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How Chefs Advanced Molecular Gastronomy by Resisting the Label

Slavich, Barbara; Svejenova, Silviya; Opazo, M. Pilar; Patriotta, Gerardo

Document Version
Accepted author manuscript

Published in:
Organization Studies

DOI:
10.1177/0170840619835268

Publication date:
2020

License
Unspecified

Citation for published version (APA):
Slavich, B., Svejenova, S., Opazo, M. P., & Patriotta, G. (2020). Politics of Meaning in Categorizing Innovation: How Chefs Advanced Molecular Gastronomy by Resisting the Label. *Organization Studies*, *41*(2), 267-290. https://doi.org/10.1177/0170840619835268

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Politics of Meaning in Categorizing Innovation: How Chefs Advanced Molecular Gastronomy by Resisting the Label

Barbara Slavich, Silviya Svejenova Velikova, M. Pilar Opazo, and Gerardo Patriotta

Journal article (Accepted manuscript*)

Please cite this article as:
Slavich, B., Velikova, S. S., Opazo, M. P., & Patriotta, G. (2020). Politics of Meaning in Categorizing Innovation: How Chefs Advanced Molecular Gastronomy by Resisting the Label. *Organization Studies*, *41*(2), 267-290. https://doi.org/10.1177/0170840619835268

DOI: https://doi.org/10.1177/0170840619835268

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* This version of the article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the publisher's final version AKA Version of Record.

Uploaded to CBS Research Portal: February 2021

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Journal:	*Organization Studies*
Manuscript ID	OS-16-0507.R3
Manuscript Type:	Article
Keywords:	politics of meaning, Category formation, labeling, artifacts, Innovation < Topics, social semiotics
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ABSTRACT

This study examines innovators' efforts to conceptualize and communicate their novel work through categorization. Specifically, we view category formation as a controversial process of meaning making, which we theorize through the concept of 'politics of meaning' and operationalize through a social semiotics approach. By analyzing the labeling controversies underlying a new culinary style publicized as 'molecular gastronomy', we find that innovators' efforts at categorization unfold along four consecutive stages: experimenting with a new style, communicating the new style, contesting the dominant label, and legitimating the category meaning. Our study suggests that a new category's dominant label can substantially deviate from the innovators' intended denotations, yet nonetheless bring that category forward by triggering public negotiations around its meaning, which lead to categorical deepening and legitimation. By putting forward a 'politics of meaning' view on categorizing innovation, this work advances our understanding of the connection between labeling and category formation in the context of innovation.

Key words: innovation, innovators, categorization, labeling, politics of meaning, social semiotics, haute cuisine

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Stat rosa pristina nomine, nomina nuda tenemus.
Umberto Eco, The Name of the Rose

Introduction

Scholars have suggested that in order to promote innovation and make it intelligible to audiences, social actors resort to categories and labeling (Delmestri & Greenwood, 2016; Navis & Glynn, 2010). Categories are groupings of actors and objects based on their similar properties (Negro, Koçak & Hsu, 2010). They confer stability to emerging orders by including them as building blocks in extant classification systems, orienting meanings in a legitimate direction, defining rules of inclusion and boundaries, bestowing identity, and facilitating valuation (Bowker & Star, 2000; Curchod, Patriotta & Neysen, 2014; Koçak, Hannan & Hsu, 2014; Rao, Monin & Durand, 2005; Khaire & Wadhwani, 2010). Labeling is the process of giving a name to emerging phenomena based on a common set of attributes and roles (Negro, Hannan & Rao, 2011), which directs attention and helps audiences perceive an emerging pattern (Kennedy, 2008; Zhao, Ishihara & Lounsbury, 2013). Labels play a key role in the creation and functioning of categories, connecting an object with a system of explicit and implicit meanings captured by denotation and connotation (Granqvist, Grodal & Woolley, 2013). Thus, a category exists whenever the same label denotes different actors or objects in a field (Curchod et al., 2014).

Scholars examining category formation processes have shown that in certain contexts and situations innovators are able to ensure that labels agree with their intentions, as in the cases of New Nordic cuisine and nouvelle cuisine (Byrkjeflot, Strandgaard Pedersen & Svejenova, 2013; Rao, Monin, & Durand, 2003) or the Slow Food movement (van Bommel & Spicer, 2011). However, these processes are often contested (Grodal, Gotsopoulos, & Suarez, 2015; Granqvist et al., 2013; Jones, Maoret, Massa & Svejenova, 2012), at times leading to labeling inconsistencies, as in the case of bitcoin in the UK (Vergne & Swain,

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2017). For example, the variety of actors involved in stabilizing an innovation into a recognizable category – journalists, critics, analysts, and other evaluators – tend to use language that reflects their respective expertise and agendas, which might lead to a misinterpretation of the innovators' strategies and efforts (Grodal et al., 2015). Thus, far from recreating order, category formation may involve controversies over meaning and competition among multiple actors over the labeling of the new category. In such liminal or unstable zones (Kennedy & Fiss, 2013) characterized by temporary "disorder", it becomes more difficult for innovators to promote their agenda, create consensus around a label, and increase awareness of the category of which they consider themselves members.

While scholars recognize that the categorizing of innovation can be a contested process, our understanding of how innovators navigate controversies over the labels underpinning new categories - and how they create alternative labels themselves - remains limited, with some notable exceptions (e.g. Granqvist et al., 2013; Grodal & Kahl, 2017; Vergne & Swain, 2017). This is an important omission, because controversies can destabilize an innovation and hamper its legitimation and survival. Perhaps more importantly, controversies expose innovators' preferences in relation to the meaning of an innovation and how this meaning is captured in labels, and in so doing shed light on how innovators negotiate their novel ideas as they enter the public arena, progressively acquire meaning through labeling, and achieve legitimation.

In order to further understand how labeling relates to categorizing innovation, this study examines the efforts of innovators to define their novel work and make it comprehensible to audiences in the presence of competing labels. More specifically, it draws on the concept of 'politics of meaning' (Geertz, 1973) to capture the connection between the symbolic representations through which innovators give meaning to their novel work and the public arenas in which these meanings are negotiated. Empirically, we investigate the

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labeling controversies underlying category formation in the context of a new culinary style[1] that has been in the making internationally since the mid-1990s. We refer to the new style by its dominant label 'molecular gastronomy', and account for other labels put forward during the category formation. We focus primarily on the efforts of the innovators – four iconic chefs associated with the new style — to make their novel work noticed and understood in the presence of competing labels, and on their attempts to negotiate the meaning of their work with other stakeholders who act as a sounding board for their innovation efforts. We find that a new category's dominant label can substantially deviate from the innovators' intended denotations but can nonetheless move the category forward by triggering their engagement in negotiations around meaning, which expand the label's connotations and lead to categorical deepening (Grodal et al., 2015).

Our study advances work on the categorizing of innovation by drawing attention to the contested meaning-making processes underlying the formation of a new category. More specifically, it shows how communicative exchanges – in the form of public controversies over labels – allow innovators to progressively enrich the meaning associated with their novel style. In the next section, we review the relevant literature on the formation and labeling of new categories, highlighting how politics of meaning might add value to extant perspectives on categorization. We then outline the empirical setting, the methods for data collection, and the approach to data analysis. In the empirical section, we describe the categorization dynamics along four stages and subsequently discuss our findings in theoretical terms. We conclude by highlighting the theoretical contributions of our study, elaborating on the transferability of our findings, acknowledging some limitations and pointing to avenues for future research.

[1] Style is "a durable, recognizable pattern of aesthetic choices" guiding the actions of producers, which is conceptually different from a category as "an established sociocultural construction", and yet difficult to disentangle from it empirically (Godart, 2018: 106, 114).

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Theoretical background

Organizational theorists have studied categorization processes from two broad perspectives. The first depicts categorization as a cognitive process that deals with the uncertainty and ambiguity that is inherent in newly-emerging entities (Durand & Paolella, 2013; Rosa, Porac, Runser-Spanjol, & Saxon, 1999). Uncertainty stems from encountering entities that are new, unfamiliar, and often devoid of expectations. Ambiguity refers to the multiple and often contradictory stimuli associated with the emergence of new entities, which make them susceptible to multiple interpretations. From this perspective, categorizing facilitates understanding an entity in two main ways: through labels and through exemplars. By condensing an entity's components and meaning into a label, it makes a shift "from knowing that is based on direct acquaintance to knowing that is based on linguistic categories" (Weick & Sutcliffe, 2007: 57). This is achieved by relating encountered entities to exemplars or prototypes stored in the memory (Durand, Granqvist & Tyllström, 2017). A problem arises, however, in cases of innovation, for which labels and exemplars need to be identified.

The second perspective captures categorization as a social process by which categories are enacted differently depending on the social situation within which they evolve (Durand et al., 2017). It emphasizes a category's embeddedness in socio-cultural contexts, revealing influences of macro forces on categorization (Glynn & Navis, 2013; Rindova, Dalpiaz & Ravasi, 2011). From this perspective, categories are cultural resources or toolkits (Swidler, 1986) that actors draw upon in interaction to make sense of social phenomena. Their formation and labeling are influenced by norms and conventions that reflect shared understandings and thereby confer legitimacy to them (Becker, 1982; Glynn & Abzug, 2002; Glynn & Marquis, 2004, 2006; Patriotta & Hirsch, 2016). To acquire legitimacy, categories need to resonate with audiences directly and/or through interpretations by intermediaries (Durand & Khaire, 2017; Pontikes, 2012).

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Overall, these perspectives illustrate how the ambiguity and uncertainty related to emerging innovations are addressed cognitively and culturally. However, categorization is also "infused with traces of political and social work" (Bowker & Star, 2000: 49), which reflects actors' conflicting goals, interests, and ideologies, and results in struggles. Furthermore, a political understanding of categorization is not restricted to the 'politics of interest': that is, to the pursuit of immediate objectives by individual actors. Rather, it encompasses the politics of meaning (Patriotta & Spedale, 2009) – the controversies through which relevant social actors participate in collective processes of category labeling, conceptualization, and rules of inclusion. From this perspective, how a category evolves is influenced by discoursive struggles (Grodal & Kahl, 2017), political devices (Quinn & Munir, 2017), and ongoing negotiations of meanings and boundaries (Durand et al., 2017). These negotiations explain, for example, why innovations as emergent social phenomena are defined through competing categories and labels.

We distinguish this view as a political perspective on categorization. The political perspective draws on insights from both the cognitive and socio-cultural perspective, recognizing the importance of labels and exemplars from the former, and the situated and negotiated nature of categorization from the latter. Yet it also differs from them in that it pays special attention to how conflicts, choices, contestation, and persuasion over meaning are advanced by different actors at different points in time. In doing so, the politics of meaning captures the complex and dynamic connection between labeling and category formation, which is particularly important in contexts of innovation. It does so in the following three ways.

First, attention to politics of meaning, and the related political perspective, emphasizes how 'zones of ambiguity' (Bowker & Star, 2000) – the gaps between the meaning of the categorized entity and the competing labels that denote it – may trigger

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competitive processes of meaning making that influence the category's evolution. From this perspective, the innovators involved in the social construction of categories are 'sensegivers' (Gioia & Chittipeddi, 1991; Maitlis & Lawrence, 2007), who negotiate a category's meaning and labeling according to their own interests, preferences, and professional and linguistic biases (Jones et al., 2012; Logue & Clegg, 2015).

Second, categorization and labeling are communicative processes in which innovators attempt to convey meaning to target audiences (Grodal & Kahl, 2017). For example, Modern Indian art came to be a distinctive category through a sequence of related discursive processes involving problematization of the existing institutional language and rhetorical actions by multiple intermediaries and audiences (Khaire & Wadhwani, 2010). Rao et al. (2003) and Svejenova, Mazza, and Planellas (2007) discussed processes of discursive theorization by movement activists and innovators respectively, whereas Koçak et al. (2014) emphasized the role of storytelling by producers through press releases and product brochures, and by consumers through product reviews.

Third, successful categorization involves some form of synthesis or consensus that stabilizes the link between a category and its label (Wry, Lounsbury, & Glynn, 2011), whereas unsuccessful categorization is characterized by persistent labeling inconsistencies (Vergne & Swain, 2017). Scholars have noted that in this process of category evolution some labels slip out of use or remain idiosyncratic, while others are adopted, becoming part of the common knowledge and being further infused with value (Kennedy & Fiss, 2013). Furthermore, certain semantic links of a category can be lost or expanded (Grodal et al., 2015). These considerations indicate that extant research has begun to address the contested processes of meaning making underlying category formation. At the same time, they also suggest a need for furthering our understanding of how the dynamic connection between categories and labels influences the categorization of innovation.

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Methods

Research setting

The case of molecular gastronomy was selected for its potential to inform contested processes of category formation associated with innovation. We focused on four innovators who are viewed as its main exponents and primary sensegivers: Ferran Adrià (formerly of elBulli, Rosas, Spain), Grant Achatz (Alinea, Chicago, USA), Heston Blumenthal (The Fat Duck, Bray, Berkshire, UK), and Massimo Bottura (Osteria Francescana, Modena, Italy). Adrià is widely considered to be the pioneer and undisputed leader of the new style (Opazo, 2016; Svejenova et al., 2007), whereas the other chefs are important contributors who had apprenticed or collaborated with him in the development of the style (Arenós, 2011). Our primary focus was on understanding how these four prominent chefs negotiated the meaning of their novel work. Views and actions of other stakeholders involved in the controversy - media, critics and scientists - were considered insofar as they allowed us to capture and comprehend the innovators' semiotic moves.

Molecular gastronomy originated in the mid-1990s. It differs substantially from nouvelle cuisine, which praised chefs as creators and involved fresh ingredients, low inventories, service on plates and menus eaten within a short time (Rao et al., 2003). Molecular gastronomy emphasizes an ongoing quest for novelty. It is usually worked on in a dedicated lab, offers long pre-set menus, views food service as a performance, and provides diners with new and surprising experiences orchestrated to trigger emotional and intellectual responses. Its chefs are experimenters who offer innovations with new levels of playfulness, provocation, and creativity. Its signature dishes include Adrià's *Deconstructed Potato Omelet* (a reinterpretation of the components of a traditional Spanish dish), Blumenthal's *Sound of the Sea* (a dish consumed while wearing earphones to hear the sound of waves), Achatz's *Balloon, Helium, Green Apple* (a floating edible balloon, which changes the diner's voice

when inhaled), and Bottura's *Oops! I dropped the lemon tart* (a "grandmother's recipe" transformed into an abstract composition).

Data collection

We collected data referring to the period 1995-2015. We chose 1995 as a starting point for our analysis because this was when Adrià began systematically developing a new culinary style (Hamilton & Todoli, 2009) and 2015 as its end as by then the new style had become legitimated. Data on the innovators' efforts involved interviewing and observing the chefs and their collaborators, collecting artifacts that communicate the meaning of their style, and participating at events. In addition, we considered the media coverage of the new cooking style as well as relevant publications from academic databases. Data included five sources: interviews, observations, artifacts, participation at public events, and databases.

Interviews: We conducted 13 in-depth interviews with the chefs, 17 with their collaborators, and 4 with critics and scientists involved in labeling the emergent culinary category. The interviews explored the chefs' styles of cooking, the meaning they associated with them, their differences from other existing styles, and their labeling and communication.

Observations: We undertook participant observations at Adrià's research lab and the business innovation workshop in Barcelona intermittently from 2006 to 2013. This allowed us to witness practices of culinary creation and the development of new business and social ideas.

Artifacts: We collected 81 chefs' diagrams and sketches, 104 photographs of dishes and working practices, 32 videos and documentaries, and 38 books. In addition, we considered the chefs' websites to be a means of communicating their cooking styles and visited them several times.

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Participation at events: We attended 31 public talks in which the chefs were presenting their work. We also attended 16 field-configuring events (Lampel & Meyer, 2008), including culinary conferences, university courses and art exhibitions, in the domains of gastronomy, art, and, science that took place in Denmark, Germany, Italy, Spain, and the U.S. between 2007 and 2014. At these events, we looked at how exponents of the new style and category presented and discussed it.

Databases: We gathered data on labeling the new style by critics, journalists, and scientists by using the Factiva database, a leading source for press articles and business news, as well as academic databases. First, we performed database searches using the key words – such as molecular gastronomy, modernist cuisine, progressive American, experimental, techno-emotional cuisine, and multi-sensory cooking – that are used to denote the new culinary style. This resulted in 8,388 press articles over the period between 1995 and 2015. Based on these articles, we identified the prominence of different labels on a yearly basis by counting how many times each label appeared in the Factiva database, as depicted in Figure 1. In a second stage, we selected a sub-set of articles that included the label 'molecular gastronomy' (a total of 4,376), organized them in chronological order, and read through them to trace how the meaning associated with the label evolved over time.

Data analysis

We treated the data collected from various sources and at different points in time as one dataset. We initially organized our empirical material chronologically. In order to empirically investigate the politics of meaning in labeling and categorizing the new style, we adopted a social semiotic approach: that is, we focused on the innovators' intentional construction and communication of meanings through signs (Kress, 2010). Signs are motivated conjunctions of form and meaning (signifier and signified) that take the form of words, images, sounds,

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gestures, and objects. Taken together, signs constitute semiotic resources and provide the building blocks for the symbolic construction of social realities. From this perspective, categories are constructed through sign-making – the process of purposefully combining form and meaning to communicate a particular message to an intended audience. Following this approach, we viewed the innovators as 'sign-makers', and treated their communicative acts as 'semiotic moves' that express the sign-makers' interests.

In our semiotic analysis, we used the collected data over time and across sources to develop a detailed analytical timeline of the innovators' semiotic moves in the categorization process (Figure 2). We tracked the main semiotic moves and plotted them against the labeling and category formation. We discussed the timeline until a consensus emerged around the main stages and their naming and temporal bracketing. We bracketed each stage based on important shifts in semiotic moves made by the innovators, which we looked at as turning points in the category evolution. Within each stage, we identified iconic artifacts that accompanied those semiotic moves. We paid special attention to the innovators' choice of signifier (material form) and signified (meanings and interests) and their influence on category meaning (Table 1). Wherever possible, we specified the innovators' intentions through our interviews and from publicly accessible accounts (see, for example, Table 1, iconic artifact 1, Adrià's intentions behind publishing his 1998 book).

By systematically analysing and triangulating our different sources of data, we sought to arrive at an explanation of the innovators' role in category formation through politics of meaning.

Findings

Our findings suggest that the formation of molecular gastronomy as a category was a political process of meaning making that unfolded in four consecutive stages: experimenting with a

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new style, communicating the new style, contesting the dominant label, and legitimizing the category meaning. During these stages, the innovators made different semiotic moves and interacted directly or indirectly with various intermediaries (such as the media, critics, and scientists) who reacted to the labeling and categorizing of their style and contributed to category formation. Early in this process, 'molecular gastronomy' became a dominant label and was sustained over time by the media (Figure 1), whereas the category meaning deepened in the contestation and finally became legitimated by being anchored in well-known institutions. Figure 2 outlines the main stages in the innovators' efforts (their semiotic moves) in relation to labeling and category formation, and Table 1 offers an analysis of the iconic artifacts that accompanied the innovators' semiotic moves.

Insert Figure 1, Figure 2 and Table 1 about here

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1. Experimenting with a new style (1995-1999)

The innovators' semiotic moves. During this period, a new style emerged based on chefs experimenting in different locations, including Spain (Ferran Adrià), the UK (Heston Blumenthal), and Italy (Massimo Bottura). As in the case of nouvelle cuisine, these chefs drew from art as they created novel dishes, and also collaborated with scientists to introduce new ingredients (including xanthan gum, agar-agar, and seaweed) and develop novel techniques (such as spherification, sous-vide, and freeze drying), all of which was unprecedented in high-end cuisine. Their kitchens used new equipment (Thermomix, food dehydrators, and Pacojets) that they acquired from the food industry or developed for their creative needs. Adrià and Blumenthal established experimental units (culinary workshops or "labs") and used novel practices for the elaboration and codification of their work (Svejenova

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et al., 2007). Like scientists, they began recording, visualizing, and classifying their experiments (see for example Adrià's "conceptual maps" – lists of possible combinations of techniques).

The chefs also started creating meaning for their new style, mostly through books and interviews, mobilizing a professional discourse relating to cuisine as an avant-garde sector. Adrià, for example, published "The Secrets of elBulli" (Table 1, iconic artifact 1), in which he detailed his culinary philosophy and the distinctiveness of his new cuisine, defining it as conceptual avant-garde, yet suggesting it should be others to judge the style. In the late 1990s, he and Blumenthal separately began to get their ideas out to the public by giving interviews in the local Spanish or UK media about the novelty of their work, albeit without labeling their style. Acknowledgement of the new style was given momentum in a 1999 cover story run by the magazine of a major Spanish newspaper, which hailed Adrià as "*the best chef in the world*", an affirmation that had up to then been reserved to French chefs, and gave the chef's own account of his new style, offering endorsements of his innovative skills from other chefs (Table 1, iconic artifact 2). Adrià subsequently recognized that the cover story was the first time when he and his team were able to 'explain" their culinary style to the public, and get the opinion of other chefs on it.

Labeling and category formation. The local media noticed the chefs' attempts to give meaning to their new creations; however, perhaps because they were widely dispersed geographically, their new styles were not connected into a common set of attributes or an emerging pattern, which is essential for labeling and category formation (Kennedy, 2008; Negro et al., 2011; Zhao et al., 2013).

2. Communicating the new style (2000-2005)

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The innovators' semiotic moves. The chefs continued experimenting and began to communicate the novelty and distinctiveness of their style more actively. For example, a New York Times Magazine cover story brought the New Spanish cuisine to international fame, hailing it as a successor of Nouvelle Cuisine, and thus challenging French hegemony in haute cuisine. The magazine's cover featured a photo of Adrià holding his signature dish *Carrot Foam,* and quoted him stating that "*[t]here is a cuisine for the first time with new techniques and concepts*", which he reffered to as 'a *new nouvelle cuisine'* (Lubow, 2003), hinting at the significance of this innovation (Table 1, iconic artifact 3). Subsequently, Adrià expressed his regret that this label did not take off: "*Nobody really bought it, and it is only referred to in the context of Lubow's article*" (Adrià, Soler and Adrià, 2009).

During the same period, Blumenthal wrote a column entitled 'The Appliance of Science' in *The Guardian,* in which he mentioned aspects of his novel work (Table 1, iconic artifact 4). The column's title explicitly referred to the application of science to cooking, whereas the body text illustrated the novelty of the chef's creations - for example, the use of a helium balloon for altering diners' pitch of voices. Blumenthal's website included a section entitled 'Philosophy' in which he noted that "*eating is a multi-modal process (involving all the senses)*" and the senses determine "*what we taste and our emotional response to it*" (https://web.archive.org).

Labeling and category formation. From 2000 on, the 'molecular gastronomy' label began to be used in relation to Adrià and Blumenthal (see, for example, Cookson, 2000; Leake, 2000), pointing at the chefs' connection to science and their use of unusual equipment, atypical ingredients, and new techniques in the creation of highly innovative dishes. They were viewed as the style's examplars: Blumenthal was "*the latest proponent of molecular gastronomy*" and Adrià was its radical pioneer (Pigott, 2003). Bottura, who had spent time at Adrià's restaurant in 2000, was also associated with the style by the local Italian

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media, which emphasized his welcoming of the positive technologies that had allowed him to cook dishes such as his famous boiled meat in a vacuum or to concentrate flavors at very low pressures. Overall, the media began lumping and labeling these chefs together (including Achatz who had just opened his restaurant Alinea) into a category, which was "*labeled molecular gastronomy because some practitioners deconstruct and reconstruct food with the tools and temperament of biochemists*" (Bruni, 2005). The connection to science rather than to art, the latter being the differentiator of previous culinary movements (such as nouvelle and classical cuisines), became a prominent new source of differentiation.

Labeling the style and naming exemplars of it brought it into existence (Hacking, 1986), and created a momentum for it to spread and develop (Li, 2017). Anchored in science as a powerful modernization discourse, the molecular label overpowered alternative labels, such as Adrià's 'new nouvelle cuisine'. Molecular gastronomy was, however, also the name of a scientific sub-discipline created by the physicist Nicholas Kurti and physical chemist Herve This (This, 2013) in 1988 which applied scientific principles to the analysis of food transformations at a microscopic level (Roosth, 2013; Yek & Struwe, 2008). Although media articles at the start of this period also mentioned the label's original meaning, it was lost in later accounts.

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3. Contesting the dominant label (2006-2009)

The innovators' semiotic moves. The chefs collectively and individually began to publicly react to and resist the 'molecular gastronomy' label, explaining the differences among their culinary approaches. Their collective moves involved fighting what they considered a 'misnomer' together and encouraging food critics and scientists to propose alternative collective labels, while their individual moves involved maintaining their differences and proposing individual labels for each.

Collective moves. These involved publishing a manifesto, mobilizing critics and scientists to advance alternative labels, and engaging in debates on the meaning of the new cuisine (Figure 1). In 2006 Adrià, Blumenthal, Keller (an American chef) and McGee (a writer on the chemistry and history of food science) published a manifesto entitled "*Statement on the 'New Cookery'*" in a British newspaper (Table 1, iconic artifact 5). In it, they forcefully affirmed that: *"The term 'molecular gastronomy' does not describe our cooking, or indeed any style of cooking"* (Adrià, Blumenthal, Keller & McGee, 2006). Semiotically speaking, the manifesto – a genre often associated with avant-garde artistic movements – was a collective attempt to contest the molecular label and articulate the principles that guided the emerging category. It emphasized that the "new cookery" builds on "*the best that tradition has to offer*", in which "*modern thickeners, sugar substitutes, enzymes, liquid nitrogen, sous-vide, dehydration, and other nontraditional means"* are tools for making *"delicious and stimulating dishes"* and not defining features of their *cooking* (Adrià et al., 2006).

The chefs also mobilized experts (including critics and scientists who had collaborated with them and/or were part of their professional circles), encouraging them to come up with and promote alternative labels with a more accurate take on their style. Inspired to do so by Adrià, the Spanish food critic Pau Arenós coined the label 'techno-emotional cuisine' in a local newspaper article (El Periodico, 2006), and subsequently developed it in a book (Arenos, 2011). In his recollections, Adrià "*was the one that started to get all of us involved. [He kept asking] How are we calling ourselves? We must have a name! […] So I decided to write an article in 2006 with the term techno-emotional cuisine. Why? Because [in this new style] the technology is at the service of emotions and feelings*" (personal interview). In 2008, scientists Vega and Ubbink (2008) proposed the label 'science-based cuisine' and suggested that it was more about technology than science. They noted that while it was

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receiving *"significant publicity and media coverage"*, molecular gastronomy was *"mistakenly seen as a cooking style"* and *"surprisingly poorly communicated"* (Vega & Ubbink, 2008: 372, 373).

Finally, the chefs engaged in public debates. For example, in 2009 Adrià and Blumenthal, alongside Harold McGee (a co-author of the manifesto) discussed the topic "Does molecular gastronomy exist?" at the culinary conference Madrid Fusión in Spain. Achatz, who was in the audience, engaged in the dialogue through the media by publishing an article in The Atlantic (Achatz, 2009). In it, he noted that it *"seems difficult for us to move past the basic defense of science in cooking, and on to the meatier subject of what this style of cuisine is all about. ... Science is an integral part of cooking. What we (the so-called "molecular gastronomists") are doing is about far more than science: it's about crafting an experience, about creativity, and about change."*

Individual moves. The chefs resisted the dominant label individually by explaining their distinctiveness and labeling their personal styles, as well as mobilizing verbal and visual text and material artifacts as 'spokespersons'. Paradoxically, while they strived for distinctiveness, their accounts shared an attention to the importance of multiple senses and emotions. Blumenthal (Anonymous, 2006a), for instance, explained that "*[m]olecular makes it sound complicated and gastronomy makes it sound elitist*", and declared "*[m]olecular gastronomy is dead"*. Sometimes compared to Willy Wonka for his culinary wizardry (see Table 1, iconic artifact 7), he insisted that his cooking was "*not science-driven, but science-enabled*"; it was "multi-sensory" as a term as it evoked all senses (Blumenthal, 2009). Adrià posted on his restaurant's website that while *"[e]verybody seems to think that I am the […] leading light of molecular cuisine", "we have never ascribed any scientific origin to our creations, which have come about from a purely culinary quest"* (www.elbulli.com). In his publications, furthermore, he emphasized the role of emotions such as irony or joy in his

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cuisine. As Adrià's collaborator explained: "*What we have done is a sensitive cuisine […], dishes that convey emotions. People come to our restaurant to enjoy themselves and to be surprised by Ferran [Adrià]. It's an evolution from a regional cuisine to a more technical-conceptual one*" (personal interview).

In 2006, Bottura stated that cuisine is good or bad, not molecular, the latter being only an "*instrumental and distorted*" label (Anonymous, 2006b). In his restaurant's website, he defined his cuisine as "traditional seen from ten kilometers away*",* seeking to represent Italian landscapes and passion. For Bottura, "*Cooking is a collision of ideas, techniques, and cultures. It is not mathematical; it is emotional*" (https://www.osteriafrancescana.it/). Achatz, who had trained in Adrià's kitchen and opened his own restaurant, Alinea, in 2005, confirmed this feeling of discontent with the molecular label in a TV interview (stating that he hated it), and defined his cuisine as "progressive American" (Table 1, iconic artifact 6). In his first book, next to pictures of dishes, Achatz (2008: 27) stated that "*while technology and techniques are a focus of inquiry at Alinea",* cooking is an aesthetic experience consisting in finding innovative ways of using local ingredients. The chefs' individual resistance involved mobilization not only of verbal text for justification of their opposition to the label and its overly science-based meaning but also, particularly, of visual text, e.g. photos and videos that overall are more suitable than verbal text visual to communicating tacit and aesthetic aspects as well as, for mimicking direct sensory experience (Meyer, Jancsary, Höllerer, & Boxenbaum, 2018). These material artifacts exemplified the chefs' practices and acted on their behalf to convey the uniqueness of their styles to broader, non-professional audiences.

Labeling and category formation. Despite the chefs' collective and individual moves, no strong rival label emerged at this stage. However, their objections helped connect the science-based grounding of the molecular label to aesthetics, emotions, technology, multi-disciplinarity, and locality, which gradually deepened the meaning of the category (Grodal et

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al., 2015). As the molecular label became a shared reference and a 'common enemy' in the resistance, its use and 'stickiness' increased (Figure 1), and it continued to be a glue for the category and a catalyst for its further development.

4. Legitimating the category meaning (2010-2015)

The innovators' semiotic moves. The chefs' semiotic moves focused on legitimizing the deeper category meaning by revealing or conducting their work outside their kitchens, at well-known institutions such as culinary conferences, universities, galleries, and foundations with a social agenda. This constituted "*an evolution from the secrecy that traditionally dominated the chefs' kitchens to the sharing in the public arena*" (Bottura, public talk, 2015), and made the chefs better able to communicate the key semantic connections of their style, enhancing appreciation of it[2]. In so doing, the role of the chefs expanded beyond the profession to include science, art, and social change.

Culinary conferences (cuisine as craft). The chefs displayed their innovative ideas and methods at a growing number of culinary events, such as Madrid Fusion or MAD in Copenhagen. They increasingly used videos of their creations and brought samples of the objects and technologies involved in preparation of their dishes (such as siphons, envelopes, and sprays with aromas), allowing attendees to see and taste their work. At these events, they were often in "chef's whites", their traditional uniform, signaling their culinary identity, but they also acted as academics, educating the audiences with slides, pictures, and videos to convey the concepts or emotional and sensorial elements of their work.

Universities (cuisine as science). In 2010, Harvard University, in collaboration with Adrià, debuted a course and a series of public lectures called "Science and Cooking", which

[2] Since 2005, when Achatz's Alinea was inaugurated, the chefs' restaurants have consistently been in the top 20 of The World's 50 Best Restaurants ranking – three of them, Adrià, Blumenthal, and Bottura, reaching the number 1 position on one or more occasions – and all of them have received three stars, the highest culinary rating awarded by the Guide Michelin.

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brought Spanish and U.S. chefs, including Adrià and Achatz, to the classroom (Figure 2). In their lectures, the chefs used images and diagrams to clarify the role of science as a tool supporting the execution of their dishes, not only in functional but also in aesthetic and emotional terms. Becoming instructors on cooking-related scientific courses at prestigious universities allowed the chefs to convey their desired meanings to a scientific community in a scientific context, which afforded them a certain status and public recognition.

Galleries (cuisine as art). All four chefs had enjoyed artistic collaborations at previous stages, including Adrià's participation as an artist in the *documenta* contemporary art exhibition in Kassel (Germany). At this point, however, they became more proactively involved in exhibiting their work at art institutions, such as galleries, which conferred a certain artistic status on their work and their role as chefs. For example, in 2013 Bottura participated in a pioneering exhibition on the relationship between art and cuisine at the Palais des Beaux-Arts in Paris, where visitors could view some of the objects and images that inspired some of Bottura's most famous dishes (Kramer, 2013). In 2014, the Drawing Centre in New York City organized an exhibition entitled "Ferran Adrià: Notes on creativity" focusing on the chef's drawings and other forms of culinary visualizations (Table 1, iconic artifact 8).

Foundations (cuisine as a voice for social change). The chefs increasingly 'publicized' their work through the media in ways that involved social engagement and had the potential to resonate with mass audiences, beyond the niche group of 'foodies' as regular clients at the chefs' restaurants. In 2015, after a long preparatory process, Bottura created the *Food for Soul* Foundation. Its first project was a refectory for homeless people, inaugurated with meals made from leftover food from the Milan Expo 2015 (Table 1, iconic artifact 9). This was later scaled up at other locations across the globe. Through this project, Bottura

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promoted social awareness regarding cutting food waste and fostering social inclusion, and regularly invited well-known chefs (including Adrià) to work with him.

Overall, these semantic connections between the chefs at well-known institutions not only conferred legitimacy on the category and expanded the role of the chefs from culinary innovators to scientists, artists, and agents of social change: they also allowed them to appreciate their similarities, and not only their differences, which lent further support to their joint categorization: "*We are now aware of what our common values are on which we could build our shared identity, but also of our differences, which constitute our strengths"* (Bottura, public talk, 2015). Their actions gradually stabilized the category meaning beyond the initial emphasis on science.

Labeling and category formation. At this stage, a group of scientists (Myhrvold, Young, and Bilet, 2011), some of whom had worked with the chefs, launched the 'modernist cuisine' label in a lavishly illustrated book of the same name, which became the first real contender for the molecular label (Figure 1). They explained that *"[s]cience and technology are sources that can be tapped to enable new culinary inventions, but they are a means to an end rather than the final goal".* The chefs *"adopting this new approach to cooking and food disapproved of the label "molecular gastronomists." (A term preferable to many of them is "Modernist")",* Myhrvold and This (one of the creators of molecular gastronomy as a scientific sub-discipline) affirmed this in a co-authored article in the Encyclopedia Britannica (https://www.britannica.com/topic/molecular-gastronomy, undated). Adrià wrote one of the forewords for the book and appeared in a promotional video on its website (http://modernistcuisine.com/). Blumenthal endorsed it in the media, finding that it was consistent with the discourse of art and convention-breaking that characterized their cooking (Birkett, 2011). Despite the chefs' appreciation of the label and its media traction, however,

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this attempt to explain the new category as modernist – as the modernization of cuisine – did not overcome the 'stickiness' of the science myth associated with the molecular label.

Although the molecular label persisted, the more detailed category meaning was associated with craft, science, art, and social change at well-known institutions, thereby legitimizing an expanded semantic network (Grodal et al., 2015). As the controversy dwindled, a process of taking stock of the meanings generated took place. For example, the media offered a more nuanced depiction of the category, recognizing that *"chefs have come to dislike the term 'molecular gastronomy,' on the ground that it is alienating and makes what they do sound like scientific party tricks. Much of the new cooking has nothing to do with the lab"* (Lanchester, 2011). It also acknowledged that: *"[t]erms like […] "molecular gastronomy" are more popular with the media than the restaurant industry. […] Whatever you call it, scientifically advanced cooking has enabled chefs to present plates that are fun, surprising and theatrical, and create better flavours*" (Warwicker, 2014). However, even where the chefs' disapproval of the label was acknowledged, the media continued to refer to their restaurants as 'dens' or 'temples' of molecular gastronomy.

Overall, the media grew more attentive to the category's connections with aesthetics and emotions. For example, Achatz' work was compared with Jackson Pollock's art (Munshi, 2014), Adrià was called *"[a] culinary Dali*" (Smith, 2014), and Blumenthal *"the master of food as conceptual art"* (Jones, 2014). The media also acknowledged the chefs' distinctiveness: Blumenthal was a pioneer of *'multisensory gastronomy'*, and Achatz played *"with diners' concept of food"* (Bosker, 2015). Over time, the semiotic moves by the innovators enabled a deepening of category meaning and its legitimation as a distinctive category in the classification history of haute cuisine.

Discussion

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This study focused on the contested processes of meaning making by which innovators categorize their novel work and seek to make it comprehensible to audiences. We found that new categories can be proceeded with despite disagreements on labels. This is because controversies around a label gradually deepen the category (its semantic field) with new meanings. As others have done before us, we found that category formation involves ongoing redefinition in communicative exchanges (Grodal & Kahl, 2017) and categorization acts (Durand et al., 2017). However, attention to the politics of meaning in categorizing innovation shows three important differences compared with previous studies.

First, the stabilization of innovation as a category does not necessarily require consensus over a label. Rather, categorical deepening occurs through ongoing competitive claims emerging within a fragmented political arena, which foster learning processes and lead to the progressive refinement of the category. In our case, for example, unlike New Nordic Cuisine (Byrkjeflot et al., 2013), in which agreement on the style's label preceded the elaboration of its practices, the chefs developed novel practices without ever agreeing on a label. In addition, contestation of the label was not between competing styles, as with nouvelle cuisine vis-à-vis classic cuisine (Rao et al., 2005, 2003) or among factions within the same style, as in the case of modern architecture (Jones et al., 2012): rather, it involved proponents of the style in contestation with the media as the sounding board for their style. Perhaps not surprisingly, the media sought simplicity and polemic (which are better served by connecting cooking to the myth of science), while the creators insisted on having the complexity and distinctiveness of their work recognized. This being the case, while it was opposed by the chefs, the 'molecular gastronomy' label acted as a catalyst for negotiations of meaning. It forced the chefs to engage in a dialectic interaction with their intermediaries and audiences (the media, critics and scientists, and the public), to articulate what they did, to attempt to label their respective styles, and to give legitimacy to their innovations at well-

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known institutions. In this regard, controversies around meaning can be seen as an ongoing competitive process in which innovators reflect on their work, experiment with different forms of communication, and learn about how they are perceived by intermediaries and audiences, and then use this to refine their arguments and positions.

Second, our findings suggest that categorical deepening can occur through a decoupling of categories and labels. In other words, the proliferation of seemingly conflicting labels rather than an agreed-upon signifier (Li, 2017) can help stabilize a category by providing it with sufficient interpretive flexibility, which in turn permits the attachment of actors and audiences with different interests. In addition, controversies around competing labels generate creative tension, which forces the innovators to clarify the category's semantic boundaries and bring it into focus. Hence, our study extends Grodal et al.'s (2015) theoretical argument that an innovative product's label and content can stand in opposition and still bring a new category forward, leading to its deepening and increased semantic links to other categories. In our case, the label 'molecular gastronomy' seems to have stuck because it points to a powerful and differentiated legitimated myth. It incarnates the discourse of science, which provides rationale, linguistic, and material resources for meaning making. The label conveys a simple and familiar message: this approach is about "bringing science into the kitchen". Conversely, the label 'modernist cuisine' – which is preferred by some chefs – evokes the world of art and the breaking of artistic conventions. However, the novelty of cuisine as science seems to be more salient and easier for audiences to grasp as an innovation than that of cuisine as art, which has been associated with prior culinary styles (Rao et al., 2003). Our findings therefore suggest that 'mislabeling' (labeling by intermediaries and audiences in disagreement with the innovators) is not necessarily detrimental to category formation, which can be driven forward through disagreement. By contesting the 'molecular gastronomy' label, the chefs fuelled communication and media

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coverage of their styles' uniqueness, keeping the category alive and encouraging further deepening and legitimation.

Third, our findings revealed that categorization was achieved through communication processes by which innovators attempted to signal their preferred meanings to target audiences. The deliberate use of textual, visual and material artifacts in public arenas allowed the chefs to objectify their innovations, facilitating the category's legitimation (Boxenbaum, Jones, Meyer, & Svejenova, 2018; Delmestri & Greenwood, 2016; Jones, Boxenbaum & Anthony, 2013; Meyer et al., 2013). Of particularly significance was the role of signaling through material artifacts. Artifacts as physical embodiments of a category confer durability – a key element in our situation, considering the ephemeral nature of food and its preparation. Arguably, one of the strengths of this emerging culinary category was its visual and material impact, which had a significant influence on the negotiation of its attributes, features, and meaning. Our study suggests that these artifacts are not simply functional objects: they can become political agents that take part in the politics of meaning and promoting category formation. When deliberately mobilized by skillful actors, material and visual artifacts act as 'spokespersons', representing the category symbolically, embodying identities, and supporting processes of theorization and legitimation. In our case, the objects mobilized by the chefs became 'non-human actants' endowed with a capacity for ad hoc performances, and participating in the category's social construction and stabilization (Latour, 1987; Lanzara & Patriotta, 2007).

Furthermore, communication – whether it is pursued verbally and/or through material and visual artifacts – is sensitive to institutional contexts: that is, its effectiveness is influenced by legitimation processes. The chefs we studied attempted to crystallize the meaning of their work not only by anchoring it in artifacts, but also by bringing representations of their innovative cooking styles to well-known institutions, both within and

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outside the culinary field. This allowed 'displacing' tools and their representations from the chefs' home institution (the kitchen) to established societal institutions (including culinary conferences, universities, galleries, and foundations), thereby reaching wider audiences and legitimating the category in a broader institutional space. These semiotic moves allowed the chefs to assert a more comprehensive and cross-disciplinary nature for the new style. Leveraging new signs, or the same signs in a different context and with a different purpose, led to new meanings and a new state of category deepening. This suggests that innovators pursue categorization of their novel work through strategic anchoring of signs to well-known institutions (Suchman, 1995). In our case, for example, semiotic moves and iconic artifacts were connected to instituions of science, art, and the culinary profession to strengthen particular arguments, thus legitimating and conferring new meanings to the category.

Conclusion

This study offers a political perspective on categorizing innovation, one which considers how innovators engage in semiotic moves in contested social environments to convey their preferred meanings of a new category. These moves involved their labeling. During this process, the plausibility of a label is more important than its accuracy, given that labels provide traction for the category by triggering public negotiations around meanings. Through meaning-making, innovators project their view of the category into a public space, producing temporary recordings of the state of the art at the time. In communicating what they do, innovators have a political purpose: they shape the category, using available cultural, material, and social resources to influence audiences' perceptions of the innovation (Kress, 2010).

Our findings are potentially transferrable to several contexts, although more research is needed in order for the potential of the political perspective to unfold. These insights are

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especially pertinent in contexts where exemplars of style (Godart, 2018) are at least as important for category formation as products or outputs (Rosa et al., 1999). The cultural and creative industries exemplify these contexts, in which the style of the creators is important for classification of the works (such as songs, fashion collections, and buildings). In these contexts, creators seek optimal distinctiveness (Alvarez, Mazza, Strandgaard Pedersen, & Svejenova, 2005) and can contest labels that obscure their authenticity. For example, radical artistic movements have resisted mocking labels by critics, which (despite their resistance) have become their official monikers ('Impressionism', for example, was a nickname coined by a sarcastic critic who was reviewing and exhibition by impressionist artists which "grew into a lazy generalization" over time (Gay, 2008: 84), despite the existence of alternative labels). Other relevant sectors might include technology and mobility, in which products and experiences increasingly have aesthetic properties and recognizable styles, in addition to functionality (Eisenman, 2013). They can also involve intellectual endeavors such as research, especially when researchers are lumped together and labeled in schools of thought, with which they may disagree.

The insights from our work may also have implications for the study of regulatory categorization as a contest between firms and regulator, where firms try to disrupt unfavorable regulation through the use of deliberate language and labels (Ozcan & Gurses, 2018). Further, they may have some bearing in better comprehending labeling and categorization in situations of crises and scandals involving media exposure (Zavyalova, Pfarrer, Reger, & Shapiro, 2012). Similar to contexts of innovation, these situations disrupt the status quo, triggering controversies and requiring negotiation of meaning (Patriotta, Gond, & Schultz, 2011). Organizations that find themselves in such situations often engage in politics of meaning in order to shift attention away from unfavorable evaluations of their

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conduct. For example, they may deny allegations, or justify conduct by reframing the labeling and categorization of their actions in the public arena.

This study has a number of limitations that open up possibilities for further research. First, we focused on four geographically dispersed chefs' reactions to how their novel work was labeled and categorized by the media. Investigation of a greater number of chefs associated with the nascent category or of chefs from a given geographical area (such as Spain) could have provided a richer picture of the category formation or enabled the identification of different dynamics. Furthermore, our vantage point for capturing the politics of meaning was the innovators, and we only looked at intermediaries (for example, the media, critics, and scientists) in relation to the innovators' moves. Future work could provide a more balanced account of innovator-intermediary communicative exchanges and delve into how professional actors such as design studios and advertising agencies 'midwife' the creation of powerful signifiers (Li, 2017) that influence the adoption of new practices.

In addition, we considered labeling and categorization by a somewhat traditional group of intermediaries. There are more recent ones, however, such as consumers operating on social media channels who make sense of new styles, products, and experiences. Future research could explore how they are not only sensemakers who draw on their experiences, but also sensegivers of innovations (Hennion, 2007). Lastly, while our study suggested that contestation and disagreement over labeling might bring a category formation forward, our data did not allow us to investigate how much variation within the category or contestation relating to its meaning is tolerable if it is to be sustained (Lounsbury & Rao, 2004). Future research could explore this resilience threshold.

Overall, we believe that with its emphasis on interests, communication, and meaning, the political perspective on category formation proposed in this study opens up interesting possibilities for advancing research on categorizing innovation.

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References

Achatz, G. (2008). *Alinea*. Berkeley, CA: Ten Speed Press.

Achatz, G. (2009). In Madrid, defending Molecular Gastronomy. *The Atlantic*. Retrieved from https://www.theatlantic.com/health/archive/2009/03/in-madrid-defending-molecular-gastronomy/1522/

Adrià, F., Blumenthal, H., Keller, T. & McGee, H. (2006). Statement on the 'new cookery'. *The Observer, The Guardian*. Retrieved from http://www.theguardian.com/uk/2006/dec/10/foodanddrink.obsfoodmonthly

Adrià, F., Soler, J., & Adrià, A. (2009). elBulli, Historia de un sueño [DVD] RTVE. 10 Documentaries.

Alvarez, J.L., Mazza, C., Strandgaard Pedersen, J., & Svejenova, S. (2005). Shielding idiosyncrasy from isomorphic pressures: Towards optimal distinctiveness in European filmmaking. *Organization*, 12, 863–888.

Anonymous (2006a). 'Molecular gastronomy is dead': Heston speaks out. *The Observer, The Guardian*. Retrieved from https://www.theguardian.com/observer/foodmonthly/futureoffood/story/0,,1969722,00.html

Anonymous (2006b). Massimo Bottura. Il maestro Massimo Bottura, lo chef che sa fondere la tradizione con l'innovazione. *Alimentipedia*. Retrieved from http://www.alimentipedia.it/massimo-bottura.html

Arenós, P. (2011). *La cocina de los valientes*. Barcelona, Spain: S.A. Ediciones B.

Becker, H.S. (1982). *Art worlds*. Berkeley, CA: University of California Press.

Birkett, R. (2011). Modernist cuisine: 'Unparalleled in its breath and depth'. *The Guardian*. Retrieved from https://www.theguardian.com/lifeandstyle/2011/may/24/modernist-cuisine-cookbook

Blumenthal, H. (2009). *The Fat Duck Cookbook*. London, UK: Bloomsbury Publishing.

Bosker, B. (2015). A feast for the senses. *The New Yorker*. Retrieved from http://www.newyorker.com/tech/elements/multisensory-gastronomy-a-feast-for-the-senses.

Bowker, G.C. & Star, S.L. (2000). *Sorting things out: Classification and its consequences*. Cambridge, MA: The MIT Press.

Boxenbaum, E., Jones, C., Meyer, R., & Svejenova, S. (2018). Towards an articulation of the material and visual turn in organization studies. *Organization Studies*, 39, 1–20.

Brincat, I. (2015). Adrià brothers cook together for the first time in seven years at Bottura's soup kitchen. *Food and Wine Gazette*. Retrived from https://www.foodandwinegazette.com/3849

Bruni, F. (2005). Sci-fi cooking tries dealing with reality. *The New York Times*. Retrieved from https://www.nytimes.com/2005/05/11/dining/scifi-cooking-tries-dealing-with-reality.html

Byrkjeflot, H., Strandgaard Pedersen, J. & Svejenova, S. (2013). From label to practice: The process of creating new Nordic cuisine. *Journal of Culinary Science and Technology*, 11, 36–55.

Cookson, C. (2000). Cooking up with physics and chemistry. *Financial Times*. Retrieved from Factiva database.

Curchod, C., Patriotta, G., & Neysen, N. (2014). Categorization and identification: The identity work of 'business sellers' on eBay. *Human Relations*, 67, 1293–1320.

Delmestri, G. & Greenwood, R. (2016). How Cinderella became a queen: Theorizing radical status change. *Administrative Science Quarterly*, 61, 507–550.

Durand, R. & Khaire, M. (2017). Where do market categories come from and how? Distinguishing category creation from category emergence. *Journal of Management*, 43, 87–110.

Durand, R. & Paolella, L. (2013). Category stretching: Reorienting research on categories in strategy, entrepreneurship, and organization theory. *Journal of Management Studies*, 50, 1100–23.

Durand, R., Granqvist, N., & Tyllström, A. (2017). From categories to categorization: A social perspective on market categorization. In M. Lounsbury (Ed.) *From Categories to Categorization: Studies in Sociology, Organizations and Strategy at the Crossroads*. *Research in the Sociology of Organizations*, 51, 3–30. Bingley, UK: Emerald Publishing Ltd.

Eisenman, M. (2013). Understanding aesthetic innovation in the context of technological evolution. *Academy of Management Review*, 38, 332–351.Gay, P. (2008). *Modernism: The lure of heresy*. New York, NY: W. W. Norton and Company.

Geertz, C. (1973). *The interpretation of cultures*. New York, NY: Basic Books.

Gioia, D.A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12, 433–48.

Glynn, M. A., & Navis, C. (2013). Categories, identities, and cultural classification: Moving beyond a model of categorical constraint. *Journal of Management Studies*, 50, 1124–1137.

Glynn, M.A. & Marquis, C. (2006). Fred's bank: How institutional norms and individual preferences legitimate organizational names. In A. Rafaeli, & M. Pratt (Eds.), *Artifacts and organizations: Beyond mere symbolism* (pp. 223-239). Mahwah, NJ: Lawrence Erlbaum.

Glynn, M.A., & Abzug, R. (2002). Institutionalizing identity: Symbolic isomorphism and organizational names. *Academy of Management Journal*, 45, 267–280.

Glynn, M.A., & Marquis, C. (Eds). (2004). *When good names go bad: Symbolic illegitimacy in organizations*, 22. New York, NY: JAI/Elsevier Science.

Godart, F.C. (2018). Why is style not in fashion? Using the concept of "style" to understand the creative industries. *Research in the Sociology of Organizations*, 55, 103–128.

Granqvist, N., Grodal, S., & Woolley, J. (2013). Hedging your bets: Explaining executives' market labeling strategies in nanotechnology. *Organization Science,* 24, 395–413.

Grodal, S. & Kahl, S.J. (2017). The discursive perspective of market categorization: Interaction, power, and context. *Research in the Sociology of Organizations*, 51, 151–184.

Grodal, S., Gotsopoulos, A. & Suarez, F.F. (2015). The co-evolution of technologies and categories during industry emergence. *Academy of Management Review*, 40, 423–445.

Hacking, I. (1986). Making up people. In T. Heller, M. Sosna and D.W. Wellbery (Eds.), *Reconstructing individualism: autonomy, individuality, and the self in Western thought* (pp. 222–36). Stanford, CA: Stanford University Press.

Hamilton, R. & Todoli, V. (Eds). (2009). *Food for thought, thought for food.* Barcelona, Spain: Actar.

Hennion, A. (2007). Those things that hold us together: Taste and sociology. *Cultural Sociology,* 1, 97–114.

http://www.nytimes.com/2003/08/10/magazine/a-laboratory-of-taste.html?pagewanted=all

Jones, C., Boxenbaum, E. & Anthony, C. (2013). The immateriality of the material in institutional logics. *Research in the Sociology of Organizations*, 39, 51–75.

Jones, C., Maoret, M., Massa, F., & Svejenova, S. (2012). Rebels with a cause: Formation, contestation, and expansion of the de novo category 'Modern Architecture', 1870–1975. *Organization Science*, 23, 1523–1545.

Jones, J. (2014). Why cooking was the original artform – and is still the most universal. *The Guardian*. Retrieved from https://www.theguardian.com/artanddesign/jonathanjonesblog/2014/jan/03/cooking-original-artform-heston-blumenthal-rirkrit-tiravanija

Kennedy, M. T., & Fiss, P. (2013). An ontological turn in categories research: From standards of legitimacy to evidence of actuality. *Journal of Management Studies*, 50, 1138–1154.

Kennedy, M.T. (2008). Getting counted: Markets, media, and reality. *American Sociological Review*, 73, 270–295.

Khaire, M. & Wadhwani, R.D. (2010). Changing landscapes: The construction of meaning and value in a new market category – Modern Indian Art. *Academy of Management Journal*, 53, 1281–1304.

Koçak, Ö., Hannan M. T. & Hsu, G. (2014). Emergence of market orders: Audience interaction and vanguard influence. *Organization Studies*, 35, 765–790.

Kramer, J. (2013). Post-Modena. *The New Yorker*. Retrieved from http://www.newyorker.com/magazine/2013/11/04/post-modena

Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. London, UK: Abingdon Routledge.

Lampel, J., & Meyer, A.D. (2008). Field-configuring events as structuring mechanisms: How conferences, ceremonies, and trade shows constitute new technologies, industries, and markets. *Journal of Management Studies*, 45, 1025–1035.

Lanchester, J. (2011). Incredible edibles: The mad genius of "Modernist Cuisine". *The New Yorker*. Retrieved from http://www.newyorker.com/magazine/2011/03/21/incredible-edibles

Lanzara, G.F. & Patriotta, G. (2007). The institutionalization of knowledge in an automotive factory: Templates, inscriptions, and the problem of durability. *Organization Studies*, 28, 635–660.

Latour, B. (1987). *Science in action: How to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press.

Leake, J. (2000). Chefs cook up new dishes in physics lab. *The Sunday Times*. Retrieved from Factiva database.

Li, Y. (2017). Semiotic theory of institutionalization. *Academy of Management Review*, 42, 520–547.

Logue, D.M. & Clegg, S. (2015). Wikileaks and the news of the world: The political circuitry of labeling. *Journal of Management Inquiry*, 24, 394–404.

Lounsbury, M. & Rao, H. (2004). Sources of durability and change in market classifications: A study of the reconstitution of product categories in the American mutual fund industry, 1944—1985. *Social Forces*, 82, 969–999.

Lubow, A. (2003) A laboratory of Taste. *The New York Times*. Retrieved from

Maitlis, S., & Lawrence, T. (2007) Triggers and enablers of sensegiving in organizations. *Academy of Management Journal*, 50, 57–84.

Meyer, R., Jancsary, D., Höllerer, M. A., & Boxenbaum, E. (2018). The role of verbal and visual text in the process of institutionalization. *Academy of Management Review*, 43, 392—418.

Munshi, N. (2014). Michelin-starred chef Grant Achatz. *Financial Times*. Retrieved from https://www.ft.com/content/eb771654-e71f-11e3-88be-00144feabdc0

Myhrvold, N., Young, C., & Bilet, M. (2011). *Modernist cuisine: The art and science of cooking*. Bellevue, WA: The Cooking Lab.

Navis, C. & Glynn, M.A. (2010). How new market categories emerge: Temporal dynamics of legitimacy, identity, and entrepreneurship in satellite radio, 1990-2005. *Administrative Science Quarterly*, 55, 439–471.

Negro, G., Hannan, M.T. & Rao, H. (2011). Category reinterpretation and defection: Modernism and tradition in Italian winemaking. *Organizational Science*, 22, 1449–1463.

Negro, G., Koçak, Ö., & Hsu, G. (2010). Research on categories in the sociology of organizations. *Research in the Sociology of Organizations*, 31, 3–35.

Opazo, M.P. (2016). *Appetite for innovation: Creativity and change at elBulli*. New York, NY: Columbia University Press.

Ozcan, P & Gurses, R. (2018). Playing cat and mouse: Contests over regulatory categorization of dietary supplements in the United States. *Academy of Management Journal*, 61, 1789–1820.

Patriotta, G. & Hirsch, P.M. (2016). Mainstreaming innovation in art worlds: Cooperative links, conventions and amphibious artists. *Organization Studies*, 37, 867–887.

Patriotta, G. & Spedale, S. (2009). Making sense through face: Identity and social interaction in a consultancy task force. *Organization Studies*, 30, 1227–48.

Patriotta, G., Gond, J.P., & Schultz. F.A. (2011). Maintaining legitimacy: Controversies, orders of worth and public justifications. *Journal of Management Studies*, 48, 1804–1836.

Pigott, S. (2003). This sauce needs more nitrogen oxide. *The Times*. Retrieved from https://www.thetimes.co.uk/article/this-sauce-needs-more-nitrogen-oxide-wjwst7q90xm

Pontikes, E.G. (2012). Two sides of the same coin: How ambiguous classification affects multiple audiences' evaluations. *Administrative Science Quarterly*, 57, 81–118.

Quinn, Q., & Munir, K. (2017). Hybrid categories as political devices: The case of impact investing in frontier markets. *Research in the Sociology of Organizations*, 51, 113–150.

Rao, H., Monin, P. & Durand, R. (2003). Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy. *American Journal of Sociology*, 108, 795–843.

Rao, H., Monin, P. & Durand, R. (2005). Border crossing: Bricolage and the erosion of categorical boundaries in French gastronomy. *American Sociological Review*, 70, 968–991.

Rindova, V., Dalpiaz, E. & Ravasi, D. (2011). A cultural quest: A study of organizational use of cultural resources in strategy formation. *Organization Science*, 22, 413–431.

Roosth, S. (2013). Of foams and formalism: Scientific expertise and craft practice in molecular gastronomy. *American Anthropologist*, 115, 4–16.

Rosa, J.A., Porac, J.F., Runser-Spanjol, J. & Saxon, M.S. (1999). Sociocognitive dynamics in a product market. *Journal of Marketing*, 63, 64–77.

Smith, R. (2014). A culinary Dalí, delving into palettes: Ferran Adrià opens at the Drawing Center. *The New York Times.* Retrieved from https://www.nytimes.com/2014/02/14/arts/design/ferran-Adrià-opens-at-the-drawing-center.html

Suchman, M. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, 20, 571-610.

Svejenova, S., Mazza, C. & Planellas, M. (2007). Cooking up change in haute cuisine: Ferran Adrià as an institutional entrepreneur. *Journal of Organizational Behavior*, 28, 539–

561.
Swidler, A. (1986). Culture in action: symbols and strategies. *American Sociological Review*, 51, 273–86.
This, H. (2013). Molecular gastronomy is a scientific discipline, and note by note cuisine is the next culinary trend. *Flavour*, 2, 1.
van Bommel, K. & Spicer, A. (2011). Hail the snail: Hegemonic struggles in the Slow Food movement. *Organization Studies*, 32, 1717–1744.
Vega, C. & Ubbink, J. (2008). Molecular gastronomy: A food fad or science supporting innovative cuisine? *Trends in Food Science & Technology*, 19, 372–382.
Vergne, J.P. & Swain, G. (2017). Categorical anarchy in the UK? The British media's classification of bitcoin and the limits of categorization. *Research in the Sociology of Organizations*, 51, 187–222.
Warwicker, M. (2014). Kitchen science: What 'molecular cuisine' has taught us. *BBC*. Retrieved from http://www.bbc.co.uk/food/0/27243852
Weick, K.E. & Sutcliffe, K.M. (2007). *Managing the Unexpected: Resilient performance in an age of uncertain*ty. Hoboken, NJ: Wiley (2nd Revised edition).
Wry, T., Lounsbury, M., & Glynn, M.A. (2011). Legitimating nascent collective identities: Coordinating cultural entrepreneurship. *Organization Science*, 22, 449–463.
Yek, G.S. & Struwe, K. (2008). Deconstructing molecular gastronomy. *Food Technology*, 62, 35–43.
Zavyalova, A., Pfarrer, M.D., Reger, R.K., & Shapiro, D.L. (2012). Managing the message: The effects of firm actions and industry spillovers on media coverage following wrongdoing. *Academy of Management J*ournal, 55 (5), 1079–1101.
Zhao, E.Y., Ishihara, M. & Lounsbury, M. (2013). Overcoming the illegitimacy discount: Cultural entrepreneurship in the US feature film industry. *Organization Studies*, 34, 1747–1776.

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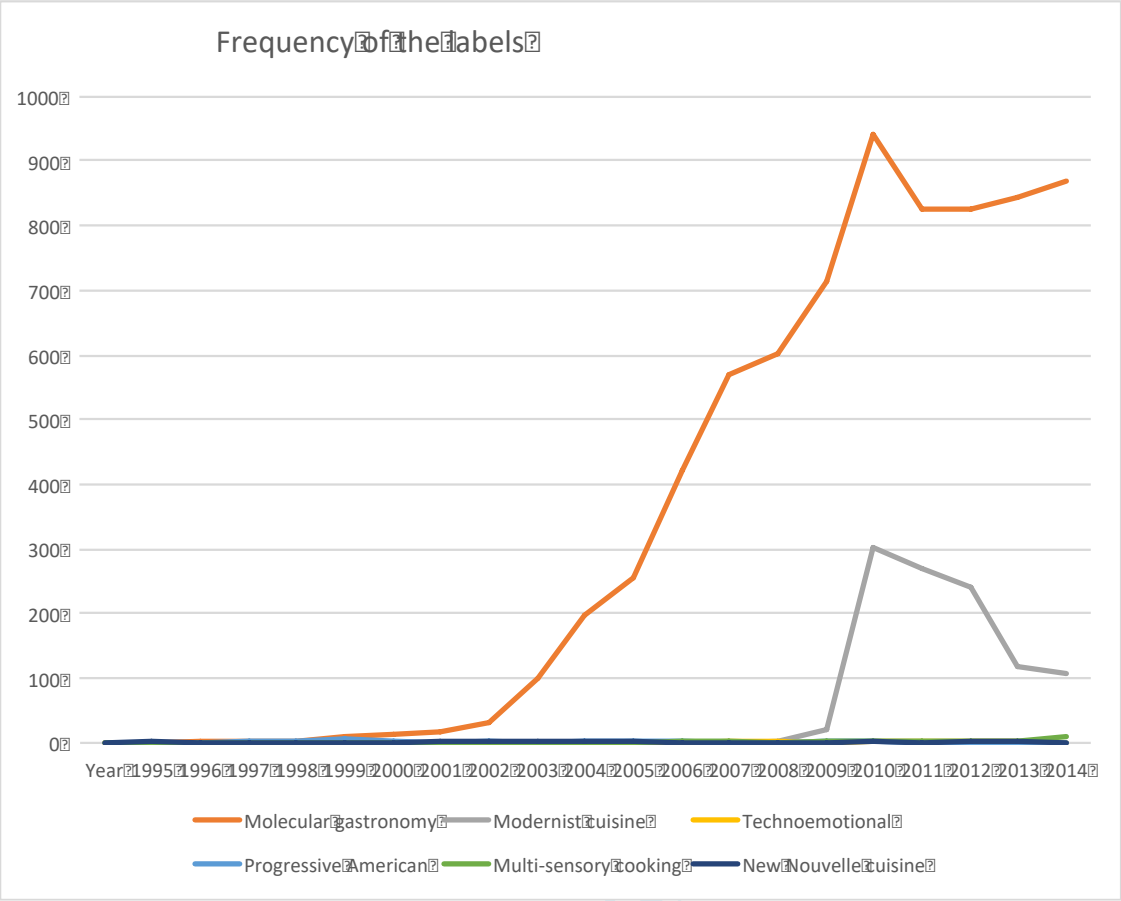
Figure 1. Number of articles per label in the media



Source: Authors' own elaboration based on Factiva searches of articles published between 1995 and 2015. A significant rise in the popularity of the label "molecular gastronomy" can be observed in 2003, the same year in which the article on Adrià's "Laboratory of Taste" was published in The New York Times (Lubow, 2003). The rise in the popularity of the modernist cuisine label is largely associated with the publication of Myhrvold, Young and Bilet's book of the same name in 2011.

Figure 2. Timeline of molecular gastronomy

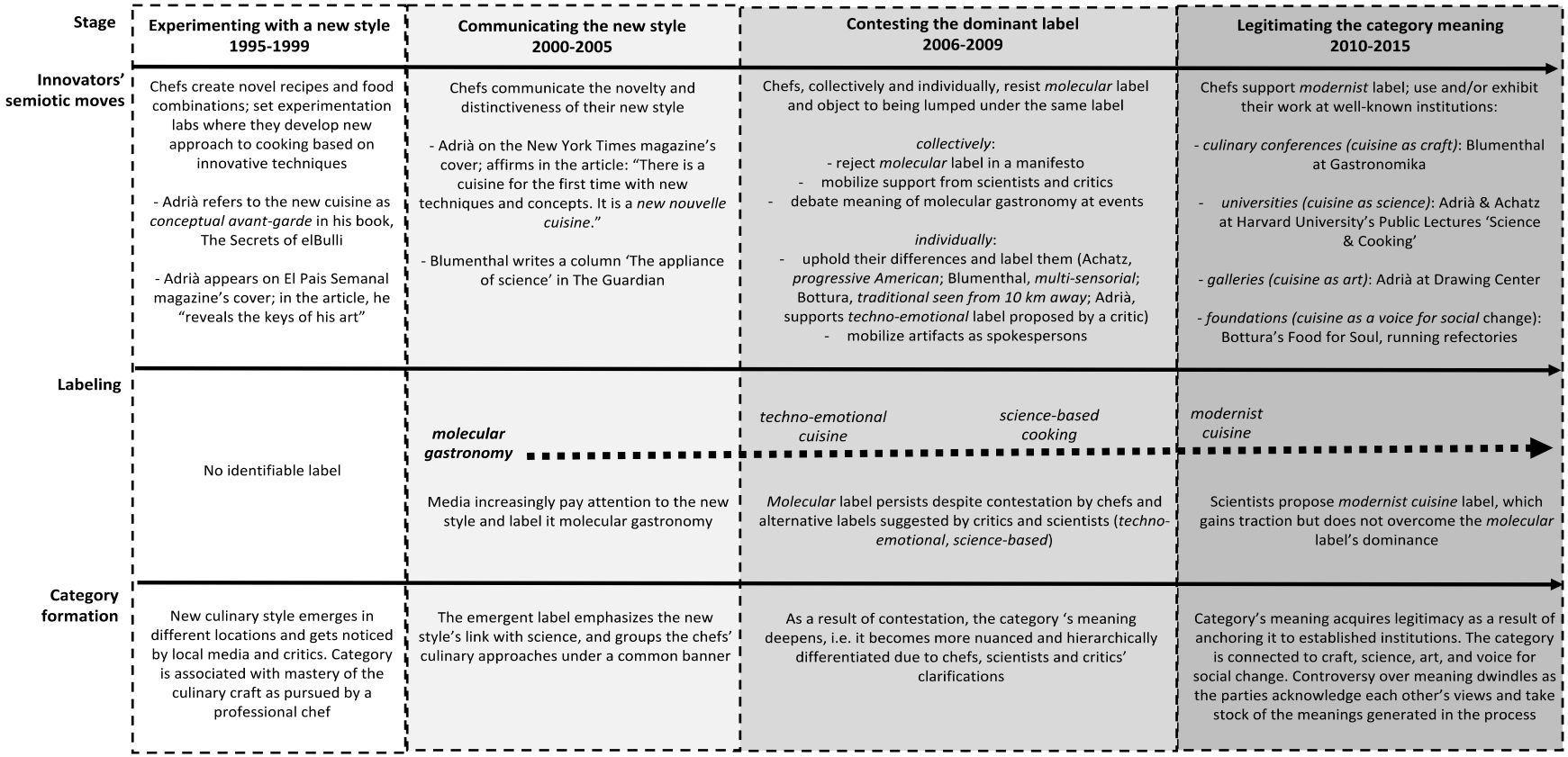
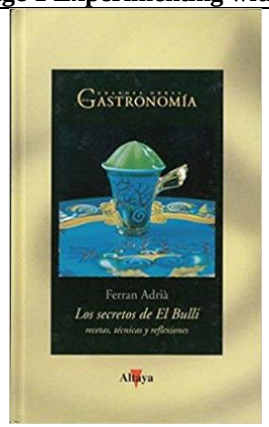


Table 1. Analysis of selected iconic artifacts accompanying the innovators' semiotic moves

	Iconic artifact	Signifier (material form) & Signified (meanings and interests)	Influence on category meaning
Stage 1 Experimenting with a new style (1995-1999)			
1	 1998, Adrià's book "The Secrets of elBulli" (in Spanish); www.amazon.es	*Signifier:* Spanish book *Signified*: Title signals the revelation of "secrets" about the chef's new style. The cover image is a 1995 signature elBulli dish "cappuccino of mint-flavored baby broad beans", which uses typical Catalan ingredients in an innovative way (what later would become known as deconstruction). The dish captures the unique features of the new style. Adria theorizes his style by reflecting on his recipes, ingredients, and philosophy. The cover image shows a green emulsion served in a rather traditional recipient. In the text, he defines his style as conceptual avant-garde and notes that "perhaps it is better that others judge the style I offer to my diners". The rationale for publishing the book is noted in *The Story of elBulli* (http://elbulli.com/historia/version_imprimible/1961-2006_en.pdf): "…our new style, forged between 1994 and 1997, began to emerge. … this new style had become consolidated and so we thought it would be useful to "explain" it, by setting down in writing the philosophy of the new style of cuisine that was being created in elBulli. The result of this need and this intention was Los secretos de El Bulli…"	The book positions the chef's innovation as primarily an avant-garde culinary endeavor
2	 1999, El Pais Semanal's cover story "Ferran Adrià: The Best Chef in	*Signifier:* Spanish newspaper magazine cover story *Signified*: Title signals Adrià's exceptional achievement and excellence (best in the world); image presents him in traditional clothes, holding traditional utensils (a pan and a spoon), hinting that he is representative of his profession; the text of the article reveals the endorsement of Adrià's innovative approach by other chefs, and Adrià reveals "the keys of his art". The significance of this cover is captured in *The Story of elBulli* (source above): "The fact that in June 1999 El País Semanal made us its cover story … meant that for the first time, our restaurant monopolized newsstands all over Spain. … this was the first time that were	The article positions the new style as significant (in excellence and novelty) in the world culinary field

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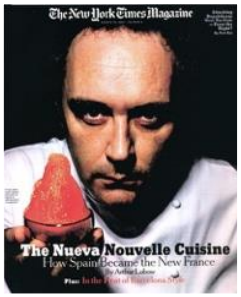
	the World" (in Spanish); http://elbulli.com/historia/index.php?lang=es&seccion=5#	able to "explain" ourselves to the public, in an article in which other chefs also gave their opinion. This … undeniably marked a great leap forward in our reputation among other professionals and amateur gastronomes.	
Stage 2 Communicating the new style (2000-2005)			
3	 2003, New York Times Magazine cover story, "La Nueva Nouvelle Cuisine: How Spain Became the New France"; http://elbulli.com/historia/index.php?lang=es&seccion=5#	*Signifier*: International newspaper magazine cover story *Signified*: Title signals a new culinary style, based in Spain, of the same significance as, in continuity of and as variation to Nouvelle cuisine; sub-title suggests new style challenges French culinary hegemony. The image depicts the chef as an experimenter, holding his signature dish – carrot air – in a novel recipient. He stares at the camera daringly and mysteriously: here is something radically new. In the article, Adrià is quoted affirming the style's novelty and proposing a name for it: "there is a cuisine for the first time with new techniques and concepts. It is a new nouvelle cuisine." As recognized by the chef, "There was an important attempt in 2003 to capture our style in a name that might manage to find consensus" (Adrià, Soler and Adrià, 2009).	The article suggests that there is a collectivity working with a new style, suggesting a possibility for a category. The meaning of this category is rooted in cuisine and emphasizes novelty, with the chef as a magician or alchemist
4	 2004, The Guardian, "How very English…"**;** https://www.theguardian.com/lifeandstyle/2004/jun/05/foodanddrink.shopping4	*Signifier*: Regular column "The appliance of science", written by Blumenthal during 2004 and 2005 in the UK-based (with international outreach) newspaper The Guardian, in which he makes connections between science and his own culinary style *Signified*: The title of the series evokes the application of science to cooking, while the title of the specific column emphasizes the British cooking tradition. The latter contrasts with the text, which points to the novelty of the chef's creations, including the use of a helium balloon to alter the pitch of diners' voices: "Alongside each glass will be a strip of mint, and each drink will be served with a balloon filled with helium and the smell of newly-cut grass. The plan is that guests will nibble the mint strip, sip the cocktail, and then breathe in some of the helium - after that, they'll be able to chat over cocktails in high-pitched voices."	The article does not include images but "paints" them with words; it reveals a novel and distinctive style, associated with science not as an end in itself but as a source of surprise
Stage 3 Contesting the dominant label (2006-2009)			

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5	 2006, The Observer (The Guardian), Statement on the 'new cookery'; https://www.theguardian.com/uk/2006/dec/10/foodanddrink.obsfoodmonthly	*Signifier*: A statement (manifesto), published in the UK-based newspaper *Signified*: A collective move that can associated with avant-garde art movements by Adrià and Blumenthal, together with another chef and Harold McGee, an author who writes about the chemistry and history of food science. It articulates the meaning and future potential of the new style of cuisine; joint signing age by Adriàme style/category.	The text is unsupported by "factual" images; it affirms the new category's distinctiveness from previous culinary styles; and emphasizes its dialogue with multiple disciplines (art, psychology, design, architecture and science)
6	 2007, SavoryTV.com, interview with Achatz; https://www.youtube.com/watch?v=yhB_Beh36ss	*Signifier:* A video by an online culinary platform, shared on Youtube, containing an interview with the chef at his restaurant *Signified:* Video's caption notes that "Award-winning chef Achatz takes you on a tour of his celebrated restaurant and explains his cooking philosophy". In the video, chef Achatz defines his style of cooking: "The cuisine of Alinea is what we call progressive American… Some people call it avant-garde, some people call it molecular gastronomy, a term which I personally hate. To me that denotes cuisine that is solely based on science and that's just not what we do. …we want your time here to be like watching a performance or experience a performance art, or being moved by walking through a modern art museum and seeing pieces that really affect you. That's what we want your experience to be at Alinea, not a science class".	The video captures the chef's disapproval of the molecular label and an attempt to label his style of cuisine by analogy with art performance, performance art, and modern art museum

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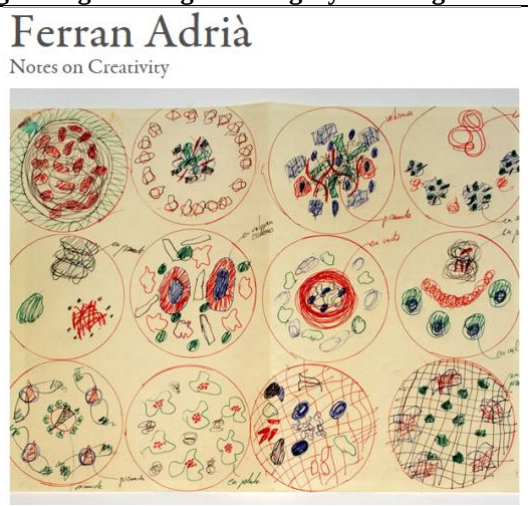
7	 2008, "Heston Blumenthal: The real Willy Wonka", Express, https://www.express.co.uk/expressyourself/39725/Heston-Blumenthal-The-real-Willy-Wonka	*Signifier:* An article in a UK-based newspaper *Signified:* The title introduces Blumenthal as 'the real Willy Wonka' for his "new molecular gastronomy creations", in reference to "Roald Dahl's maverick sweet maker" from 'Charlie and the chocolate factory'. His lab is described as surrounded by contraptions such as centrifuges and vacuum jars, as well as cookers, pots and pans. The image depicts the chefs as an eccentric experimenter, wearing headphones and staring at his tasting menu with a reassuring smile. In the interview he explains his style of cuisine as "multi-sensory" and illustrates it with his dish Sound of The Sea, "which is served up with an iPod nano in a seashell. The idea is that the fish in the dish is meant to taste better while listening to lapping waves and seagulls."	The article labels the chef's creations as molecular gastronomy, yet also acknowledges multi-sensory cuisine as the label he gives to his own style
Stage 4 Legitimating the category meaning			
8	 2014, The Drawing Center, New York, Exhibition "Ferran Adrià: Notes on Creativity", http://www.drawingcenter.org/en/drawingcenter/5/exhibitions/9/upcoming/502/ferran-adria/	Signifier: A web image and a press release pdf file available next to it on the center's web Signified: An exhibition is a public showing, usually associated with works of art. The title of the exhibition refers to creativity, which is associated with the arts. What is exhibited is the chef's visualizations and drawings. The press release to the exhibition notes that this is "the first major museum exhibition to focus on the visualization and drawing practices of master chef Ferran Adrià. The exhibition emphasizes the role of drawing in Adrià's quest to understand creativity. His complex body of work positions the medium as both a philosophical tool—used to organize and convey knowledge, meaning, and signification-—as well as a physical object—used to synthesize over twenty years of innovation in the kitchen."	Legitimation and expansion of the category in relation to the discourse of art. Event takes place in a palace known for holding art exhibitions. Chefs are artists, exhibiting work in art galleries

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9	 Today sees the opening of **Refettorio Ambrosiano** (Ambrosian Refectory), the charity initiative created by chef Massimo Bottura and **Davide Rampello**, curator of Pavilion Zero and of the Event Programming for Expo Milano 2015. The project is supported by the **Archdiocese of Milan** and **Caritas Ambrosiana**. A former theater attached to the parish of San Martino in the Greco neighborhood of Milan has been converted into a refectory for the poor and needy, in which some of the world's best chefs will prepare menus from leftover food collected daily on the exhibition site of Expo Milano 2015. 2015, Expo Milano 2015 tweet; http://www.expo2015.org/archive/en/news/the-opening-of-refettorio-ambrosiano--a-place-of-sharing-and-beauty--and-a-refuge-for-fragile-souls--interview-with-chef-massimo-bottura.html	*Signifier*: A tweet on Expo Milano 2015 describing the opening of a community kitchen by Bottura *Signified*: The tweet's main text is "The Opening of Refettorio Ambrosiano: A Place of Sharing and Beauty, and a Refuge for Fragile Souls. Interview with Chef Massimo Bottura". The picture shows a loaf of bread wrapped in a cloth and placed on a wooden table. The image evokes a return to basic food and the social function of the refectory as a place for the poor and needy. In the interview Bottura explains the initiative as follows: "The Refectory is a welcoming place for fragile souls and one of the Expo's important legacies for the city of Milan and the new generations", noting "how talent and creativity can turn throwaway food into a gourmet meal."	Molecular chefs are depicted as change agents, connecting their work and the meaning of the category to social change

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