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Constructions, Claims, Resonance, Reflexivity: Language and Market Categorization

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Abstract

Studies on market categorization exhibit substantial agreement that language plays a central role in articulating and constructing meanings among market participants and crafting consensus to produce a collective of interacting market actors. The purpose of this paper is to take stock of the growing body of research on language and market categories. This review has two aims. We begin by identifying how scholars have applied a variety of language constructs in category research, providing an understanding of the differences between these constructs and elaborating their uses and functions in the studies on market categorization. The second part of the review then provides a detailed analysis of the applications of these constructs in empirical studies addressing various situations and settings for categorization. We conclude the review by providing a synthesis of the role of language in market categorization and discuss avenues for future research.

Keywords

categorization, language, discourse theory, market category, review

Introduction

A burgeoning literature addresses the role of categories in markets and industries (Delmestri, Wezel, Goodrick, & Washington, 2020; Pontikes,

2012; Rao, Monin, & Durand, 2005; Ruef & Patterson, 2009; Zuckerman, 1999). In psychology, categories are considered to involve individuals' cognitive assessment of the apparent similarity of objects, making it easier to order the

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vast amount of information that they receive through their senses (Fiske & Taylor, 2013; Mervis & Rosch, 1981). Drawing on the tenets of psychological research on cognitive categories, a majority of studies on market categories have started from the idea of a categorical imperative. This imperative refers to how categories – after having become socially shared and stabilized among the market participants – enable the recognition of and exchanges between producers and audiences engaging with similar products or services (Vergne & Wry, 2014). In this approach, market categories have a stabilizing and disciplinary function as they demarcate memberships and identities. They thus guide members to conform and to exhibit certain prototypical features, or else risk suffering the penalty of deviation such as lower valuation or exclusion (Zuckerman, 1999).

In parallel, the socio-cultural approach to categorization has developed to account for dynamism – how categories are construed and negotiated as continuously changing entities (Durand, Granqvist, & Tyllström, 2017; Rosa, Porac, Runser-Spanjol, & Saxon, 1999). Accordingly, the socio-cultural approach pays attention to collective and social aspects of categorization with the focus on how category meanings and boundaries are produced in interactions between market participants, accounting for pluralism in addition to consensus (Jones, Maoret, Massa, & Svejnova, 2012; Lee, Hiatt, & Lounsbury, 2017). Market categories – such as electric cars, organic foods and social impact firms – are entities that are ‘agreed by the actors and audiences who use them’ (Navis & Glynn, 2010, p. 441). The process of market categorization then involves ‘a cooperative venture between organizations and their audiences, rooted in cultural understandings and expectations,’ characterized by ‘interpretive potency’ (Glynn & Navis, 2013, p. 1125). Studies explore categorization as a symbolic endeavour, centring on the gradual collective sharing of symbols and language (Ashforth & Humphrey, 1997; Khaire & Wadhvani, 2010).

Reflective of these theoretical underpinnings, studies exhibit substantial agreement that language is the key means for articulating and constructing meanings among market participants and for crafting consensus to produce a collective of market actors (e.g. Granqvist, Grodal, & Woolley, 2013; Grodal & Kahl, 2017; Kennedy, 2008; Khaire & Wadhvani, 2010; Navis & Glynn, 2010; Rosa et al., 1999). However, empirical research is dispersed and this scholarship lacks an overarching understanding of the different language-based approaches to study market categories.

The purpose of this review is to take stock of this rapidly growing area of scholarship with a focus on the dynamic role that language plays in actors making sense of, as well as in enacting and transforming, market categories. We argue in particular that a focus on language-based approaches offers significant possibilities for further theorization of market categorization as plurivocal – a dynamic process resulting from the interactions and multiple interpretations among the participants. Our review begins with an analysis of how different language-related constructs – commonly employed in many strands of the social sciences – have been used to date. Studies have addressed how discourses help (re)construct valuation principles for categories (Khaire & Wadhvani, 2010; Siltaoja et al., 2020); how narrative structures produce and disseminate plotted category meanings across participants (Kennedy, 2008; Rosa et al., 1999); how frames and framing are used to formulate and foreground selected category meanings (Chliova, Mair, & Vernis, 2020; Lee et al., 2017); and how vocabularies provide an overall semantic structure for understanding market categories (Jones et al., 2012; Loewenstein, Ocasio, & Jones, 2012). Research has furthermore looked at specific forms of language use, such as studying how market participants adopt and use labels to convey meanings and identities (Granqvist et al., 2013; Grodal, Gotsopoulos, & Suarez, 2015; Vergne, 2012), and how they employ analogies and metaphors to make the

unfamiliar familiar and the initially illegitimate and provisional category more legitimate (Navis & Glynn, 2010).

The second part of our review shows that scholars have applied these language-based constructs to study diverse settings where category boundaries, members, identities and valuation principles are in flux. We identify three primary empirical settings – category emergence (Lee et al., 2017; Navis & Glynn, 2010), changes in category valuation (Delmestri & Greenwood, 2016; Siltaoja et al., 2020) and instances of strategic categorization (Glaser, Krikorian Atkinson, & Fiss, 2020; Kodeih, Bouchikhi, & Gauthier, 2019). We then analyse the use and functions of the particular language constructs in producing, changing and disseminating category meanings in each setting.

While research on language and market categories has expanded rapidly, we identify shortcomings and blind spots that provide avenues for future studies to more profoundly acknowledge the fundamental role of language in categorization across different settings and levels of analysis. This review also has implications for methodology as we outline how research could look at market categorization and language use in its specific instances through real-time and immersive methodologies such as ethnography. We further advocate for a move beyond a focus on language as text or speech to embrace multimodal communication so as to account for the role of visuals in categorization. In all, the main aim of this review is to provide the ground for future studies to be better informed about language constructs and their particular application, and to use that as a basis for novel theoretical advances and research designs.

We begin this review article by discussing the different approaches to market category research, namely the categorical imperative and the socio-cultural approach. We then provide definitions for the constructs used to study language in categorization and offer a brief summary of their use and function in the empirical studies on categories. After that, we review the empirical

settings for language-oriented research. Finally, we discuss the domains and methods for future language-oriented studies on market categories.

Towards a Language-Based Perspective: From actual categories to active categorization

Generally speaking, in current research on categories in markets, there are two main approaches to study and define categories, which we label broadly as categorical imperative and socio-cultural approaches (see Table 1 for a summary and comparison). To provide the context for language-based perspective on categories, we begin by presenting these approaches briefly (for more extensive reviews, see e.g. Durand et al., 2017; Glynn & Navis, 2013; and Vergne & Wry, 2014).

Research on the categorical imperative, forming the core of published work on categories in organizational theory, draws from disciplinary foundations in cognitive psychology and sociology. The basic assumption in cognitive psychology is that categories are cognitive tools for individuals to organize objects and concepts based on their similarity in order to simplify and cluster sensory information (Fiske & Taylor, 2013; Mervis & Rosch, 1981). The sociological version that has adopted this approach then accounts for the implications of market categories *after* they have become widely shared and automatically applied (Vergne & Wry, 2014). Studies in this area are mainly concerned with the activation and effects of a category; that is, how a particular category is taken into use, and what outcomes the category perceptions lead to, for instance by enabling and restricting action in markets (Durand et al., 2017; Vergne & Wry, 2014). Categories are seen to have a disciplining function (thus, *categorical imperative*) – category members must conform to the existing categories by exhibiting particular features or otherwise face penalties for deviation such as lower valuation or exclusion from the category (Zuckerman, 1999). Membership in categories

Table 1. Comparison of the different approaches to research on market categories.

	Categorical imperative	Socio-cultural approach
Category conception	Categories have prototypical structural properties and are experienced by actors as given, binding and 'objective' fact	Categories and their symbolic, temporal and social properties are continuously (re)constructed in interactions
Ontology	Realist (causation)	Constructivist (construction)
Focus	Categorical imperative: norms and codes have a governing role Categories as constraining Activation and effects of a given category	Categorical plurality Categories as generative and plastic Active production of categories through constructing and negotiating meaning and boundaries
Assumption	Category as a stable entity	Categorization as a process
Agency	Members as conforming to existing categories; passive Clear and distinct member roles and activities: producers, intermediaries and audiences	Reflexiveness, interests; also active Actor roles may be overlapping and unclear, context dependent
Methods	Predominantly quantitative	Predominantly qualitative
Principles for evaluation	Sameness, resemblance, grades of membership Bounded variation	Resemblance, credibility, plausibility, resonance; ability to appear as relevant Valuation principles audience dependent, multiple audiences
Identity	Durable attribute perceived and assessed by audiences, external code related to properties of a firm or offering	Dynamic narrative, claims, identification

is accordingly seen to be regulated by external audiences based on the sameness and resemblance of typically material or otherwise observable features (Ruef & Patterson, 2009). Actor or category identities are then perceived as durable attributes (Hannan, Pólos, & Carroll, 2007). While variation is allowed it is bound to and assessed as a distance to the category prototype, defining the grades of membership of a firm or an offering in a given category (Kovács & Hannan, 2010; Pontikes, 2012). Categories thus have properties such as fuzziness and leniency in terms of how well-defined and restrictive they are, and contrast in how sharp their boundaries are towards other categories (Hannan et al., 2007; Ruef & Patterson, 2009). Moreover, firms and offerings need to differentiate themselves from others so that there is a viable niche for each offering within the market category (Hannan et al., 2007; Zuckerman, 1999).

Conceived in this way, studies in the categorical imperative approach offer a strong foundation for understanding particularly the enabling and limiting aspects of categories in markets. However, the observed dynamism in situations of category emergence and change, and to an extent the conflicting valuations in situations involving hybrid and pluralist market categories, have prompted the need to develop alternative explanations (see Jones et al., 2012). The socio-cultural paradigm on categories accounts for such dynamism and has coexisted alongside the categorical imperative research from the outset (Rosa et al., 1999). This approach pays attention to categories as dynamic and socially constructed entities and considers market categorization as a process that includes reflexive agency and interests and accounts for specific contexts of categorization (Durand et al., 2017; Glynn & Navis, 2013).

Market categories are ‘in continual flux . . . originating from political processes involving the state, media, firms, or professions’ (Glynn & Navis, 2013, p. 10), but also as a result of a variety of situated and contextual aspects of categorization (Granqvist et al., 2013). Rather than constraining and disciplining, categories are seen as plural in nature, providing potential for their construction, application and manipulation. Organizations do not merely conform to the requirement of prototypical features and the categorical imperative, but membership in a category is driven by reflective actors and their goals and interests (Durand & Paoletta, 2013; Granqvist & Ritvala 2016). Also, multiple salient identities may coexist for firms and products. Instead of stable and descriptive features or properties, identities can be understood as claims that connect a company or an object to a broader cultural narrative (Glynn & Navis, 2013). Beyond considering similarity as the evaluation principle, these studies thus also account for credibility, plausibility and the overall resonance of categorization activities and claims among various audiences (Granqvist et al., 2013; Ozcan & Gurses, 2018).

Addressing categorization as a dynamic construction emphasizes the role of language in categorization processes. Ontologically, it means that categories come into being as a result of human action and the use of language in articulating, sharing and contesting meaning. Accordingly, in this language-oriented view, the world is not already categorized in a way that must be found, accepted and confirmed as a status quo – but it is continuously construed, contested and (re)produced through language. Language has been scarcely addressed in the categorical imperative research, and where it has been, it is understood as representing the established category structures and a range of acceptable and consensual signifiers. In contrast, a socio-cultural approach positions language at the very heart of categorization, and focuses on the continuous and situational production of market categories in and through language, and on the subsequent enactment of those categories.

Language-Based Approaches in the Study of Categories and Categorization

In recent years, language has taken a prominent position in category research. Language is vital for understanding, communicating and constructing various forms of social organizing (Morgan 1980; Boje, Oswick, & Ford, 2004). In the context of categories research, it allows for explaining how categorization occurs in social interactions through expressions, texts and symbols (see also Berger & Luckmann, 1966). To uncover how language has been used to study market categories in management and organization theory, we conducted an extensive review. Both authors have worked with the topic of language and categories over an extensive period. We took our existing knowledge of empirical studies as the starting point. Additionally, we performed a systematic search for empirical papers in the following publications: *Academy of Management Journal*, *Administrative Science Quarterly*, *American Journal of Sociology*, *Annual Review of Sociology*, *American Sociological Review*, *Journal of Management*, *Journal of Management Studies*, *Organization Science*, *Organization Studies* and *Strategic Management Journal*. As search terms, we used *categor** or ‘category OR categorization’ in the abstract or in the keywords. From the initial set, we then selected the relevant articles by studying the abstract, and when necessary, the full text to identify to what extent language-related constructs formed part of the theoretical framing, methodology and findings of the study. We aimed to be inclusive in our selection; all studies that used language constructs as part of their conceptual toolset, data or analysis were included even if language was not the core focus or aspect of the research. In total, following this process, we identified 35 studies (see Table 2 in the Appendix for a summary). While we identified empirical studies for our review, we have included several relevant conceptual pieces in sections where we develop the argument and motivation of this paper and discuss its implications.

We present the review in two parts. The first section discusses the identified language constructs – discourse, narratives and storytelling, frames and framing, codes and vocabularies, and labels. For each construct, we first briefly summarize how it has been treated in research on language from where it has been borrowed. We then discuss its uses and functions in category research. We start from such language constructs that in themselves entail broader systems of meaning and context; namely, discourse and narratives. We then discuss the instances of language that are typically embedded in broader discourses and narratives whereby their meaning emerges in relation to these broader systems. For example, frames, labels and metaphors derive their meaning in part from their connection to particular discourses and narratives, and vocabularies are symbolic structures that again reflect certain discourses and (re)produce narrative structures. Table 3 provides a summary of these constructs and their primary application in category research. The second part of the review then presents how these constructs have been applied to study varying aspects and situations of categorization in empirical studies. Thus, our review – both mapping and explicating the role of language in empirical analysis – provides in this way a foundation for further theory building on language and market categories.

Discourse as a macrostructure for meaning and valuation

Discourses are commonly understood as forms of language use. Within the social sciences, the interest in discourse is often driven by the ways it constructs certain things to ‘exist’, or enables and restricts what can be thought of or said about an entity. Discourse analysis is then the analysis of discourse(s), their production and dissemination, encompassing a vast group of methods. Some of these analytic methods entail the detailed study of linguistics, others are more concerned with social structures, and yet others combine these two dimensions (Phillips, Lawrence, & Hardy, 2004). Accordingly, epistemological and ontological positions in streams

of discourse analysis do vary (cf. Alvesson & Kärreman, 2000; Fairclough, 2005; Grant, Hardy, Oswick, & Putnam, 2004). For example, critical discourse analysis tends to explore how social structures, hierarchy and related processes shape texts and communication (see e.g. Foucault, 1972). Thus, it connects texts to the use of power and sociopolitical context. Some approach discourses through detailed analyses of other semiotic features of texts; for example, by incorporating visual aspects into the analysis (Kress, 2010). Yet other versions of discourse analysis focus on the micro-foundations of language use and carry out various forms of detailed linguistic analysis (e.g. analysis of grammar, semantics, vocabulary, metaphor, forms of argumentation or narrative, and so forth; see Wodak, 2001). In addition, some orientations perceive that it is possible to combine both macro- and micro-level analysis in the study of discourse (see e.g. Fairclough, 1992, 2003). Thus, the focus of research in discourse analysis can vary from the analysis of macro-level structures, to the meso-level with a focus on context and processes of production of a text, to the micro-level analysis of argumentation. However, what tends to join these various approaches is their understanding of language – focusing on ‘texts’ in a broad sense – in the form of written texts, spoken interaction and multimedia texts (Fairclough, 2005) as social interaction embedded in social contexts.

Research on discourse is thus quite eclectic and encompassing. In terms of research on categories, it is broadly applicable as discourse governs the way categories can be meaningfully made sense of and talked about. Discourse is a well-suited conceptual tool for studying change in values and in category valuation and for elucidating the role of power in category formation. Existing research has drawn mostly from the tradition of critical discourse analysis, for which the priority is to understand ‘how changing practices of language use (discourse) connect with (e.g. partly constitute) wider processes of social and cultural change’ (Fairclough, 1992, p. 269). Studies have examined the construction of meaning for a novel category by

Table 3. Language constructs used in categorization research.

Linguistic function	Connections to category constructs	Uniqueness as compared to other linguistic constructs
Discourse		
A system of statements that constructs objects and concepts	Discourse governs the way categories can be meaningfully talked and reasoned about	Values and valuation, morality, power; analysis of visuals as well as texts
Narratives and storytelling		
Establish and explain the connections between the various constructs and disseminate meanings, temporal and causally connected plotlines, can also come as fragments, polyphony	Produce and disseminate meanings about category elements (products, users, experiences), temporally and causally organized storylines, legitimating device (expectations, dramatization)	Temporality, plot, dramatization, broad dissemination e.g. through media
Frame and framing		
<i>Frame</i> : schemata of interpretation, frame semantics <i>Framing</i> : act of framing of meaning, makes events and occurrences meaningful by relating them to a frame of interpretation, aims to provide meaning, manipulate and contest meanings	<i>Frames</i> as representations of category meanings <i>Framing</i> used to produce consensus over or contesting category meanings and identities	Frames as means for inclusion and exclusion Attention to framing contests between the participating communities
Vocabularies		
Systems of words, creates and exhibits the basic conceptual schema	Vocabulary structures as constitutive codes for categories	Focus on words and their structures
Labels		
Labels associate (or disassociate) an object with a meaning system through denotations and connotations	Labels as markers of identity and category membership Categories are defined in terms of agreement about a label Labels enable a category to be perceived and come into existence	Unique signifiers of the category, used also to create distinctions between category members. Labels are used strategically to position firms or offerings in a category. Metonymy: labelling an object as a member of a category, and being representative of the whole category
Metaphors and analogies		
Create connections to existing meanings and familiar examples; Metaphors utilize figures of speech and analogies create analogical meaning	Making a category seem familiar and connecting it other categories, particularly important for emerging or illegitimate categories	Expounding similarity, managing ambiguity

connecting category discourses to broader societal discourses, and explored how, by so doing, discourse stabilizes or changes the category meanings and legitimates the category (Khaire & Wadhvani, 2010; Siltaoja et al., 2020). From such a perspective, category discourses are subject to, and dependent on, the broader societal discourses that delineate a certain status, moral order and power relations.

A closer examination of discursive processes in categorization then helps to understand the power dynamics and order of markets – for example, how market participants have varying possibilities to access and shape discourses. Moreover, discourses are an instance of strategic action – certain discourses can be mobilized when firms communicate their offerings and seek to influence a selected audience (Coslor, Crawford, & Leyshon, 2020; Kahl & Grodal, 2016; Hsu & Grodal, 2020; Siltaoja et al., 2020). Whereas dominant macro discourses often are persistent (at the level of society), they do change over time. In sum, discourse acts as a cultural resource in categorization – discourses provide the category with meaning but also draw attention to agency and reflexivity in their formation.

Narratives and storytelling as tools for coherent plots

Narratives can be defined as temporal discursive constructions that create meaning around a category and its focal elements such as products and identities (Barry & Elmes, 1997; Czarniawska, 1997; Gabriel, 2004). Despite variety in our understanding of narratives, Gergen and Gergen (2001) identify certain qualities that distinguish a narrative from other forms of language. First, a narrative has an outcome worthy of telling forward – it may contain some engaging or even dramatic elements. Second, it includes events that led to this outcome. Third, the narrative is often organized in a temporal sequence. Fourth, these temporal sequences have a causal nature, meaning that one event led to another (Gergen & Gergen, 2001). These elements of narratives when combined give rise to an explicit or implicit

plot that structures meaning and events in time and space. The plot then produces coherence in that narratives are ‘causally linked sequences of events that have a beginning, a middle and an end’ (Giorgi, Lockwood, & Glynn, 2015, p. 5). While some traditions of narrative analysis focus on relatively coherent plots or accounts, we acknowledge that narratives are often articulated only in fragments (Boje, 2008; Polkinghorne, 2007). Moreover, there are various alternative narratives that may be told around the same topic – referred to as narrative polyphony (Sonenshein, 2010; Vaara & Tienari, 2011). Therefore, narratives are dynamic and changing as stories around a topic also shape each other.

Narratives have been used quite extensively in category research. Category narratives spread through storytelling – the explicit use and dissemination of narratives (Garud, Schildt, & Lant, 2014; Lounsbury & Glynn, 2001; Wry, Lounsbury, & Glynn, 2011). The seminal study on categories by Rosa et al. (1999, p. 68) shows how market stories enable producers to reach a broad audience and disseminate the focal features of the products, their usage and benefits. As the products and stories continuously evolve and interact, the meanings of market categories also change over time (Rosa et al., 1999). Narratives and storytelling further serve as important meaning-making and legitimating devices for actors involved in new market categories (Kennedy, 2008; Khaire, 2014; Navis & Glynn, 2011).

Narratives tend to be either regressive or progressive; regressive stories narrate past occurrences and progressive stories are future oriented (Gergen & Gergen, 2001). For category development, progressive stories are crucial. Growth stories and positive expectations support the development of legitimacy and collective identity in nascent categories (Garud et al., 2014; Wry et al., 2011). Market category narratives can also have dramatic elements which may arouse a positive response and stabilize category meaning (Rindova, Pollock, & Hayward, 2006; Rosa et al., 1999). Finally, narrative polyphony has been found to be a characteristic of storytelling in emerging categories

whereas stable categories are characterized by a narrower, convergent repertoire of stories (Grodal et al., 2015). Narratives in categories thus focus attention on the temporally and causally coherent plots that are being generated by market actors and also address fragments and multiple storylines in ongoing meaning making and legitimation.

Frames and framing in formulating and contesting meanings

Frames have cognitive foundations as they refer to ‘schemata of interpretation’ that serve ‘to locate, perceive, identify and label’ occurrences (Goffman 1974, p. 21). Frames ‘help to render occurrences and events meaningful and thereby function to organize experience and guide action’ (Benford & Snow, 2000, p. 614). A frame ties abstract words to concrete cues and defines the parameters for what is included or excluded as meaningful and valid. Frame analysis then considers word choices as verbal frames (see Entman, 1993). Framing, on the other hand, refers to interactive processes of the social construction of meaning whereby actors from multiple communities take part to articulate, negotiate and contest particular frames (Benford & Snow, 2000). Members from different communities then aim to promote their grievances and interests by formulating them into persuasive language (Granqvist & Laurila, 2011). Framing is considered as both a cognitive and social process and linked to the expressions that members assign to situations (Cornelissen & Werner, 2014).

In the study of market categories, frame analysis is generally applied to explore the socio-cognitive building blocks of categories (Hiatt & Carlos, 2019; Navis & Glynn, 2011). Market actors may seek to influence how people interpret and perceive categories and thus ‘promote similar frames that represent consensus over category meanings or advance competing frames that may or may not be compatible’ (Hiatt & Carlos, 2019, p. 866). Framing can be directed to a particular audience in order to persuade its

members to join or support the category (Lee et al., 2017). Category studies tend to assume that as the category matures, certain cognitive frames become dominant, and framing contests are less prevalent. However, ambiguity of frames can also persist and may enable category growth by allowing inclusive participation (Chliova et al., 2020). Addressing frames and framing in category research then pays attention to the formulation of category meanings into persuasive sets of arguments by which certain meanings can be promoted and others suppressed through demarcation and contestation.

Vocabularies and category codes as semiotic structures

In language studies, vocabulary, terminology, labels, naming and so forth are formed by using the basic elements of language, that is, words. Words are signs that transmit but also produce meanings that are constitutive of social categories. Loewenstein et al. (2012, p. 42) define vocabularies as ‘the system of words and their meanings commonly used by social collectives’ that ‘are instrumental in the social construction of meaning’. These authors state that all cultural categories are characterized by vocabularies that category members then use to infer meanings. In this approach, vocabulary structures are constitutive of social categories in general.

Examining market categories through the use of words such as vocabularies and elements of vocabularies such as codes and labels has been commonplace. Traditionally, categories convey certain properties or ‘codes’ that an organization or an offering should legitimately possess – violations of the codes then lead to declining valuations by observers (Durand, Rao, & Monin, 2007). Category research has oftentimes treated these codes as stable and measurable properties and identity markers. Accordingly, codes are markers of a meaning-making process that has already taken place. Codes are perceived as mirrors of reality and readily observed and evaluated as such by audiences. In contrast, the socio-cultural research on categories considers

codes as ‘words’ that form the basic vocabulary used to construct and communicate categories and their meanings. Along with the change of category and its societal context, the codes and vocabulary structures also change (Jones et al., 2012; Weber, Heinze, & DeSoucey, 2008). From this perspective, codes and vocabularies act more as an orienting rather than a disciplinary element. A market category likewise serves as a ‘vocabulary for describing a demand environment that is always changing’ (Kennedy, Lo, & Lounsbury, 2010, p. 2). For example, Jones et al. (2012) show that categories do not necessarily develop around agreed and consensual use of codes and vocabularies but, instead, the use of multiple and sometimes conflicting vocabularies and exemplars can enable category formation. Codes and vocabularies then provide a structural understanding of the use and ordering of words in a particular category setting.

Labels as anchors of meaning

A label is among the most commonly used language constructs in category studies. Labels are acknowledged as central anchors of meaning. According to Loewenstein et al. (2012, p. 63), ‘every cultural category is labelled by a word’. Labels ‘associate an object with a system of meaning’ that is mediated through a label’s denotation (or explicit meaning) and connotation (implicit meaning) (Peirce, 1931, in Granqvist et al., 2013, p. 396). Denotations are the literal categorical reference – the set of objects to which it refers (Granqvist et al., 2013). For example, the label ‘organic’ denotes organizations such as the Whole Foods Market and organic farms, which then act as the label’s categorical referents that audiences make use of when assessing the similarity of potential entrants. Connotations of a label are ‘the underlying meanings that a label references’ (Granqvist et al., 2013, p. 396). Thus, the label ‘organic’ may connote attributes such as ‘pure’, ‘healthy’ and ‘pesticide free’, which are then associated with the organizations that use this label. Labels act as metonymy – figures of speech that replace the name of a thing with the

name of something else with which it is somehow associated (Cornelissen, 2008). Seen in this way, labels provide a reference point in that a member of the category, an ‘organic company’, is representative of the whole category. In turn, when companies use the same label, their perceived categorical similarity is enforced (Zerubavel, 1997), which further stabilizes the category.

Several category scholars define categories as ‘semantic objects . . . social agreements about the meanings of labels applied to them’ (Negro, Hannan, & Rao, 2011, p. 1450; also Hannan et al., 2007). Labels also form the key identity markers in a category as memberships are signalled by the label use (Hannan et al., 2007; Navis & Glynn, 2010). Labels provide substance, reference points and tools for identity claims, and make the category ‘real’ and ‘countable’ (Kennedy, 2008). In addition, a label is a key means to separate a new category from existing categories – labels and labelling are a central aspect of the construction of meaning around the novel category. Labels create connections to particular discourses and by adopting different labels category members can invoke meanings from various discourses (Slavich, Svejnova, Opazo, & Patriotta, 2020). Other scholars have explored the strategic use of labels to access the resources of a category, such as funding, reputation and status, and to establish the viability of a new category (Granqvist et al., 2013). Organizations also use labels to differentiate themselves from similar competitors (Kodeih et al., 2019). In sum, labels provide an understanding of key signifiers and their change over time and allow for an exploration of the various strategies that are used by organizations to signal category membership through claiming and denouncing labels.

Metaphors and analogies as producing familiarity and relations

Analogies and metaphors are figurative comparisons that project pre-existing meaning to a new situation, which helps to manage ambiguity (Cornelissen, 2012). Metaphors – ‘figurative

language that represents one thing in terms of another' (Cornelissen, 2012, p. 119; Lakoff & Johnson, 1999) – and analogies – 'a comparison of two otherwise unlike things based on resemblance of a particular aspect' (*Merriam-Webster Dictionary*, 2018) – connect novel, ambiguous or abstract concepts to familiar examples or create new connections between objects. Thus, tropes such as metaphors and analogies are a pervasive and essential feature of language. Metaphors are figures of speech that involve the simultaneous equating and negating of two different ideas of objects, creating a vision in which a creative perception of the meaning takes place non-verbally (Tsoukas, 1993, p. 336), such as 'this organization is a zoo'. Metaphors (re)construct various images, stereotypes and organizational power relationships that have implications for how people, things and organizations are categorized (Lakoff & Johnson, 1999; Vaara, Tienari, & Säntti, 2003). Whereas metaphor usually concentrates on one point of resemblance figuratively, analogy establishes what is common between two things of different types – for instance, 'the Rolls Royce of bikes'. Analogies then can act as a rhetorical device and as a structured form of comparison.

Studies on market categories explore metaphors and analogies especially when categories are novel, complex, or there is otherwise a lot of ambiguity associated with them (Hill & Levenhagen, 1995; Kennedy & Fiss, 2013; Navis & Glynn, 2010; Weick, 1979). The use of metaphors can help to legitimate the category by making it understandable (Navis & Glynn, 2010). Labels can act as analogies by creating a connection to existing categories – think of minivan or light cigarettes (Grodal et al., 2015; Hsu & Grodal, 2015; Rosa et al., 1999). However, when categories become better understood and widely shared and legitimate, metaphors are deemed to have a lesser role as they are no longer necessary for conveying meanings (Powell & Colyvas, 2008). Moreover, Bajpai and Weber (2017) studied how analogies were used in translating the notion of privacy as a meaningful abstract category across different institutional settings over

time. In sum, in research on categorization, metaphors and analogies play a key role especially in shedding light on the creation and maintenance of meaning through referrals to familiar objects and instances.

Taken together, by disentangling these language-related constructs analytically from each other, we uncover and elaborate their particular uses and functions. Such analysis also supports the future research designs on language and market categorization. We give further shape to this theme by reviewing and elaborating in more detail how these constructs have been employed in the various settings of market categorization.

Research on Language and Categories: Dynamism in Category Emergence, Valuation Change, and Strategic Categorization

We next present our systematic analysis of the empirical research to date that addresses language in category research. Based on our review and subsequent analysis, we divided the empirical research on language and categories into three types. These types are analytically distinct but overlap. The first type consists of studies that examine category emergence. These studies address the role of language in the shaping of meanings, boundaries, identities and valuation principles for the whole category – where these do not yet exist or are characterized by significant ambiguity. The second type is composed of studies that examine changes in category valuation. In addition to established categories, many of these studies also look at category emergence. However, the main difference from the previous type is that they tackle situations in which a category is already impregnated with meaning and suffers from low legitimacy, poor reputation, or an outright stigma – and where language is then used to address this state of affairs. The third type elaborates the use of language in strategic categorization. Even though many of the situations involving the

production of meaning and valuation principles can be understood as ‘strategic’, the difference from the previous two types is that studies on strategic categorization do not focus on the meanings of the entire category – but rather on managing the categorization of a particular organization or a group of organizations through manipulating language and symbols strategically. These studies then particularly stress agency and reflexivity on the part of market actors. Below, we present studies within each type.

Language and category emergence

Category research has paid much attention to the role of language in emerging market categories. Rather than having already stable cognitive frameworks in place, emerging market categories are characterized by a lack of shared meaning and thus unclear boundaries and understandings of the basic classification principles (Aldrich & Fiol, 1994; Granqvist et al., 2013; Khaire, 2017; Khaire & Wadhvani, 2010). Similarly, actor roles and identities are typically ambiguous in such settings. In this process of negotiating category boundaries and memberships, language plays a crucial role (Granqvist et al., 2013; Hsu & Grodal, 2020; Lakoff, 1987; Weber et al., 2008). Studies on category emergence have focused on nascent meanings, identities and boundaries, and have explored the various types of language that are used in their construction. These studies mainly draw on a constructivist ontology to show how the different market participants engage in producing the category through language, and how their conceptual systems (i.e. use of language and associated meanings) interact and shape each other in the process (Kennedy, 2008; Rosa et al., 1999; Weber et al., 2008). The produced meanings can then gradually form the more taken-for-granted understandings of the key category elements through cognitive embedding (Kennedy, 2008). Indeed, nearly all studies addressing category emergence emphasize the role of language in shaping the shared meanings and socio-cognitive frameworks on which

stable or mature categories then rest. By the number of studies, this is the largest of the three categories in our review. These studies also mobilize the broadest variety of the above reviewed language constructs.

According to Durand and Khaire (2017, p. 90), ‘new categories need discourses and narratives that distinguish their members from other categories’. In emerging market categories, the birth of a category requires discursive linkages to existing and valued categories. Khaire and Wadhvani (2010) employ critical discourse analysis to study how categorical meanings, identities and valuation criteria were established in the emerging category of modern Indian art. They analysed changes in texts and in institutional vocabularies to trace how aesthetic and economic value were assigned to a piece of artwork. Moreover, they traced the intertextual connections between focal texts and the broader discourse on modern art and modernism and how these provided a basis for category meanings and valuation. Their study shows how the emergence of the modern Indian art category was significantly influenced by the reinterpretation of historical constructs to enhance commensurability, which enabled aesthetic comparisons and the valuation of modern Indian art (Khaire & Wadhvani, 2010). Market category emergence then requires connecting new discourses to the broader values, meanings and power relations as represented by, and embedded in, macro-cultural discourses.

With regard to narratives and storytelling, the seminal study by Rosa et al. (1999) shows how narratives provide coherent meanings for emerging categories. They define emerging market categories as ‘unstable, incomplete, and disjointed conceptual systems held by market actors, which is revealed by the cacophony of uses, claims, and product standards’ (Rosa et al., 1999, p. 64). These authors pay attention to market stories and studied how they helped build consensus around product representations in the minivan market. These stories are narrated in interaction between consumers and producers, whereby their understandings and interpretations continuously shape each other.

In nascent categories, narratives are effective forms of producing connections between previously disconnected entities and they are also tools to construct continuity from the past to the future (Garud et al., 2014; Rosa et al., 1999).

Further, scholars have explored frames and the framing of meaning in this setting. In nascent fields, actors from previously unconnected contexts begin to engage with one another, and these encounters are oftentimes characterized by the coexistence of multiple divergent frames and their contestation. Focusing on the role of framing as shaping congruent meanings, Navis and Glynn (2010) in their study of satellite radio in the United States found that initial framing activities tend to focus on giving meaning for the market category as a whole. This framing takes advantage of the use of metaphors to make the category understandable and legitimate and by analogically claiming affiliations with established firms. Later, as the category matures, linguistic frames are then used to position and differentiate organizations within the category and start to focus on articulating specific organizational identities (Navis & Glynn, 2010).

Emerging markets do face contestation, as the following set of studies show. Zietsma, Ruebottom and Slade Shantz (2018) studied how the emergence of the cleantech category was hindered by incumbents in the marketplace who sought to maintain their status and market share. Incumbents used positive rhetoric for the new cleantech category but at the same time tried to control aspects of the evaluation – emphasizing the business viability as a legitimate principle instead of ecological performance. Zietsma et al. (2018) show how challengers' language and attributes can be hijacked; incumbents can strategically and incrementally succeed to maintain their own category by adopting selected elements of the emerging category while simultaneously curbing or slowing down the emergence of those category features that undermine their status.

Contestation also characterized the emergence of the US biodiesel market. Hiatt and Carlos (2019) uncovered the conditions under

which market participants would promote similar frames representing consensus over category meanings or advance competing, divergent frames. They found that the salience of particular frames as part of framing contests shapes producers' understandings of opportunities and consequently also influences their market entry strategies. Their findings question the prevalent assumption that congruent meanings are necessary for category growth and stability but rather suggest that the key aspect is how producers make use of framings.

Similarly, Lee et al. (2017) explored the development and legitimation of the organic farming category in the US by unveiling the tradeoffs associated with category growth. Rapid growth led to increasing tensions between mainstream farmers and environmentally driven farmers. This underscored the difficulty of maintaining a shared collective identity in a situation of increasing membership heterogeneity. As a result, the standardizing agency began to manage these tensions through a rhetoric of 'diversity' (Lee et al., 2017). Supporting the argument on the benefits of the coexistence of multiple frames during emergence, Chliova et al. (2020) analysed the category of social entrepreneurship and found that transition from exclusive to inclusive frames can lead to persistent ambiguity, which allows for broader participation and supports category growth. The above studies uncover the ways through which frames and framing impact category meanings, boundaries, salient identities and thus participation – and underscore that multiple and even conflicting frames can coexist during a category's transition from emergence to stability and enable growth.

Category emergence studies have also paid attention to vocabularies, providing an understanding of the codes and signs that can then act as a resource for market participants. A new category is born through 'the emergence of a new vocabulary, new features in artifacts, and theorization about these new features' (Jones et al., 2012, p. 1523; also Loewenstein et al., 2012). Jones et al. (2012) studied how the *de novo* category of modern architecture emerged over

time by employing a structural semiotic analysis of institutional logics (as represented by vocabularies) and artefact codes (material features of buildings). In terms of vocabularies, they analysed the details of language used in the texts of architects and audiences over time. They uncovered how different architects used distinct sets of symbols, how a plurality of symbols coexisted, how they related these symbols to one another, and how the symbolic associations changed over time, representing the changing category meanings and materiality in the form of buildings (Jones et al., 2012). Accordingly, categories can be established through boundary expansion through vocabularies rather than boundary contraction.

Category studies traditionally tend to assume that stable categories have one or very few strong labels (Hannan et al., 2007), whereas the recent literature has shown how emerging categories can develop while having multiple labels (Vergne & Swain, 2017). Studies increasingly point out that stabilization of a category does not necessarily require a strong consensus over a label (Slavich et al., 2020). Even if the consensus seems to exist, the meanings associated with the label can differ (Anthony, Nelson, & Tripsas, 2016). Slavich et al. (2020, p. 284) elaborate in their study on molecular gastronomy how a new label can catalyse producers to reflect on their work (see also Rao et al., 2005). The ‘molecular gastronomy’ label brought science into the kitchen as chefs introduced scientific discourses to food preparation, whereas the label ‘modernist cuisine’ invoked the artistic meaning of breaking conventions (Slavich et al., 2020). They find that categories and labels can become decoupled from each other, and sometimes the coexistence of multiple labels can help stabilize the category as it allows the participation of actors and audiences that do not necessarily have the same understanding of the category or shared interests. Similar to findings on frames and framing contests (Chliova et al., 2020; Lee et al., 2017), these authors find that tensions between competing labels can generate innovation but may also force category stakeholders to sharpen the category’s boundaries.

In summary, contexts of emergence most clearly challenge the assumption of categories as stable entities. Existing studies show how language is used in multiple ways to produce novel meanings, borrow legitimacy from established categories, and create coherence across the multiple participants in and around a market category. Yet, studies also show that category emergence and growth may be enabled by ambiguity. Taken together, these studies establish how market categories are fundamentally constituted through language.

Language and valuation change

We identified another clearly demarcated setting for studies of categorization, namely, situations in which category valuation changes. In contrast to emerging categories that are characterized by a relative void of meaning, a common theme of studies in this category is that they begin from a situation in which a category and its members suffer from a negative valuation. Here, studies tend to be longitudinal in nature in order to show how a valuation change takes place over time and how this relates to a change in meaning. This stream of research shows that gaining social acceptance and an improved valuation is dependent on the discursive and cultural resources used in the process. Language is used to mobilize familiar and culturally valued attributes to construct new meanings for undervalued categories or employed in particular ways to represent category features. In doing so, studies address the role of language in processes of category legitimation (Lee et al., 2017), in changing the status of the category (Delmestri & Greenwood, 2016; Pedeliento, Andreini, & Dalli, 2019), or in mitigating the effects of extreme forms of negative valuation such as stigma (Pedeliento et al., 2019; Siltaoja et al., 2020).

In terms of discourse, the study of Siltaoja and colleagues (2020) explores extreme forms of negative valuation by showing how the category of organic farming in Finland moved from stigma to legitimacy through boundary construction. The study uncovers how category membership can evolve as a result of contestation within the community and involve processes of actors

manipulating category boundaries through new labels and discourses. In organic farming, a rift emerged between two communities, organic and biodynamic, due to the negative attention that biodynamic perspectives received from focal audiences. Organic farmers strove to discursively remove morally controversial features, leading to the exclusion of biodynamic farming from the category and diverting the stigma associated with biodynamism in their discourse. Organic farmers then discursively assimilated their practices and identities to those of (legitimate) conventional farmers (see also Weber et al., 2008). After the successful establishment of a new label, organic farmers continued the discursive work of differentiation through category contraction (Siltaoja et al., 2020). Relatedly, Hsu and Grodal (2020) examined the emergence of the electronic cigarette category in the US – but found that discursive linkages to established valued categories may not always result in a positive valuation. Stakeholders may fail to pay attention to such discursive work so as to clearly differentiate the categories and may associate the categories as being one and the same. Hsu and Grodal (2020) thus elaborate how new, stigmatized categories emerge through discourse and are impacted by stigma transfer.

In terms of narratives, Pedeliento et al. (2019) focus on the construction of a historical narrative to elaborate the status change of gin. They study how the context – political, social, economic and technological forces – affected successive configurations of the gin category over time. Their historical narrative shows how for most of its existence the category was symbolically associated with what was considered as morally bereft consumption, for instance through metaphors such as ‘mother’s ruin’. However, the image of sophistication alongside mass production and novel category codes succeeded in improving the status of the category, leading to the perception of highly differentiated premium products.

New narratives or revitalized older narratives may also be used to contest negative valuations. Lashley and Pollock (2019) address stigma reduction of medical cannabis by

studying narratives in legitimation. They uncover how the promoters of the medical cannabis category successfully reconstructed and revitalized the age-old, suppressed narrative that marijuana is medicine, offering a moral framing and agenda for the category. The promoters of the category then established medical cannabis as a novel moral prototype among stakeholder audiences through narratives that emphasized healing and the alleviation of suffering of patients, and through broader associations to the overall healthcare category. The category members also publicly disidentified with the stigmatized prototype and denounced the relationship with the black market category. Lashley and Pollock’s (2019) study shows how category prototypes are narratively constructed and purposefully selected, which in turn influences category valuation.

The use of visual material and connecting the category meanings to culturally valued narratives is also a means to change category valuation. Thus, category valuation is not only born from its immediate meaning, but from its ‘fit’ and connectedness to culturally valued practices. Delmestri and Greenwood (2016), analysing a redefinition of a mature category, present a historical case of how grappa, a cheap alcohol for the underclasses, succeeded in changing its perceived status. The study shows how changing the status of the category – particularly when labels are fixed due to legal regulation – is dependent on both changes in practices and communication (Delmestri & Greenwood, 2016). Practice change occurred by adopting a different production method which allowed grappa to become classified as part of the wine category rather than being evaluated as a liquor. Additionally, through the use of language and images producers strove to make grappa synonymous with elegance and sophistication.

Research has also looked at the role of vocabularies in valuation change and boundary management. Rao and colleagues (2005) study the hybridization of nouvelle and classical cuisine and elaborate how a borrowing process – referring to the combination of various styles of two rival cuisines – blurred the boundaries of the

categories. Originally these categories stood as oppositional pairs; they had their specific codes (as in vocabularies) and material elements. The authors analysed the specific category meanings, including the rhetoric used in culinary descriptions and legitimate vocabulary; for example, how dishes are named. The authors then identified a borrowing of vocabulary and rhetoric – the use of familiar words in association with new words – as an effective practice in the long term to change category valuation and legitimate the new category. In this sense, borrowing created connections between the rival categories and increased their similarity and commensurability (Rao et al., 2005).

In sum, language plays a key role in changing category valuation. These studies establish that language provides cultural resources to change negative meanings through connections to legitimate discourses. The process involves changing the category boundaries and the related language as well as strengthening the desired meanings and excluding the undesired ones. This involves particularly the use of persuasive language and labels directed towards specific audiences who hold negative evaluations.

Strategic categorization

The third type of category and language studies addresses the strategic use of language to impact the categorization of a single organization or a group of organizations. Thus, whereas the two previous streams of research explored the meaning creation for, or the valuation of, the whole category, these studies focus on particular actor groups strategically using language or manipulating category meanings to manage membership. These studies address discourses, narratives and frames, but predominantly look at how market participants engage in the strategic use of labels to include or exclude certain members.

Ozcan and Gurses (2018) address language from multiple perspectives in their study on the strategic categorization of dietary supplements. They observed how US dietary supplement makers moved their products from the food to the drug category, resulting in regulatory

resistance. These producers then created an entirely new regulatory category for dietary supplements which enabled a rapid growth of the market. They engaged in advocacy work around the new product category by connecting it to meta-narratives and activated specific meanings through various rhetorical tools. The authors found that the sequence of these activities is important. For the launch, it is crucial to get consumers interested by linking the cause to a larger cultural frame. Rhetorical strategies of dramatization and urgency are then useful in getting a response from consumers and gaining the wider public's attention. Their study particularly emphasizes 'the role of metanarratives involving cultural values and rhetorical tools . . . in generating advocacy among the public' (Ozcan & Gurses, 2018, p. 1809). Ozcan and Gurses (2018, p. 1810) also find that in creating a new regulatory category, actors need to disassociate 'from both the extant category and its evaluator' through developing a new frame for evaluation that makes obsolete the category and the previously established evaluator. In sum, this study elegantly shows how language plays a major role in strategic categorization.

Coslor and colleagues (2020) examine how certain category members act as gatekeepers and seek to influence the selection of further potential members. In particular, their study shows how language is used strategically to include potential category members and exclude others. Drawing on a three-year ethnography examining how gallerists act as category gatekeepers in high-end art hotspots in London and New York, their study unveils the role that language plays in the maintenance of the social and moral ordering of the art market. The study uncovers the vocabulary of a 'sorting mechanism' in terms of how gallerists separate out potential and problematic buyers. This sorting, being a discursive process, produces certain moral attributes as qualities (e.g. artistic stewardship) of a preferred type of buyer. This process also contributes to category maintenance, but it is strategic because the aim is to guard boundaries and produce exclusivity, influencing the current and future value of the art.

Labels are also a key tool for strategic categorization as they provide a means to signal membership in the category, even when a firm might not have the necessary qualities or capabilities that relate to a category. Granqvist et al. (2013) studied how during the nanotechnology hype, ambiguity over the category meanings and a lack of commonly agreed evaluation principles allowed leeway for strategic claims about membership. Firms used or were assigned with the nano-label even when they did not have any category-relevant features. Such labelling was driven by a desire to access category-related resources, or to demonstrate a viable category. Non-substantive participation was enabled by those supposed to judge the claims and guard the boundaries, themselves profiting from wider participation (Granqvist & Ritvala, 2016). In the presence of excitement and hype around novel market categories, characterized by vague boundaries, there may more generally be a demand for particular storylines and labels. In such situations, resemblance and credibility that is created by labelling may offer sufficient grounds for accepting category claims. The use of labels then needs to be plausible rather than accurate and have resonance with the interests of various participants and the broader category and cultural narratives (Granqvist et al., 2013; Lounsbury & Glynn, 2001; Martens, Jennings, & Jennings, 2007; Navis & Glynn, 2011; Santos & Eisenhardt, 2009). Moreover, as category meanings are in flux, once-popular market labels may over time become irrelevant or even stigmatized (Granqvist et al., 2013). In such instances, even actors with substantially developed activities and capabilities may wish to entirely decouple their activities from the market category by adopting other market labels or through disassociation (Granqvist et al., 2013; Vaara & Monin, 2010; Vergne, 2012).

Labels and naming are also central tools in creating connections to more legitimate and established categories as shown by the following two studies. Negro, Hannan and Fassiotto (2015) explore how category membership communicates collective market signals. They examine biodynamic and organic viticulture,

domains that each contain various codes and rules creating restrictions on the methods of wine production. Their study elaborates how novel categories create connections to successful, mature categories through labels and naming practices. They also explore the challenges of the adoption and development of new labels; for example, in terms of how producers strategically label themselves by adopting less demanding, yet related labels, as differences are hard to perceive for a general audience because the marketplace is complicated. Relatedly, studying the US feature film industry, Zhao, Ishihara and Lounsbury (2013) explore how the strategic naming of products might enhance audience attention. They found that a simple familiarity of names is not sufficient but rather 'names imbued with known reputations serve as a symbolic device that enhances audience attention' (Zhao et al., 2013, p. 1747).

Looking at the status implications of labelling, Kodeih and colleagues (2019) examine how organizations may seek to strategically categorize their products by using the labels of varying rankings. Their empirical story unveils the categorization strategies used in two rival French business schools, ESSEC and HEC, and their different strategies for positioning their Grande École programmes. ESSEC chose the MBA category, using a product-centric strategy and aiming for a higher status programme. HEC, in turn, chose an audience-centric strategy and positioned itself around its MiM programme (the Master of Science in Management), following a European tradition of management education – but selecting a lower status and emerging category. HEC sought acknowledgement as a leading member in the category whereas ESSEC associated itself with a high-status category, expecting positive spillover as a result. Accordingly, categories and their meanings were shaped and evolved as a result of relational, competitive processes of adopting particular category labels and efforts to foster evaluations for an organization's benefit (Kodeih et al., 2019).

Finally, Granqvist and Ritvala (2016) identified several drivers for how market participants

engage in and decide upon categorization through labels. The categories of nanotechnology and functional foods differed in that the nanotechnology boundaries were extremely lax whereas the functional foods category became highly regulated. By tracing the dynamics of categorization and memberships across these two settings, these authors find that strategic categorization characterizes vital categories, and that such efforts renew the category by challenging the established players and introducing new actors and meanings. But they also find that if category membership is predominantly strategic and goal-based without substantial and material foundations and an associated commitment, the category may become compromised. In this manner, overly strict category boundaries may constrain its renewal whereas overly lax boundaries and excessive strategic categorization through the strategic use of labels may lead to its demise (Granqvist & Ritvala, 2016).

To sum up, this body of research thus explores market participants' efforts to strategically guard their membership in categories, or to produce and protect a category driven by the goals and interests of certain market actors (Durand & Paolella, 2013). The majority of studies in this tradition address the strategic use of labels in such processes, while also acknowledging other language constructs.

Our review in its entirety shows that extant research has addressed the role of language in categories and categorization from a multitude of perspectives – but that it is still driven by strong assumptions and by a relatively narrow take on and use of language. For example, even though studies would mention terms such as discourse or narrative, it does not necessarily indicate that researchers would employ existing methods for discursive or narrative analysis. In addition, various forms of language intersect, overlap and interpenetrate in the empirical world in complex ways which are difficult to capture in empirical studies. Based on these issues and our review of the work to date, we next elaborate how to advance methodologically and conceptually future research on language and market categorization.

Discussion

There is a relatively substantial and rapidly growing body of research addressing the role of language in market categories and categorization processes. We begin this section by offering a synthesis of the studies that we have reviewed and by acknowledging areas for future studies. We then elaborate two emerging areas of research addressing the dynamics of language and categorization with important implications for methodology – category work and multimodality. Category work pays attention to acts of market categorization unfolding in real time, drawing on participative methodologies. Multimodality, as a broader trend (see e.g. Meyer, Höllerer, Jancsary, & van Leeuwen, 2013), prompts scholars to look beyond language to other forms of communication that are typical of market categories, including visuality. We conclude by revisiting the functions of language in categorization.

Synthesis of the existing research

Thus far, this review has shown how language is at the core of categories and how it has multiple uses and functions across different levels of analysis and the various situations for categorizing markets. Table 4 provides a detailed synthesis of existing research supporting our discussion below, as well as suggestions for future research.

Studies to date address, as we have highlighted, three particular settings for categorizing: category emergence, valuation change and strategic categorization. Empirical studies on category emergence have explored the production of meaning through language by using a widest range of language constructs and explored their interconnections, including intersections between narratives and storytelling, the framing of meanings and the use of labels. However, to date, research has been less focused on discursive approaches – despite this providing a means to address how emerging categories become legitimate and valued. In contrast, studies on valuation change have focused

Table 4. Synthesis of research to date and suggestions for future research on settings for categorization.

Synthesis		Future research	
Category emergence	Valuation change	Strategic categorization	Category maintenance
Discourse How the production of new discourses take place, how discursive connections to established and more familiar discourses a done	How discursive work removes controversies, how discourses are mobilized to assimilate with valued categories	How status hierarchies are discursively produced	How hegemonic discourses around categories are produced and maintained
Narratives, storytelling Stories producing coherent meanings, their dissemination in the media	Production of new or alternative or revitalizing old narratives, production of valued identity narratives	Production of metanarratives, dramatizing and temporalizing	Category maintenance as (re)production of success stories and prototype narratives
Frame, framing Coexistence and contestation of frames	Tradeoffs resulting from framing efforts	Developing a new frame for evaluation	Maintenance of dominant category frames; incumbent framing
Vocabularies Emergence of new vocabularies and associations	Borrowing vocabularies and symbols, blurring boundaries	Emerging interest	Gradual renewal of the category by adopting the vocabularies of subcategories
Labels Emergence and use of new labels as category signifiers; connections to discourses	Attaching the category to new or legitimate labels	Adopting labels to create beneficial symbolic associations, to make category 'exist', to occupy a niche	Dominance of established labels and leeway for regulated labels
Metaphors, analogies Potent in settings with ambiguity, e.g. labels as providing analogical reference, placing new objects in relation to familiar ones	Use of valuing and devaluing metaphors and analogies; using analogies to legitimate categories	Emerging interest	Use of metaphors and analogies to reproduce stability, category prototypes as analogies, lesser occurrence of metaphors
			Category demise How risk discourses, lack of discursive production and temporalizing discourses contribute to category demise Lack of narrative production, development of cautionary stories of a market collapse, narrative temporalizing From solution framing to problem framing: risk, harmful, thing of the past How renewal of category codes, symbols and symbolic associations becomes impossible Disassociating labels from categories Negative metaphors and analogies: references to harm and risk, temporalizing (stone age, extinct), moralizing tone (crime), generally pessimistic

predominantly on discourse and narratives, whereas the particular role of labels, metaphors and analogies is yet to be explored in further detail. Studies could look, for example, at how stigmatized or illegitimate labels might be replaced through disassociation and the adoption of new labels, and by such means enable a change in valuation. Finally, research on strategic categorization has looked particularly at the use of labels to explore actors' attempts to manipulate category meanings and boundaries. Similar to the studies on category emergence, research on strategic categorization would benefit from studying how discourses provide grounds for organizations to claim membership in emerging and established categories, or to draw category boundaries.

Category maintenance and demise

We identify two further settings to explore language dynamics and market categorization with Table 4 presenting potentially interesting topics for future research. *Category maintenance* refers to how incumbents maintain positions in a relatively stable marketplace, enabled by their embeddedness in, and dominance of, the market category. Scholars have studied category maintenance in conjunction with category emergence (Zietsma et al., 2018) and strategic categorization efforts as many such activities contribute to category maintenance (see particularly Coslor et al., 2020; Glaser et al., 2020). Maintaining established categories in many situations requires an active and continuous production of language in support of the category. Maintenance work can feature different discursive means of valorizing existing categories, or of marginalizing and stigmatizing challengers. For example, language can be used to portray categories accessible for only a selected group of actors, these including luxury categories or elite organizations (see e.g. Coslor et al., 2020). However, prior research has largely overlooked how stability is characterized by strongly established discursive genres, conventions and power relations that are reproduced through language. The way ideologies, knowledge, legacy and tradition

are narratively and discursively produced and sustained in conjunction with market categorization needs to be better understood, including how potentially subtle and covert means of maintenance take place (see also Quinn & Munir, 2017; Zietsma et al., 2018).

Future studies, we suggest, could explore category maintenance as a continuous, slow and discursively grounded phenomenon, tracing the gradual incorporation of new discourses and vocabularies over time. The way regulated labels and standards are guarded as taken-for-granted nominators and how incumbents engage in preserving the current status order may be interesting questions for further research. Studies furthermore suggest that a decline in the use of metaphors and analogies is likely to take place when a category matures (Powell & Colyvas, 2008). Future studies could explore what kind of language use indicates a mature category and whether any threats to existing categories can trigger the use of metaphors, analogies and other tropes as a means to guard the status quo.

Another crucial setting for categorization, *category demise*, has similarly received only scarce attention. Kuilman and Van Driel (2013) addressed this issue by arguing that demise can be examined by paying particular attention to category labels, whereby declining label use may also indicate category decline. We outline three situations that can lead to category demise and may in the process exhibit particular uses of language. First, a category may be construed as harmful. In this sense, the question of how risk discourses and banned labels feature in the category demise provide future research possibilities (see Hardy & Maguire, 2010). Second, categories may become obsolete, this being particularly noticeable in the case of technological product categories such as low-playing records, typewriters and film cameras. The absence of language may hasten the demise, or one may observe the production of temporalized narratives and discourses about old-fashioned, useless things of the past with a similar impact. Categories can also re-emerge as part of the domain of a dedicated hobbyist, or as part of

different categories such as antiquities. These aspects of the discursive and narrative temporalizing of categories, and the ensuing changes in their categorization over time, provide interesting paths for future studies.

Third, categories are inherently bound with moral aspects (Arjaliès & Durand, 2019; Cornelissen & Cholakova, 2019) and alongside societal changes categories may turn immoral. Research on category stigma has largely focused on successful de-stigmatization (Pedeliento et al., 2019; Siltaoja et al., 2020). But what happens if stigmatization is permanent and pushes the category into the margins of society? What kinds of discursive processes are involved, and how do categories evolve from there and may come to exist underground? Research could study particular language-related dynamics within stigmatized categories; such as for instance trophy hunting, human trafficking and slavery, or the illegal trade of drugs. Finally, it would be particularly fruitful to study category demise and category emergence in a connected manner. Examples of such cases include text management software replacing the typewriter industry; or how new toxic substances are replaced by other less harmful substances. A lead question in such settings is how do new categories create discursive and symbolic associations with the categories that they replace and are now dead, and how do they differentiate from them?

Category work

While existing studies on categorization have employed a multitude of methods, there is a void of research in tracing how categories are produced and how categorization takes place in real-time interactions. Analysis of *category work* would enable novel understanding on how categorization is conducted by multiple actors, and how this can vary temporally and across places and settings. Immersive methodologies such as ethnography are well suited to trace unfolding communication in their immediate environments, and thus would provide contextualized understandings on, for instance, how

entrepreneurs and executives position their companies and offerings towards different audiences (see also O'Connor, 2002). Workshops, meetings, trade fairs, conferences and member events are central sites in which meaning production takes place for many categories (Blanchet, 2018). Studying category work could also uncover how categorization is politically motivated, seeking to promote the interest of its proponents and selected actors involved – to shape the category meanings and their association for example through lobbying, manipulating, silencing and producing particular visual and textual connections (Edwards, 1991; Cornelissen & Cholakova, 2019).

Exploring categorization in such settings may enable understanding of real-time category work; how particular events promote or impede inclusion or exclusion in market category development (who is invited, what and whose knowledge counts, who gets access to shape official and non-official discourses, and how this work is further politically motivated beyond these settings; see e.g. Banerjee, 2012); how categorization in various discursive spaces is influenced by contextual factors (such as place, status hierarchies); and how these affect the nature and outcome of various acts of categorization. Finally, ethnographic studies could trace how acts of categorization are related to materiality, for example, how exhibits, samples, or visuals are used in defining category boundaries or claiming membership – pointing toward the value of adopting a multimodal approach to communication.

From language to communication – multimodality and categories

Language is not only about texts but also includes several forms of visual communication (Fairclough, 2005). Images are central in the construction of meaning and also involve symbolic struggles (Bourdieu, 1983). Visual text refers to communicating meaning via images rather than words, although images may contain text. Visual text then provides spatial, holistic and simultaneous representations of social

reality, while written and spoken text provides linear, additive and sequential representations (Höllerer, Jancsary, & Grafström, 2018). Although a multimodal perspective has a long tradition in semiotics, anthropology, sociology and cultural studies, it has not yet been used to a great extent in research on market categories. This is curious because market categories combine both material and abstract elements that are represented and enacted in various ways (Delmestri et al., 2020; Höllerer et al., 2018). Visuals show the materiality of the category and may thus communicate the category attributes more effectively than written text in a limited space. Furthermore, all language-related constructs elaborated in our paper have been recognized to hold visual meaning (e.g. visual analogy, visual metaphor, visual discourse) (e.g. Blanchet, 2018; Cornelissen, Oswick, Thøger Christensen & Phillips, 2008).

A social semiotic view on multimodality is a particularly promising way of understanding meaning construction holistically (Kress, 2010) and for expanding the approach from language in categorization to communicative processes more broadly. To date, some studies examining categories and language have acknowledged the importance of both visuals and text for category meanings. For instance, Blanchet (2018) shows how the category of ethical fashion was primarily constructed through visuals (signs and symbols) that communicated category boundaries and was then enforced through discursive statements. Also, Anthony and colleagues (2016) combined visual and textual materials in their study of the musical synthesizer category exploring the positioning of new products. Slavich et al. (2020) studied the molecular cuisine category, and similarly found that signalling through material artefacts played a crucial role, not only as simply functional objects but also as strategic and political signifiers in shaping category meanings.

The multimodal perspective offers further interesting possibilities to study communicative processes in categorization. Most centrally, perhaps, there is the question of how are prototypes produced and communicated through visuals

and a combination of visuals and texts? Boundaries of a category and category contrast (i.e. what is included in the category, and how it differs from other categories) can be construed both through discourse and visual imagery (e.g. artefacts, symbols, see also Jones et al., 2012). As such, it would be interesting to explore how visual symbols are used for new categories to signal their difference from the mainstream. How does the portrayal of family resemblance change visually and textually over time? How are visual and textual materials used in a restrictive sense? What is the category not about (e.g. through banning signs; see Blanchet, 2018)? In which cases are symbols more inclusive? The adoption of certain visual markers clearly shows how products are free from certain ingredients while others communicate their connections to valued ingredients and materials. A further question then is whether there are changes in the occurrence of inclusive or restrictive visuals over time, and if so, why. These types of mechanisms for inclusion and exclusion are important for category valuation, enabling further studies to examine what discursive and visual materials are used to promote valuation or valuation loss over time.

Conclusion

This review establishes that language has important functions in market categorization. Language offers tools for signifying and specifying the category – a category is made into being and into an independent entity through language by developing new vocabularies, mobilizing novel labels, narrating connections between previously disparate objects, actors and occurrences, and by modifying existing discourses. Language is central in valuing and moralizing categories – defining the ‘worth’ of the category through creating connections to established discourses. Valuation change seeks to borrow and extend positive meanings through connections, connotations and assimilation. At the same time, language is used in disassociating, for getting rid of a given category identity and by invoking connotations through adopting

new labels and discourses. In many situations, language use is strategic; language can be used to obfuscate memberships or signal multiple categories.

This body of research is still developing and we outline above but some of the many possible avenues for future research that categories research could take. Central to these further developments is our argument that category scholars become more informed of the existing traditions and methodologies of research on language, and more systematically apply these in their studies on categorization. We also advocate for a more encompassing communicative approach that also accounts for the role of real-time category work as well as visuals, making use of relevant methodologies. Such an approach provides the space for several important contributions to understanding categorization in both dynamic and stable settings.

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Appendix

Table 2. Studies on language and categorization.

Authors, year	Research question	Method, context	Language-related constructs	Key findings
1. Anthony, Nelson & Tripsas, 2016	How do firms advance different interpretations as a part of their competitive strategy in an emergent market?	Inductive, longitudinal study on the emergence of sound synthesizer category	visuals, label, vocabulary	A shared unified meaning over a label is not a necessity for category emergence: category actors may agree on some attributes of the label while other key attributes may display significant variation
2. Arjalies & Durand, 2019	How and why do market actors include or exclude normative attributes in a product category definition?	Longitudinal study on the creation of socially responsible investment (SRI) category	attributes, definitions	The development of the SRI category was characterized by a struggle over the meaning of the label. The study shows how market actors can define and enact product categories to pursue multiple purposes or moral expectations
3. Bajpai & Weber, 2017	How is the concept of privacy translated in the advert of digital communication technologies?	Analysis of public discourse and policy documents in the US	analogy, vocabulary, translation	Category change was a dynamic process whereby conceptions of privacy were connected to institutional orders of worth, offering theories, analogies and vocabularies that could be used when bringing the concept of privacy into new domains
4. Chiova, Mair & Vernis, 2019	How and under what conditions can a category sustain plural frames as it progresses into maturity?	Data-driven coding of interviews and archival data on social entrepreneurship	frame, label	The study uncovers framing mechanisms that allow a label to hold multiple frames over time. When the production of a valued label with an exclusive framing fails to develop, stakeholders may engage in inclusive reframing that allows label adoption without the need to change their frame. This allows the coexistence of divergent frames when these are construed as complementary and not adversarial
5. Coslor, Crawford & Leyshon, 2020	How do gatekeepers sort audience members through categorical assessment, monitoring and other professional practices?	Multi-sited ethnography on art as an investment	discourse	The gatekeepers' discourse shows how buyers are categorized, which either enables or hinders their access to the category. The findings thus show how socialization and conformity mechanisms are deployed through discourses
6. Delmestri & Greenwood, 2016	How does a category succeed in overcoming categorical imperative and change its status?	Longitudinal qualitative study on Grappa di Picoli	rhetoric, vocabulary, visual materials	Social valuation of a category may be changed through theorization by allusion that draws heavily on the visual, the material, and the linguistic. These authors particularly find that 'the persuasive rhetoric of visuals and the silent, unobtrusive role of material objects may be more appropriate than the use of language' in status change
7. Glaser, Krikorian Atkinson & Fiss, 2020	How can goal-based categorization enable stable market transactions?	Inductive qualitative study on online advertising industry	discourse	Examining industry discourse, the study finds that when market actors encounter idiosyncratic, ad hoc, categorization they create classificatory infrastructure that makes it possible to categorize products dynamically
8. Granqvist, Grodal & Woolley, 2013	How and why do executives use the nanotechnology label to position their firms?	Inductive case study on nanotechnology label	label, semiotics	The study shows that labelling does not on many occasions relate to the firm's actual capabilities. Rather, executives assess market category labels in terms of their ambiguity, their avoidance of the perceived credibility gaps, and the assessment of the label's signalling value. The study outlines the conditions for executives' choices for different labelling strategies (associating, hedging, disassociating)

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Table 2. (Continued)

Authors, year	Research question	Method, context	Language-related constructs	Key findings
9. Granqvist & Ritvala, 2016	What drives market participants' categorization activities during different stages of market category development?	Comparative, longitudinal case study on functional foods and nanotechnology in Finland	label	The study compares meaning creation and labelling practices throughout the development of two different categories, one with lax and the other with regulated boundaries – uncovering very different dynamics for labelling. Yet, both overly lax and overly strict boundaries may constrain category vitality and renewal
10. Hiatt & Carlos, 2019	How does the salience of different stakeholder frames shape entrepreneurs' perceptions of market opportunities and influence their market-entry strategy?	Qualitative analysis of archival data and interviews to develop understanding of the competing frames; regression analysis of founding biodiesel ventures	frame, framing	The salience of category frames promoted by different stakeholders signal market opportunity differently. E.g. dominant frames lead to less founding of firms in dissimilar and incompatible product categories, and worse performance of firms in those categories
11. Hsu & Grodal, 2015	How do market participants' changing category-related attributions decrease the scrutiny of category offerings, opening up strategic opportunities for firms?	Multi-method historical study; analysis of media discourse, print ads, product features, and references to competitors in the US light cigarette category	strategic claims	The symbolic boundary between light and full-flavour brands was produced through advertisement discourse and imagery (e.g. emphasizing high-tech imagery to highlight the scientific progress associated with light cigarettes). Also the packaging design manifested the differences between light and full-flavour brands
12. Hsu & Grodal, 2020	How do new, stigmatized categories emerge?	Longitudinal, inductive study on the changing stakeholder perceptions of the e-cigarette category in the US	attributes, codes, discourse	The use of product attributes, labels and discursive strategies that build similarity to another category can be detrimental to the valuation of a new category and transfer negative valuation from the existing category to the emerging one
13. Jones, Maoret, Mazza & Svejnova, 2012	How does a de novo category arise, and upon what institutional material do actors draw to create a de novo category?	Longitudinal, historical examination of the evolution of 'modern architecture' category, structural semiotics analysis	vocabulary, artefact code	The study shows how symbols and the symbolic associations changed over time representing the changing meanings; and connecting cultural and material changes. A new category may house multiple meanings and exemplars, allowing innovation – instead of a prototype keywords and sets of words
14. Kennedy, 2008	How do firms in an emerging market get categorized and counted?	Analysis of media data to uncover patterns of association that predict firm attention, prominence and survival	media discourse, vocabulary, label	The study is positioned on the linguistic turn in organization and management research. Shared cognitive structures for making sense of new markets emerge and are disseminated through media discourse. The discourse allows for seeing that the market exists for real, for instance by making it possible to count company populations

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Authors, year	Research question	Method, context	Language-related constructs	Key findings
15. Kennedy, Lo & Lounsbury, 2010	How does the value of conformity change with ongoing meaning construction?	Historical analysis of the development of nanotechnology	label, framing	Emergence of concrete meaning for a new label among multiple stakeholders turned nanotechnology into a useful label to gain access to research funding, reflecting the category's currency
16. Khaire, 2017	How can the commentary of intermediaries contribute to the creation of new market categories comprising undervalued goods?	Qualitative analysis of the activities of an intermediary in developing the category of independent cinema in the US	framing, narrative	The study shows how the intermediaries, through their narratives and actions, shaped and changed conventions of value by establishing criteria by which the novel category was to be identified, also founding the standards of quality
17. Khaire & Wadhvani, 2010	How are the meanings of new market categories constructed and shared? How does this process relate to the creation of criteria for valuing goods in that category?	Longitudinal case study on modern Indian art; discourse analysis and hermeneutics	discourse analysis, vocabulary	New meaning creation is a process which offers new constructions of the past historical meanings by problematizing existing institutional language, spreading new rhetoric and institutionalizing new constructs
18. Kodeih, Bouchikhi & Gauthier, 2019	How and why do competing organizations position their products in categories of varying status?	Longitudinal case study on strategic categorization of business schools	labels vocabulary, language	Organizations can use either product-centric or audience-centric strategies while communicating their offerings. The strategies either alter product features or seek to shape audience perceptions on category meaning
19. Kuilman & Van Driel, 2013	How do organizational categories disappear?	A historical case study on the categorical demise of specialized warehousing companies	labels	The study uncovers how highly legitimate label can attract a large number of organizations that do not fit with the category schema. As a result, this poor fit of organizations decreases the legitimacy of the whole category, leading to its demise
20. Lashley & Pollock, 2019	How can a core stigmatized emerging category succeed in changing its valuation by creating a public moral image?	Longitudinal qualitative study on medical marijuana	language, symbol, label, visual material	The study uncovers the role of language and rhetoric in the creation of a moral prototype. Employment of morally valued and legitimate symbols (medical symbols) in marketing and product packaging enable this
21. Lee, Hiatt & Lounsbury, 2017	What kind of tradeoffs of meanings and identities does legitimation of a new category feature?	Qualitative case study on US organic food category	label, framing	Legitimacy-seeking behaviours through labelling may lead to diluting the initial collective identity. Category boundaries can be enhanced by introducing and standardizing labels, and making them address the product rather than the producer
22. Navis & Glynn, 2010	How do identity and legitimation dynamics emerge in the new market category?	A mixed methods study on US satellite radio	linguistic frame, metaphor, label	Creative analogies enable category emergence, for instance through claiming firm affiliations. Linguistic frames give meaning to the category; they foreshadow the future, frame organizations uniquely and differentiate gradients of membership

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Table 2. (Continued)

Authors, year	Research question	Method, context	Language-related constructs	Key findings
23. Negro, Hannan & Fassiotto, 2015	How does category membership communicate collective market signals?	Mixed method study on sustainable wine production categories (biodynamic, organic)	label	The paper provides multiple contributions on the role of labels in signalling in markets. For example, vague category boundaries (sustainable wines) leads high status actors to engage with a label with clear and restrictive boundaries (biodynamic wine) as it bears signal value
24. Ozcan & Gurses, 2018	How are regulatory categories determined through the strategies and interaction of firms, regulators, and other category audiences?	Qualitative inductive study using archival data and interviews studying the creation of the dietary supplements category in US	meta-narrative, rhetorical tool, label	The paper looks at the power contests between firms and regulators during the evolution of a regulatory category. The study identifies the role of meta-narratives involving cultural values and rhetorical tools: hooking through meta-narratives, activating through rhetorical tools, particularly dramatization. Strategic use of relevant category attributions and labels in associating and disassociating with a category
25. Pedeliento, Andreini & Dalli, 2020	How does category emergence and change happen as a result of political, social, technological and economic forces?	Longitudinal socio-historical analysis on the development of the gin category	historical narrative, label	The gin category succeeded in changing its status through global diffusion of the product rather than authenticity. The status change is explained as a gradual transition of the product category from one social class to another. The change of the meanings associated with the label are central in this process
26. Quinn & Munir, 2017	How is a hybrid category constructed and employed for political advantage?	Qualitative study on impact investing organization in sub-Saharan Africa	rhetoric, label	Organizational actors perpetuated unequal power relations through strategically using the hybrid category of socially responsible impact investing as a political device, e.g. through rhetoric and labels
27. Rao, Monin & Durand, 2005	How does the erosion of categorical boundaries take place in the case of opposing category pairs?	Mixed method study on categorical boundaries of nouvelle and classical cuisine	rhetoric	The qualitative analysis shows how the cuisine categories (classical, nouvelle) relied on a set of rhetoric and codes, and how their erosion and hybridization gave rise to new categories
28. Rosa, Porac, Runser-Spanjol & Saxon, 1999	How do product markets emerge and stabilize as conceptual systems among producers and audiences?	Regression analysis of coded texts from consumer and industry publications on the minivan market	stories, label	The study grounds an argument on how product categories develop in interactions between producers and consumers, whose conceptual systems interact. Market stories establish and explain the connections among products, benefits and usage conditions. Stories trigger subsequent storytelling. A multitude of stories help to construct collective beliefs about the category boundaries. Market sensemaking therefore happens through stories, which implies that the meanings of products are shaped and maintained over time through public and private discourse
29. Siltaoja, Lähdesmäki, Granqvist, Puskas & Kurki, 2020	How does a category succeed in changing its negative valuation through boundary work?	Longitudinal qualitative study on organic farming category	discourse analysis, label, argumentation	Category meanings result from discursive changes and clarifications that define the category's symbolic boundaries. In such a process, focus on culturally valued attributes and legitimate practices is vital

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Authors, year	Research question	Method, context	Language-related constructs	Key findings
30. Slavich, Svejnova, Opazo & Patriotta, 2020	How do innovators seek to conceptualize and communicate their novel work through categorization?	Qualitative, longitudinal study on molecular cuisine category	label, semiotics, artefact	New categories are born as a result of contestation of meanings: study shows how communicative exchanges (particularly the public contestation of labels, and the deliberate use of textual, visual and material artefacts) allow meaning change
31. Vergne, 2012	What explains variation in disapproval across firms operating in contested industry categories?	Mixed method study on global arms industry	codes (textual choices) used to classify stigmatized groups	Category straddling decreases negative evaluations faced by firms. Secrecy, in another words, very low visibility both textually and visually in the media is an asset for stigmatized industries
32. Vergne & Swain, 2017	What has prevented the stabilization of the categories used to classify Bitcoin?	Mixed methods, inductive analysis of media articles on Bitcoin in the British media	label	Over 100 distinct labels are used to create associations with Bitcoin. The study identifies how inconsistent labelling is maintained across different levels of analysis, to explain the long-lasting categorical confusion
33. Weber, Heinze & Desoucey, 2008	How is a new category formed?	Longitudinal study on grass-fed cattle category	vocabulary, cultural code	The new market is created through a set of cultural codes. Codes are linguistic devices to construct what the category means, further translated into action frames and language that stakeholders can understand and find persuasive. Codes provide vocabularies for market participants, for example in terms of justifying market entry (producers) and paying a price premium (consumers)
34. Zhao, Ishihara & Lounsbury, 2013	How might strategic naming of products enhance audience attention despite the liabilities associated with category spanning?	Quantitative study on the naming of a sample of films released in the US	name	Naming is a cultural resource that can be used to gain audience attention during category spanning
35. Zietsma, Ruebottom & Slade Shantz, 2018	How is disruptive innovation avoided to maintain the status quo?	Inductive longitudinal study of the emergence of the Canadian cleantech sector	rhetoric, frames	Category maintenance can override category emergence. Established and incumbent category actors in a regime can use positive rhetoric and make (symbolic) resource commitments to extend their offerings to the emerging category while simultaneously maintaining status quo and prohibiting the establishment of a separate category