al., 2005, p. 147–148), although they do not explicitly position meanings into their model. From the CR perspective, the means-end chain depending on consumer’s goals and values, and the meaning-making processes that depend on (socio)cultural context are the theoretically defined mechanisms that hierarchical CPV conceptualizations build on. However, the role of sensory perception has been essentially ignored in this literature.

With the hierarchical conceptualizations, the focus of subjective CPV research shifted from the objectivist epistemology of outwardly imposed dimensions toward explaining consumers’ (*who*) internal goal-oriented meaning-making for the phenomenon-observing marketers (*who observe*). Still, the boundary conditions of an objectivist external world (*where*) and a temporally static (*when*) outcome prevailed.

ViU and ViE conceptualizations

The most recent research on customer-oriented perspective of value originates from the service marketing literature: service-dominant logic (SDL) (Macdonald et al., 2011, 2016; Vargo & Lusch, 2004, 2008, 2017), service logic (SL) (Grönroos, 2008, 2011; Grönroos & Voima, 2013), and customer dominant logic (CDL) (Anker et al., 2015; Heinonen

et al., 2010, 2013; Heinonen & Strandvik, 2015). These scholars use the concepts of value-in-use (ViU) and value-in-experience (ViE) to study subjective value perceptions. Among them, SL and CDL together with SDL’s ViE scholars emphasize the phenomenological nature of ViU/ViE (Grönroos, 2011; Heinonen et al., 2013; Helkkula & Kelleher, 2010; Helkkula et al., 2012a, b; Medberg & Grönroos, 2020). ViU posits that the customer is the ultimate arbiter of value, which emerges in her experience of using the firm’s offering, be it a service or a manufactured good. Hence, ViU is experientially, uniquely, and contextually perceived and determined by the customers (Grönroos, 2011; Grönroos & Gummerus, 2014; Vargo & Lusch, 2008).

Within SDL, this notion of subjectively determined value has since its early days evolved into an axiom: “value is always uniquely and phenomenologically determined by the beneficiary” (Vargo & Lusch, 2017, p. 47), applying equally to all actors in a value ecosystem. Yet, SDL’s approach to customer value is not purely phenomenological. Zeithaml et al. (2020) described it as social constructionist and in fact Vargo et al. (2023) have deployed critical realism by acknowledging a stratified ontology of nested realities and the emergent nature of value in business ecosystems.

In contrast, adhering strictly to interpretivism, the CDL literature underscores the customer’s subjective perspective and the ViE conceptualization of SDL the phenomenological Lifeworld perspective. These scholars recognize the individual customer’s accumulated experience within value formation and acknowledge the multi-contextual and dynamic nature of value that is embedded in her life and ecosystems (Heinonen et al., 2013; Heinonen & Strandvik, 2015; Helkkula et al., 2012a).

Despite service marketing’s success in establishing the subjectivity of value perceptions, critique of the abstract nature of their conceptualizations endures (Hartwig & Jacob, 2021; Medberg & Grönroos, 2020). Recent studies have set out to reveal the constituents of ViU. For example, Bruns and Jacob (2016) deployed means-end thinking to generate an empirically based ViU framework for a weight loss/fitness app, consisting of six dimensions and 24 standardized value aspects. Leroi-Werelds (2019) updated Holbrook’s value typology by incorporating theoretical contributions from SDL and SL with certain advancements in marketing into it, proposing altogether 14 positive and 10 negative value types. Medberg and Grönroos (2020) identified seven SL/ViU dimensions in retail banking, which they found to resemble the previously defined service quality dimensions.

Reminiscent of the early CPV conceptualizations, with a high number of dimensions and a positivist stance, these approaches suffer from similar theoretical and practical difficulties (Gallarza et al., 2011; MacKenzie, 2003; Zauner et al., 2015). Hence, in the SDL and SL literatures, value

dimensions are identified from what essentially is a provider's perspective—resulting in outcomes lacking explanatory strength if viewed from a customer's/consumer's subjective perspective (Gummerus, 2013; Heinonen et al., 2013).

Also, although many in-depth considerations of subjective meanings are embedded in ViU and SDL (Akaka et al., 2014, 2015; Anker et al., 2015; Ballantyne & Varey, 2006; Edvardsson et al., 2011; Macdonald et al., 2011, 2016; Peñaloza & Venkatesh, 2006), only a few value conceptualizations account for them. Furthermore, those that do so fall short of describing their goal-related reference points that would explain the individualistic emergence of meanings. Indeed, some scholars have presented the criticism that despite the expressed phenomenological characterization of the ViU concept, the SDL and SL literatures still perpetuate the provider-orientation in their conceptual handling (Heinonen & Strandvik, 2015). Hence, they have yet to define the constituents and dynamics capturing individually emerging meanings for ViU.

In contrast, the CDL and SDL's ViE scholars consider the subjective consumer value concept in the most phenomenological terms in their conceptualizations of “value formation” (Heinonen et al., 2013) and “value as an experience” (ViE) (Helkkula et al., 2012a). They adhere to the interpretive approach emphasizing the hermeneutic spiral. Although the conceptualization of ViU within CDL does not consider the role of meanings, the authors conceptualizing ViE within SDL do. They state that “meaning emerges from individuals' everyday lived experiences and is prioritized in some form by those individuals” (Helkkula et al., 2012a, p. 61). Nevertheless, their conceptualization does not encompass any point of reference according to which this subjective prioritization—or meaning-making itself—occurs. Instead, the authors highlight the use of interpretive methods in the operationalization of subjective meanings experienced in social contexts.

Helkkula et al. (2012b, p. 563) postulate that co-creation practices “are part of the experience of value.” Hence, from a CR perspective, practices can be seen as a theoretically defined generative mechanism identified for ViE. Still, neither CDL nor SDL's ViE scholars aim for a formal delineation of the constituents in their conceptualizations. Furthermore, no conceptualization of phenomenological value in service marketing has included or considered sensory perception.

In terms of paradigms and boundary conditions, the ViU and ViE conceptualizations within the different service marketing approaches (SDL, SL, and CDL) differ. SDL currently distinctly defines an academic helicopter perspective (*who observe*) of the objectivist external world (*where*) in which all actors (*who*) in an ecosystem (*where*) are equally the ones perceiving value from their own vantage points

(*who & where*) and stages of emergence (*when*), i.e., through subjectivist epistemologies (Vargo et al., 2023). As SDL's focus has shifted to developing a macro perspective—viewing markets as complex adaptive systems and value as dynamically cocreated by all actors of an ecosystem—the need for studying marketing phenomena, such as subjective value perceptions, at different levels of aggregation and emergence has become clearer (Vargo et al., 2023). Hence, whereas SDL's original paradigm concerning the conceptualization of ViU was social constructionist (Zeithaml et al., 2020) its current paradigm concerning value ecosystems can be deemed to represent critical realism. As far as boundary conditions are concerned, this also essentially means that the ontological and epistemological differences among the ecosystem actors (consumers, firms, service providers, institutional stakeholders) need to be considered in theory development, as they impose constraints on the cross-context applicability of theories and thus their generalizability (Busse et al., 2017).

Hence, for defining meaningful conceptualizations for customers'/consumers' subjective value perceptions, distinct boundary conditions of *who*, *who observes*, *where*, and *when* are required at the micro level of the individual (Webster & Lusch, 2013). This has been the quest of ViU within SL, ViE within SDL, and “ViU formation” within CDL, adhering to the interpretive philosophical paradigm and positing customers as phenomenological beings (*who*) in their Lifeworlds (*where*). Yet, a closer look at the boundary conditions of *who observes* and *where* the phenomenon takes place reveals differences. The one *who observes* the phenomenon of ViU within SL is clearly the provider, i.e., the marketer. As its *where*, SL places customers in their own epistemological Lifeworlds (Grönroos & Voima, 2013). However, the ontology and epistemology of ViU within SL are those of the provider, as fundamentally the provider's social constructionist (Zeithaml et al., 2020) plane is *where* this conceptualization locates the phenomenon it studies. Hence, ViU within SL deploys two epistemologies: the stated phenomenology of the consumer's Lifeworld and the implicit social constructionist viewpoint (Zeithaml et al., 2020) of the “provider” (Heinonen & Strandvik, 2015; Helkkula et al., 2012a).

In turn, CDL and ViE in SDL have adopted the most interpretative paradigm and characterize ViU/ViE in the most phenomenological terms. One distinction between them can be traced to *who* is the *observer* of the phenomenon. In the ViE conceptualization, it is a marketer interpreting the customer within her Lifeworld (*where*), implying an eye-to-eye observational view. ViU formation within CDL suggests a more macro-level perspective, studying “how customers embed service in their processes” (Heinonen & Strandvik, 2015, p. 472) and “how customers in their ecosystems

engage different types of providers” (Heinonen & Strandvik, 2015, p. 472). Thus, within CDL’s “ViU formation,” the boundary conditions are the customer’s ecosystem (*where*) from a helicopter perspective (*who observes*).

Nevertheless, the phenomenological ontology of these two conceptualizations assumes that reality for each customer/consumer/individual is the output of her idiosyncratic cognitive processes. In fact, this inherent unbounded individuality of realities with regards to ontology explains why these approaches have not been capable of identifying general constituents for a conceptualization of subjectively experienced consumer value. Instead, ViE scholars see the narrative and projective methodologies as the main means of getting a hold of the phenomenon (Helkkula et al., 2012a). In contrast, however, ViU formation’s philosophically ambitious perspective stresses its uncontrollable idiosyncrasy, leaving little conceptual (or even methodological) room for acquiring further understanding of the phenomenon.

The boundary condition of *when* within subjective value conceptualizations in service marketing also reflects their philosophical approaches. In a critical realist manner, SDL accounts for a dynamic ViU with its notion of co-creation, but a static ViU in its approach to evaluating value outcomes. Interpretative ViU within SL and CDL and ViE within SDL consider the phenomenon as both a temporal and longitudinal experience/process, which is dependent on the historical (i.e., hermeneutical) events in an individual’s past as well as current and imaginary future experiences.

Our review highlights how all extant subjective value conceptualizations enhance understanding of the topic from a CR-informed managerial perspective. The early dimensional conceptualizations of CPV are the ones which acknowledge the sensory dimension. The hierarchical conceptualizations conceive of means-end and (life) goals as effectively ascribing subjective meanings that shape the formation of value perception. The service marketing literature laudably commits to the interpretive, phenomenological approach, although failing to specify the constituents of the phenomenon. Indeed, none of the approaches offer a comprehensive explanatory model for this multifaceted phenomenon, leaving managers without a clear understanding of its key mechanisms and the various nested levels of reality essential for harnessing knowledge in their marketing practices.

Ontological and epistemological positions of subjective value conceptualizations

Our theory-contending review allows us to map subjective value conceptualizations on the basis of their ontological and epistemological positions (see Fig. 2). SDL’s insight

into phenomenology as the fundamental customer-centric approach in defining value caused a paradigmatic shift. It spurred the currently dominating ViU and ViE conceptualizations that embrace interpretivism’s subjectivist study of the structures of experience as opposed to positivism’s objectivist CPV models. However, our review also identifies deficiencies in the specification of ontological and epistemological assumptions and boundary conditions. In fact, the philosophical perspective deployed is seldom mentioned in the conceptualizing articles (for exceptions, see Helkkula and Kelleher (2010); Helkkula et al. (2012a)). Overall, the philosophical ambiguities in the field have hindered the development of explanatory conceptualizations with managerially relevant constituents for subjective consumer value.

Thus, especially for managers, a critical realist approach provides ontological, epistemological, and conceptual clarity for understanding the formation of consumers’ subjective, phenomenological, and socially constructed value perceptions, embedded in the natural world. Figure 2 positions the CR approach vis-à-vis others and explicates its stratified ontology and subjectivist epistemology. Differing from extant conceptualizations of consumers’ subjective value perceptions, the stratified ontology allows the simultaneous existence of things both outside and inside the subject’s mind. The ECPV conceptualization grounded on it thus yields marketers an “outsider’s view” of consumers’ subjective experience. Its subjectivist epistemology allows the simultaneous existence of the consumer’s phenomenological Lifeworld guiding her perception and “ways of knowing,” and interpretative, yet theory-infused and structured “ways of knowing” for marketers. Ultimately, it enables the development of new tools of thinking for marketers.

Premises for the emergent customer perceived value conceptualization

Adhering to CR, we state that emergence of consumer perceived value is generated through an interplay of two contingent mechanisms and their inter-related components (Bhaskar, 2010; Danermark et al., 2002; Sayer, 1992). Next, we will theoretically ground, dissect, and define the identified generative mechanisms—meaning-making and sensory perception (the Identification step). This unpacking provides the ontological groundings (Syed et al., 2009) for understanding how the “real level” mechanisms generate the existence of the CPV on the “actual level.” In CR terms, the emergence of (E)CPV is a result of the interactive, causal influences of these enduring generative mechanisms. We thus term the critical realist account of the CPV concept Emergent Consumer Perceived Value (ECPV).

The mechanisms of meaning-making and sensory perception are essentially about consumers interpreting entities (situation/object/person/concept/physical property) encountered in their social context and physical surroundings to conjure subjectively relevant meanings that form their ECPV. These individually emerging meanings enable a consumer to grasp the significance of an entity in relation to her subjective and context-dependent goals. Hence, meaning-making and sensory perception *operate as mechanisms of interpretation* in the generation of ECPV (cf. Schoppek, 2021). In the identification step of our theorizing, we unpack the mechanisms into their constituents and their interrelations (Danermark et al., 2002; Mingers & Standing, 2017; Wynn & Williams, 2012). This entails a description and causal analysis of the factors and their relationships (Bhaskar, 2010; Danermark et al., 2002) that underlie a consumer's tendency/capacity of interpreting goal- and context-dependent meanings from her physical surroundings through her goal- and context-dependent sensory perception, thus causing the emergence of her ECPV.

To conceptualize the constituents and their interrelations forming this open-system phenomenon (Bhaskar, 2010), we adhere to CR's pluralist/relativist epistemology and judgmental rationalism. The latter states that for explanatory purposes, rational grounds exist for preferring certain theories and explanations over others (Bhaskar, 1975, 2007; Isaksen, 2016; Sorell, 2018). This *greater explanatory power* is "defined as having greater (but not final) epistemic credibility because it can explain more significant phenomena and has a greater ability to integrate knowledge" (Isaksen, 2016, p. 245), thus providing relative depth and comprehensiveness to an explication. The former gives CR the capacity for interdisciplinarity, which is a prerequisite for greater explanatory power (Bhaskar, 2009, 2010; Danermark & Morgan, 2023; Isaksen, 2016). As per these CR groundings, the theories chosen for our novel conceptualization thus "can either (a) identify and/or describe and/or explain a deeper level of reality; and/or (b) achieve a new order of epistemic (explanatory and/or taxonomic) integration, or at least show grounded promise of being able to do so" Bhaskar (2009, p. 82).

According to CR's immanent critique (Isaksen, 2018), on the basis of epistemic grounds theory development is always rooted in some history from which its premises will depart (Bhaskar, 2010; Isaksen, 2016). Hence, we use this principle to develop new theory on the terms provided by the prior conceptualizations (CPV/ViU/ViE). Thus, in our rational theory choice (Isaksen, 2016) we depart from the theories of phenomenology, more specifically related to perception and its goal-orientation, and theories deployed in the tradition of hierarchical CPV conceptualizations, namely goal-orientation, the means-end theory, and terminal values.

Continuing to align with judgmental rationalism, we then bring forth new theories that in an interdisciplinary form provide new explanatory depth and comprehensiveness for our conceptualization of ECPV: theories of goal-oriented perception in cognitive sciences (perception-action cycle), ecological psychology (affordance), and terminal values as life goals (Schwartz's system of basic values). Furthermore, to theorize on the role of sensory perception in subjectively perceived value formation, we insert new ideas from the field of experimental phenomenology into our explanation of ECPV. Specifically, the Gestalt concepts brought in from experimental phenomenology aid in explaining the mechanism of sensory perception and how individuals translate physical properties into subjective appearances, thus aligning with Bhaskar's (2009) notion of providing novel explanatory power.

Subjective goals as initiators of perception and anchors of meaning: Mechanism of meaning-making

According to phenomenology, the manifestation of experiences in an individual's consciousness occurs through grasping phenomena directly in subjective meanings "as an intentional process, actively guided by human intention" (Lavery, 2003, p. 23, see also Polkinghorne, 1983). This also applies to the phenomenology of perception (Merleau-Ponty, 1962), which posits that instead of reacting to a stimulus, the act of perceiving with one's senses is a phenomenological, proactive, intentional action, guided by the goals of the agent in question (Fuster, 1997, 2003, 2004; Koenderink, 2010; von Uexküll, 1926).

This goal-orientation of meanings and sensory perception is captured in the concept of "perception-action cycle" (Fuster, 1997, 2004; Sun et al., 2001), according to which individuals process sensory inputs from their surroundings to detect information that is meaningful to their subjective goals. Individuals utilize these inputs in taking action toward those goals, leading to changes in their environment, generating new sensory signals, producing their next action, and so forth (Koenderink, 2010). This impredicativity of the subjective perception-action cycle was captured in the term "Umwelt" by the biologist and ethologist von Uexküll (von Uexküll & Kriszál, 1934). Umwelt—"subjective universe"—refers to the individual's unified experience of her surroundings (Hachen, 2021; Merleau-Ponty, 1962; von Uexküll & Kriszál, 1934) within her phenomenological and socially constructed Lifeworld (Gadamer, 1993; Lavery, 2003; Schütz & Luckmann, 1973). A Lifeworld in turn consists of both the Umwelt and the individual's intrinsic experiences, and subjective conceptual entities/structures, including her objectives and goals. Thus, explained through

both phenomenology's views of perception and cognitive science's perception-action cycle, an individual's sensory perception presents her with opportunities and threats according to her goals in the given spatiotemporal and sociocultural environment, preparing her for taking action toward or away from these goals. Hence, meaning-making and sensory perception are interrelated and inherently goal-driven. Consequently, understanding an individual's meaning-making and perception formation requires the understanding of her subjective goals, be they by nature materialist-functional, social, or both.

Schwartz's (2006) system of ten basic values represents different types of life goals or motivations: self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism. Empirical research validates their universality, meaning that they are recognized and structured similarly across societies and cultures (Schwartz, 2006). In essence, terminal values are transsituational, "fundamental, stable human goal structures" (Manfredo et al., 2017, p. 773, see also Schwartz, 2006). The adoption and prioritization of these life goals drive people's actions (Manfredo et al., 2017; Rokeach, 1968; Schwartz, 2012), thus making them the underlying anchors of the perception-action cycle that imparts meaning to perceptions. In an empirical study, Babin et al. (2019) showed that the achievement of terminal values is a valid end state of the perceived shopping value construct in consumer-retail interaction experiences. This further substantiates that an individual's terminal values as her life goals are in fact the anchoring meanings that she uses as a consumer when she perceives something as valuable. Thus, life goals and Schwartz's system for them are a key concept for ECPV in two ways. First, they are the fundamental, transsituational, socially constructed goals providing the meaning in which human beings'/consumers' value judgments are anchored. Second, they grant marketers a common categorization and terminology for describing life goals that are highly abstract and often unconscious in nature.

Hence, we define the mechanism of meaning-making as an individual's act of interpreting entities (situation/object/person/physical property) in her Umwelt (phenomenological, socially constructed, and spatiotemporal) into individually emerging meanings that form the perceived value, which are contingent on her subjective goals, including life goals, in the given physical and social context. Among the goals, the enduring life goals constitute the underlying foundation for the other, context-specific goals. Thus, Schwartz's life goals have elevated explanatory power over other kinds of goals. The necessary relationship between an individual's goals and her Umwelt is explained by the phenomenology of perception and the perception-action cycle. The result of the meaning-making is ECPV, which guides the person in

taking action either toward achieving a goal or avoiding a hindrance in achieving one.

Perception as appearances and affordances: Mechanism of sensory perception

In renouncing positivism, CR aligns with phenomenology in its view of individuals having their own experience and perception of reality but recognizes their contingency on the social and natural realities in which they are embedded. In this regard, the individual's phenomenological and socially constructed perception of reality is contingent on her individual sensory perception of natural reality, and vice versa. While the foci of phenomenologist studies have primarily been on philosophical, sociological, and cultural aspects, the philosophy's early research on the inseparability of body and mind (Albertazzi, 2015; Smith, 1988) also influenced scholars studying human perception (Smith, 2003) and its interaction with physical surroundings, ultimately catalyzing the Gestalt movement (Albertazzi et al., 2010b; Smith, 1988; Wagemans, 2015). The legacy of the Gestalt theorists is carried forward today by the field of experimental phenomenology (Albertazzi, 2012, 2015; Albertazzi, 2021; Albertazzi et al., 2010b; Hachen, 2021; Koenderink, 2010; Lappin, 2013; Wagemans et al., 2012), which studies the qualitative structures of immediate visual awareness (Koenderink, 2015) and the intrinsic associative mechanisms of perceptual experience (Albertazzi, 2015). This work establishes premises for the role and mechanism of sensory perception in the generation of individually emerging meanings.

Hence, experimental phenomenologists treat visual appearances (i.e., visual sensory percepts) as the primary, elementary level of meaning in the phenomenological sense (Albertazzi et al., 2010a). Accordingly, Albertazzi et al. (2010b) offer an account of the components at play in the act of visual sensory perception. They state that perception is "the presentation of a unitary occurring event [entity] of which the perceiver's subjective structure is a non-independent part" (Albertazzi et al., 2010b, p. 7). "Presentation" refers to visual appearances taking place in a person's subjective awareness (Albertazzi, 2021) in the form of Gestalts (Wagemans et al., 2012). In essence, they are subjective psychic presentations/appearances of space-time dynamics (Albertazzi, 2015), such as colors, tones, configurations, scenes, sources of light, movements, and shape transformations (Albertazzi, 2021). These appearance Gestalts are not constructed from pure sensory data, but are already phenomenonic material in themselves (Albertazzi, 2015). "Non-independent subjective structure" means that perceptual appearances are always dependent on the perceiver, her subjective Umwelt, and the context of other intentional

modalities in progress, such as a judgment (Albertazzi, 2015). In our specific case, thus, this contextual intentional modality is that of forming a value judgment—a subjective perception of value.

Appearances/presentations occur constantly one after another in consciousness, whereas representations are consolidated schematized presentations stored in memory (Koenderink et al., 2010). They have the form of schematic Gestalts, referring here to coherent and meaningful, subjective spatiotemporal patterns human beings deposit in their minds about, e.g., significant objects, important places, or familiar faces (Lappin, 2013). Thus, perceptual consciousness is a product of the integration of the current situation and knowledge about prior situations (Lappin, 2013). Consequently, experimental phenomenology studies the dynamics of sensory perception by examining the perceiver's ad hoc appearance Gestalts (presentations) and their correlations to the physical properties/structures of objects and surroundings, affected by her a priori schematic Gestalts (representations) (Koenderink, 2010). In essence, thus, experimental phenomenology conceives sensory perception as an individual's means and capacity for making causal ascriptions—interpretations—between immediate appearances of physical properties and the dispositional, “hidden” powers and propensities individuals have learned to associate with them (Mausfeld, 2010), such as a ball being able to roll downhill.

Supporting the goal-orientation of sensory perception, Gibson (2015/1979) considered sensory perception simultaneously involving the co-perception of the self and the detection of information specifying functionally meaningful properties—affordances—of the surroundings for the observer. Informed by Gestalt theories, “affordance” refers to the translation of the objective and physical properties of the world into subjectively evaluated possibilities, threats, benefits, and sacrifices, such as any horizontal, flat, extended, and rigid support for sitting down (Gibson, 2015/1979). Hence, affordance is an empirical cue of possibility or threat in an individual's Umwelt, which gets translated into a meaningful spatiotemporal, subjective appearance in her specific quest of achieving her goals. In the act of perceiving, an individual compares a detected spatiotemporal affordance, interpreted in the form of an appearance, to her preexisting schematic and diagnostic Gestalts, which are representations of preferences/ideals she has stored in her mind in relation to her subjective goals, such as “what a fast car looks like” and “what a delicious yogurt tastes like.” Fundamentally, explained through both experimental phenomenology and the concept of affordance, sensory perception is the mechanism through which individuals interpret physical properties in their surroundings

into subjective individually emerging meanings in relation to their goal pursuit.

We assert that the theory of the emerging field of experimental phenomenology provides novel explanatory depth in unpacking the act of sensory perception within the study of subjective value perception. In CR's terms (Bhaskar, 2009, p. 73), it is capable of detailing and explaining this generative mechanism down to a level that other theories cannot, as far as we know, or at least shows “grounded promise of being able to do so” (Bhaskar, 2009, p. 82). Furthermore, we posit that affordance plays a key role in this mechanism. Based on these theories, we define the mechanism of sensory perception as an individual's act of interpreting physical properties into appearances that are part of individually emerging meanings, which are contingent on her subjective goals, including life goals, in the given physical and social context. In this operation, it is through affordances that the physical properties in an individual's physical surroundings get translated into appearance Gestalts (their phenomenonic interpretations) in her spatiotemporal and sociocultural Umwelt.

Conceptualizing emergent consumer perceived value

In the previous section, we dissected and holistically analyzed the two generative mechanisms of ECPV formation. Next, we conceptualize Emergent Consumer Perceived Value by describing how the mechanisms and their components intermesh in generating this emergent, open-system phenomenon. In our analysis, this is the concluding step of iterative Correction, which synthesizes our conceptualization through “epistemic integration of the knowledges of different mechanisms” (Bhaskar, 2010, p. 5). It explicates consumers' imperatively goal-oriented, phenomenological, sociocultural, historic, and spatiotemporal value perception formation, where meaning and consequent perceived value essentially emerge from one's opportunities and hindrances in achieving one's goals in a given context.

Hence, we posit that consumers actively seek informative—i.e., individually meaningful—sensory cues in their surroundings about possibilities in pursuing their subjective goals. We term these spatiotemporal cues Sensory Value Affordances and define them as *subjectively selected physical properties functioning as proxies for intrinsic perceptual appearances matching the diagnostic Gestalts, induced by the subjective goals of the individual*. They are of phenomenonic nature, because the perceiving consumer selects them as idiosyncratically meaningful cues in diagnosing subjective value, and hence they belong to the perceiver's Umwelt. Notably also, although they are heuristic devices

(Koc, 2002), they are not mere mental shortcuts or “rules of thumb,” but instead serve as specific sensory percepts that individuals utilize as meaningful information in their mental act of forming a value judgment, without which such judgments would not exist.

An example is the smoothness sensed by the tongue in evaluating an ice cream for the desired attribute of creaminess (Chen & Eaton, 2012). Similarly, a disposable spoon that comes with a mini tub of ice cream is either a visual and tactile sensory value affordance for indulgence on-the-go, or a plastic inconvenience that must be discarded, depending on one’s goals. Finally, consumers detect sensory value affordances, such as imagery on packaging, also in determining if an offering advances the pursuit of their life goals. In choosing ice cream, this could be hedonism, but it could also be a joyous moment with loved ones (benevolence) or a teenager’s rebellious display of enjoying ice cream for lunch in defiance of her parents (self-direction).

In essence, within the act of interpretation, the consumer compares the appearance rendered by a sensory value affordance against the diagnostic Gestalts in her subjective “system of cognitive categories and their associations” (Grunert & Beckmann, 1999, p. 371) of preferred ideals and reference experiences of relevant goal achievement in a given context. With reference to the means-end theory, we delineate these models of value to consist of four associatively interlinked elements: (1) personal terminal values (life goals); (2) subjectively preferred consequences of engaging with an offering; (3) subjectively preferred attributes of

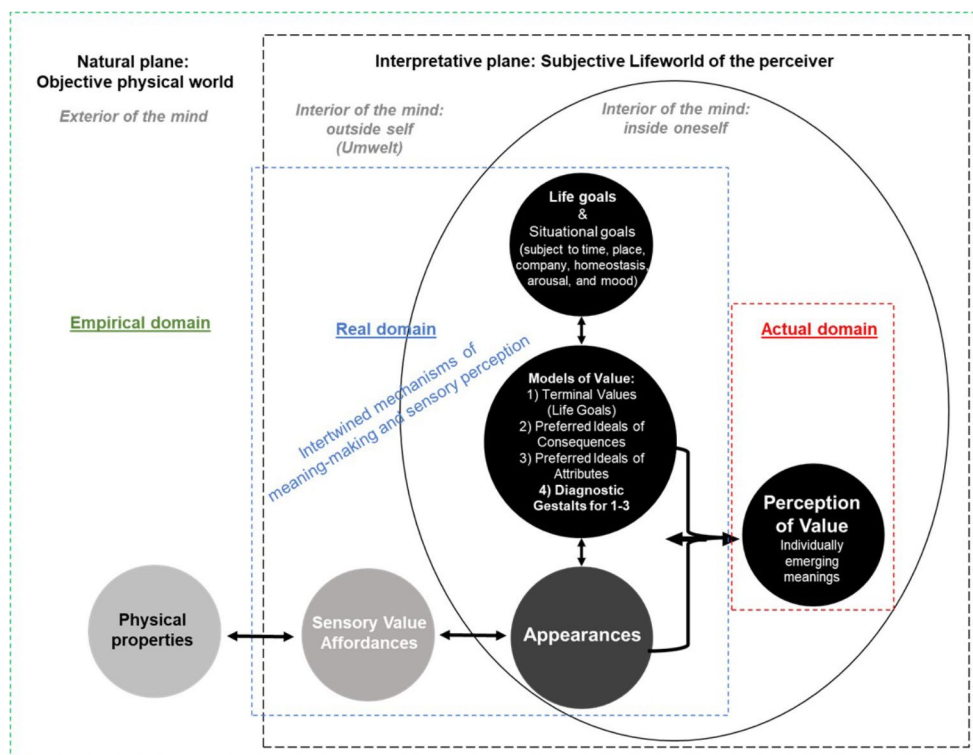
the offerings; and (4) subjective diagnostic Gestalts of all of them, against which appearances are compared in the act of ECPV formation.

CR’s subjectivist/pluralist epistemology provides the “multifocal lens” of our ECPV conceptualization, where the consumer’s phenomenological and socially constructed Lifeworld necessarily guides her perception and ways of knowing about the world, while rational theory choices synthesized into the framework guide the marketer’s interdisciplinary ways of knowing about the consumer’s subjective perceptions of value.

The proposed conceptualization of Emergent Consumer Perceived Value formation is depicted in Fig. 3. As goals exist only on the subjective and internal-to-mind ontological level, the interrelations capable of explaining ECPV axiomatically take place on the interpretative plane, i.e., the “subjective Lifeworld of the perceiver.” Hence, we postulate that perceptual appearances and diagnostic Gestalts are the primary objects of consciousness, i.e., the most elementary “units of qualitative experience” human beings have about the exterior-to-mind world. As the physical properties generating appearances belong to the external-to-mind world, a link to it needs to be maintained. For this, we adhere to CR’s stratified ontology, where it is accepted that things exist simultaneously and overlappingly both outside and within a subject’s mind.

Hence, the conceptualization of ECPV formation consists of stratified ontologies, where the black dotted line distinguishes the natural plane and “objective physical

Fig. 3 Conceptualization of emergent consumer perceived value (ECPV) formation



world” with physical properties from the perceiver’s subjective Lifeworld. The Lifeworld is further divided into two spheres. The entirely internal-to-mind constituents of ECPV are depicted within the oval sphere, including the (life) goals and models of value an individual carries in her mind and the ad hoc appearances she generates in the moment and act of perception. Outside this sphere of the self, but within one’s Lifeworld and interior-of-the-mind, resides the Umwelt, i.e., the middle sphere where the subjectively selected sensory value affordances are positioned. They belong to the Umwelt due to their phenomenical and socially constructed meaning to the perceiver but are outside the self-ontology because of their semi-conceptual, partly noumenal character.

Emergent Consumer Perceived Value is generated through a heuristic comparison within the perceiver’s Lifeworld: she compares sensory value affordances detected in a physical property and emitted to her consciousness as appearances to the diagnostic Gestalts within her model of value activated in the given context. This comparison is what essentially occurs in the act of interpretation, facilitated by the two intertwined generative mechanisms of meaning-making and sensory perception. This comparative interpretation results in the emergence of phenomenological and socially constructed (individually emerging) meanings, which constitute the perception of value. Hence, the outcome of the comparison determines the meanings, and consequent result of the individual’s value judgment, i.e., her perception of value: “Does this entity I am evaluating advance (or hinder) me in achieving my goals?”

For example, the dominant red color of a yogurt packaging is picked up as a sensory value affordance by a hungry shopper with a craving for a high-energy snack who prioritizes hedonic value. “Red+yogurt” renders for her an appearance of a sweet treat that matches her diagnostic Gestalt within her model of value in the context of a supermarket and the goal of acquiring hedonic energy. Hence, she perceives the offering as having high value to herself. A sensory value affordance can also positively correlate with a diagnostic Gestalt of negative value, such as the foul odor of spoiled milk. The model of value applied in a situation depends on both the perceiver’s life goals and her situational goals in the given context. The life goals infuse her perception with enduring meaning and value, and situational goals with more Umwelt-specific meaning and value dependent on, for example, time, place, company, homeostasis, arousal, and mood.

Let’s say a person with the terminal value of “achievement” is committed to achieving her ideal slim body image. In the same situation, hungry in the supermarket’s dairy section, she would probably detect the sensory value affordances of light blue color and the texts “high in protein”

and “no added sugar” on the packaging of a quark product and would thus opt for quark instead of yogurt. Hence, as a person’s terminal values can be considered her fundamental life goals, which remain fairly constant, we introduce them into our conceptualization of ECPV as the key motivators for people’s actions, functioning as the ultimate mediators of subjective meanings. Schwartz’s system of life goals provides our framework with a generalization of relevant subjective meanings onto which individuals’ subjective models of value are anchored.

To conclude, a consumer’s emergent perception of value is formed through a comparison she makes between the ad hoc appearances rendered by the physical properties she detects in her surroundings as sensory value affordances, and the diagnostic Gestalts in her a priori models of value, which depend on her life goals and the situational goals at hand. This comparison is at the heart of the act of interpretation through which a consumer translates sensory percepts into meanings and subsequent perceptions of value, based on her models of value and the context at hand. The models of value comprise associative conceptual categories, interlinking the individual’s terminal values (life goals) with her subjectively preferred/ideal consequences of engaging with an offering, the offering’s preferred/ideal attributes for her, and the diagnostic Gestalts she has learned to associate with each of these conceptual categories in her model. Thus, the CR-informed ECPV deploys a holistic, epistemologically interdisciplinary approach, accounting for the mechanism of meaning-making and sensory perception as the intertwined modes of interpretation resulting in individually emerging meanings constituting the consumer’s subjective value perceptions.

The aforementioned constituents are the building blocks, i.e., the *what*, within our novel theoretical conceptualization (Fig. 3). *How* they jointly function in forming the outcome was described in text and indicated with arrows in Fig. 3. The two-way arrows in the conceptualization refer to the dynamic nature of the relations between the conceptual components in the framework. That is, none of the elements are fixed, meaning that all elements are capable of affecting each other dynamically as the result of lived experiences and learning. Hence, the two-way arrows represent the emergent nature of ECPV. All in all, Fig. 3 depicts the phenomenon of ECPV formation as an open system where the Lifeworld (interpretative plane) of the perceiver is embedded in the objective physical world (natural plane). The “empirical domain” is thus everything outside the Lifeworld plane. The “actual domain” encompasses the individual’s perception of value. It consists of the phenomenological and socially constructed individually emerging meanings, generated as an outcome of the interplay of the mechanisms of meaning-making and sensory perception in the “real domain.”

The components and the relations of the mechanisms are depicted in the circles within it.

ECPV is a good example of an adaptive system and an emergent marketing phenomenon (Vargo et al., 2023). ECPV formation is a process where a new whole, i.e., an individual's subjective perception of value, emerges from the complex interaction of the constituent elements, whose properties alone may not entirely explain the properties of the whole. In other words, dynamic ad hoc interactions may always play a role in the process in unpredicted ways, which cannot exhaustively be accounted for in a model.

Hence, the phenomenon has a relational and context-dependent nature. This means that the same individual's emergent value perception of the same offering in the same assortment might differ according to circumstances. It could change due to, e.g., the prioritization of her life goals in a given situation (buying food for a Tuesday vs. Saturday night), her situational goals (picking a wine bottle alone vs. in the company of others), or her homeostasis (buying food when very hungry vs. not at all). In other words, the value perception emerges as the result of an interaction between the constituent elements, where both the elements and the context can influence each other. Thus, it is fairly easy for consumers to recognize if an offering has subjective value for them at the very moment when they experience it, but it is more difficult to contemplate in advance because the exact circumstances of the engagement with the offering might have a profound effect on the outcome of the act of ECPV formation. Consumers, of course have and can apply any of their numerous models of value in the different value judgment situations they face, as well as learn from their experiences and adapt their models of value based on their myriad interactions with offerings. It is this openness to outside influences and the capability of self-organizing processes in the "system" of ECPV formation that makes the phenomenon ontologically emergent. Consequently, it is aligned with the views of Vargo et al. (2023) regarding ontological emergence in that the ECPV formation phenomenon acts on and interacts with the other constituent elements of the system from which it emerged.

The aim of our theory development is to provide novel explanatory tools for marketers in understanding consumers' subjective value perception formation. Hence, it is "why" the conceptualization exists, justifying the chosen philosophical paradigm of critical realism with a stratified ontology and subjectivist/pluralist epistemology. Consequently, the boundary conditions of *who*, *who observes*, *where*, and *when* also fall into place. We assume consumers to be phenomenological and social beings (*who*) living in their Lifeworlds embedded in the natural world (*where*) and marketers to be observers (*who observe*) of the phenomenon of ECPV formation. This phenomenon is dependent on the

consumer's previous life experiences as well as the ad hoc sociocultural and spatiotemporal context at hand, making the phenomenon timewise simultaneously longitudinal and temporal (*when*). It is these clearly defined perspectives of the subject, the observer, and the contextual and temporal factors that constitute the boundaries of generalizability for the proposed theoretical model to ensure that it accurately reflects reality for the given purpose.

Application of the conceptualization: Improving the ECPV of processed food products

To illustrate the usefulness of the proposed model of ECPV, we apply it to a real-world problem in the context of processed food products. Industrial food products are manufactured using various food processing technologies; some are similar to those used in home cooking, but on a larger scale, while others are novel and significantly different (Meijer et al., 2021). Generally, consumers are unaware of the technologies used in food production and tend to be suspicious of food processing technologies due to concerns over potential safety risks, lack of naturalness, and wider implications for the environment, workforce, and society (Meijer et al., 2021). Naturalness in food products often refers to elements that are familiar (vs. unknown) and have kinship with nature (vs. man-made), such as traditional processing methods (vs. novel) (Etale & Siegrist, 2021), organic farming (vs. conventional), natural ingredients (vs. artificial), and minimal processing (vs. extensive) (Román et al., 2017). Hence, the emergence of the meaning of "naturalness" in a particular instance of a food product is dependent on the associations to the aforementioned elements within the model of value that consumer(s) have constructed for themselves of the various experiences with food offerings during their lives.

Thus, from a phenomenologically visceral point of view, both safety and naturalness issues relate to the fact that foods are ingested, and thus always present both potential immediate physical threats (e.g., toxins, sharp objects, spoilage) and benefits (e.g., energy, healthy nutrients) for the individual. Then again, from a sociocultural point of view, the issues some people have with food processing technologies relating to the environment, workforce, and society concern their subjective terminal values (life goals). Hence, like all animals, people try to foresee the multiple meanings of consuming foods and food products in relation to their goal achievement; previous experiences and knowledge play a crucial role in this, and sensory value affordances signal the desired and non-desired attributes, consequences, and opportunities in achieving both situational goals (including visceral) and life goals (terminal values).

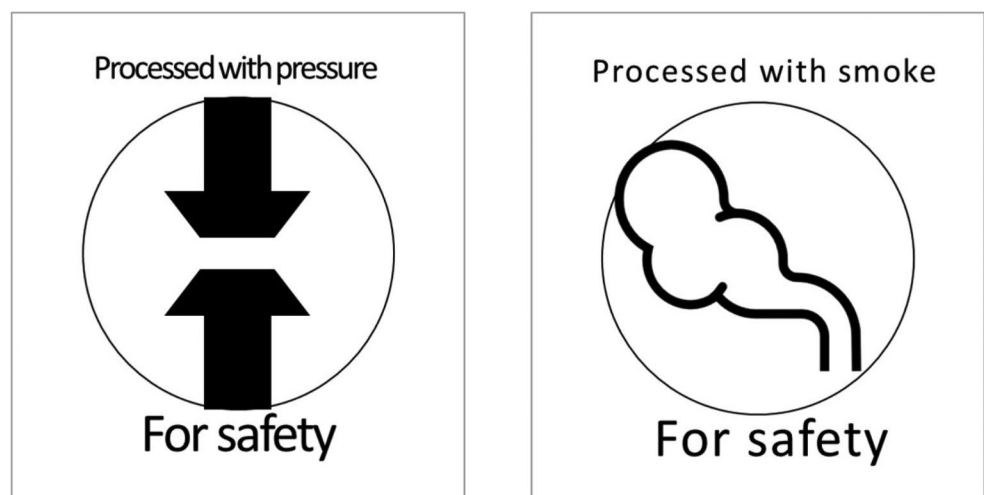
As research has shown, the technological processing that food products undergo is one of the factors consumers use in attributing meanings related to the products' familiarity, visceral safety, and environmental and societal impacts. However, people/consumers are heterogenous, and individually emerging meanings can be traced back to consumers' life goals and models of value. For example, consumers concerned with sustainability have scored higher in studies measuring food technology neophobia (Cavaliere & Ventura, 2018). Similarly, Swedish people scoring high on Schwartz's basic values of universalism and benevolence score significantly higher in negative attitudes toward GMO-based breeding of fruit and vegetables, whereas the opposite applies to people scoring high on the life goals of power and achievement (Spendrup et al., 2021). On the other hand, in the case of cultured meat, a study among Austrian consumers found that people adhering to the value of universalism are more likely to score high on willingness to try cultured meat, supporting previous findings that the life goal of universalism is linked with environmental concerns and the importance of animal welfare regarding dietary choices (Lewisch & Riefler, 2022). As these examples show, marketers in the food industry benefit from understanding how different consumer groups with different life goals make meanings, i.e., associate different technologies as offering attributes with different consequences within their hierarchical models of value.

Food processing is suspicious to consumers who neither understand the technologies nor can perceive their use in the final product with their senses. Additionally, the food industry's lack of transparency regarding processing methods creates an overall sense of distrust and negative attitudes toward food processing, despite it using them mostly for consumers' benefit, e.g., in facilitating food safety for extended periods of time (Meijer et al., 2021). As pointed out by Meijer et al. (2021), "Consumers need information about the production technology, but they also have to trust

the information they receive" (p. 107). As these authors also note, despite their technical names, many industrial food processing methods resemble traditional home cooking methods, such as high-pressure processing (HPP) or refined technical smoke or fractionated liquid smoke methods (Meijer et al., 2022). Thus, they could be intuitively understood by many consumers with previous personal experiences of using pressure or smoke in food preparation and because of their empirical nature. Empirically, "pressure" is conceived through sensory perception based on its effect on physical properties (changing their form/Gestalt), and "smoke" through its physical properties detected as Gestalts both visually (smoke cloud) and olfactorily (smell of smoke). Hence marketers could present the processing methods derived from familiar cooking methods to consumers on food packaging labels with the help of visual symbols based on verified sensory value affordances identified through research. This would enable the creation of positive associations between industrial processing methods and valued attributes of food safety and familiarity. Illustrative examples of such symbols depicting sensory value affordances of pressure and smoke are presented in Fig. 4.

According to Meijer et al. (2021), only a few food labels currently establish a direct link between the processing technique used and an associated beneficial consequence, like "no artificial preservatives added" in the case of some HPP processed guacamoles. Hence, food manufacturers can design products and packaging with enhanced perceived value in the eyes of their target consumers through understanding what kind of sensory value affordances they associate with different processing technologies and their positive consequences for the product. Acknowledging the emergence of the phenomenon, however, they need to account for the target group's life goals, and the hierarchical associations between their goals, their preferred consequences and attributes, and their diagnostic Gestalts within the target group's model(s) of value.

Fig. 4 Illustrative examples of food packaging labels with symbols of pressure and smoke acting as sensory value affordances for safety and familiarity for food processing technologies



Discussion

Understanding the experiential and socially constructed subjectivity of value perceptions within marketing has come a long way since Holbrook and Hirschman's (1982) first notion. Acknowledgements of the intrasubjective consumer phenomenology and the intersubjective nature of consumers' social reality has resulted in the dominant conceptualizations of ViU/ViE. However, they have also brought about certain conceptual ambiguities, and resulted in inadequately defined boundary conditions.

To provide a holistic view and explanation for subjective value perception formation for marketers, we base our novel ECPV theory on critical realism. Thanks to CR's ontological and epistemological clairvoyance, we establish clear boundary conditions for our ECPV conceptualization, defining the consumer as the active perceiver in her both longitudinal and immediate spatiotemporal Lifeworld embedded in the natural world, and the marketer as the observer of the phenomenon. Moreover, CR's epistemological interdisciplinarity supported by its judgmental rationalism allows us rational theory choice in explaining the phenomenon in question. Accordingly, we capture two generative mechanisms—meaning-making and sensory perception—as its key constituents. We theoretically identify and describe their components using elements inherent in existing conceptualizations of subjective consumer value, combined with external theories to provide novel breadth and depth. To start with, we incorporate ViU's/ViE's acknowledgement of phenomenology and hierarchical CPV conceptualizations' goal-orientation, means-end theory, and terminal values as constituents into our ECPV conceptualization. Then, we augment our holistic ECPV conceptualization with cognitive science's perception-action-cycle, ecological psychology's affordance, Schwartz's system of basic values as life goals, and experimental phenomenology's Gestalt concepts. Together they furnish an approach combining several levels of analysis for a more comprehensive description of the studied phenomenon (Bhaskar, 2010; Vanharanta & Wong, 2022). Thus, our conceptual contribution addresses recent calls for advancing organic marketing theory through combining its own ideas with valuable insights and customized theories from other relevant disciplines (Hunt, 2020; Hunt et al., 2022; Key et al., 2020; Nenonen, 2022; Varadarajan, 2020).

Critically, the two proposed generative mechanisms for ECPV are both dependent on life goals: the foundation on which consumers' subjective models of value build on. The notion that life goals play an integral role in explicating meaning-making within subjective value perceptions is not new (Babin et al., 2019; Karaba & Kjeldgaard, 2014; Zeithaml, 1988). However, to increase epistemological

clarity for marketers in understanding consumers' subjective, individually emerging meanings, we propose the use of Schwartz's basic value framework. Its globally validated universal life goals can help to explain individuals' socially constructed symbolic meaning-making in the formation of subjective value perceptions. Additionally, adhering to validated, universal dimensions shown to function in multiple contexts inhibits marketers' natural inclination to generate case-by-case dimensions of consumer value derived from their own, provider-perspective epistemology.

To account for both phenomenological and socially constructed sensory perception in the formation of ECPV, we introduced the novel concept of sensory value affordance. It explicates how meanings conveyed through signs and symbols (semiotics) within a sociocultural context (Edvardson et al., 2011; Karababa & Kjeldgaard, 2014) are both intra- and intersubjectively conceived through sensory percepts of physical properties purposefully selected by consumers. Thus, meanings are phenomenologically perceived while also being socially and semiotically constructed (and maintained) through the sensory value affordances a consumer detects in her physical surroundings. They provide her with the interpretative means for translating physical properties into meaningful appearances that match (or do not) the diagnostic Gestalts in her models of value in the act of value perception formation. Hence, with our novel sensory value affordance concept, we simultaneously relate corporeality to both its sociocultural context and sensory perception of immediate physical surroundings.

We conceptualize Emergent Consumer Perceived Value as an adaptive open system and emergent marketing phenomenon as per Vargo et al. (2023). This provides interesting conceptual notions for marketers. For instance, from a manager's perspective, consumers with similar ECPVs can make up submarkets within a market or a category. To illustrate, consumers prioritizing the life goal of performance may value minimally processed foods ("clean label") because of their naturalness due to their aspiration to obtain the best possible nourishment for themselves. At the same time, another group of consumers valuing these same attributes could consist of those who prioritize the life goal of universalism and aspire to minimize harm to the environment with their food choices. It is, then, important for marketers to ask: What kind of sensory value affordances do these two groups of consumers look for in food product packaging? The sensory value affordances accounting for the attributes of low number of ingredients used and minimal processing could indeed be the same for both groups. However, distinguishable life goals and preferred consequences probably require differing sensory value affordances to be found on the packaging for the product to be perceived as valuable in the eyes of each group. As this illustrative

example shows, the value for consumers emerges from the interaction between the consumer and the company, but the outcome of ECPV formation emerges from the interactions taking place on the consumers' subjective Lifeworld planes.

Thus, within the nested view of value theories (Vargo et al., 2023), our conceptualization of ECPV corresponds with the very first-order emergence of value in an ecosystem: that of consumer's subjective perspective. It represents a positive (or negative) change in the viability of the focal system—which in this case is the Lifeworld of the consumer—where the positive ECPV shifts her closer to goal achievement, and a negative ECPV does the opposite. Thus, within the phenomenon of ECPV, value is dynamically cocreated by the consumer, the firm, and the context, but, due to its boundary conditions, the outcome—Emergent Consumer Perceived Value—is generated solely by the consumer's phenomenological and social constructionist mechanisms contingent on natural reality. In this sense, ECPV can be considered the micro level in the domain of value theories (Vargo et al., 2023) and the micro theory of value on “the consumer's system level” (Webster & Lusch, 2013) zooming in on the “pure” subjective value perception of the consumer.

Contributions and implications

Theoretical contributions and implications for future research

Our conceptualization of ECPV formation provides three major theoretical contributions. First, it specifies the constituents for the phenomenon and defines functional linkages between them. Future quantitative research could operationalize and test these linkages. However, as we consider, following Vargo et al. (2023), ECPV formation to be an open system and emergent marketing construct, various constraints in researching these relationships most likely apply. Future studies should explore what they are, and how they impact ECPV formation.

Another implication from this contribution is offering the highlighted marketing theory-based tools for exploring the individually emerging meanings underlying the value perceptions of consumers. We have illuminated that life-goal-based meanings direct human actions in their Lifeworlds, and that the means-end theory can be harnessed to understand consumers' hierarchically organized meaning-making within value perception formation. To empirically capture ECPV formation, reclaiming the full use of projective and laddering methods (Reynolds & Gutman, 1988) can help to dig into deeply subjective, emotional, subconscious and sometimes even socially questionable meanings. To illustrate, dominant-shaped packages (whose

“broad-shouldered” V-form functions as a sensory value affordance) increased male consumers' purchase intention of healthy food and this effect was explained by the intrasexual competition drive (status life goal) (Qian et al., 2023). Moreover, interesting research avenues into mapping meanings within ECPV formation could be discovered especially through deploying network analysis (Basov et al., 2021; Fuhse & Mützel, 2011) and even AI-mediated tools (Garnelo & Shanahan, 2019; Kazemi et al., 2022).

The second contribution emanates from the introduction of the Sensory Value Affordance (SVA) concept, which links physical properties and subjective meanings in ECPV formation. The incorporation of SVA into the conceptualization of ECPV opens up new empirical avenues. It operationalizes the consumer mind–physical reality gateway. Hence, we call for the development of new methodologies based on experimental phenomenology and the Gestalt concepts for studying perceptual meaning-making. Such methods could identify sensory value affordances among particular consumers (target group) in a given marketing context (product/service category, point-of-sale, brand perceptions, offline vs. online vs. metaverse). Consequently, associative patterns between sensory value affordances and diagnostic Gestalts for preferred attributes, consequences, and life goals in the target group's ECPV could be extracted and capitalized on (cf. Affonso & Janiszewski, 2023).

Our current overconsuming western culture is perpetuated through sociocultural symbols and sensory cues promoting materialism and high-emission lifestyles. This could serve as a topic for a case study. The sensory value affordances for the life goals linked to these lifestyles (status, power, hedonism, competence) are omnipresent in western surroundings. In the quest to shift humanity toward more sustainable living and consuming (Manfredo et al., 2017), we could study what kind of SVAs underlie ECPV in different consumer groups concerning these desirable yet unsustainable lifestyles. How could these sensory value affordances be utilized in the design of new more sustainable market offerings (cf. Li et al., 2023)? Experimental studies could help to answer this question.

The third theoretical contribution concerns the untangling of the ontological and epistemological tapestry of subjective value conceptualizations, creating overall conceptual clarity for future research. Hence, our ECPV conceptualization with its clear boundary conditions and philosophical positioning helps to identify for what purpose and for which stakeholder groups the different value theories are designed. Recognition of their ontological and epistemological premises is a prerequisite for eventually integrating these segregated customer value approaches, a call recently voiced by Hunt et al. (2022). In this integration task, we advocate for the nested view of value theories (Vargo et al., 2023),

leading us to suggest that ECPV forms on the micro level of a consumer's Lifeworld. This, in turn, calls for future research on its ramifications on the subsequent levels in the value ecosystem. For example, shared or institutionalized ECPV formation pertaining to a given or a particular category should also be explored.

Implications for marketing as a discipline

Our aim has been to provide a well-grounded mid-range marketing theory serving B2C managers in understanding the phenomenon at hand at a relevant level of specificity (Varadarajan, 2020). They benefit from its novel explanatory depth and comprehensiveness in understanding the nature, process, and mechanisms of subjective ECPV formation. Our ECPV conceptualization, thus, exemplifies an integrated theory gathering and detailing subfield-specific methods into a comprehensive framework. It answers a call expressed, among others, by Hunt et al. (2022) who see such frameworks as crucial to appropriately addressing substantive marketing problems from a managerial perspective. Indeed, developing the subfield-related co-existence of value conceptualizations within marketing and business studies is managerially important because they assist in interpreting and analyzing the particularities of the business realities facing different managers (Nenonen, 2022). This, in turn, provides genuine stakeholder relevancy for marketing (Hunt, 2020; Hunt et al., 2022). Equipping marketers with sophisticated tools for identifying ECPV enables them to design more specific value propositions—in exchange for better economic value capture. Success in this elevates the influence of marketing within organizations (Key et al., 2020) and closes the gap between academia and practice (Busse et al., 2017; Nenonen, 2022). Hence, we believe that our ECPV conceptualization facilitates both theory-building and marketing practice.

Furthermore, by being the first to distinguish between the intangible components of subjective value perceptions and the tangible, physical properties involved in them, the ECPV conceptualization offers far-reaching implications for the marketing discipline. Firstly, it helps to navigate past technological and marketplace disruption factors (Belk, 2020; Key et al., 2020) and to reorient toward the essence: the fundamentally phenomenological and socially constructed consumer perceived value entity embedded in the natural world. Needless to say, ECPV formation perfectly matches with this characterization.

Lastly, this distinction also facilitates the discovery of innovative, more sustainable marketing solutions and product/service designs. This is because ECPV facilitates conveying the desired perceptions of value for

citizen-consumers while enabling minimizing the implications of utilized physical materials and their volume. Hence, armed with the provided novel thinking tools, marketing scholars and practitioners can more effectively tackle the dilemma of acute anthropogenic overconsumption for the benefit of the planet and societies at large.

Acknowledgements We are grateful to the anonymous reviewers for their valuable suggestions. Any remaining deficiencies, however, are our sole responsibility.

Funding Open Access funding provided by University of Vaasa.

Declarations

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

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

References

- Affonso, F. M., & Janiszewski, C. (2023). Marketing by design: The influence of perceptual structure on brand performance. *Journal of Marketing*, 87(5), 736–754. <https://doi.org/10.1177/00222429221142281>.
- Akaka, M. A., Corsaro, D., Kelleher, C., Maglio, P. P., Seo, Y., Lusch, R. F., & Vargo, S. L. (2014). The role of symbols in value cocreation. *Marketing Theory*, 14(3), 311–326. <https://doi.org/10.1177/1470593114534344>.
- Akaka, M. A., Vargo, S. L., & Schau, H. J. (2015). The context of experience. *Journal of Service Management*, 26(2), 206–223. <https://doi.org/10.1108/JOSM-10-2014-0270>.
- Albertazzi, L. (2015). Philosophical background: Phenomenology. In J. Wagemans (Ed.), *The Oxford handbook of perceptual organization* (pp. 21–44). Oxford University Press.
- Albertazzi, L. (2021). Experimental phenomenology: What it is & what it is not. *Synthese*, 198(9), 2191–2212. <https://doi.org/10.1007/s11229-019-02209-6>.
- Albertazzi, L., van Tonder, G., & Vishwanath, D. (2010a). *Perception beyond inference. The information content of perceptual processes*. MIT Press.
- Albertazzi, L., van Tonder, G., & Vishwanath, D. (2010b). Introduction. In L. Albertazzi, van G. Tonder, & D. Vishwanath (Eds.), *Perception beyond inference. The information content of perceptual processes* (pp. 27–58). MIT Press.
- Amazeen, P. G., & Amazeen, E. L. (2017). A systems approach to perception and action. *Ecological Psychology*, 29(3), 213–220. <https://doi.org/10.1080/10407413.2017.1330119>.

- America Marketing Association (AMA) (2017). Definition of marketing, 2017, <https://www.ama.org/the-definition-of-marketing-what-is-marketing/>. Accessed Jan. 28, 2024.
- Anker, T. B., Sparks, L., Moutinho, L., & Grönroos, C. (2015). Consumer dominant value creation: A theoretical response to the recent call for a consumer dominant logic for marketing. *European Journal of Marketing*, 49(3–4), 532–560. <https://doi.org/10.1108/EJM-09-2013-0518>.
- Archer, M. S. (1995). *Realist Social Theory: The Morphogenetic Approach*. Cambridge University Press.
- Armstrong, R. (2019). Elaborating a critical realist approach to soft systems methodology. *Systemic Practice and Action Research*, 32(4), 463–480. <https://doi.org/10.1007/s11213-018-9466-7>.
- Arndt, J. (1985). On making marketing science more scientific: Role of orientations, paradigms, metaphors, and puzzle solving. *Journal of Marketing*, 49(3), 11–23. <https://doi.org/10.1177/002224298504900302>.
- Babin, B. J., & James, K. W. (2010). A brief retrospective and introspective on value. *European Business Review*, 22(5), 471–478. <https://doi.org/10.1108/09555341011068895>.
- Babin, B. J., James, K. W., Camp, K., Jones, R. P., & Parker, J. M. (2019). Pursuing personal constructs through quality, value, and satisfaction. *Journal of Retailing and Consumer Services*, 51, 33–41. <https://doi.org/10.1016/j.jretconser.2019.05.021>.
- Ballantyne, D., & Varey, R. J. (2006). Creating value-in-use through marketing interaction: The exchange logic of relating, communicating and knowing. *Marketing Theory*, 6(3), 335–348. <https://doi.org/10.1177/1470593106066795>.
- Basov, N., de Nooy, W., & Nenko, A. (2021). Local meaning structures: Mixed-method sociosemantic network analysis. *American Journal of Cultural Sociology*, 9, 376–417. <https://doi.org/10.1057/s41290-019-00084-9>.
- Belk, R. (2020). Resurrecting marketing. *AMS Review*, 10, 168–171. <https://doi.org/10.1007/s13162-020-00182-9>.
- Bhaskar, R. (1975). *A Realist Theory of Science*. Leeds Books.
- Bhaskar, R. (1989). *Reclaiming reality: A critical introduction to contemporary philosophy*. Verso.
- Bhaskar, R. (1998). *The possibility of Naturalism*. Routledge.
- Bhaskar, R. (2007). Theorising ontology. In C. Lawson, J. Latsis, & N. Martins (Eds.), *Contributions to Social Ontology* (pp. 192–204). Routledge.
- Bhaskar, R. (2009). *Scientific Realism and Human Emancipation* (2nd ed.). Routledge.
- Bhaskar, R. (2010). Contexts of interdisciplinarity: Interdisciplinarity and climate change. In R. Bhaskar, C. Frank, K. G. Høyer, P. Næss, & J. Parker (Eds.), *Interdisciplinarity and Climate Change: Transforming knowledge and practice for our global future* (pp. 1–24). Routledge.
- Bogna, F., Raineri, A., & Dell, G. (2020). Critical realism and constructivism: Merging research paradigms for a deeper qualitative study. *Qualitative Research in Organizations and Management: An International Journal*, 15(4), 461–484. <https://doi.org/10.1108/QROM-06-2019-1778>.
- Bruns, K., & Jacob, F. (2016). Value-in-use: Antecedents, dimensions, and consequences. *Marketing: ZFP–Journal of Research and Management*, 38(3), 135–149. <https://www.jstor.org/stable/26426818>.
- Busse, C., Kach, A. P., & Wagner, S. M. (2017). Boundary conditions: What they are, how to explore them, why we need them, and when to consider them. *Organizational Research Methods*, 20(4), 574–609. <https://doi.org/10.1177/1094428116641191>.
- Bygstad, B., Munkvold, B. E., & Volkoff, O. (2016). Identifying generative mechanisms through affordances: A framework for critical realist data analysis. *Journal of Information Technology*, 31, 83–96. <https://doi.org/10.1057/jit.2015.13>.
- Cavaliere, A., & Ventura, V. (2018). Mismatch between food sustainability and consumer acceptance toward innovation technologies among millennial students: The case of Shelf Life Extension. *Journal of Cleaner Production*, 175, 641–650. <https://doi.org/10.1016/j.jclepro.2017.12.087>.
- Chen, J., & Eaton, L. (2012). Multimodal mechanisms of food creaminess sensation. *Food & Function*, 3(12), 1265–1270. <https://doi.org/10.1039/C2FO30116D>.
- Colman, A. M. (2015). *A dictionary of psychology*. Oxford University Press. <https://doi.org/10.1093/acref/9780199657681.001.0001>.
- Danermark, B., & Morgan, J. (2023). Applying critical realism in an interdisciplinary context: An interview with Berth Danermark. *Journal of Critical Realism*, 1–37. <https://doi.org/10.1080/14767430.2023.2188710>.
- Danermark, B., Ekstrom, M., Jakobsen, L., & Karlsson, J. C. (2002). *Explaining Society: An introduction to critical realism in the Social Sciences*. Routledge.
- Easton, G. (2002). Marketing: A critical realist approach. *Journal of Business Research*, 55(2), 103–109. [https://doi.org/10.1016/S0148-2963\(00\)00145-4](https://doi.org/10.1016/S0148-2963(00)00145-4).
- Easton, G. (2010). Critical realism in case study research. *Industrial Marketing Management*, 39(1), 118–128. <https://doi.org/10.1016/j.indmarman.2008.06.004>.
- Edvardsson, B., Tronvoll, B., & Gruber, T. (2011). Expanding understanding of service exchange and value co-creation: A social construction approach. *Journal of the Academy of Marketing Science*, 39(2), 327–339. <https://doi.org/10.1007/s11747-010-0200-y>.
- Elder-Vass, D. (2010). *The Causal Power of Social structure: Emergence, structure and agency*. Cambridge University Press.
- Elster, J. (1998). A plea for mechanisms. In P. Hedström, & R. Swedberg (Eds.), *Social mechanisms: An Analytical Approach to Social Theory* (pp. 45–73). Cambridge University Press.
- Etale, A., & Siegrist, M. (2021). Food processing and perceived naturalness: Is it more natural or just more traditional? *Food Quality and Preference*, 94, 104323. <https://doi.org/10.1016/j.foodqual.2021.104323>.
- Fletcher, A. J. (2017). Applying critical realism in qualitative research: Methodology meets method. *International Journal of Social Research Methodology*, 20(2), 181–194. <https://doi.org/10.1080/13645579.2016.1144401>.
- Fuhse, J., & Mützel, S. (2011). Tackling connections, structure, and meaning in networks: Quantitative and qualitative methods in sociological network research. *Quality & Quantity*, 45, 1067–1089. <https://doi.org/10.1007/s11135-011-9492-3>.
- Fuster, J. M. (1997). *The Prefrontal cortex: Anatomy, physiology and neuropsychology of the Frontal lobe* (3rd ed.). Lippincott-Raven.
- Fuster, J. M. (2003). *Cortex and mind: Unifying cognition*. Oxford University Press.
- Fuster, J. M. (2004). Upper processing stages of the perception–action cycle. *Trends in Cognitive Sciences*, 8(4), 143–145. <https://doi.org/10.1016/j.tics.2004.02.004>.
- Gadamer, H-G. (1993). *Truth and Method*, 2d ed., translation revised by Joel Weinsheimer and Donald Marshall. New York: Continuum (Original German version published in 1960).
- Gallarza, M. G., Gil-Saura, I., & Holbrook, M. B. (2011). The value of value: Further excursions on the meaning of role of customer value. *Journal of Consumer Behaviour*, 10(4), 179–191. <https://doi.org/10.1002/cb.328>.
- Garnelo, M., & Shanahan, M. (2019). Reconciling deep learning with symbolic artificial intelligence: Representing objects and relations. *Current Opinion in Behavioral Sciences*, 29, 17–23. <https://doi.org/10.1016/j.cobeha.2018.12.010>.
- Gibson, J. J. (2015[1979]). *The ecological approach to visual perception*. Psychology.

- Gorski, P. S. (2013). What is critical realism? Why should you care? *Contemporary Sociology*, 42, 658–670. <https://doi.org/10.1177/0094306113499533>.
- Grönroos, C. (2008). Service logic revisited: Who creates value? And who co-creates? *European Business Review*, 20(4), 298–314. <https://doi.org/10.1108/09555340810886585>.
- Grönroos, C. (2011). Value co-creation in service logic: A critical analysis. *Marketing Theory*, 11(3), 279–301. <https://doi.org/10.1177/1470593111408177>.
- Grönroos, C., & Gummerus, J. (2014). The service revolution and its marketing implications: Service logic vs service-dominant logic. *Managing Service Quality*, 24(3), 206–229. <https://doi.org/10.1108/MSQ-03-2014-0042>.
- Grönroos, C., & Voima, P. (2013). Critical service logic: Making sense of value creation and co-creation. *Journal of the Academy of Marketing Science*, 41(2), 133–150. <https://doi.org/10.1007/s11747-012-0308-3>.
- Grunert, K. G., & Beckmann, S. C. (1999). A comparative analysis of the influence of Economic Culture on East and West Germany consumers' subjective product meanings. *Applied Psychology: An International Review*, 48(3), 367–390. <https://doi.org/10.1111/j.1464-0597.1999.tb00007.x>.
- Gummerus, J. (2013). Value creation processes and value outcomes in marketing theory: Strangers or siblings? *Marketing Theory*, 13(1), 19–46. <https://doi.org/10.1177/1470593112467267>.
- Gutman, J. (1982). A means–end Chain Model based on consumer categorization processes. *Journal of Marketing*, 46(1), 60–72. <https://doi.org/10.1177/002224298204600207>.
- Hachen, I. (2021). Phenomenology and animal sensory systems: Asking why. *Psychology of Consciousness: Theory Research and Practice*, 8(3), 274. <https://doi.org/10.1037/cns0000290>.
- Harré, R., & Bhaskar, R. (2001). How to change reality: Story vs. structure — a debate between Rom Harré and Roy Bhaskar. In J. Lopez, & G. Potter (Eds.), *After Postmodernism, an introduction to critical realism* (pp. 22–38). Continuum.
- Hartwig, K., & Jacob, F. (2021). Capturing marketing practices for harnessing value-in-use. *Journal of Marketing Theory and Practice*, 30(2), 137–153. <https://doi.org/10.1080/10696679.2021.1895671>.
- Heinonen, K., & Strandvik, T. (2015). Customer-dominant logic: Foundations and implications. *Journal of Services Marketing*, 29(6–7), 472–484. <https://doi.org/10.1108/JSM-02-2015-0096>.
- Heinonen, K., Strandvik, T., Mickelsson, K. J., Edvardsson, B., Sundström, E., & Andersson, P. (2010). A customer-dominant logic of service. *Journal of Service Management*, 21(4), 531–538. <https://doi.org/10.1108/09564231011066088>.
- Heinonen, K., Strandvik, T., & Voima, P. (2013). Customer dominant value formation in service. *European Business Review*, 25(2), 104–123. <https://doi.org/10.1108/09555341311302639>.
- Helkkula, A., & Kelleher, C. (2010). Circularity of customer service experience and customer perceived value. *Journal of Customer Behaviour*, 9(1), 37–53. <https://doi.org/10.1362/147539210X497611>.
- Helkkula, A., Kelleher, C., & Pihlstrom, M. (2012a). Characterizing value as an experience: Implications for service researchers and managers. *Journal of Service Research*, 15(1), 59–75. <https://doi.org/10.1177/1094670511426897>.
- Helkkula, A., Kelleher, C., & Pihlstrom, M. (2012b). Practices and experiences: Challenges and opportunities for value research. *Journal of Service Management*, 23(4), 554–570. <https://doi.org/10.1108/09564231211260413>.
- Hoddy, E. T. (2019). Critical realism in empirical research: Employing techniques from grounded theory methodology. *International Journal of Social Research Methodology*, 22(1), 111–124. <https://doi.org/10.1080/13645579.2018.1503400>.
- Holbrook, M. B. (1999). Introduction to Consumer Value. In M. B. Holbrook (Ed.), *Consumer value. A Framework for Analysis and Research* (pp. 1–28). Routledge.
- Holbrook, M. B., & Corfman, K. P. (1985). Quality and value in the consumption experience: Phaedrus rides again. In J. Jacoby, & J. Olson (Eds.), *Perceived Quality* (pp. 31–57). Lexington Books.
- Holbrook, M. B., & Hirschman, E. C. (1982). The Experiential aspects of Consumption: Consumer Fantasy, feelings and Fun. *Journal of Consumer Research*, 9(2), 132–140. <https://doi.org/10.1086/208906>.
- Hu, X. (2018). Methodological implications of critical realism for entrepreneurship research. *Journal of Critical Realism*, 17(2), 118–139. <https://doi.org/10.1080/14767430.2018.1454705>.
- Hunt, S. D. (2020). Indigenous theory development in marketing: The foundational premises approach. *AMS Review*, 10(1–2), 8–17. <https://doi.org/10.1007/s13162-020-00165-w>.
- Hunt, S. D., Madhavaram, S., & Hatfield, H. N. (2022). The marketing discipline's troubled trajectory: The manifesto conversation, candidates for central focus, and prognosis for renewal. *AMS Review*, 1–18. <https://doi.org/10.1007/s13162-022-00238-y>.
- Isaksen, K. R. (2016). Reclaiming rational theory choice as central: A critique of methodological applications of critical realism. *Journal of Critical Realism*, 15(3), 245–262. <https://doi.org/10.1080/14767430.2016.1169369>.
- Isaksen, K. R. (2018). Without foundation or neutral standpoint: Using immanent critique to guide a literature review. *Journal of Critical Realism*, 17(2), 97–117. <https://doi.org/10.1080/14767430.2018.1427180>.
- Johnson, P., & Duberley, J. (2000). *Understanding Management Research: An introduction to Epistemology*. Sage.
- Johnson, P., & Duberley, J. (2003). Reflexivity in management research. *Journal of Management Studies*, 40(5), 1279–1303. <https://doi.org/10.1111/1467-6486.00380>.
- Karababa, E., & Kjeldgaard, D. (2014). Value in marketing: Toward sociocultural perspectives. *Marketing Theory*, 14(1), 119–127. <https://doi.org/10.1177/1470593113500385>.
- Kazemi, M., Kim, N., Bhatia, D., Xu, X., & Ramachandran, D. (2022). Lambda: Backward chaining for automated reasoning in natural language. *ArXiv*. <https://doi.org/10.48550/arXiv.2305.14333>. abs/2212.13894.
- Key, T. M., Clark, T., Ferrell, O. C., Stewart, D. W., & Pitt, L. (2020). Marketing's theoretical and conceptual value proposition: Opportunities to address marketing's influence. *AMS Review*, 10(3), 151–167. <https://doi.org/10.1007/s13162-020-00176-7>.
- Koc, E. (2002). The impact of gender in marketing communications: The role of cognitive and affective cues. *Journal of Marketing Communications*, 8(4), 257–275. <https://doi.org/10.1080/13527260210145993>.
- Koenderink, J. J. (2010). Vision and information. In L. Albertazzi, van G. Tonder, & D. Vishwanath (Eds.), *Perception beyond inference. The information content of perceptual processes* (pp. 27–58). MIT Press.
- Koenderink, J. J. (2015). Methodological background: Experimental phenomenology. In J. Wagemans (Ed.), *The Oxford handbook of perceptual organization* (pp. 41–54). Oxford University Press.
- Lappin, J. S. (2013). Inferential and ecological theories of visual perception. In L. Albertazzi (Ed.), *Handbook of experimental phenomenology: Visual perception of shape, space and appearance* (pp. 37–69). John Wiley & Sons Ltd.
- Laverty, S. M. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative Methods*, 2(3), 21–35. <https://doi.org/10.1177/160940690300200303>.
- Lawani, A. (2021). Critical realism: What you should know and how to apply it. *Qualitative Research Journal*, 21(3), 320–333. <https://doi.org/10.1108/QRJ-08-2020-0101>.

- Leroi-Werelds, S. (2019). An update on customer value: State of the art, revised typology, and research agenda. *Journal of Service Management*, 30(5), 650–680. <https://doi.org/10.1108/JOSM-03-2019-0074>.
- Lewis, L., & Riefler, P. (2022). Behavioural intentions towards cultured meat: The role of personal values, domain-specific innovativeness and distrust in scientists. *British Food Journal*, 125(5), 1769–1781. <https://doi.org/10.1108/BFJ-03-2022-0270>.
- Li, R., Wang, Y., & Zhang, H. (2023). The shape of premiumness: Logo shape's effects on perceived brand premiumness and brand preference. *Journal of Retailing and Consumer Services*, 75, 103516. <https://doi.org/10.1016/j.jretconser.2023.103516>.
- Macdonald, E. K., Wilson, H., Martinez, V., & Toossi, A. (2011). Assessing value-in-use: A conceptual framework and exploratory study. *Industrial Marketing Management*, 40(5), 671–682. <https://doi.org/10.1016/j.indmarman.2011.05.006>.
- Macdonald, E. K., Kleinaltenkamp, M., & Wilson, H. N. (2016). How business customers judge solutions: Solution quality and value in use. *Journal of Marketing*, 80(3), 96–120. <https://doi.org/10.1509/jm.15.0109>.
- MacKenzie, S. B. (2003). The dangers of poor construct conceptualization. *Journal of the Academy of Marketing Science*, 31(3), 323–326. <https://doi.org/10.1177/0092070303031003011>.
- Manfredo, M. J., Bruskotter, J. T., Teel, T. L., Fulton, D., Schwartz, S. H., Arlinghaus, R., & Sullivan, L. (2017). Why social values cannot be changed for the sake of conservation. *Conservation Biology*, 31(4), 772–780. <https://doi.org/10.1111/cobi.12855>.
- Mausfeld, R. (2010). The perception of material qualities and the internal semantics of the perceptual system. In L. Albertazzi, van G. Tonder, & D. Vishwanath (Eds.), *Perception beyond inference. The information content of perceptual processes* (pp. 159–199). MIT Press.
- Medberg, G., & Grönroos, C. (2020). Value-in-use and service quality: Do customers see a difference? *Journal of Service Theory and Practice*, 30(4–5), 507–529. <https://doi.org/10.1108/JSTP-09-2019-0207>.
- Meijer, G. W., Lähteenmäki, L., Stadler, R. H., & Weiss, J. (2021). Issues surrounding consumer trust and acceptance of existing and emerging food processing technologies. *Critical Reviews in Food Science and Nutrition*, 61(1), 97–115. <https://doi.org/10.1080/10408398.2020.1718597>.
- Merleau-Ponty, M. (1962). *Phenomenology of Perception*. Routledge and Kegan Paul.
- Mingers, J. (2015). Helping business schools engage with real problems: The contribution of critical realism and systems thinking. *European Journal of Operational Research*, 242(1), 316–331. <https://doi.org/10.1016/j.ejor.2014.10.058>.
- Mingers, J., & Standing, C. (2017). Why things happen—developing the critical realist view of causal mechanisms. *Information and Organization*, 27(3), 171–189. <https://doi.org/10.1016/j.infoandorg.2017.07.001>.
- Nononen, S. (2022). Resurrecting marketing: Focus on the phenomena! *AMS Review*. <https://doi.org/10.1007/s13162-022-00245-z>.
- Okoli, C. (2015). The view from giants' shoulders: Developing theory with theory-mining systematic literature reviews. *SSRN*. <https://doi.org/10.2139/ssrn.2699362>.
- Overby, J., Woodruff, R., & Gardial, S. (2005). The influence of culture upon consumers' desired value perception: A research agenda. *Marketing Theory*, 5(2), 139–163. <https://doi.org/10.1177/1470593105052468>.
- Peñaloza, L., & Venkatesh, A. (2006). Further evolving the new dominant logic of marketing: From services to the social construction of markets. *Marketing Theory*, 6(3), 299–316. <https://doi.org/10.1177/1470593106066789>.
- Peters, L. D., Pressey, A. D., Vanharanta, M., & Johnston, W. J. (2013). Constructivism and critical realism as alternative approaches to the study of business networks: Convergences and divergences in theory and in research practice. *Industrial Marketing Management*, 42(3), 336–346. <https://doi.org/10.1016/j.indmarman.2013.02.003>.
- Polkinghorne, D. (1983). *Methodology for the human sciences: Systems of inquiry*. State University of New York.
- Qian, D., Yan, H., Pan, L., & Li, O. (2023). Bring it on! Package shape signaling dominant male body promotes healthy food consumption for male consumers. *Psychology & Marketing*, 40(8), 1451–1465. <https://doi.org/10.1002/mar.21835>.
- Reynolds, T. J., & Gutman, J. (1988). Laddering theory, methods, analysis, and interpretation. *Journal of Advertising Research*, 28(1), 11–31.
- Rokeach, M. (1968). *Beliefs, attitudes, and values*. Jossey-Bass.
- Román, S., Sánchez-Siles, L. M., & Siegrist, M. (2017). The importance of food naturalness for consumers: Results of a systematic review. *Trends in Food Science & Technology*, 67, 44–57. <https://doi.org/10.1016/j.tifs.2017.06.010>.
- Ryan, A., Tähtinen, J., Vanharanta, M., & Mainela, T. (2012). Putting critical realism to work in the study of business relationship processes. *Industrial Marketing Management*, 41(2), 300–311. <https://doi.org/10.1016/j.indmarman.2012.01.011>.
- Sánchez-Fernández, R., & Iniesta-Bonillo, A. M. (2007). The concept of perceived value: A systematic review of the research. *Marketing Theory*, 7(4), 427–451. <https://doi.org/10.1177/1470593107083165>.
- Sayer, A. (1992). *Method in social science: A realist approach* (2nd ed.). Routledge.
- Sayer, A. (2013). Looking forward to new realist debates. *Dialogues in Human Geography*, 3(1), 22–25. <https://doi.org/10.1177/2043820613485050>.
- Schoppek, D. E. (2021). How do we research possible roads to alternative futures? Theoretical and methodological considerations. *Journal of Critical Realism*, 20(2), 146–158. <https://doi.org/10.1080/14767430.2021.1894908>.
- Schütz, A., & Luckmann, T. (1973). *The structures of the life-world* (R. M. Zaner & H. T. Engelhardt, Jr., Trans.). Evanston, IL: Northwestern University Press.
- Schwartz, S. H. (2006). Basic Human values: Theory, measurement, and applications. *Revue française de sociologie*, 47(4), 929–968.
- Schwartz, S. H. (2012). An overview of the Schwartz Theory of Basic values. *Online Readings in Psychology and Culture*, 2(1), 2307–0919.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159–170. [https://doi.org/10.1016/0148-2963\(91\)90050-8](https://doi.org/10.1016/0148-2963(91)90050-8).
- Smith, B. (1988). Gestalt theory: An essay in philosophy. In B. Smith (Ed.), *Foundations of Gestalt Theory* (pp. 11–81). Philosophia.
- Smith, D. W. (2003). Phenomenology. In E. N. Zalta (Ed.), *Stanford encyclopedia of philosophy*. Stanford University. <https://plato.stanford.edu/entries/phenomenology/>.
- Smith, C., & Elger, T. (2014). Critical realism and interviewing subjects. In P. K. Edwards, J. O'Mahoney, & S. Vincent (Eds.), *Studying organizations using critical realism: A practical guide* (pp. 109–131). <https://doi.org/10.1093/acprof:oso/9780199665525.003.0006>.
- Sorrell, S. (2018). Explaining sociotechnical transitions: A critical realist perspective. *Research Policy*, 47(7), 1267–1282. <https://doi.org/10.1016/j.respol.2018.04.008>.
- Spendrup, S., Eriksson, D., & Fernqvist, F. (2021). Swedish consumers' attitudes and values to genetic modification and conventional plant breeding—the case of fruit and vegetables. *GM Crops & Food*, 12(1), 342–360. <https://doi.org/10.1080/21645698.2021.1921544>.

- Steffansen, R. (2016). Critical realist methodology guiding theory development: The case of the norwegian second home ownership paradox. *Journal of Critical Realism*, 15(2), 122–141. <https://doi.org/10.1080/14767430.2016.1148375>.
- Sun, R., Merrill, E., & Peterson, T. (2001). From implicit skills to explicit knowledge: A bottom-up model of skill learning. *Cognitive Science*, 25(2), 203–244. https://doi.org/10.1207/s15516709cog2502_2.
- Sweeney, J., & Soutar, G. (2001). Consumer Perceived Value: The development of a multiple item Scale. *Journal of Retailing*, 77(2), 203–220. [https://doi.org/10.1016/S0022-4359\(01\)00041-0](https://doi.org/10.1016/S0022-4359(01)00041-0).
- Syed, J., Mingers, J., & Murray, P. A. (2009). Beyond rigour and relevance: A critical realist approach to business education. *Management Learning*, 41(1), 71–85. <https://doi.org/10.1177/1350507609350839>.
- Tadajewski, M. (2006). Remembering motivation research: Toward an alternative genealogy of interpretive consumer research. *Marketing Theory*, 6(4), 429–466. <https://doi.org/10.1177/1470593106069931>.
- Tadajewski, M. (2008). Incommensurable paradigms, cognitive bias and the politics of marketing theory. *Marketing Theory*, 8(3), 273–297. <https://doi.org/10.1177/1470593108093557>.
- Vanharanta, M., & Wong, P. (2022). Critical realist multilevel research in business marketing: A laminated conceptualization of resilience. *Journal of Business & Industrial Marketing*, 37(10), 2010–2021.
- Varadarajan, R. (2020). Advancing theory in marketing: Insights from conversations in other disciplines. *AMS Review*, 10, 73–84. <https://doi.org/10.1007/s13162-020-00167-8>.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic of marketing. *Journal of Marketing*, 68(1), 1–17. <https://doi.org/10.1509/jmkg.68.1.1.24036>.
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1–10. <https://doi.org/10.1007/s11747-007-0069-6>.
- Vargo, S. L., & Lusch, R. F. (2011). It's all B2B... and beyond: Toward a systems perspective of the market. *Industrial Marketing Management*, 40(2), 181–187. <https://doi.org/10.1016/j.indmarman.2010.06.026>.
- Vargo, S. L., & Lusch, R. F. (2017). Service-dominant logic 2025. *International Journal of Research in Marketing*, 34(1), 46–67. <https://doi.org/10.1016/j.ijresmar.2016.11.001>.
- Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3), 145–152. <https://doi.org/10.1016/j.emj.2008.04.003>.
- Vargo, S. L., Peters, L., Kjellberg, H., Koskela-Huotari, K., Nenonen, S., Polese, F., Samo, D., & Vaughan, C. (2023). Emergence in marketing: An institutional and ecosystem framework. *Journal of the Academy of Marketing Science*, 51(1), 2–22. <https://doi.org/10.1007/s11747-022-00849-8>.
- von Uexküll, J. J. (1926). *Theoretical Biology*, Harcourt, Brace.
- von Uexküll, J. J., & Kriszál, G. (1934). *Streifzüge Durch die Umwelten Von Tieren Und Menschen*. Springer. <https://doi.org/10.1007/978-3-642-98976-6>.
- Wagemans, J. (2015). Historical and conceptual background: Gestalt theory. In J. Wagemans (Ed.), *The Oxford handbook of perceptual organization* (pp. 3–20). Oxford University Press.
- Wagemans, J., Elder, J. H., Kubovy, M., Palmer, S. E., Peterson, M. A., Singh, M., & von der Heydt, R. (2012). A Century of Gestalt psychology in Visual Perception. *Psychological Bulletin*, 138(6), 1172–1217. <https://doi.org/10.1037/a0029334>.
- Waite, D. (2022). Critical realist perspectives on the urban growth system. *Environment and Planning A: Economy and Space*, 54(6), 1219–1235. <https://doi.org/10.1177/0308518X221102958>.
- Webster, F. E., & Lusch, R. F. (2013). Elevating marketing: Marketing is dead! Long live marketing! *Journal of the Academy of Marketing Science*, 41(4), 389–399. <https://doi.org/10.1007/s11747-013-0331-z>.
- Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, 14(4), 490–495. <https://doi.org/10.5465/amr.1989.4308371>.
- Wikgren, M. (2005). Critical realism as a philosophy and social theory in information science? *Journal of Documentation*, 61(1), 11–22. <https://doi.org/10.1108/00220410510577989>.
- Wilson, T. (2012). What can phenomenology offer the consumer? Marketing research as philosophical, method conceptual. *Qualitative Market Research: An International Journal*, 15(3), 230–241. <https://doi.org/10.1108/13522751211231969>.
- Woodruff, R. B. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139–153. <https://doi.org/10.1007/BF02894350>.
- Wynn Jr, D., & Williams, C. K. (2012). Principles for conducting critical realist case study research in information systems. *MIS Quarterly*, 9, 787–810. <https://doi.org/10.2307/41703481>.
- Zauner, A., Koller, M., & Hatak, I. (2015). Customer Perceived Value —Conceptualization and avenues for Future Research. *Cogent Psychology*, 2(1), 1–17. <https://doi.org/10.1080/23311908.2015.1061782>.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, & value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22. <https://doi.org/10.1177/002224298805200302>.
- Zeithaml, V. A., Verleye, K., Hatak, I., Koller, M., & Zauner, A. (2020). Three decades of Customer Value Research: Paradigmatic roots and Future Research avenues. *Journal of Service Research*, 23(4), 409–432. <https://doi.org/10.1177/1094670520948134>.

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