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Réponses stratégiques de l'entreprise aux évaluations

Saverio Dave Favaron

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Réponses stratégiques de l'entreprise aux évaluations

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Abstract

The rise of digital media technology over the last decades has transformed the way in which organizations are evaluated. Judgments by experts and critics, recognized for their knowledge of evaluation criteria, appropriate weightings, and appropriate preferences, are losing their appeal to customers in many industries. Every day, on a plurality of platforms and websites, individuals disclose information about their interactions with organizations and their products or services. Compared to traditional media or professional critics, digital users and customers tend to share subjective and partial experiences, have lower concerns for accuracy and balance, and often put emphasis on the emotional content. As more customers rely on this information for their purchasing choices, firms in many industries find themselves in a position where it is hard to ignore the opinions expressed online by customers as inconsequential. In this thesis, I study how the strategies and behaviors of organizations are affected by the “democratization” of evaluation processes. The empirical setting for my analyses is the restaurant industry.

In the first chapter, I study online reviews as a source of information for restaurants, which may learn about problems, errors, or improvement opportunities. I examine what features of customer feedback make it more likely to be considered by target restaurants. With an online experiment in the French restaurant industry, I find that decision makers allocate attention to feedback that is expected to have a stronger impact on the reputation and performance of the restaurant. However, I also find evidence of a “disturbance” effect of the emotions evoked by certain feedback features. With this chapter I emphasize the importance of incorporating affective mechanisms in the study of attention, and shed light on how individual-level emotions impact organizational-level outcomes.

In the second chapter, I analyze the effects of the interaction between amateur and expert evaluations. In particular, I study the entry of an expert evaluator (i.e., *Michelin* guide) in a market, and how it pushes some organizations to make strategic choices that signal their aspirations. Drawing on literature on organizational status, I find that restaurants better rated by *Michelin* make changes to their offer with the aim to self-identify with the elite group. These changes consist in the adoption or removal of certain features displayed in their menus. In addition, by using topic modeling techniques applied to Yelp reviews, I observe that customers’ reactions to the entry of *Michelin* make restaurants more or less sensitive to the expert’s evaluations.

In the third chapter, I focus on how organizations use public responses to customers to address criticism in online settings. Recent studies are not conclusive on the reputational benefits of public responses to reviews. These responses may reduce the likelihood of future negative reviews while, at the same time, draw attention to problems. Building on existing literature on reputation and impression management, I propose that organizations may resolve this trade-off by making a strategic use of different types of verbal accounts (e.g., apology). Although public responses to customers may be counterproductive, adapting the style of public responses to the features of customer reviews might be an optimal strategy for organizations. For this study I analyze restaurant reviews in France and the United States using standard econometric models supported by supervised learning techniques.

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INTRODUCTION (FR)

Les organisations, tant privées que publiques, sont soumises à des évaluations par leurs *stakeholders* et par la société. Ces évaluations sociales constituent la base des perceptions ciblées sur l'organisation et influencent le comportement des organisations et leurs interactions avec les *stakeholders*. Au cours des dernières décennies, les pratiques d'évaluation sociale ont connu deux tendances distinctes et liées. La première tendance est une croissance généralisée de l'importance des évaluations publiques. Les classements, par exemple, sont devenus une partie importante de l'environnement des entreprises : ils ont augmenté la visibilité et la responsabilité des processus organisationnels et ont produit des effets directs et indirects sur les pratiques et les performances des organisations (Martins 2005). Une bonne position dans un classement prestigieux peut être associée à un accès plus facile aux ressources essentielles (Sauder et al. 2012), à de meilleures performances (Srivastava et al. 1997) et à des chances de survie plus élevées (Rao 1994). La deuxième tendance est l'évolution vers des formes d'évaluation en ligne, qui remettent en question les processus traditionnels de formation de la réputation (Etter et al. 2019, Orlikowski et Scott 2014). Les nouvelles technologies de l'information et de la communication ont changé la manière dont les évaluations sont produites, diffusées et accessibles (Karpik 2010). Avec la démocratisation rampante des processus d'évaluation, un grand nombre de consommateurs anonymes produisent des évaluations influentes qui sont subjectives, partielles, souvent inexactes et chargées d'émotion (Etter et al. 2019). En conséquence, les formes traditionnelles d'évaluation, produites par un petit nombre d'experts et d'organisations crédibles, ont perdu leur rôle central dans de nombreuses industries. Si de nombreuses recherches ont été menées sur les effets de la première tendance, documentant la manière dont les entreprises réagissent aux nouveaux classements influents et à la divulgation d'informations comme une incitation à la réputation (Chatterji et Toffel 2009, Espeland et Sauder 2007, Jin et Leslie 2003, Rao et al. 2003, Waguespack et Sorenson 2011), peu d'études ont analysé la deuxième tendance. Comment le comportement et les choix stratégiques des organisations sont-ils affectés par la démocratisation des processus d'évaluation? Cette question est le fondement de ma thèse.

D'un point de vue empirique, apporter des réponses significatives à cette question nécessite un cadre où les organisations ont directement vécu la transition des formes traditionnelles d'évaluation par des experts reconnus, vers une prévalence des évaluations produites par les consommateurs en ligne. C'est pourquoi j'ai décidé d'utiliser le secteur de la restauration comme cadre empirique pour ma thèse. D'un point de vue théorique, la question peut être abordée sous de multiples angles. Par conséquent, en privilégiant la théorie sur la réputation, sur le statut et sur l'attention, mon approche dans cette thèse ne se limite pas à une seule lentille théorique. Cette approche permet, je crois, d'apporter une réponse plus articulée à une question encore largement inexplorée par la recherche dans la littérature sur la gestion et la stratégie. Ma thèse est organisée en trois chapitres.

Dans le premier chapitre, co-écrit par Giada Di Stefano, j'étudie les évaluations des consommateurs en ligne comme outil de correction des pratiques organisationnelles. Si les évaluations en ligne constituent une menace sérieuse pour la réputation de l'organisation, elles représentent également une source d'information pour les organisations, qui peuvent y découvrir des problèmes, des erreurs ou des possibilités d'amélioration. Dans le cadre d'une expérience en ligne basée sur des scénarios dans le secteur de la restauration en France, dans laquelle je manipule les caractéristiques d'un hypothétique avis de consommateur, j'examine quelles caractéristiques des commentaires en ligne font qu'il est plus probable que les restaurants envisagent de modifier leurs pratiques. Je constate que les propriétaires d'entreprises accordent plus d'attention aux commentaires qui devraient avoir un impact plus fort sur l'organisation. Cependant, je trouve également des preuves d'un effet perturbateur des émotions évoquées par certaines caractéristiques du feedback, qui peut amener les décideurs à ne pas tenir compte du contenu d'un feedback qui est potentiellement précieux pour l'organisation. Dans ce chapitre, j'insiste sur l'importance d'intégrer les mécanismes affectifs dans l'étude de l'allocation de l'attention, et je mets en lumière la manière dont les émotions au niveau individuel peuvent avoir un impact sur les résultats au niveau de l'organisation.

Dans le deuxième chapitre, rédigé avec Giada Di Stefano et Rodolphe Durand, j'analyse les évaluations des experts et des consommateurs, et la manière dont leur interaction affecte le comportement des organisations évaluées. J'étudie en particulier l'entrée d'un expert évaluateur (le guide

Michelin) sur un marché, et comment les évaluations du nouvel expert poussent certaines organisations à faire des choix stratégiques qui signalent leurs aspirations. En m'appuyant sur la littérature relative au statut des organisations, je constate que les restaurants qui subissent une augmentation de statut avec l'entrée du guide Michelin modifient leur offre dans le but de s'identifier à l'élite. Ces changements consistent en l'adoption ou la suppression de certaines caractéristiques affichées dans leurs menus, telles que les références à la qualité des ingrédients ou aux techniques de cuisson. En utilisant des techniques de modélisation de sujets appliquées aux évaluations Yelp, j'observe que les réactions des consommateurs aux évaluations du guide Michelin rendent les restaurants plus ou moins sensibles aux évaluations des experts.

Dans le troisième et dernier chapitre, je me concentre sur la façon dont les organisations utilisent les réactions du public pour entrer en contact direct avec leurs clients en ligne et pour faire face aux menaces à la réputation. Les études récentes ne sont pas concluantes sur les avantages des réponses publiques pour la réputation des clients. Ces réponses peuvent réduire la probabilité de futurs avis négatifs tout en attirant l'attention sur les problèmes. En me basant sur la littérature existante sur la gestion de la réputation et de *l'impression management*, je propose que les organisations puissent résoudre ce compromis en faisant un usage stratégique de différents types de comptes rendus verbaux, tels que les excuses et les prétextes. En analysant un échantillon de 294 000 critiques et plus de 9 500 réponses publiées dans les pages Yelp des restaurants de Los Angeles, je constate que les excuses sont plus efficaces que les prétextes pour atténuer les menaces en ligne sur la réputation des restaurants. En outre, grâce à une expérience en ligne administrée aux propriétaires et aux gérants de restaurants, je trouve les premières preuves d'une utilisation stratégique potentielle de la gestion des impressions pour atténuer ces menaces. La figure 1 (page 11) montre un résumé visuel de la thèse. Si l'accent mis sur l'évaluation de l'organisation et des consommateurs est commun aux trois chapitres, dans chaque chapitre, je me concentrerai sur un type différent de réponse organisationnelle. Dans les chapitres 1 et 2, j'examine deux types de réponses indirectes : l'intention d'apporter des changements (c'est-à-dire de reconfigurer les pratiques organisationnelles) et la conformité stratégique. Dans le chapitre 3, j'examine les implications des réponses organisationnelles directes adressées aux consommateurs.

INTRODUCTION

Organizations, both private and public, are subject to evaluations by stakeholders and society. These social evaluations form the basis of perceptions targeted at the organization, and influence the behavior of organizations and their interactions with constituents. Over the past few decades, practices of social evaluation have experienced two distinct and related trends. The first trend is a generalized growth in the salience of public evaluations, with organizations, products, and services being exposed to heightened scrutiny and accountability (Espeland and Sauder 2007, Martins 2005). Rankings, for example, have become a prominent part of the business environment: they increased the visibility and accountability of organizational processes, and produced direct and indirect effects on organizational practices and performance (Martins 2005). A good position in a prestigious ranking may be associated with easier access to critical resources (Sauder et al. 2012), better performance (Srivastava et al. 1997), and higher chances of survival (Rao 1994). The second trend is the move toward online forms of evaluations, which challenged traditional processes of reputation formation (Etter et al. 2019, Orlikowski and Scott 2014). New information and communication technologies have changed the way evaluations are produced, disseminated, and accessed (Karpik 2010). With the rampant democratization of evaluation processes, a large number of anonymous consumers produce influential evaluations that are subjective, partial, often inaccurate and emotionally charged (Etter et al. 2019). As a consequence, traditional forms of evaluation, produced by a small number of experts, critics, and credible media organizations, have lost their central role in many industries. While there has been considerable research on the effects of the first trend, documenting how firms react to new influential rankings and to disclosure as a reputational incentive (Chatterji and Toffel 2009, Espeland and Sauder 2007, Jin and Leslie 2003, Rao et al. 2003, Waguespack and Sorenson 2011), limited research work has focused on the impact of the second trend. How are the behavior and the strategic choices of organizations affected by the technology-driven democratization of evaluation processes? This question is the foundation of my dissertation.

From the empirical standpoint, providing meaningful answers to this question requires a setting where organizations directly experienced the transition from traditional forms of evaluation from

recognized experts, to a prevalence of evaluations produced by consumers online. For this reason, I decided to use the restaurant industry as the empirical setting for my dissertation. From the theoretical standpoint, the question can be addressed from multiple perspectives. Therefore, by privileging theory on reputation, status, and attentional selection, my approach in this dissertation is not restricted to a single theoretical lens. This approach, I believe, allows for a more articulated answer to a question that is still largely unexplored by research in the management and strategy literature. My dissertation is organized in three chapters.

In the first chapter, co-authored by Giada Di Stefano, I study online consumer reviews as a tool to correct organizational practices. While online reviews pose a serious threat to organizational reputation, they also represent a source of information for restaurants, which may learn about problems, errors, or improvement opportunities. With a scenario-based online experiment in the French restaurant industry, in which I manipulate the features of a hypothetical consumer review, I examine what features of online feedback make it more likely to be considered by restaurants to make changes to their practices. I find that business owners allocate more attention to feedback that is expected to have a stronger impact on the organization. However, I also find evidence of a disturbance effect of the emotions evoked by certain feedback features, which may cause decision makers to disregard the content of feedback that is potentially valuable to the organization. With this chapter I emphasize the importance of incorporating affective mechanisms in the study of attention allocation, and shed light on how individual-level emotions might impact organizational-level outcomes.

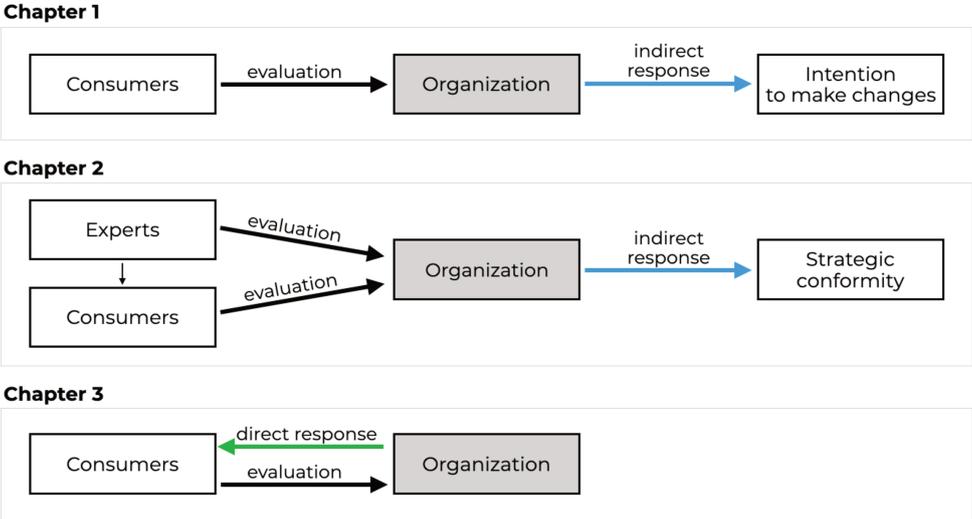
In the second chapter, coauthored by Giada Di Stefano and Rodolphe Durand, I analyze evaluations by both experts and consumers, and how their interaction affects the behavior of the organizations being rated. In particular, I study the entry of an expert evaluator (i.e., *Michelin* guide) in a market, and how the new expert's evaluations pushes some organizations to make strategic choices that signal their aspirations. Drawing on literature on organizational status, I find that restaurants that experience a status shock with the entry of *Michelin* make changes to their offer with the aim to self-identify with the elite group. These changes consist in the adoption or removal of certain features displayed in their menus, such as references to the quality of ingredients or to cooking techniques. By

using topic modeling techniques applied to Yelp reviews, I observe that consumers’ reactions to the *Michelin* guide’s evaluations make restaurants more or less sensitive to the expert’s evaluations.

In the third and final chapter, I focus on how organizations use public responses to directly engage with their customers online, and address reputational threats. Recent studies are not conclusive on the reputational benefits of public responses to customers. These responses may reduce the likelihood of future negative reviews while, at the same time, draw attention to problems. Building on existing literature on reputation and impression management, I propose that organizations may resolve this trade-off by making a strategic use of different types of verbal accounts, such as apology and excuse. Analyzing a sample of 294 thousand reviews and over 9,500 responses published on the Yelp pages of Los Angeles restaurants, I find that apologies are more effective than excuses in mitigating online threats to the reputation of restaurants. In addition, by means of an online experiment administered to restaurant owners and managers, I find initial evidence of a potential strategic use of impression management to mitigate such threats.

Figure 1 shows a visual summary of the dissertation. While the focus on the organization and consumer evaluations is common to the three chapters, in each chapter I will focus on a different type of organizational response. In Chapter 1 and 2, I examine two types of indirect responses: the intention to make changes (i.e., reconfigure organizational practices), and strategic conformity. In Chapter 3, I examine the implications of direct organizational responses addressed to consumers.

Figure 1: Structure of the dissertation



Contribution to the literature on attentional selection

When decision makers are exposed to multiple stimuli directed at their organizations, such as online reviews (Orlikowski and Scott 2014), crowdsourced suggestions (Piezunka and Dahlander 2015), or comments in a discussion forum (Haas et al. 2015), they selectively allocate attention only to a portion of the stimuli they receive. Attentional selection, the “outcome of automatic or intentional attentional processes that result in focusing attention on selective stimuli or responses to the exclusion of others” (Ocasio 2011, p. 1289), is a direct consequence of information overload and the finite attention of individuals (Cyert and March 1963, Dean and Webb 2011). What determines which stimuli receive attention? The prior literature has identified a number of potential drivers of attentional selection such as the characteristics of the providers of information (Hansen and Haas 2001), features of the stimuli (Haas et al. 2015), perceived urgency (Sullivan 2010) or familiarity with the problem at hand (Piezunka and Dahlander 2015). While these studies provide valuable insights on the mechanisms of attentional selection, they assume that decision makers will purposefully direct attention on the basis of rational (cost-benefit) or cognitive processes. Surprisingly, however, emotions are not considered for their influence on the assessment by decision makers – a portrayal that is clearly incomplete based on what theory (e.g., Ashkanasy et al. 2017) and anecdotal evidence suggest.

With the study presented in Chapter 1, I contribute to existing literature on attentional selection by suggesting an important role of emotions, and the affective dimension in general, in driving the process of attentional selection. In the context of online reviews from customers, restaurant owners and managers declare to allocate attention to online feedback on the basis of rational considerations on its perceived impact on the organization. However, I also find evidence of a significant effect of the emotions evoked by certain feedback features in driving their attention process. In particular, when feedback triggers an overwhelming feeling of anger in the decision maker, I observe the choice to disregard feedback regardless of its consequences for the organization. This finding indicates how analytical considerations and emotional reactions interact and compete to explain attention allocation, and emphasizes the importance of incorporating affective mechanisms in the study of attention. By uncovering circumstances in which emotions take over, pushing the decision maker to act against the

best interest of the organization, I also shed light on how individual-level emotions might impact organizational-level outcomes (Ashkanasy et al. 2017, Elfenbein 2007, Huy 2012).

While the resulting effects may be exacerbated by the specific nature of online customer feedback (often emotionally charged) and the characteristics of the recipients (small organizations, with a limited distance between individual and organizational level) I believe these findings could be extended to other settings. For instance, one may think about CEOs overreacting to feedback on social media or at public events. In these situations, emotional reactions by key decision makers may produce tangible effects on the organization, such as damaging its reputation or affecting its stock price. In this regard, my work could potentially connect with research on top management teams, which has been studying the impact of emotions and dispositions of top managers on their decisions, and the performance of their organizations (Chatterjee and Hambrick 2007, Hayward and Hambrick 1997, Wade O'Reilly and Pollock 2006).

Contribution to the literature on status and conformity

Organizational scholars have devoted substantial attention to the concept of status, which is defined as the position occupied by an actor in a social hierarchy (Askin and Bothner 2016, Piazza and Castellucci 2014, Piezunka et al. 2018, Podolny 1993, Sorenson 2014). High-status firms command higher prices, face lower costs, obtain easier access to resources, and enjoy greater freedom to deviate from norms (Benjamin and Podolny 1999, Phillips and Zuckerman 2001, Podolny 1993, Sauder et al. 2012). In most of prior studies, once high-status is achieved, the associated benefits are expected to automatically accrue to actors, thus making status self-reinforcing, and status positions more difficult to change (Gould 2002, Malter 2014, Merton 1968). This conceptualization of status implies that high-status firms should not feel the need to take actions to secure newly acquired positions.

In the second chapter of this dissertation, building on recent studies proposing a dynamic view of status hierarchies (Askin and Bothner 2016, Bowers et al. 2017), I challenge this assumption. I propose that a status increase actually creates pressures on producers to change their self-presentation so as to make sure it conforms to what they believe audiences expect from high-status actors. What I find, in a

sample for Washington D.C. restaurants, is consistent with this argument. I observe menu changes that resemble genuine attempts of restaurants to be perceived as worthy members of the elite, and to conform to what they believe audiences expect from high-status restaurants. In addition, I observe that when organizations are exposed to increased scrutiny by consumers, as a reaction to the status increase, conformity may be enhanced. With this study, I contribute to a little understood area of status research, which is the agentic reaction of actors following a status change. In particular, the study sheds light on the active participation of organizations at incarnating the *ethos* of the high-status group (Goffman 1959, Jourdan et al. 2017). High status organizations do not merely exploit the opportunities provided by higher status, but they operate changes to align their operations and identity with their perception of what elite status entails. As such, and in combination with the catalytic action of buyers, the study provides a different view on how status dynamics are activated.

Furthermore, this study contributes to research on organizational conformity (Durand et al. 2007, Phillips and Zuckerman 2001). Conformity to the ethos of the high-status group can be interpreted as an attempt by the organization to adhere to norms, in order to be perceived as a worthy member of the elite. This, to some extent, runs contrary prior correlational evidence that shows a higher propensity of high-status players to deviate from norms (Phillips and Zuckerman 2001). In general, my dissertation adds to recent work on the strategic use of conformity (Durand and Kremp 2016, Kim and Jensen 2011).

Contribution to the literature on reputation

One of the most tangible effects on organizations of the rise of digital communication technologies is the substantial change in processes of reputation formation (Etter et al. 2019). Until recently, the reputation of organizations was mainly shaped by legitimate news media organizations, producing evaluations and rankings. Due to their structural position and uncontested credibility, these organizations shaped collective judgements to the point that organizational reputation has been frequently equated with media reputation (Zavyalova et al. 2012). Digital technologies have transformed the process of reputation formation, as members of organizational audiences now play an active role

in disseminating evaluations and *de facto* shaping organizational reputation. With new evaluations about products, services, and experiences being produced in real time on multiple online sites, a key challenge for organizations is to correct differences between what is perceived by the public and what is desired to be perceived (Leary and Kowalski 1990). What tools are available to organizations to mitigate threats to reputation in this new landscape? Are impression management strategies traditionally used to address consumer complaints as effective to address online reviews?

These questions have received incomplete answers by strategy and management scholars. Public responses to online reviewers have been proposed as an effective tool to manage online reputation (Proserpio and Zervas 2017). These responses, usually called management responses, may signal to potential customers that the organization is willing to address wrongdoing and that it *cares* about its clients. At the same time, however, management responses may draw excessive unwanted attention to problems (Wang et al. 2016), may be interpreted as defensive (Ashforth and Gibbs 1990), and may lead to a higher likelihood for complainers to express their dissatisfaction (Chevalier et al. 2018, Gans et al. 2017). In the third chapter of my dissertation, through the analysis of online reviews and management responses posted on Yelp, I contribute to the ongoing debate on the effectiveness of public organizational responses, and provide new answers to the aforementioned questions. I integrate theory on impression management and suggest that the effectiveness of public responses is tightly linked to the style of responses, an aspect that has not yet received attention by scholars. Initial evidence presented in Chapter 3 indicates that some verbal accounts (i.e., apology) may be more effective than others (i.e., excuses) in mitigating online threats to reputation. Also, the style of an organizational response appears to be chosen to better match the type of threat faced by the organization. Overall, these results add to the emerging research on the new reputation dynamics in the *digital age* of social media interactions (Etter et al. 2019, Orlikowski and Scott 2014).

In Table 1, I provide a summary of the studies presented in each chapter of this dissertation.

Table 1: Summary of the three chapters

	Chapter 1 <i>Examining attentional selection in the context of online customer feedback</i>	Chapter 2 <i>Organizational responses to status shocks</i>	Chapter 3 <i>Addressing online threats to organizational reputation with apologies and excuses</i>
Research Question(s)	Which features of online customer feedback make a decision maker more likely to pay attention to it? What are the drivers of attention?	How do organizations react to positive status shocks?	Are common impression management tactics effective to mitigate online threats to reputation?
Methods	Scenario-based online experiment (supported by qualitative exploration)	Natural experiment (diff-in-diff) (supported by topic modeling)	Analysis of archival data (supported by textual analysis/machine learning)
Main Findings	Decision makers pay more attention to feedback that is less negative, longer and more detailed, and about peripheral components of a service offering. The main driver of attention is the perceived impact of feedback on the organization, but the emotions triggered by some features of feedback interfere with analytical considerations.	Organizations that experience a positive status shock make observable changes to their offer with the aim to self-identify with the high-status group. Consumers' reactions to an expert evaluation (that determines the status shock) make restaurants more or less sensitive to the expert's evaluations.	Organizations are more likely to use public responses to address more negative consumer evaluations. Apologies are more effective than excuses in mitigating the online threat posed by consumer reviews. Initial evidence suggests that apologies are used strategically to address more manageable violations.
Contributions	Complement literature on ratings, by showing the impact of ratings on (the intention to perform) substantive organizational changes. Emphasize the role of affective mechanisms in the study of attention. Shed light on the connections between individual and organizational level of analysis, within the context of attentional selection.	Integrate literature on the agentic reaction of organizations after a status change, by showing the active participation of organizations at incarnating the <i>etbos</i> of the status position. Add to literature on organizational conformity, and the strategic use of conformity, providing evidence of higher conformity by high-status actors.	Shed light on the role of impression management tactics for managing online threats to reputation. Add empirical evidence to recent theoretical frameworks on the impact of online evaluations, and the management of reputation in the <i>digital age</i> .

CHAPTER 1: Examining attentional selection in the context of online customer feedback

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INTRODUCTION

Thanks to advances in information technology, our decisions as customers are increasingly informed by online customer feedback – i.e., unsolicited reviews published on the Internet by customers intending to evaluate the products and/or services provided by organizations. Nowadays we turn to the opinion of the crowd in making relatively inconsequential choices like where to eat or which movie to go to, but also in deciding which doctor we should consult with or which job we should apply to. As the number of industries not affected by online feedback continues to shrink (Fourcade and Healy 2017), and the volume of online reviews generated each day continues to grow (Botelho 2017, Olson and Waguespack 2014), organizations find themselves in a position where it is hard to ignore the opinions customers express online as inconsequential. For instance, in the restaurant industry, where customers increasingly rely on online feedback for their purchasing choices (Simonson and Rosen 2014), a one-star decrease in Yelp ratings has been shown to lead, on average, to a 5% to 9% reduction in revenues (Luca 2016). As a result, restaurants are expected to pay attention to reviews (ReviewTrackers 2018).

Human attention is, however, a finite resource. This implies that decision makers cannot consider and thoroughly evaluate all feedback directed toward their organization. Rather, they automatically or intentionally focus their attention on selective stimuli (Ocasio 2011). This view is supported by research conducted in different settings (Bouquet and Birkinshaw 2008, Hansen and Haas 2001, Hoffman and Ocasio 2001, Greve 2008), which also suggests that as feedback increases, the portion of suggestions that receive organizational attention decreases (Piezunka and Dahlander 2015). In this paper we contribute to this literature by *identifying which features of online customer feedback make a decision maker more likely to pay attention to it, and why this is the case.*

In line with previous studies (van Knippenberg et al. 2015), we expect decision makers to pay attention to online customer feedback based on the extent to which such feedback is consequential for

their organization. According to research in this domain, decision makers engage in considerations about expected benefits and costs of attending to stimuli (Haas et al. 2015). They direct their attention where it seems most needed (Sullivan 2010, Stevens et al. 2015). And, as the amount of feedback increases, they tend to filter out distant suggestions to increase their efficiency at handling a large variety of stimuli (Piezunka and Dahlander 2015). Our findings corroborate these studies by showing that the expected consequences that feedback has on an organization are important drivers of attention allocation for its key decision makers. However, we also complement prior work by suggesting that when online reviews generate a strong emotional reaction in their recipients, decision makers will discard feedback, even the highly consequential one. Our emphasis on emotional reactions as another mechanism behind attention allocation stems from a recent, but growing research stream in strategic management (Ashkanasy et al. 2017, Hodgkinson and Healey 2011, Huy 2011), according to which emotions are “integral to the very nature of cognition, infusing reasoning, learning, decision making, and action” (Hodgkinson and Healey 2011, p. 1503). This view builds in turn on a solid tradition in psychology (Lerner et al. 2015), neuroscience (Phelps et al. 2014), and decision theory (Loewenstein et al. 2015), according to which emotions triggered at the moment of decision making have the potential, under certain circumstances, to override cognitive processing and deliberative decision-making altogether (Loewenstein and Lerner 2003). In line with these studies, we argue that emotions can act like a “disturbance” factor on the processing of feedback. In particular, we argue that when feedback triggers a strong feeling of anger in the decision maker, such a strong emotional reaction will take over and decision makers will end up discarding also the feedback they expect to be consequential for the organization.

For this paper we focus on the restaurant industry, where the phenomenon of online customer feedback is well established. We start by theorizing about the role that some specific features of feedback play in attracting or diverting the attention of decision makers, based on their expected consequences on the organization, as well as on the emotions they trigger in the decision maker. We complement extant theory with qualitative insights generated through a series of exploratory interviews with chefs across France, Italy, and the United States. The result is a set of hypotheses, which we then

test by means of a scenario-based experiment involving chefs working for around 200 restaurants in France. By running our scenario-based experiment with real industry players, we are able to combine the inference power of a randomized experiment with the external validity of a field study.

We believe our study makes several contributions. First, we study a particular type of feedback that is becoming an inescapable source of information for individuals and organizations in many industries. In particular, we are among the first to provide a glimpse of how and when organizations make use of the information in online reviews. Extant literature in this domain has predominantly examined how managers respond to customer complaints, which arguably provide indications about reputation and impression management tactics, but say less about substantial efforts undertaken by organizations to use the information for actual strategic changes (Conlon and Murray 1996, Proserpio and Zervas 2017, Wang et al. 2016, Wang and Chaudry 2018). Second, we extend previous research that examines how organizations allocate attentions to problems, issues or feedback in general (Haas et al. 2015, Piezunka and Dahlander 2015, Stevens et al 2015, Sullivan 2010). By uncovering the interplay of analytical considerations and emotional reactions, we enrich prior theory by bringing in a whole new set of mechanisms behind attentional selection. Third, and related to this emphasis on emotions, our work provides a better understanding of the circumstances under which individual-level emotions can have an impact on organizational-level outcomes (Ashkanasy et al. 2017, Elfenbein 2007, Huy 2012). By uncovering the circumstances under which emotions take over and push the decision maker to change course of action, we shed light on the effect that the emotional reactions of individual decision makers have on the entire organization.

THEORETICAL FRAMEWORK

Our interest in this paper is to examine attentional selection in the context of the growing amount of online feedback organizations receive from customers. Organizations have always been exposed to a variety of stimuli from external sources (e.g., customers, but also suppliers, competitors, etc.), way before the advent of review websites. Still, there are at least three features that set online customer feedback apart from the other types of stimuli organizations receive. First, online customer feedback is

public. Once a review is published online, the “target” firm is only one of the many actors that have access to it. Existing and potential customers, but also competitors and other actors inside and outside the organization and the industry, are all part of the broader audience the reviewer is, more or less consciously, talking to. Publicity grants this type of feedback the ability to have a strong impact on the organization, but it is also a potential source of emotional involvement, as it implies that each comment received is simply impossible to ignore. Second, online customer feedback is *amateurish*, as it consists of opinions expressed from laypersons who self-select into the role of evaluators (Botelho 2017). The non-professional nature of online reviews may induce decision makers to question the credibility of the feedback provider, thus making feedback more difficult to accept (Brett and Atwater 2001). Once again, emotional considerations may kick in. Third, online customer feedback is *unsolicited*. Online reviews arrive “via slingshot without warning, respite, regulation, or accountability” (Orlikowski and Scott 2014, p. 889) – a feature that differentiates them from feedback elicited on purpose by organizations (Piezunka and Dahlander 2015, Nambisan and Baron 2010). Such an uncontrolled and unsolicited stream of feedback exposes decision makers to a multitude of emotional triggers they cannot anticipate or avoid. Going through industry blogs in the restaurant industry, it is not uncommon to read posts like the following: “*Negative reviews online, I don't know about any of you, but for me (and others I know up here) they are so hard to deal with.*” Or even: “*When you're working for someone else and you read a bad review, you only feel kind of responsible. But when it's your own place, it very quickly turns sour—you feel like someone has insulted your family member or your child.*”

Taken together, these considerations suggest that online customer feedback has the potential to impact an organization because of its consequences on reputation and performance (Luca 2016). However, they also highlight how online customer feedback can trigger emotional reactions in the individuals who constitute the organization and are exposed to the feedback it receives. Should we expect such emotional reactions to affect attentional selection? Previous literature gives us reasons to believe this should be the case. Emotions have been shown to have an effect on the extent to which decision makers engage in systematic processing (Tiedens and Linton 2001), on their attention span (Derryberry and Tucker 1994), as well as on the cues they attend to (Niedenthal and Kitayama 1994).

The latter is particularly relevant in the light of our interest in identifying which features of online customer feedback make a decision maker more likely to pay attention to it, and why this is the case. As we will see, however, previous literature on attentional selection does not tell us much about the role that emotions play in the process. A gap we intend to start closing with our study.

What We Know about Attentional Selection

In a recent assessment of the state of the art of research on organizational attention, Ocasio (2011) pointed out that one important strand of work in this domain focuses on attentional selection, that is “the emergent outcome of automatic or intentional attentional processes that result in focusing attention on selective stimuli or responses to the exclusion of others” (Ocasio 2011, p. 1289). According to studies in this domain, actors selectively direct their attention based on bottom-up factors (e.g., characteristics of stimuli; Hansen and Haas 2011), top-down factors (e.g., characteristics of the environment in which the organization is embedded; Hoffman and Ocasio 2001), or a combination of the two (Bouquet and Birkinshaw 2008, Greve 2008).

In this paper, we take a bottom-up approach to the study of attentional selection and focus on why some stimuli (such as reviews provided by customers) may receive longer, deeper, or more elaborated processing than others (Pashler 1998). Previous research has examined this issue in a variety of contexts. Hansen and Haas (2001), for instance, studied how employees of a management consulting firm were allocating their attention to different providers of electronic information. According to the authors, when competition for attention was high, providers were more likely to gain attention when they developed a reputation for quality and focus by being selective and concentrated in their document supply. In another study, Sullivan (2010) examined the process through which the Federal Aviation Administration formed airline safety rules. According to the author, when proposing new rules, decision makers allocated their attention to domains with the greatest number of problems. Then, in deciding which rules to finalize, decision makers directed their attention to those domains where rulemaking seemed more urgent because new problems were emerging. A third example is the study by Haas *et al.* (2015) on the allocation of attention to problems posted on the online discussion forum

of a global engineering firm. Their analysis suggests that, when deciding whether to allocate attention to a problem, decision makers engaged in a series of considerations about the expected benefits and costs associated to providing a solution, with issues like salience and cognitive load also having an impact on the choice. Piezunka and Dahlander (2015) examined how organizations allocate attention to crowdsourced suggestions from external contributors. The authors argue that as suggestions grow in number, organizations increase their efficiency at handling a large variety of stimuli through simplification, rationalization, and filtering out distant suggestions. Finally, the paper by Stevens and colleagues (2015) examined the drivers of attention in the context of for-profit social enterprises – firms that experience competing claims on attention because of profit and social goals. According to the authors, decision makers turn attention away from social goals when profit goals become more urgent – that is, when firm performance is low.

Overall, these studies suggest that in the presence of multiple stimuli, decision makers will selectively allocate their attention to some of the stimuli received – that is, attentional selection will occur. They also propose that attention may be triggered by features of the stimuli as well as characteristics of those who provide the stimuli in the very first place (as in the case of Hansen and Haas 2001). Finally, they suggest that attentional selection may be intentional as well as automatic (Ocasio 2011) – that is, decision makers may purposefully direct their attention based on cost/benefit considerations, but they also end up being affected by factors like cognitive load, urgency, and salience. Surprisingly, however, decision makers are described as not being at all influenced by emotions in their evaluations – a portrayal that is clearly incomplete based on what theory (e.g., Ashkanasy et al. 2017) as well as day-to-day observation (recall the blog posts we previously discussed) suggest. This clearly represents a gap in extant literature, which leaves us ignorant of the effect that incorporating emotions into a model of attentional selection may have.

Making Space for Emotions: Anger, Guilt, and Developmental Feedback

Recent years have seen increasing attention paid to the role emotions play in guiding decision making. After all, as Herbert Simon (1983, p. 29) put it, “in order to have anything like a complete

theory of human rationality, we have to understand what role emotion plays in it.” The renewed interest in emotions has spurred research in a variety of domains, including dynamic capabilities (Hodgkinson and Healey 2011), strategy implementation (Huy 2011), entrepreneurship (Cardon et al. 2009), business failure (Shepherd et al. 2009), and organizational change (Huy 1999, 2002). Indeed, as Ashkanasy et al. (2017, p. 175) note: “organizations are intrinsically human entities. As such, the processes that drive human thought and behavior also drive organizations. Understanding organizations therefore requires understanding the processes that guide human behavior and decision making. These processes, in turn, emanate from the human brain, which is the source of two related but nonetheless differentiable phenomena: cognition and affect.” To put it differently: “a person’s behavior is the joint product of a deliberative system that assesses options in a consequentialist fashion and an affective system that encompasses emotions such as anger and fear and motivational states such as hunger, sex, and pain” (Loewenstein et al. 2015, p. 56). The dual-process perspective described above differs from other frameworks distinguishing between controlled and automatic processes (Shiffrin and Schneider 1977), symbolic and associative processes (Slovic 1996, Smith and DeCoster 2000), impulsive and reflective processes (Lieberman 2003, Strack and Deutsch 2004), and System I and II (Kahneman and Frederick 2002). In line with previous studies, we view affect and emotion as being “integral to the very nature of cognition, infusing reasoning, learning, decision making, and action” (Hodgkinson and Healey 2011, p. 1503). In such a view, both automatic and controlled reasoning can be ‘hot’ (high affect) or ‘cold’ (low affect).

Portraying decision making as the joint product of both analytical considerations and emotional reactions, has clear implications for our study of attentional selection. As our review of extant research has shown, previous work has succeeded at incorporating the richness of cognitive and behavioral factors into a rational choice model, but still portrays a decision maker who is “somewhat crippled emotionally, and thus detached from the emotional and visceral richness of life” (Loewenstein 1996, p. 289). To start closing this gap, in this paper we examine the effect of emotions on attentional selection. In particular, we focus on immediate, rather than expected emotions, i.e. we are interested in emotions experienced at the time of the decision, instead of those resulting from predictions about the emotional

consequences of decision outcomes (Loewenstein and Lerner 2003, Loewenstein et al. 2001; Rick and Loewenstein 2008). Also, we focus on integral, rather than incidental emotions, i.e. emotions experienced because of the decision at hand, instead of those arising from unrelated factors (Bodenhausen 1993). Finally, in line with previous studies (Lebel 2017), we focus on discrete emotions, as opposed to an affective experience in general, so as to be able to disentangle the effect of specific emotions.

Within this context, we examine the effect of two negative emotions, namely *anger* and *guilt*. This choice is motivated by three reasons. First, both anger and guilt are frequently experienced in organizations (Lazarus and Cohen-Charash 2001). As a result, these two emotions have been studied together in several contexts, such as in-group advantage (Leach et al. 2006), hostility (Tangney et al. 1992), transgression (Iyer et al. 2007), and third-party punishment (Nelissen and Zeelenberg 2009). Second, anger and guilt are both characterized by negative valence, and may be elicited in response to managing a transgression (Lazarus 1991), thus making them relevant to study in relation to emotional reactions to feedback, when such feedback points to any kind of shortcoming. To better fit our empirics to the theory, we hence decided to intentionally focus on feedback that is *developmental*, in that at least to some extent it offers suggestions or signals issues (Brett and Atwater 2001). Consistently, we will examine attentional selection to developmental feedback, as illustrated in the following real examples: “*Very good dinner, just small flaw, the way they asked us to leave at 9.30pm sharp*” or “*It's good, but not very abundant. And, even if the quality is there, we do not expect to be hungry when leaving a restaurant that is defined as a bistro.*” This is different from feedback that does not offer any opportunity for improvement, as in the case of a numerical rating without any comment or comments like: “*Nothing to redact, nothing to add, simply delicious as it is!*” or “*Not worth it!*”. Third, anger and guilt differ in significant ways that promote our goal of building a theory that describes when these negative emotions may lead to attentional selection. Anger and guilt stand on opposite ends of a spectrum with respect to the attribution of blame. Guilt requires internal blame (Tangney 1999) and an acknowledgement that we had control over actions (Lazarus 1991). On the contrary, anger is associated with external blame and a belief that one has been subjected to an inconsiderate or malevolent offense on purpose (Lazarus 1991). Anger and guilt are also

accompanied by opposite action tendencies. Anger generally leads to act against the source of blame and is associated with deviant behavior (Lebel 2017, Roseman et al. 1994, Fox and Spector 1999, Rodell and Judge 2009, Umphress et al. 2013). On the other hand, guilt is associated with an impulse to expiate (Lazarus 1991), and constructive actions such as reparation and apologizing (Bohns and Flynn 2013, Tangney 1991).

Given the proximity between *guilt* and *shame* (Lazarus 1991, Bohns and Flynn 2013), one may wonder why we have decided to exclude the latter. The rationale has to do with the empirical context under examination. First, “guilt makes us want to atone publicly, whereas shame encourages us to hide.” (Lazarus 1991, p. 244) Feelings of guilt may hence be more consistent with the public nature of the stimuli under examination in our research, which makes hiding away not a viable option. Second, different from guilt shame implies feeling humiliated “in the eyes of someone whose opinion is of great importance.” (Lazarus 1991, p. 291) This should not be the case in our context, given the amateurish nature of customer reviews. Evidence collected through our exploratory qualitative interviews supports these intuitions, as all of the chefs we interacted with consistently talked about guilt, rather than shame.

HYPOTHESES DEVELOPMENT

We started by asking which features of online customer feedback make a decision maker more likely to pay attention to it, and why this is the case. Based on previous literature, we identified two potential mechanisms behind attentional selection. First, extant work tells us that decision makers attend to feedback based on the extent to which they expect it to be consequential for their organizations. Second, we uncovered theoretical reasons to believe that feedback may trigger an emotional reaction in decision makers, and this may in turn affect their attention allocation. In this study, we focus on two discrete emotions, anger and guilt. We now need to understand which features of feedback make decision makers interpret it as highly consequential, and which characteristics trigger feelings of anger and/or guilt. We then want to understand how analytical considerations about the expected consequences of feedback will interact with emotional reactions to feedback to ultimately explain attentional selection. If attention is the joint result of these two different processes, it is indeed

interesting to understand how they interplay with each other when feedback triggers both. Do decision makers only attend to feedback that “deserves” their attention based on analytical considerations about its expected consequences on the organization? Or do the anger and guilt experienced in reaction to feedback interfere with such analytical considerations?

In looking for an answer to these questions, we triangulate findings from extant research with evidence collected through an exploratory qualitative examination of the industry in which we will test the resulting framework, i.e. the restaurant industry (see Table 2 for a complete list of all the data sources). The purpose is to ground our hypotheses in the empirical context under examination and provide a “sanity check” for the general predictions in the specific case of online customer feedback. We start by discussing the role of feedback features, and then move to discuss the interplay between the analytical considerations and emotional reactions they trigger.

Table 2: Qualitative exploration and data sources

Data Source	Type of Data	Use in the Analysis
Industry-related sources	- Internet forums visited by professional chefs, managers, and owners (Cheftalk.com) - Leading industry blogs (Open for Business, Toast Restaurant, Modern Restaurant Management)	- Understand industry specificities - Understand insiders’ approach to online reviews
	- Articles in specialized press	- Understand industry specificities
	- Academic literature in hospitality management	- Understand industry specificities - Understand the business
Archival sources	- Customer reviews and management responses (when available) from TripAdvisor, Yelp, Google Reviews, OpenTable, LaFourchette	- Triangulate interview data and other information from forums and press articles
	- Conferences and events on fine-dining	- Understand industry specificities - Understand insiders’ approach to online reviews
Interviews (October 2016 to November 2017)	- 1 informal interview with a food critic (US) - 4 interviews with restaurant managers - 10 interviews with restaurant owners, chefs or chef-owners	- Understand insiders’ approach to online reviews, including explicit considerations of expected consequences and emotional involvement
Additional data	- Open feedback collected at the end of the survey	- Understand general problems faced by insiders, related to the management of online reviews

The Role of Feedback Features

Any human-generated feedback message is a complex stimulus. Not only does feedback comprise information about the recipient and its behavior, but it also carries information about the sender and

is intrinsically subjective in its style (Ilgen et al. 1979). As a result, feedback is not a complete and valid representation of reality but requires a process of interpretation on the part of the recipient (or recipients, as in the case of online feedback). In this section, we examine features of feedback that are likely to affect how decision makers react to it. These features encompass the content, sign, style, and source of feedback. We formulate hypotheses about the effects of these four features on the extent to which decision makers will interpret them as highly consequential for the organization. We also hypothesize the prevailing emotional reaction they will trigger in the decision making, i.e. anger or guilt.

Content. According to the Merriam-Webster dictionary, feedback is defined as “the transmission of evaluative or corrective information about an action, event, or process to the original or controlling source.” Hence the first, core feature of feedback is its content, meaning the action, event, or process it revolves around. All else being equal, we expect more fundamental feedback, that is feedback revolving around a core feature of the organization under scrutiny, to be perceived as more consequential for the organization. A service offering, such as that provided by restaurants, hotels, or airlines, can be conceptualized as comprising a core and a relational component (Iacobucci and Ostrom 1993). In the examples above, food, rooms, and transport represent core features of the offer, whereas the friendliness or politeness of staff or customer service constitute its peripheral aspects (Sparks and Browning 2011). This distinction is important because previous work has shown that reviews tend to focus on both sets of features (Guo et al. 2017, Sparks and Browning 2010). However, according to previous studies, potential customers find reviews providing information about core features more useful and hence tend to pay more attention to them (Schindler and Bickart 2012). If this is the case, then such fundamental feedback should be more consequential for the focal organization. If customers are indeed more attentive to reviews focusing on core features, the expected impact of such fundamental feedback on the organization should be higher, compared to that of more peripheral feedback. Anecdotal evidence collected in the field is supportive of this view. When asked about the perceived impact of customer reviews, one informant commented: “We regularly read reviews, especially on Tripadvisor. If the customer says something about food, we ask the chef ‘what do you think about this?’” Another one explained that negative comments on the quality of food can have:

“very serious consequences from both an economic and a personal point of view”. On the basis of these considerations, we hence hypothesize:

Hypothesis 1a (H1a): The more fundamental the feedback, the higher its perceived impact on the organization.

In terms of emotional reactions, we expect more fundamental feedback to generate feelings of anger in the recipient. Core features of a business, such as the quality of the food for restaurants or the layout of rooms for hotels, are more stable and harder to change. These choices often directly reflect the personality and taste of entrepreneurs or managers, that is why criticism addressed at these choices should be more hurtful and likely to be interpreted as a personal devaluation. When faced with this type of criticism, decision makers have a hard time acknowledging errors or mistakes, and will rather attribute the causes of failure to external factors, such as the incompetence of the source of feedback. Taken together, these considerations suggest that anger is the most likely emotional reaction triggered by feedback revolving around core, rather than peripheral features. This results from previous work arguing that anger is more likely to be elicited when a critique points to a cause that is more stable, as noted above for core features (Hareli and Hess 2008). Also, feelings of anger are more likely to be associated with failures that involve an integral part of the recipient and are accompanied by stronger feelings of devaluation, as in the case of fundamental feedback (Leary et al. 1998, Leary and Springer 2001). Qualitative evidence collected in the field is consistent with this theoretical view. As one of our informants noted: “*Sometimes I really want to say ‘Come on, you don’t understand! You think you’re in a trattoria but this is more refined gastronomy.’*” Note how the first reaction of the restaurant owner is to deflect responsibility, by attributing criticism to the poor taste of the reviewer, or a lack of fit between the reviewer’s expectations and the actual quality of the restaurant. Based on these arguments, we formulate the following hypothesis:

Hypothesis 1b (H1b): The more fundamental the feedback, the stronger the feeling of anger in the recipient.

Sign. One of the most studied features of feedback is its sign (Audia and Locke 2003, Baron 1988, Krings et al. 2015). All else being equal, we expect more negative feedback to be perceived as more

consequential for the organization. Negative feedback has been shown to impact on organizational performance in a variety of industries – restaurant revenues, hotel bookings, online sales, and box office performance are all substantially affected by negative evaluations (Luca 2016, Ye et al. 2009, Chintagunta et al. 2010, Zhu and Zhang 2010). And indeed, economists and sociologists have consistently reported stronger responses when organizations face negative feedback (Jin and Leslie 2009, Chatterji and Toffel 2010, Martins 2005, Wang et al. 2016). In the context of online reviews, five stars have become the standard for evaluating all sort of transactions or relationships. Doctors on RateMD.com, car rides on Über and Lift, hotels and restaurants on Yelp.com, TripAdvisor, and Google, products and sellers on Etsy, eBay and Amazon. Five stars are synonym of good or excellent quality, while anything below five signals potential issues (Wolff-Mann 2016, Fowler 2017). Research shows that indeed: (a) potential customers rarely invest sufficient time and effort to go beyond the surface of average ratings (Bright Local, 2018); and (b) negativity bias makes negative reviews more likely to affect purchase decisions than positive reviews (Basuroy et al. 2003, Chevalier and Mayzlin 2006, Rozin and Royzman 2001, Sen and Lerman 2007). Our informants also reported being particularly concerned with negative feedback, sometimes complaining that “*it takes maybe ten positive reviews to make up for a very negative comment*”. One informant explained:

It is very difficult for us in this profession not to feel in danger next to each table, and it is very hurtful to receive a negative rating without having the possibility to explain why, ask for forgiveness, or just discuss it. The sanction we receive is without appeal and the consequences can be very serious sometimes from an economic viewpoint, surely from a personal standpoint, but also in our relationship with our employees.

In line with theoretical arguments and evidence from the field, we hence hypothesize:

Hypothesis 2a (H2a): The more negative the feedback, the higher its perceived impact on the organization.

In terms of emotional reactions, we expect more negative feedback to generate feelings of anger in the recipient. From a theoretical standpoint, the link between negative feedback and anger is well established in psychological literature on performance feedback. People exposed to negative feedback are more likely to perceive that the provider of feedback intended to harm them and are less likely to trust the source of feedback (Alicke 2000, Frijda 1986, Tedeschi and Felson 1994). These perceptions of harm and distrust, in turn, induce negative emotions such as anger (Baron 1988, 1993, Raver et al.

2012). The same underlying causal structure that leads to more intense hurt will lead to increased levels of anger in the recipient of feedback (Hareli and Hess 2008). Empirical evidence supports these theoretical arguments. For example, Brett and Atwater (2001) found that negative feedback, even when delivered in a clearly constructive way, is not perceived as useful or accurate and is likely to trigger feelings of anger. In line with theory, our informants described harsh numerical ratings as overly punitive, as if “*these people just enjoy thrashing you.*” A comment posted on a professional forum reiterates: “*It's those that give one star because their potato was cold that irk me, especially when they go on as to how great the service was, and the steak was perfect, etc. Deduct 4 stars for the potato, really?*” Another informant clearly expressed anger when discussing low ratings:

Some people are extremely severe with us. They have no idea of the amount of work we do, and we are not given any right to make a mistake. We are continuously judged, but I doubt these customers would accept the same situation with their jobs. They hide behind the screen, and if there is a problem they demolish you and hurt you badly. There is a lot of pressure in the kitchen, and this is also because of these customers.

Based on these arguments, we formulate the following hypothesis:

Hypothesis 2b (H2b): The more negative the feedback, the stronger the feeling of anger in the recipient.

Style. Until now, we have focused our attention on the content and sign of feedback. However, according to previous literature, the exact same feedback may be interpreted differently depending on how it is delivered and by whom (Ilgen et al. 1979). We start with the former, i.e. the style with which feedback is provided.

All else being equal, we expect more detailed feedback to be perceived as more consequential for the organization. This is consistent with work arguing that such feedback is often perceived as more accurate and valid (Hareli and Hess 2008), and more helpful for others (Cao et al. 2011, Liu et al. 2008). Potential customers assign more weight to reviews that are more articulated, ruling out the possibility that these reviews are inaccurate, superficial, or even fake. More detailed reviews are also longer on average, and previous literature suggests that longer text captures recipients’ attention and crowds out other stimuli (Parkhurst et al. 2002, Wolfe and Horowitz 2004). Qualitative evidence we collected during our preliminary interviews supports this view. When asked about how she would deal with a detailed review posted by an actual customer few days before our visit, one of our informants

commented: *“In cases like this I always try to remember who the reviewer was. In one or two instances we even contacted the person by phone for further explanations, because these reviews are damaging.”* Based on these considerations, we predict:

Hypothesis 3a (H3a): The more detailed the feedback, the higher its perceived impact on the organization.

In terms of emotional reactions, we expect more detailed feedback to generate feelings of guilt in the recipient. When feedback is richer in details, it also tends to be more specific about facts and problems. One of the conditions for feeling guilty is indeed the possibility to attribute a negative event to a specific behavior or cause (Lazarus 1991), that is highly distinct and identifiable (Bohns and Flynn 2013). As a result, we expect individuals to be more likely to feel guilty when facing more detailed feedback (Bohns and Flynn 2013, Lewis 1971, Smith et al. 2002, Tracy and Robins 2006). Our informants also noted that since it is often difficult for them to remember the specific situations that led to the review, reading more specific and articulated comments that *“point to real problems”* is interpreted as a signal of good faith on the side of the customer: *“The customer is honest, tries to help you...No bad words, just a fair critique.”* This makes it harder for the recipient not to take any responsibility for what happened, thus leading to more-pronounced feelings of guilt. Accordingly, we hypothesize the following:

Hypothesis 3b (H3b): The more detailed the feedback, the stronger the feeling of guilt in the recipient.

Source. The source of feedback is another important factor that influences appraisal processes. Individuals interpret feedback differently depending on who provides it. In the organizational context, for instance, ratings from supervisors may be perceived as more deserving of attention than feedback from peers (Brett and Atwater, 2001). In open-source settings, feedback from some users may be regarded as more useful than other (Rullani and Haefliger 2013). This is also true in the context of online customer feedback. As one informant explained: *“I look at the profile of the reviewer. What types of restaurants he reviewed. His history as a reviewer.”* Similarly, on a professional forum, one chef commented:

“It’s not a good idea to take a negative Yelp review seriously unless and until you click the Yelp reviewer’s username and look at what sort of reviews they give similar venues. Some people just love to bitch about anything and everything.”

All else being equal, we expect feedback provided by more experienced evaluators to be perceived as more consequential for the organization. Experienced evaluators are judged as more competent and reliable for their ability to compare similar experiences. In some way, they are closer to professional critics, relative to the casual reviewer (Bourdieu 1993). When providers of feedback are deemed credible, recipients attribute higher validity to the underlying issue (Audia and Locke 2003) and allocate more cognitive resources to the appraisal of feedback (Petty and Cacioppo 1986). It should hence come as no surprise that in online settings, empirical evidence specifically indicates that managers (Levy et al. 2013) as well as users (Cao et al. 2011) are more attentive to reviews posted by more experienced customers. We hence hypothesize:

Hypothesis 4a (H4a): The more experienced the provider of the feedback, the higher the perceived impact of feedback on the organization.

In terms of emotional reactions, we expect feedback provided by more experienced evaluators to generate feelings of guilt in the recipient. Feedback provided by a credible source is associated with a perception of higher validity. In the words of one informant, *“I personally have a hard time reading negative comments from people with zero experience of gastronomic restaurants. If you’re criticizing what we do, you need to have some sort of experience.”* Similarly, another one reflected: *“You need to understand if it’s a real problem with service or food, and not the subjective feeling of a customer that is not very used to gastronomy.”* High validity of the feedback provided is in turn expected to play a significant role for the elicitation of guilt (Lazarus 1991). As is the fact that more experienced reviewers are also less likely to be perceived as malevolent and willing to harm the recipients (Hareli and Hess 2008). Their higher credibility and better intentions make it harder for the recipient not to take any responsibility for what happened, thus leading to more-pronounced feelings of guilt. Based on these considerations, we hence formulate the following hypothesis:

Hypothesis 4b (H4b): The more experienced the provider of the feedback, the stronger the feeling of guilt in the recipient.

The Interplay between Analytical Considerations and Emotional Reactions

Once we have established which features of feedback make decision makers interpret it as highly consequential, and which characteristics trigger feelings of anger and/or guilt, we can move to examine the interplay between analytical considerations about expected consequences of feedback and emotional reactions to feedback itself. We start by formulating a baseline hypothesis, according to which decision makers will allocate attention to feedback based on its expected consequences on the organization. This is in line with previous literature suggesting that decision makers ultimately allocate their attention to problems that are expected to have a higher impact (Kaplan 2008, Shepherd et al. 2017), are perceived as critical or urgent (Sullivan 2010), and to which it is more beneficial to find a solution (Haas et al. 2015).

Baseline hypothesis: Decision makers are more likely to allocate attention to feedback that has high perceived impact on the organization.

Our focus in this paper is to try and understand whether the feelings of anger or guilt triggered by feedback may have an effect on this baseline. Theory tells us this may be the case as emotions have the potential to override cognition as they intensify (Baumeister et al. 1994, Bazerman et al. 1998, Hoch and Loewenstein 1991, Loewenstein 1996). In the words of Loewenstein and Lerner (2003, p. 627), “at sufficient levels of intensity, emotions can overwhelm cognitive processing and deliberative decision-making altogether. Under the influence of intense emotions, people often report themselves as being (or having been) ‘out of control’ or ‘acting against their own self-interest.’” This is because emotions can instinctively trigger some action impulses driven by evolutionarily adaptive responses (Frijda 1986, Lazarus 1991, Lerner et al. 2015) – think, for instance, about the human tendency toward ‘fight or flight’ in situations that trigger fear. But it also comes from the fact that emotions can influence the capacity to predict outcomes (e.g., Johnson and Tversky 1983), the reactions to those predictions (e.g., Loewenstein 1996), and the quality and quantity of information processing.

Our prediction is that anger will act as a disturbance factor on the somehow obvious course of action described in the baseline hypothesis, while guilt will not. The rationale behind our prediction is based on the different locus of blame and action tendencies associated with these two emotions. When

feedback triggers a feeling of guilt, we expect the emotional reaction not to interfere with analytical considerations, and thus attention to be allocated on the expected consequences feedback may have for the organization. Work in psychology about feedback appraisal provides evidence that corroborates our conjecture. Guilt implies that the decision maker is putting the blame for whatever wrongdoing or shortcoming described in the feedback on himself. As a result, guilt triggers reparatory actions, such as engagement and apologizing (Bohns and Flynn 2013, Tangney 1991). In the context of our study, this should imply that the guilty decision maker will pay more attention to feedback and try to do something about it, in the spirit of what our informant described above. As a result, decision makers should be even more likely to allocate attention to highly consequential feedback (as per our baseline) when it generates feelings of guilt. As we have previously discussed, this should be the case for long and detailed feedback, as well as for feedback provided by expert reviewers. What we heard in the field seemed to be in line with such a prediction. When guilt prevailed, our informants reported paying more attention to feedback. The following comment illustrates this point well:

We're a small restaurant, I'm often alone in the kitchen. Sometimes I have to send out seven or eight entrecotes, and I realize that they are not equally well cooked. So, if after a few days I read a review that mentions that the entrecote was not well cooked, well, I feel bad for the customer.

In this case, being aware of a specific instance of failure, for which he feels guilty, the chef pays more attention to what customers are talking about with reference to that specific instance. Summing up, we hypothesize the following:

Hypothesis 5 (H5): Decision makers are more likely to allocate attention to highly consequential feedback that generates feelings of guilt, that is feedback that is detailed and provided by expert reviewers.

When it comes to anger, on the other hand, we expect the baseline hypothesis not to be confirmed. When feedback triggers feelings of anger, we expect decision makers to discard the feedback, independently of any consequence it may have on the organization. This resonates with work suggesting that anger implies an inference about the offender's intentions (Lazarus 1991), and consequently leads to oppose the source of blame (Roseman et al. 1994, Fox and Spector 1999, Rodell and Judge 2009, Umphress et al. 2013, Lebel 2017), sometimes with coldness and inattention (Lazarus 1991). Findings from previous literature resonate with what we observed in the field. When feedback triggered anger

in our respondents, they seemed unable to process the feedback accurately. We could clearly see how thinking back to those critiques made them angry all over again. The reaction of one informant was quite telling as he explained: “*Some critiques are clearly off base, and I take them with: That’s enough!*” We also read similar comments on professional forums, as in the following:

You have to realize that these things do make a difference. The last time I received a bad review my business dropped 30%. I know it sucks but this is where a restaurant should have someone to take over this and make the client happy. I cannot do that because it makes me so furious.

We find this quote particularly telling as it nicely sums up our argument in the case of negative reviews: high perceived impact, strong feeling of anger, and consequent inability to incorporate the feedback because of being emotionally overwhelmed. We hence hypothesize:

Hypothesis 6 (H6): Decision makers are less likely to allocate attention to highly consequential feedback that generates feelings of anger, that is feedback that is fundamental and negative.

Table 3 provides a summary of our hypotheses. As the table shows, we expect decision makers to allocate more attention to highly consequential feedback when it triggers guilt, i.e. when the style of feedback is detailed, and its source is an expert. But the opposite holds true for the cases in which highly consequential feedback triggers anger, i.e. when it revolves around a core feature of the organization, and is characterized by negative sign. As an illustration, think about a situation we are all familiar with: that moment when you are provided with teaching evaluations from your students at the end of a term. Our hypotheses suggest the following, as per H5, if the prevalent emotion is guilt (“*I should have done things differently?*”), you will most likely pay attention to what the comments are saying and focus your attention on the feedback you think may potentially have the biggest impact on your future evaluations. If, however, as per H6, the prevalent emotion is anger (“*They only say this because of the grades I gave them?*”), you will likely not pay attention to the feedback, independently on whether or not a more rational assessment of the feedback would have granted it such attention.

Table 3: Summary of hypotheses

Feedback Features	Perceived organizational impact	Emotion Triggered		Organizational Attention
		Anger	Guilt	
Content: Fundamental	+ (H1a)	+ (H1b)		- (H5)
Sign: Negative	+ (H2a)	+ (H2b)		
Style: Detailed	+ (H3a)		+ (H3b)	+ (H6)
Source: Expert	+ (H4a)		+ (H4b)	

DATA AND METHODS

To test our theoretical framework, we conducted an experiment in the restaurant industry. In particular, we designed a scenario-based experiment (Di Stefano et al. 2015, Florey and Harrison 2000, Gomez et al. 2000, Schminke et al. 1997) that we administered through a survey addressed to fine-dining restaurants in France. We used the scenario to manipulate the content, sign, style, and source of feedback. We then asked our respondents about: (1) the expected consequences of the feedback described in the scenario; (2) the extent to which the feedback was making them feel guilty and/or angry; and (3) the likelihood that they would allocate attention to the feedback. We decided to assign two scenarios per respondent to allow for within-respondent comparisons and capture the effect of feedback features above and beyond the attitude of the single individual.

Empirical context

Our initial qualitative exploration revealed a number of characteristics of the industry, which required us to make important design choices before moving forward. First, the restaurant industry stands out for the great variety of organizations that belong to it. A fast-food restaurant near a petrol station and a gourmet restaurant in the center of Paris differ in so many ways that it is hard to consider them as members of the same industry. For this reason, we decided to restrict our attention to a specific subset of organizations, namely fine-dining restaurants, which we identified as those being listed in the Michelin Guide, the most reputed rating agency in the context of fine-dining (Ferguson 1998). This choice allowed us to focus on a well-defined population of industry players who may have a similar understanding of market boundaries (Porac et al. 1995). Second, our preliminary investigation of the restaurant industry revealed some differences between the European and American market not only with respect to the relative popularity of review websites (TripAdvisor and Yelp, respectively), but also with regard to the typical organizational structure of restaurants. In particular, separation of roles is more clear-cut in the U.S. market, with owners who usually do not have operational roles, restaurant managers who are explicitly in charge of service, and a head-chef managing the kitchen. In European countries, the owner is often the head-chef, and there is usually no space for a restaurant manager.

These differences were further confirmed after we conducted our first interviews on both sides of the Atlantic. In the U.S., managers are directly responsible for reviews about service and often forward food-related reviews to chefs. In Europe, restaurants are usually smaller organizations, owned and managed by the head chef, who also deals with online feedback. We decided to focus on the European market and conducted several interviews with chefs and owners (typically chef-owners) of fine dining restaurants in France and Italy, two countries well known for their culinary tradition (Fauchart and von Hippel 2008, Di Stefano et al. 2015).

While one may think that the high-end of the restaurant industry would not care as much about reviews posted by individual customers, results from our qualitative exploration, as well as anecdotal evidence, indicate this is not the case. As one of our informants put it: *“It’s super important that we monitor what is being said about us. Honestly, I don’t think anyone can do this job without taking this into account.”* According to our informants, fine-dining restaurants care about customers’ concerns to the point that they may be willing to engineer substantive changes in the attempt to address them. This clearly emerges when reading professional forums:

I’ve used the criticism and feedback to quality check the things that are produced from my kitchen. Some of the reviews are throwaways, but a few have shown to be important in ensuring my kitchen needs to work on its consistency. I have a talented group of cooks, but sometimes complacency takes over and a shakeup / reminder is needed. Feedback is important.

Our informants provided other interesting examples. For instance, when asked about the use of information about areas of improvement emerging from online reviews, one informant told us:

We use it as a learning opportunity or training opportunity with our staff. We share a scenario that happened and then how well someone responded so we can continue to emulate that behavior. Or something that did not go well, and what we can learn from it, so we can be better in the future.

Another informant reported:

As the general manager, I use reviews about service to educate our staff. For example, if someone complains that the service was slow, we would have a discussion with the staff about different ways to change how they do their service – for instance, they could ask a manager for help, or they could organize things differently. So yes, I do take [reviews] into consideration if I think they’re making a valid point that can help us grow.

This last quote illustrates the meaning we attribute to allocation of attention in this study. The organization uses the information in the feedback provided by the customer (e.g. *service was slow*) to make some internal corrections or changes (e.g. *ask a manager for help* or *organize things differently*).

However, as the informant clearly explains, the incorporation of customer feedback is conditional on the customer *making a valid point*. This has two implications. First, for it to be incorporated, the feedback needs to be developmental, in that at least to some extent it offers suggestions or signals issues. Second, when examining all the feedback received from the organization, the decision maker allocates attention to some of the suggestions, issues, or problems highlighted, while filtering out others. Such a filtering process, and the mechanisms behind it, are what we study in this paper.

Sample

In defining our population of interest, we started with all restaurants listed in the 2017 French edition of the Michelin Guide: a total of 4,214 restaurants. Among these restaurants, 616 were awarded a star rating for culinary excellence (27 restaurants had 3 stars, 81 had two stars, 508 had one star), and 646 were awarded a Bib Gourmand for serving quality food at a reasonable price (entrée, plat and dessert for €33/37 or less in France/Paris, and two courses and a dessert/glass of wine for \$40 or less in the U.S.). The list of Michelin restaurants has recently been made freely accessible online. Restaurant pages display most of the information offered by the paper version of the Guide, including inspectors' reviews, service quality, and business information. The availability of business information allowed us to get immediate access to the e-mail addresses of 1,133 restaurants in the Guide. We further acquired a database of e-mail addresses of French restaurants from a private company, which allowed us to expand our initial dataset from 1,133 to 2,877 restaurants. We contacted all 2,877 restaurants via e-mail, only to realize that in many instances e-mail addresses were outdated or wrong. This occurrence can be explained with the relatively short life span of restaurants in France (approximately two years), which leads to frequent changes in contact details. For this reason, we decided to contact by phone all the restaurants in our initial sample.

We were able to establish a successful contact with 1,354 restaurants, which either confirmed the reception of the e-mail or asked for a new link to the survey. A comparison between these 1,354 restaurants and the entire population of 4,214 Michelin restaurants shows that our sample presents some interesting characteristics: they are more pricey ($M = 59.94$, $S.D. = 33.81$; $p = .00$, $d = .19$), higher

status as measured by Michelin stars ($M = 0.19$, $S.D. = 0.39$; $p = .00$, $d = .14$), and more likely to be located across the ten largest metropolitan areas in France ($M = .14$, $S.D. = .34$; $p = .00$, $d = 0.11$). While small in size, these differences are not surprising in light of our interest in a topic that is probably more relevant for restaurants that are more reputable and located in big cities, and hence more exposed to the phenomenon of online customer feedback.

In the end, 192 restaurants successfully participated to our study, a number that corresponds to a 14.2% response rate over the 1,354 restaurants we were able to contact, in line with other studies that used similar methodology and respondents (8.3% in Wilden et al. 2013; 13.8% in Hawass 2010). Our respondents are mainly male (62%), with an average age of 43 (minimum 21, maximum 68), and mostly owners (specifically, we had 19% pure owners, 36% chef-owners, 19% managers, and 26% chefs who did not own the restaurant). To ensure that our final sample (192) is representative of the entire population of Michelin restaurants, and that the study is not affected by non-response bias, in Table 4 we compare respondents with non-respondents. Results from this analysis show that there are no significant differences between respondents and non-respondents in terms of average price, frequency of starred and Bib restaurants, and type of cuisine. The only dimension on which our respondents differ is the location of their restaurants, which is biased toward large metropolitan areas. This is in line with what we observed above and an important boundary condition to our study. Although significant, however, this difference is relatively small, as shown by the small effect size (Cohen's d significantly below 0.5).

Table 4: Characteristics of respondents

	Population (n=1,354)		Respondents (n=192)		Non-Respondents (n=1,162)		T-test		Cohen's d
	Mean	S.D.	Mean	S.D.	Mean	S.D.	t	Sig	
Average price (€)	59.94	33.81	61.43	35.24	59.94	33.81	-0.56	0.57	0.04
Stars	0.19	0.39	0.24	0.43	0.19	0.39	-1.67	0.10	0.12
Bib Gourmand	0.14	0.35	0.15	0.35	0.14	0.35	-0.13	0.89	0.03
Creative cuisine	0.56	0.49	0.59	0.49	0.56	0.49	-0.82	0.41	0.06
Traditional cuisine	0.33	0.47	0.27	0.44	0.33	0.47	1.68	0.09	0.13
Large city ^b	0.14	0.34	0.21	0.41	0.14	0.34	-2.69	0.01	0.19

^a All characteristics from the 2017 French edition of the Michelin Guide

^b Located in one of the ten largest metropolitan areas in France, by population (population > 230,000 as of 2013)

Experimental Procedure

Each restaurant in our sample received an e-mail including a short presentation of the research project and a link to a website. Once the respondents clicked on the link, they were redirected to the survey through which we administered our experiment. Each survey included two randomly assigned scenarios (i.e. two stylized online reviews), followed by questions measuring the perceived impact of feedback on the organization, the feelings of guilt and anger it generates, as well as the likelihood for the respondent to allocate attention to the feedback included in the scenario. We explained to our respondents that the scenarios were meant to represent two hypothetical reviews received by their restaurant. We used the scenarios to manipulate the four features identified through our theoretical development, as shown in Table 5. We used a between- and within-subject factorial design, as each respondent received a random combination of the four manipulations in the first scenario, and a random combination of the four manipulations in the second scenario. This randomization both within and between subjects reduced the potential correlation between our treatments and other variables, and enabled us to remove potentially unobserved subject-level confounds (Di Stefano et al. 2015). Around 90% of the 192 respondents returned both scenarios, while the remaining 10% returned only one, for a total of 364 scenarios. Our analyses are limited to complete responses, i.e. 308 scenarios.

Table 5: Manipulated variables and corresponding treatments

	High	Low
Content: Fundamental	Customer reports problems about <u>overcooked dishes</u>	Customer reports problems about <u>rude service</u>
Sign: Negative	★ ★ ☆ ☆ ☆ (2 out of 5)	★ ★ ★ ★ ☆ (4 out of 5)
Style: Detailed	Review is <u>long and detailed</u>	Review is <u>short and without details</u>
Source: Expert	Customer <u>wrote many reviews</u> of similar restaurants in the past	Customer <u>never wrote reviews</u> of similar restaurants in the past

To design the manipulations and measures we drew on insights gathered during interviews with our qualitative informants, in particular the five we interviewed in Europe between February and August 2017. At the end of August 2017, we then pretested the instrument on a sample of 106 restaurants (not included in the final sample). Based on the results of this pretest, we refined and

simplified the manipulations and measures, which we then submitted, between October and November 2017, to another five qualitative informants, to confirm the face validity of the final version of the instrument. The experiment was officially launched in January 2018.

Variables and Measures

Table 6 shows a comprehensive list of the variables employed in our experimental test. The instrument was in French. Here we report only the literal English translations.

Table 6: Variables and measures

Variable	Measure	Operationalization
<i>Dependent Variable</i>		
Attention Allocation	Respondent's propensity to integrate the feedback provided in the review described in the scenario.	7-point scale, from very unlikely to very likely
<i>Independent Variables</i>		
Fundamental	The review described in the scenario is about a fundamental feature of the restaurant (food).	Experimentally Manipulated; High = 1, Low = -1
Negative	The review described in the scenario is accompanied by a rating that is very low for industry standards	Experimentally Manipulated; High = 1, Low = -1
Detailed	The review described in the scenario is long and detailed.	Experimentally Manipulated; High = 1, Low = -1
Expert	The review described in the scenario is written by a customer who wrote several reviews of similar restaurants before.	Experimentally Manipulated; High = 1, Low = -1
<i>Mediators</i>		
Impact	Respondent's expectation that the review described in the scenario will impact the restaurant's reputation, attractiveness, and performance.	7-point scale, from very unlikely to very likely (Cronbach's alpha = 0.92)
Anger	Respondent's propensity to feel angry after reading the review described in the scenario.	7-point scale, from very little to very much
Guilt	Respondent's propensity to feel guilty after reading the review described in the scenario.	7-point scale, from very little to very much
<i>Control Variables</i>		
Respondent_male	Gender of respondent	Male = 1, Female = -1
Respondent_age	Age of respondent	Integer count in years
Respondent_owner	Position in the restaurant	Owner/chef-owner= 1, -1 otherwise
Chain	Affiliation to a chain	Affiliated = 1, -1 otherwise
Michelin_rating	Michelin rating	1 = Guide; 2 = Bib; 3 = *; 4 = **, 5 = ***
Michelin_creative	Michelin cuisine type	Creative = 1, -1 otherwise
Review_satisfied	Satisfaction with restaurant rating on TripAdvisor	7-point scale, from very unsatisfied to very satisfied
Review_reader	Frequency with whom the respondent reads online reviews of own restaurant	7-point scale, from very rarely to very frequently

The main dependent variable in our study is *attention allocation*. As we already discussed, we look at the strongest form of attention, namely the extent to which the decision maker is willing to incorporate customer feedback, by changing organizational practices based on the comments or suggestions expressed in the review. After each of the two scenarios, we asked our respondents to indicate the likelihood (on a seven-point Likert scale) that they *would put in place some corrective actions following the customer's review (for instance, giving instructions to staff)*.

Our independent variables are the four treatments manipulated in the scenario. We manipulated the content of the review (*fundamental*) by mentioning that “customer reports problems about overcooked dishes” (high) or “customer reports problems about rude service” (low). As a manipulation check, we asked respondents to evaluate whether the review was about food. The manipulation was successful, $F(1,191) = 379.5, p = 0.00$. We manipulated the sign of the review (*negative*) by accompanying the review with a rating that was either “2 out of 5 stars” (high) or “4 out of 5 stars” (low). At the advice of our informants, we did not use 1-star ratings as the lowest threshold as they often are associated with fake reviews. Similarly, we avoided using 5-star ratings as the highest threshold given our interest in feedback that is developmental in nature. What our informants told us is also consistent with what we read on professional forums, where chefs seemed to consistently discard extreme ratings as uninformative. In the words of one chef: “*I find [reviews] useful if you disregard the 1-star and 5-star reviews and concentrate on the more thoughtful responses of the 2-4s.*” As a manipulation check, we asked respondents to evaluate whether the rating by the reviewer was substantially lower than their average rating. The manipulation was successful, $F(1,191) = 166.60, p = 0.00$. We manipulated the style of the review (*detailed*) by describing it as either “long and detailed” (high) or “short and without details” (low). As a manipulation check, we asked respondents to evaluate whether they thought the customer wanted to provide constructive feedback. The manipulation was successful, $F(1,191) = 78.51, p = 0.00$. We manipulated the source of the review (*expert*) by mentioning that “customer never wrote reviews of similar restaurants in the past” (high) or “customer wrote many reviews of similar restaurants in the past” (low). Following the advice of our informants, we did not insert reference points (“customer wrote 100 reviews”), but rather gave a concrete statement of fact with no room for subjective

interpretation. And indeed, an informant had observed: “*You sat down and ate in restaurants 100 times in one year and you think you’re ready to judge people working?*” As a manipulation check, we asked respondents to evaluate whether the reviewer had experience in rating similar restaurants. The manipulation was successful, $F(1,191) = 771.94, p = 0.00$.

Our framework is based on the existence of two mechanisms behind the allocation of attention: analytical considerations about the expected consequences of feedback (that is, the extent to which feedback is interpreted as highly consequential) and emotional reactions to feedback (that is, the extent to which feedback triggers feelings of anger and/or guilt). We measured *impact* by asking our respondents about the expected consequences of the review. In particular, we asked them to evaluate on a 7-point Likert scale, the extent to which: (1) “This review has an impact on the reputation of your restaurant”; (2) “This review has an impact on the attractiveness of your restaurant”; (3) “This review has an impact on the economic performance of your restaurant”. The choice to explicitly mention these three types of consequences of reviews comes from what we heard from our informants during the qualitative examination. We then aggregated the three measures into one single measure of *impact*, since the Cronbach’s alpha strongly supported the reliability of a single scale ($\alpha=0.92$). To measure emotional reactions to feedback, we decided to measure *anger* and *guilt* separately by asking our respondents to indicate, on a 7-point Likert scale, “to what extent, in reading the review, do you feel angry?” (*anger*) and “to what extent, in reading the review, do you feel guilty?” (*guilt*).

Finally, we controlled for several variables at the level of the respondent and the restaurant. This information was collected from our respondents in a final part of the survey, as well as from the Michelin Guide. At the level of respondent, we control for gender (*respondent_male*), age (*respondent_age*), and position in the restaurant (*respondent_owner*). At the level of the restaurant, we control for affiliation to a chain (*chain*), as well as for rating and cuisine type according to the Michelin Guide. For rating, we created a measure *Michelin_rating* that takes a value of 1 when the restaurant is simply listed in the Guide, 2 when the restaurant received a Bib Gourmand, and then 3, 4, and 5 for an increasing number of stars. Results do not change if we substitute this control variable with a separate dummy for whether the restaurant received a Bib Gourmand and whether the restaurant received any Michelin star. Results do

not change also when substituting *Michelin_rating* with one single measure of the number of Michelin stars awarded to the Restaurant (from 0 to 3). For cuisine type, we created a dummy *Michelin_creative* equal to 1 if Michelin classified the restaurant as serving creative cuisine, and 0 otherwise. Finally, we asked respondents to evaluate on a 7-point Likert scale the extent to which they were satisfied with their TripAdvisor score (*reviews_satisfied*) and the frequency with which they read online reviews (*reviews_reader*). We decided to explicitly refer to one review website in order to increase the realism of the question. The choice of TripAdvisor was motivated by the fact that our French informants consistently mentioned this specific website when being asked about their approach to online reviews. Descriptive statistics and correlations are shown in Table 7.

Table 7: Descriptive statistics and correlations

Variables	Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Attention Allocation	5.12	1.96	1	7	1.00															
2 Fundamental	-0.04	1.00	-1	1	-0.14	1.00														
3 Negative	-0.04	1.00	-1	1	-0.06	-0.02	1.00													
4 Detailed	-0.04	1.00	-1	1	0.18	-0.01	-0.05	1.00												
5 Expert	0.05	1.00	-1	1	0.07	0.02	-0.11	0.04	1.00											
6 Impact	4.75	1.84	1	7	0.34	-0.04	0.01	0.10	0.02	1.00										
7 Anger	4.34	2.09	1	7	0.06	-0.19	0.14	-0.03	-0.02	0.21	1.00									
8 Guilt	3.76	2.14	1	7	0.38	0.06	-0.07	0.08	0.03	0.35	0.21	1.00								
9 Respondent_male	0.61	0.49	-1	1	0.10	-0.02	-0.02	0.04	0.05	-0.05	-0.05	-0.02	1.00							
10 Respondent_age	43.00	10.31	21	68	0.08	0.01	-0.04	0.09	-0.01	-0.03	-0.03	0.04	0.27	1.00						
11 Respondent_owner	-0.64	0.76	-1	1	-0.10	-0.08	-0.07	0.04	-0.03	-0.04	-0.11	-0.09	-0.09	0.09	1.00					
12 Chain	-0.81	0.59	-1	1	0.06	0.02	0.03	0.07	0.10	0.07	-0.06	-0.06	0.03	-0.07	-0.11	1.00				
13 Michelin_rating	1.69	0.98	1	5	-0.08	0.00	0.12	0.01	0.00	-0.14	0.04	-0.10	-0.08	-0.13	-0.12	0.03	1.00			
14 Michelin_creative	0.20	0.98	-1	1	0.00	0.04	-0.04	0.12	-0.05	-0.08	-0.03	-0.01	0.08	-0.08	0.11	0.04	0.19	1.00		
15 Review_satisfied	5.40	1.37	1	7	0.03	0.05	-0.05	0.03	-0.05	-0.17	-0.13	-0.01	-0.04	0.04	-0.12	-0.02	0.12	0.05	1.00	
16 Review_reader	2.56	1.16	1	7	-0.04	-0.02	0.06	0.07	-0.07	-0.12	-0.01	-0.13	0.02	0.11	0.02	-0.12	-0.02	0.02	-0.02	1.00

^a All dummy variables are effect-coded (-1, +1).

Model Specification

We used a randomized experimental design to ensure that treatments are orthogonal to attributes of the respondents. This choice allows us to estimate unbiased coefficients for the treated variables. In our main model specification, we ran an OLS regression with fixed effects and robust standard errors clustered at the respondent level. We then ran a series of robustness tests. First, in order to be able to observe the behavior of respondent-level attributes, we replicated the same analysis using random instead of fixed effects. Results were consistent with the main specification. Second, in order to account for the fact that we measured *attention allocation* with a 7-point Likert scale, and that answering 2 instead of 1 may not be equivalent to answering 7 instead of 6, we replicated our analysis using an ordered probit specification. Results were again consistent with those from the main specification.

RESULTS

The Role of Feedback Features

Our aim with this paper is to understand how organizations allocate attention to feedback from customers in online settings. We started by formulating hypotheses about the effects of specific feedback features on the expected organizational consequences, on the feeling of anger, and on the feeling of guilt. In Table 8, we present the results of the regression analyses used to test these hypotheses: models 1 and 2 report the results for *impact*, models 3 and 4 refer to *anger*, while models 5 and 6 examine the effects on *guilt*. Odd models (models 1, 3, and 5) are specified according to an OLS regression with fixed-effects at the respondent level, while even models (models 2, 4, and 6) according to a random-effects GLS regressions including respondents' attributes. The former allows us to inspect the behavior of our independent variables while controlling for respondent-invariant characteristics through fixed effects. The latter enable us to directly observe the behavior of specific respondent-level attributes.

Table 8: The role of feedback features

	Impact				Anger				Guilt			
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coef	Se	Coef	Se	Coef	Se	Coef	Se	Coef	Se	Coef	Se
<i>Independent Variables</i>												
Fundamental	-0.184*	0.083	-0.178*	0.069	-0.513**	0.119	-0.479**	0.094	-0.023	0.122	0.072	0.108
Negative	0.211**	0.070	0.154*	0.069	0.423**	0.096	0.353**	0.094	-0.150	0.134	-0.182	0.108
Detailed	0.256**	0.071	0.238**	0.070	-0.090	0.118	-0.070	0.095	0.289*	0.134	0.198	0.109
Expert	-0.006	0.088	-0.036	0.071	0.119	0.120	0.038	0.096	0.079	0.140	0.097	0.110
<i>Control Variables</i>												
Respondent_male			-0.119	0.147			-0.114	0.158			-0.133	0.160
Respondent_age			-0.002	0.014			-0.002	0.015			0.009	0.015
Respondent_owner			-0.229	0.177			-0.338	0.190			-0.275	0.193
Chain			0.287	0.626			-1.512*	0.671			-0.449	0.680
Michelin_rating			-0.248	0.148			-0.002	0.158			-0.223	0.160
Michelin_cuisine			-0.057	0.145			0.019	0.156			0.035	0.158
Review_satisfied			-0.212*	0.099			-0.186	0.106			-0.041	0.108
Review_reader			-0.251*	0.120			-0.048	0.129			-0.231	0.131
Constant	4.780**	0.007	6.921**	0.876	4.360**	0.011	5.461**	0.938	3.753**	0.013	4.401**	0.952
N	308		308		308		308		308		308	
F/ Chi ²	5.627		37.494		9.338		51.994		2.048		15.306	
R ² (ω)	0.153		0.150		0.217		0.214		0.051		0.044	

^a The table displays results related to three dependent variables, namely *impact* (models 1 and 2), *anger* (models 3 and 4), and *guilt* (models 5 and 6). Odd models (1, 3, and 5) are fixed-effects OLS regressions, while even models (2, 4, and 6) random-effects GLS regressions, both with robust clustered standard errors. We report the within-R² (ω) for all models. The significance levels are indicated as follows: * p<0.05, ** p<0.01, *** p<0.00.

Let us start with the extent to which different features of feedback affect its interpretation as more or less consequential for the organization. In line with previous literature and with the qualitative evidence collected in the field, we expect all four features of feedback we manipulated in the scenario to positively affect *impact*, measured as the respondent's expectation that the review described in the scenario will impact the restaurant's reputation, attractiveness, and performance. Results from our analyses support the prediction that *negative* (H2a) and *detailed* (H3a) feedback is perceived as having a stronger impact on the organization. Contrary to our expectations, however, more fundamental feedback is perceived as less impactful (H1a), and we do not observe any significant effect for the source of feedback (H4a).

The result on fundamental feedback is particularly surprising in the light of theory as well as qualitative evidence gathered on the field. To make sense of why our quantitative respondents considered fundamental feedback less consequential, we went back to our manipulation. Remember that to manipulate fundamental feedback, we indicated that "customer reports problems about overcooked dishes" (high) vis-à-vis a case in which "customer reports problems about rude service" (low). Our manipulation check confirms that in the case of fundamental feedback the review was about food. In retrospect, we now see how, despite revolving around food, our manipulation describes a transient problem, which may be due to a temporary mistake made by the chef, rather than a fundamental, core feature of the restaurant, as we originally hypothesized. A better choice would have been describing a case in which customer reported general problems about food, or specific problems about the cooking style, the choice of dishes in the menu, or any other fundamental feature related to the food offering. We hence believe our manipulation failed to elicit the construct of interest, and the results related to fundamental should be interpreted as results related to a mistake made with food (vs. service), which is also a mistake made by the cooking brigade (vs. the waiters). If this is the case, then we could read the result above as suggestive of the fact that our respondents found a food-related mistake made by a chef less critical than a service-related mistake made by a waiter. This may be related to the fact our respondents were mainly chefs. This has two implications. First, it is reasonable to expect chefs to have a harder time accepting a critique related to food – a feeling that may lead to playing it

down. Second, a food-related mistake is also somewhat easier to fix for a chef, given that it is under his direct responsibility – once again, with the potential consequence that the chef may play a related critique down.

Models 3 and 4 of Table 8 report the results of regression analyses used to test hypotheses H1b and H2b on the feelings of anger triggered by customer feedback. In line with previous literature and with the qualitative evidence collected in the field, we expect *fundamental* (H1b) and *negative* (H2b) feedback to positively affect *anger*, measured as the respondent's propensity to feel angry after reading the review described in the scenario. Results from our analyses support the prediction that *negative* feedback leads to strong feelings of anger (H2b). Once again, however, contrary to expectations, we observe that *fundamental* feedback has a negative effect on the feeling of anger (H1b). In light of the discussion above, we interpret this result as suggestive of the tendency for chefs to downplay feedback associated to a transient, easy to fix mistake that is under their control and not worth a strong emotional reaction.

Models 5 and 6 of Table 8 display the results of the regression analyses used to test hypotheses H3b and H4b on the feelings of guilt triggered by customer feedback. In line with previous literature and with the qualitative evidence collected in the field, we expect feedback that is *detailed* (H3b) and written by customers with higher levels of *experience* (H4b) to positively affect *guilt*, measured as the respondent's propensity to feel guilty after reading the review described in the scenario. Results from our analyses support the prediction that *detailed* feedback leads to strong feelings of *guilt* (H3b). However, we do not observe any significant effect with respect to the source of feedback (H4b). Together with what we observed above, this seems to suggest that, in contrast with what happened with the qualitative informants, our quantitative respondents were insensitive to the level of expertise of the reviewer. We speculate that this may be the result of the fact that our responses were biased towards more pricey and better rated restaurants, which may exhibit a more condescending attitude towards the opinion of the single customer (Aspers and Godart 2013).

The Interplay between Analytical Considerations and Emotional Reactions

We can now finally move on to examine the effect that different features of feedback have on the allocation of attention. According to our baseline hypothesis, when feedback has high perceived impact on the organization, decision makers are more likely to pay attention to it. We also expect that anger will act as a disturbance factor on the course of action illustrated in the baseline hypothesis, while guilt will not. When guilt is elicited, we expect decision makers to devote more attention to highly consequential feedback (H5). However, when anger is elicited, we expect decision makers to discard feedback even when it is highly consequential for the organization (H6). Based on the results reported above, only two of our manipulations have been successful at eliciting an emotional reaction, namely *detailed* for the case of guilt and *negative* for the case of anger. Accordingly, we will test H5 and H6 by looking at the behavior of these two variables only. Providing a test to H5 and H6 is not an easy endeavor, as we have hypothesized two relationships that are quite complex. Accordingly, we will offer different approaches, and discuss the results that each of them has to offer.

The first, most intuitive way to test our hypotheses is to simply look at the effect that *detailed* and *negative* have on *attention allocation*. In particular, we expect our respondents to express a higher likelihood to attend to detailed feedback (high impact and high guilt) and a lower likelihood to attend to negative feedback (high impact and high anger). Models 1 and 2 in Table 9 display the results of such analysis. The dependent variable is *attention allocation*, measured as the respondent's propensity to integrate the feedback provided in the review described in the scenario. As usual, model 1 reports a fixed-effect OLS regression while model 2 reports a random-effect GLS regression. In line with our predictions, we find that decision makers allocate more attention to feedback that is highly consequential and triggers feelings of guilt, i.e. *detailed* feedback (H5). We also find support for the conjecture that decision makers will allocate more attention to feedback that triggers feelings of anger even if highly consequential, as in the case of *negative* feedback (H6).

Table 9: The interplay between Analytical considerations and Emotional Reactions

	Attention Allocation											
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coef	Se	Coef	Se	Coef	Se	Coef	Se	Coef	Se	Coef	Se
<i>Independent Variables</i>												
Detailed	0.514**	0.120	0.463**	0.097	0.365**	0.118	0.407**	0.117	0.357**	0.114	0.362**	0.113
Negative	-0.218*	0.100	-0.189*	0.096	-0.233**	0.087	-0.275**	0.104	-0.191	0.097	-0.164	0.097
<i>Mediators</i>												
Impact					0.270*	0.123	0.396**	0.131	0.263*	0.121	0.296*	0.123
Guilt					0.277**	0.072			0.285**	0.072		
Anger							-0.064	0.093	-0.092	0.091		
Prevailing Anger											-0.203**	0.062
<i>Control Variables</i>												
Fundamental	-0.405**	0.127	-0.310**	0.096	-0.349**	0.124	-0.365**	0.126	-0.398**	0.124	-0.450**	0.126
Expert	0.109	0.102	0.109	0.098	0.089	0.088	0.120	0.090	0.100	0.089	0.119	0.088
Respondent_male			0.063	0.138								
Respondent_age			0.014	0.013								
Respondent_owner			-0.389*	0.167								
Chain			1.153	0.589								
Michelin_rating			-0.073	0.139								
Michelin_cuisine			0.079	0.137								
Review_satisfied			0.017	0.093								
Review_reader			-0.110	0.114								
Constant	5.103**	0.011	4.494**	0.824	2.772**	0.552	3.485**	0.732	3.183**	0.662	3.811**	0.599
N	308		308		308		308		308		308	
F/ Chi ²	12.630		57.648		15.032		12.254		13.247		13.557	
R ² (ω)	0.239		0.238		0.357		0.293		0.363		0.335	

^a The table displays results of fixed-effects OLS regression (models 1, 3, 4, 5, and 6) and random-effects GLS regression (model 2), all with robust clustered standard errors. We report the within-R² (ω) for all models. The significance levels are indicated as follows: * p<0.05, ** p<0.01, *** p<0.00.

Once we have assessed the main effects of these two feedback features on attention allocation, we should try and understand whether the mechanisms driving these results are in fact different, as we previously hypothesized. To this end, we next run a series of mediation analyses. First, we evaluate the effect of impact and guilt as mediators to the main relationship between *detailed* and *attention allocation*. Then, we replicate the same analysis for *impact* and *anger* on the effect of *negative* on *attention allocation*. Third, we aggregate the two emotions into a single scale to account for the fact that emotions are usually not experienced in isolation (Scherer and Ceschi 2000). By using an aggregate measure of emotional reactions, we can actually make a comparison of the extent to which attention allocation is triggered by analytical considerations on one side and emotional reactions on the other. In other words, this last analysis allows us to measure how much of the effect of feedback features on attention allocation can be explained in terms of considerations about the expected consequences of feedback vs. emotional reactions generated by the feedback in the decision maker.

Detailed Feedback. We start with the case of detailed feedback. According to H5, decision makers are more likely to allocate attention to this type of feedback, because: (a) it is highly consequential; and (b) it generates feelings of guilt. To test this hypothesis, we evaluate the effect of *impact* and *guilt* as mediators to the main relationship between *detailed* and *attention allocation*. To this end, we employed the traditional Baron and Kenny (1986) stepwise approach, the Sobel (1982) test, as well as the bootstrap approach more recently developed by Preacher and Hayes (2004). Following Baron and Kenny (1986), we find that: (1) the independent variable (*detailed*) has a significant effect on the dependent variable (*attention allocation* – Table 9, model 1); (2) the independent variable (*detailed*) has a significant effect on both mediators, namely *impact* (Table 8, model 1) and *guilt* (Table 8, model 5); (3) the mediators (*impact* and *guilt*) have a significant effect on the dependent variable (*attention allocation*) even when controlling for the independent variable (Table 9, model 3); and finally, (4) the effect of the independent variable on the dependent variable (*attention allocation*) decreases after controlling for the mediators (Table 9, model 1 vs. Table 9, model 3). The Sobel test (1982) further confirmed the mediating effect of both *impact* ($z=2.24$, $p = 0.02$) and *guilt* ($z=1.94$, $p = 0.05$), and so did results from Preacher and Hayes’s bootstrap procedure (confidence interval for *impact*: 0.04, 0.15; confidence

interval for *guilt*: 0.03, 0.15). Overall, these results seem to support our conjecture that decision makers are more likely to allocate attention to detailed feedback because it is perceived as highly consequential for the organization and because it generates feelings of guilt.

Negative feedback. Next, we move to the case of negative feedback. According to H6, decision makers are less likely to allocate attention to negative feedback, because, despite being highly consequential, it generates feelings of anger, and such an emotional reaction ends up prevailing over the assessment of its consequences for the organization. To test this hypothesis, we first evaluate the effect of *impact* and *anger* as mediators to the main relationship between *negative* and *attention allocation*. Following Baron and Kenny (1986), we find that: (1) the independent variable (*negative*) has a significant effect on the dependent variable (*attention allocation* – Table 9, model 1); (2) the independent variable (*negative*) has a significant effect on both mediators, namely *impact* (Table 8, model 1) and *anger* (Table 8, model 3); (3) only one of the mediators (*impact*) has a significant effect on the dependent variable (*attention allocation*) even when controlling for the independent variable (Table 9, model 4); and finally, (4) the effect of the independent variable on the dependent variable (*attention allocation*) decreases to the extreme of disappearing after controlling for the mediators (Table 9, model 1 vs. Table 9, model 4). Consistent with the findings above, the Sobel test (1982) further confirmed the mediating effect of *impact* ($z=2.08$, $p = 0.04$), while it failed to confirm it for *anger* ($z=-1.03$, $p = 0.30$). This is also in line with results from Preacher and Hayes's bootstrap procedure, which confirm a significant mediation effect for *impact* (0.03, 0.13) but fail to do so for *anger* (-0.10, 0.01) as the confidence intervals excluded zero.

These results lend partial support to H6, as we find no evidence of a significant effect of anger on attention allocation. Negative feedback elicits anger in the recipient (Table 8) and, despite being perceived as consequential for the organization (Table 8), it is given less attention by decision makers (Table 9). However, we fail to show the causal chain linking these different pieces: We cannot claim that negative feedback is allocated less attention because of the anger it elicits. Or, at least, we cannot do so if we consider anger as an independent emotion, which is what we have done until now. Emotions, however, are usually not experienced in isolation (Scherer and Ceschi 2000). And it is not

unlikely that, in front of a review commenting on his work, a decision maker may experience a range of different emotions at the same time. If this is the case, one may argue that it is the prevalence of one emotion over the other(s) to really matter. We explore this conjecture next.

Measuring the aggregate effects of emotions. We start by aggregating the measures of *anger* and *guilt* into a single scale measuring the extent to which anger prevails over guilt. Our new *prevailing anger* measure is the difference between anger and guilt. It ranges from -6 to +6, with positive values indicating a prevalence of anger over guilt and negative values indicating a prevalence of guilt over anger. We next replicate the mediation tests presented above using this aggregate measure of emotion as our mediator. Following Baron and Kenny (1986), we find that: (1) the independent variables (*negative* and *detailed*) have a significant effect on the dependent variable (*attention allocation* – Table 9, model 1); (2) the independent variables (*negative* and *detailed*) have a significant effect on *prevailing anger* ($\beta=0.573$, $p<0.00$; $\beta=-0.379$, $p<0.01$); (3) the mediator (*prevailing anger*) has a significant effect on the dependent variable (*attention allocation*) even when controlling for the independent variables (*negative* and *detailed* – Table 9, model 6); and finally, (4) the effect of the independent variables (*negative* and *detailed*) on the dependent variable (*attention allocation*) decreases to the extreme of disappearing after controlling for the mediator (*prevailing anger* – Table 9, model 1 vs. Table 9, model 6). The Sobel test (1982) further confirmed the mediating effect of *prevailing anger* on the effect of both *negative* ($z=-2.57$, $p = 0.01$) and *detailed* ($z=1.93$, $p = 0.05$). Results from Preacher and Hayes’s bootstrap procedure confirm a significant mediation effect for *prevailing anger* as the confidence intervals excluded zero for both *negative* (-0.20, -0.07) and *detailed* (0.03, 0.15).

Results of these analyses further enrich our story. As we have seen, decision makers are more likely to allocate attention to detailed feedback, because it is perceived as highly consequential for the organization and generates feelings of guilt. We have also seen that negative feedback elicits feelings of anger, is perceived as highly consequential, and is usually allocated less attention. But we failed to show that it is because of it eliciting feelings of anger and being perceived as highly consequential. What the analysis above tells us is a slight variation to this story, and that is: decision makers are more likely to allocate attention to highly consequential feedback when it primarily triggers a feeling of guilt,

as in the case of detailed feedback. But the opposite holds true for the cases in which anger prevails, as in the case of negative feedback.

The presence of a single measure for emotional reactions to feedback allows us to carry out an additional analysis of parallel mediation (Hayes, 2013), which consists in comparing the extent to which emotional reactions (as measured by *prevailing anger*) vis-à-vis analytical considerations (as measured by *impact*) mediate the effect of feedback features on attention allocation. This allows us to provide a direct test of our theory according to which, when feedback primarily triggers anger, decision makers end up discarding highly consequential feedback because of the prevalence of such an emotional reaction. We follow the procedure suggested by Kohler, Karlson, and Holm (2011) to estimate the relative size of the indirect effects through our proposed mediators when both of them are included at the same time. In line with our prediction, we find that 24.57% of the effect of *negative* on *attention allocation* is mediated by our mediators, with *prevailing anger* explaining 53.33% of the effect and *impact* pushing 28.76% of the effect in the opposite direction. This means that: (1) the two effects go in opposite directions; (2) *prevailing anger* has an effect that is almost double in size compared to that of *impact*; and (3) as a result, what drives the effect of *negative* on attention allocation is indeed the emotional reaction to feedback (most precisely, the prevalence of anger over guilt), which has the power to overrun the effect of analytical processing. The analysis also supports our claim according to which, in the case of detailed feedback, the effect of analytical consideration and emotional reactions goes in the same direction. In particular, we find that 29.65% of the effect of *detailed* on *attention allocation* is mediated, with *prevailing anger* explaining 14.94% of the effect and *impact* explaining the remaining 14.71%. Overall, this last step of our analysis further refines our understanding of the mechanisms behind the effect of feedback features on attention allocation, by showing that the angrier the decision maker gets, the more likely she will be to discard feedback that, with a cooler head, she would consider worthy of attention.

DISCUSSION AND CONCLUSION

As the number of industries not affected by online feedback continues to shrink, and the volume of online reviews generated each day by users and consumers continues to grow, organizations find themselves in a position where it is hard to ignore the opinions customers express online as inconsequential. Human attention is, however, a finite resource: decision makers cannot consider all feedback they receive, but rather focus their attention on selective stimuli. In this paper, we tried to understand what drives attentional selection in the context of online customer feedback. Our findings revealed that some features of feedback have the power to make decision makers more or less likely to attend to it. To explain these findings, we dug deeper into the underlying mechanisms. We showed that, in general, decision makers allocate attention to feedback based on the extent to which its features suggest it will be highly consequential for the organization. However, we also found evidence of a “disturbance” effect of the emotions evoked by certain feedback features. In particular, when feedback triggers an overwhelming feeling of anger in the decision maker, we witnessed the choice to disregard feedback regardless of its consequences for the organization.

From a theoretical standpoint, our findings extend and refine previous research in a number of ways. By examining how and when organizations make concrete use of the information in online reviews, we complement prior work explaining how managers react symbolically to customer feedback with impression-management tactics (Conlon and Murray 1996, Proserpio and Zervas 2017, Wang and Chaudry 2018, Wang et al. 2016). By showing how analytical considerations and emotional reactions interact and compete to explain attention allocation, we emphasize the importance of incorporating affective mechanisms in the study of attention (Haas et al. 2015, Stevens et al. 2015, Piezunka and Dahlander, 2015, Sullivan 2010). By uncovering the circumstances in which emotions take over, pushing the decision maker to act against the best interest of the organization, we shed light on how individual-level emotions impact organizational-level outcomes (Ashkanasy et al. 2017, Elfenbein 2007, Huy 2012).

From a practical standpoint, we believe our study offers helpful insights to the three main stakeholders involved in the production, dissemination, and fruition of reviews. To customers who

contribute to platforms by posting their reviews, we show that the content, sign, and style of their reviews may make their voice more or less heard by organizations. Offering a constructive review will make organizations listen. On the other hand, while giving a very negative score may be a signal that is easily interpreted by other customers, it will not spur an establishment to improve. To organizations whose activities are under scrutiny, we show the importance of assessing feedback with a cold eye, to avoid discarding suggestions that should be addressed because of their consequences on the organization. Hiring a manager to “*keep a close eye on what has been said*” and suggest specific actions to address the points raised by customers online could be a good choice in this respect. Finally, to the platforms who connect reviewers on one side and organizations to be reviewed on the other, we provide evidence of the importance of their role in shaping how those organizations behave.

Of course, our study is not immune to limitations. First, the grounded nature of our research provides the undeniable benefit of better internal and construct validity (Di Stefano and Gutierrez 2018), but this comes at the expense of the generalizability of our finding beyond the study’s setting. We hope future research will help us extend our findings more broadly by studying how feedback features affect attentional selection and why in a variety of contexts. Second, our choice to conduct a randomized experiment with real industry players required us to select a task that was feasible to administer on a large scale. This drove our choice of a scenario-based experiment, in which participants faced a fictitious review and were asked about their intentions to incorporate the feedback it provided. Measuring intended rather than real action made the study feasible at the expense of realism. We hope to test our framework in a more realistic setting in the future, allowing us to observe the actual changes participants made to their offering in response to feedback. Progresses in computational linguistics, for instance, may make it possible to study the evolution of menus over time in response to themes evoked in reviews.

Our journey among restaurants, chefs, and critics started with the goal to identify which features of online customer feedback make a decision maker more likely to pay attention to it, and why this is the case. Along the road, we encountered what we believe are interesting findings. We have observed decision makers engaging in cost/benefit considerations and acting in a consequential fashion. But we

have also observed them being overwhelmed with emotions and acting in a counterintuitive, counterproductive way as a result. Our study of the high end of the restaurant industry uncovered instances in which key decision makers in organizations are so deeply affected by customer reviews that they 'lose it'. Borrowing a line from writer Mark Twain, it really looks like "The public is the only critic whose opinion is worth anything at all."

CHAPTER 2: Organizational responses to status shocks

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INTRODUCTION

Organizational scholars have devoted substantial attention to the concept of status, which is defined as the position occupied by an actor in a social hierarchy (Askin and Bothner 2016, Piazza and Castellucci 2014, Piezunka et al. 2018, Podolny 1993, Sorenson 2014). Research in this domain offers several insights on the antecedents and consequences of status. According to prior research, the status of an actor is influenced by the entities with whom it affiliates, as affiliation enables third parties to make inferences about the focal actor itself (Podolny et al. 1996). Arbiters and critics are considered an alternative source of status. By issuing public judgements and evaluations, they create status hierarchies that influence the performance and survival chances of actors (Rao et al. 2005, Sauder 2006). Status brings increased visibility, informational control, security, and confidence (Cole and Singer 1991, Goode 1978, Gould 2002), thus ultimately providing access to resources and performance advantages (Sauder et al. 2012, Simcoe and Waguespack 2011).

Given the benefits associated with status, a considerable body of scholarly work has documented how actors actively seek status: high-status firms command higher prices, face lower costs, obtain easier access to resources, and enjoy greater freedom to deviate from norms (Benjamin and Podolny 1999, Phillips and Zuckerman 2001, Podolny 1993, Sauder et al. 2012). In most of prior studies, however, once status is granted, the associated benefits are expected to automatically accrue to actors, thus making status self-reinforcing and leaving no need to secure a high-status position once it has been acquired (Gould 2002, Malter 2014). In other words, with self-reinforcing status hierarchies, status becomes a stable property of actors; once status is attributed, high-status actors automatically accrue disproportionate rewards and resources, and status positions become difficult to change. It is easy to see how this conceptualization of status leaves little room for any need to actively protect a high-status position. Indeed, if anything, prior studies describe high-status actors as more willing to deviate and

go against general expectations as the risk of diluting their status is irrelevant (Durand and Kremp 2016, Phillips and Zuckerman 2001, Phillips et al. 2013).

Despite being stable, however, anecdotal evidence and recent scholarship seem to suggest that status is not immutable. Restaurants lose or gain stars,¹ premium carmakers lose their appeal,² elite schools³ and premium athletes climb or fall in rankings⁴. Such a dynamic view of status has recently found its way into status scholarship as shown by the increasing interest in the active role played by actors in creating the conditions to benefit from or improve their status position (Askin and Bothner 2016, Bowers et al. 2017). Studying individual reactions to status changes, however, raises an important empirical challenge. For status to be attributed, the full population of actors needs to be placed in a hierarchy. This explains why prior work in this domain has mainly examined the effects of status for a full population of actors (examples include: California wineries in Benjamin and Podolny 1999 or Boston law firms in Phillips et al. 2013). Such an approach, however, hampers the assessment of causality in the absence of a clearly stipulated counterfactual and a control population (Azoulay et al. 2014). How could one clearly identify the extent to which any documented effect depends on being ranked vis-à-vis changing in response to the ranking?

In this study, we contribute to studying the dynamics associated with status changes, and we do so by tackling the empirical challenge described above. From a theoretical standpoint, we focus our attention on the behavior of organizations that experience a status gain. We propose that actors will actively respond to status gains by modifying their self-presentation so as to make sure it conforms to what they believe audiences expect from high-status actors. The automatic nature by which advantages accrue to high-status actors would suggest that, once actors attain membership in a high-status group, it would be rational for them to expend little effort in justifying such membership. We present arguments and evidence to the contrary by showing that a status increase actually creates pressures on

¹ www.theguardian.com/food/2020/jan/27/michelin-launches-2020-guide-controversy-bocuse-auberge-du-pont-de-collonges-third-star [last accessed: February 29, 2020].

² www.economist.com/leaders/2007/02/22/losing-their-vrrooom [last accessed: February 29, 2020]

³ www.economist.com/international/2018/05/19/how-global-university-rankings-are-changing-higher-education [last accessed: February 29, 2020]

⁴ www.theatlantic.com/health/archive/2019/10/the-power-of-momentum/601063/ [last accessed: February 29, 2020].

producers to change their self-presentation. By doing so, actors enact, justify, and defend their newly acquired status (see Correll et al. 2017). This is in line with recent work shifting the focus from audience perceptions to the perceptions of producers (Wang and Jensen 2019). We further discuss how responses to status gains are not homogeneous but rather are moderated by an actor's standing *prior to* the status shock, as well as the reaction of other critical audiences *following* the shock. Empirically, we investigate a particular type of status gain, which is the introduction of a new status hierarchy by an established and powerful intermediary, generating an actual shock in the attribution of status. In particular, we focus on the release of the first edition of the Michelin Guide (the most powerful arbiter of quality for restaurants; Ferguson 2008) for Washington D.C. in 2016, a significant event for the United States fine-dining industry. Washington D.C. was indeed only the fourth city in the country to be acknowledged by the prestigious guide. Using a difference-in-differences approach, we examine the behavior of each restaurant that was included in the guide and thus experienced a visible increase in status. We compare the behavior of included restaurants vis-à-vis that of similar D.C. restaurants that failed to be included. We also compare the behavior of included restaurants with a second control group consisting of similar restaurants in a comparable city not covered by Michelin (Boston). This enables us to identify how actors change their behavior as a result of a positive shock in their status positions.

THEORETICAL FRAMEWORK

How do actors respond to positive status shocks?

Higher status brings several advantages to actors. Prior literature has associated status with the capability of charging higher prices and generating higher revenues (Benjamin and Podolny 1999), having easier access to resources and as a result, lower costs (Phillips and Zuckerman 2001, Podolny 1993), and with higher chances of survival in general (Baum and Oliver 1992, Park and Podolny 2000, Podolny et al. 1996). It should hence come as no surprise that organizations actively seek status, and once they gain it, they make sure to capture all of the associated benefits by, for instance, making additional investments (Benjamin and Podolny 1999). However, one important assumption of prior

work is that status is a relatively stable property of actors (Azoulay et al. 2003, Washington and Zajac 2005). This stability enables high-status actors to deviate from norms and act against general expectations (Durand and Kremp 2016, Phillips and Zuckerman 2001, Phillips et al. 2013) as well as to span categories without experiencing any punishment (Kovács and Johnson 2014).

In this study, we somehow change perspective and suggest that newly awarded actors feel compelled to make changes aimed at proving that they deserve their newly acquired position. Hence, not only do we study how actors react to being placed on top of the status hierarchy, but we also consider how their reactions evolve as a result of the changing expectations from their audience. We propose that in response to the newly acquired status position, actors will enact a number of changes aimed at conforming to what they believe audiences expect from high-status players. Status signals an acknowledgment of capabilities and comes with expectations from the audience (Lynn et al. 2009, Ridgeway and Erickson 2000). These expectations are internalized by newly awarded actors who will modify the material and ceremonial aspects of their production in order to qualify as legitimate members of the elite group (Goffman 1959, Podolny 1993). An organization that makes changes to conform to its newly granted status is essentially acting on its self-presentation to better align with its perception of an audience's expectations (Fragale et al. 2012, Jourdan et al. 2017, Ridgeway and Erikson 2000, Schlenker 2002, Wang and Jensen 2019). Thus, in contrast to the dominant idea that high-status actors are less likely to conform to what is 'normal' or 'expected' (Phillips and Zuckerman 2001), we argue that after being granted a new status position, actors will be more likely to conform to what they believe audiences expect from high-status players. This extends previous theory by showing that high-status actors also feel pressure to conform.

Changes within existing status hierarchies may be insufficient to identify how actors react to a change in their status position, as actors may deliberately take actions that affect their positions. To overcome this problem, we consider an exogenous shock in a status hierarchy. The presence of an exogenous change in status hierarchies allows us to move away from a simple discussion of status gains and losses, which could originate endogenously over time. More specifically, a status shock allows one to observe the response of focal actors and audiences to the status change, net of potential actions

taken by actors that influence their status positions. Although not easy to observe, exogenous status shocks are not uncommon. Bowers and Prato (2018), for example, studied the effects of a category addition by a prestigious ranker of financial analysts. In the context of our study, we exploit the release of the first edition of the Michelin Guide for Washington D.C. in 2016. We aim at capturing how being included in the guide pushes restaurants to modify their self-presentation so to better align it with what they believe audiences now expect from them. To this end, we focus on observable changes that restaurants make to their menus.

Our choice rests on the idea that restaurant menus play a fundamental role that goes well beyond the obvious provision of information about items and prices. Menus communicate the essential nature of an establishment as they are the “first clear opportunity for the restaurant to identify itself to the patrons and give an indication about what kind of establishment it is” (Lakoff 2006, p. 151). Fine-dining restaurants tend to display very similar characteristics when it comes to their menus. They may use sophisticated names for each dish and often provide details on the sourcing of the ingredients or even the story behind the creation of the dish itself (see Figure 4, Appendix, for an example). These choices help a restaurant set expectations in the mind of their customers and, as noted by Liberman (2004), are used as status markers – tangible manifestations of the standing of the establishment. Moreover, the use of menus as a tangible means by which restaurants portray their offering and mark their status allows us to easily compare changes within and across organizations.

If menus can be used as effective markers of organizational status, we suggest that restaurants will act on them so as to be on par with their new status position (Gergaud et al. 2007, 2015, Rao et al. 2005). As an illustration, consider the study by Gergaud and colleagues (2015) on the effects of Michelin stars in New York City. According to the authors, when a restaurant increases its prices after being featured in Michelin, its chances of survival increase only when its *perceived* food quality (measured with consumer ratings) also goes up. This study hints at the important role of the alignment between producers’ actions and audiences’ perceptions but does not offer specific insights with regard to the actions taken by newly awarded restaurants to influence the perception of customers. Our argument is that changes in menus can be used by the newly recognized high-status actors as a simple, yet powerful

way, to align their self-presentation with what they believe audiences expect from them as a result of the status shock. Accordingly, we hypothesize:

Hypothesis 1: Organizations that experience a positive status shock will modify their self-presentation with the aim of conforming to the expectations associated with their newly acquired status position.

Do All Actors Respond in the Same Way?

Until now, we have discussed our interest in understanding how restaurants react to positive status shocks. We have argued that they make changes in their menus in order to conform to what they believe audiences expect from high-status players and qualify as legitimate members of the elite. In doing so, we considered the newly recognized high-status actors as homogenous. Still, one could expect menu changes to be particularly useful when audiences' perceptions are not perfectly aligned with the newly granted status position, independent of the change in audience that follows a positive status shock (Kovács and Sharkey 2014). As a result, it is reasonable to expect the response of actors to vary depending on at least two factors: (1) their standing *prior to* the status shock and (2) the reaction of other critical audiences *following* the shock.

Prior standing. Existing theories that link organizational status with actor behavior rest on several assumptions. One of these assumptions is the perceived sense of security that comes with a status position (Berkowitz and Macaulay 1961, Bowers and Prato 2018). Theory on middle-status conformity, for example, requires a status structure that is sufficiently stable to confer security to high-status actors and give them freedom to deviate (Durand and Kremp 2016, Phillips and Zuckerman 2001).

In our setting, we expect restaurants included in the guide to experience different degrees of security with respect to their newly acquired status position, as a function of their prior standing. Michelin inspectors are indeed the most prominent status evaluators in the restaurant industry (Ferguson 2008), and this holds true also in the case of Washington D.C. as shown by the feedback we collected on the field through a series of interviews (see discussion in Empirical Setting). Still, before Michelin came to town, prominent local critics were already issuing reviews and ratings, which were contributing to a restaurant's standing. Our second hypothesis postulates that organizations with a higher standing prior to the positive status shock will feel less pressure to mark their newly acquired

position (Durand and Kremp 2016, Kim and Jensen 2011), and hence will be less likely to react by modifying their self-presentation:

Hypothesis 2: The standing of an organization prior to a positive status shock will reduce the effect of such a shock on the organization's propensity to modify its self-presentation with the aim of conforming to the expectations associated with its newly acquired status position.

The interplay with customer evaluations. Most research on status has focused on a core audience that organizations face (such as critics or customers). This simplification, which is appropriate in many real-world settings, facilitates the researcher's ability to formulate predictions about the behavior of actors. However, organizations generally face multiple audiences, as anecdotal evidence and recent research show (Kim and Jensen 2011, Kovács et al. 2013, Mollick and Nanda 2015). When producers face multiple audiences, modifying one's self-presentation following a status shock may please one audience but alienate another one.

Among the many relevant audiences that organizations face, customers clearly represent a critical one (Sharkey and Kovács 2018, Wang et al. 2016). This representation has become even truer in contemporary markets in which customers are active broadcasters of opinions. Multiple websites and platforms allow customers to rate their interactions with organizations, and the volume of these public evaluations only keeps growing (Dellarocas 2003, Orlikowski and Scott 2014). Organizations can hardly afford to ignore customers' opinions as they affect future sales. Indeed, potential customers tend to perceive the content associated with personal experiences as credible and judge peer customers as reliable sources of information (Hussain et al. 2017). As a result, one should expect customers' evaluations to influence the behavior of organizations.

Our setting is particularly suited to study this situation. Fine dining has been traditionally characterized as an industry in which professional intermediaries (such as food critics) are important arbiters of taste and also exercise an important function of mediating between producers on one side and final customers on the other (Goldberg et al. 2016, Rao et al. 2005). Yet, over the last several decades, thanks to the advent of digitization, the industry of fine dining has witnessed a rampant democratization process in which lay actors (restaurant customers) have gained more and more influence, thus causing a dilution of the power once retained by critics (Karpik 2010). Nowadays, we

often pick restaurants based on reviews from Yelp, Zagat, OpenTable, TripAdvisor, Google, and other similar sources, such as websites that aggregate the opinions of amateur critics. The impact of these reviews on restaurants is substantial.⁵ It is hence reasonable to expect that the extent to which organizations react to status shocks will be affected by the way in which concurrent evaluations provided by customers change. Since both the evaluated restaurants and their customers witness the entry of Michelin, we postulate that customers' scrutiny increases the likelihood that an organization will modify its self-presentation following a status gain:

Hypothesis 3: Increased scrutiny by customers following a positive status shock will increase the effect of such a shock on an organization's propensity to modify its self-presentation with the aim of conforming to the expectations associated with its newly acquired status position.

DATA AND METHODS

Setting and Data

We test our theory in the context of fine dining, a popular context of enquiry for organization studies (Demetry 2013, Di Stefano et al. 2015, Kovács and Johnson 2014, Rao et al. 2003, 2005). Three features of this industry make it an excellent empirical setting for our study. First, restaurants have product structures (i.e., menus) that are similar enough to be meaningfully compared (Rao et al. 2003). Second, the industry presents the co-existence of expert evaluators, such as the Michelin Guide, with amateur evaluators who publish their reviews on websites, such as Yelp or TripAdvisor. Third, a large amount of information about the comments, ratings, and characteristics of customers is available through websites, such as Yelp and TripAdvisor.

On May 31st 2016, Michael Ellis, director of the Michelin guide, announced that the first edition of the Washington D.C. Michelin Guide would be published in the fall of the same year.⁶ According to Michelin, the publication of the guide would have “put the city more firmly on the world stage of great gastronomic destinations.” Press interviews released by prominent chefs, and our own interviews

⁵ In the US restaurant industry, in which customers are very active producers of evaluations (Simonson and Rosen 2014), a one-star decrease in the average Yelp rating leads to a 5-9% decrease in revenues (Luca 2016).

⁶ <https://michelinmedia.com/Michelin-guide-dc/> [last accessed: February 29, 2020]

with food critics and restaurant managers in the weeks that followed the announcement⁷ substantially confirmed Michelin's expectations: "I expect it will change consumers' expectations (about the culinary scene in DC); the Michelin guide is so highly revered" was the first comment we received from the owner of a mid-range restaurant in downtown D.C. Another informant explained, "when a new review (or award) comes out we tend to have an upsurge of people who are dining with us because of that, and so of course, we respect that they have a particular expectation." Similarly, the manager of another restaurant commented, "it is a significant standard for dining and so for DC to be included for the first time is a big deal." With the publication of the guide on October 13th 2016, Washington D.C. became the fourth city after New York, San Francisco, and Chicago that was considered by Michelin for its restaurant guide. The publication of the guide was clearly expected to elevate the status of the entire city dining scene, which suffered from "an outdated reputation of offering only fusty steakhouses."⁸

Of all restaurants in the city, only 106 were ultimately included, with 12 of these being awarded stars. The entry of Michelin drew a clear line between restaurants included in the guide and those who were legitimately expecting to be included (based on factors such as their current rating, price point, and cuisine style) but ended up not being included in the first edition of the guide. We will refer to this second group of restaurants as those that were "at risk" of making it to the guide but were in fact excluded by Michelin inspectors. Focusing our attention only on restaurants in the D.C. area, however, may not suffice, since the entire city was treated by entry of the guide. To mitigate this threat to identification, we created a matched sample of restaurants in a city that was comparable in geography, size, and dining scene but in which the Michelin guide was not present. We explain our empirical strategy in the next section.

⁷ We conducted phone interviews with three restaurant managers and one email interview with a prominent food critic (via email) in the period between the announcement and the publication of the guide.

⁸ <https://www.washingtonpost.com/news/food/wp/2016/10/13/washington-gets-its-first-Michelin-starred-restaurants-today/> (last accessed: February 29, 2020).

Empirical strategy

Given our interest in studying the effects of the entry of Michelin on the behavior of restaurants included in the guide, our empirical strategy relies on a difference-in-differences (DiD) framework in which we compare restaurants in the guide with two meaningful control groups: (1) restaurants *within* D.C. that had been “at risk” of entering and (2) restaurants *outside* D.C. that were located in a comparable city (Boston) where Michelin did not enter. For our regression analyses, we build on the classic DiD estimator (Wooldridge 2010):

$$Y_{it} = \beta_0 + \beta_1 * d_i^{Treat} + \beta_2 * d_t^{Post} + \beta_3 * d_i^{Treat} * d_t^{Post} + \alpha_i + \gamma_t + u_{it} \quad \text{Equation [1]}$$

in which Y_{it} is our dependent variable for restaurant i in year t , d_i^{Treat} is a dummy variable indicating whether the restaurant is in the treated or control group, and d_t^{Post} is a dummy variable indicating whether the observation occurs after or before the publication of the guide (2017). The term of interest in the above equation is the interaction between the two dummies for treatment and time (in bold). The coefficient (β_3) shows the effect of such interactions, capturing how restaurants in the treated group reacted to the entry of the guide compared to restaurants in the control group.

In our analysis, we also use two sets of moderators: (1) the prior standing of the restaurant, and (2) subsequent scrutiny exerted by customers. We capture each moderator effect by means of an additional interaction term in our DiD regressions:

$$Y_{it} = \beta_0 + \beta_1 * d_i^{Treat} + \beta_2 * d_t^{Post} + \beta_3 * d_i^{Treat} * d_t^{Post} + \beta_4 * Moderator_{i(t)} + \beta_5 * Moderator_{i(t)} * d_i^{Treat} + \beta_6 * Moderator_{i(t)} * d_t^{Post} + \beta_7 * Moderator_{i(t)} * d_i^{Treat} * d_t^{Post} + \alpha_i + \gamma_t + u_{it} \quad \text{Equation [2]}$$

in which β_7 captures how our two sets of moderators affect the reaction of treated restaurants.

Control group within D.C. Our first control group consists of D.C. restaurants that were excluded from the 2017 edition of the Michelin guide despite being similar to the included ones based on a number of visible parameters. To build this control group, we started with over 700 restaurants that were not included in the guide and for which we had complete information (name, location, cuisine type, price range, ratings, reviews, and menus) before and after the entry of Michelin. Next, we analyzed the most common features of restaurants included in the guide as reported in Table 10. Based on these criteria, we went through the original list and kept only restaurants with the following features: (1) Yelp

rating equal or above the lowest of all Yelp ratings of restaurants included in the guide; (2) price range equal or above the price range of the restaurant with the lowest price range in the guide; and (3) cuisine type common to at least two other restaurants in the guide. As a final check, we ensured that all top restaurants in 2016 according to the most prominent local critics were included.⁹ The resulting list includes 143 restaurants, which we used as our first control group.

Table 10: Characteristics of treated restaurants

	Mean	S.D.	Min	Max
Average Yelp rating (since restaurant was founded)	3.95	0.31	3.09	4.55
Average Yelp rating (previous 12 months)	3.98	0.33	3.25	4.70
Average price level (1-4)	2.60	0.68	1	4
Average restaurant age (years)	7.06	3.96	1	13
Average reviewer experience (previous 12 months)	105.77	49.71	34.65	378.00
Proportion of local reviewers (previous year)	0.34	0.12	0.11	0.63
Cuisine type: American - New (17); Italian (8); Seafood (7); French (6); Bars (4); Greek (4); Thai (4); Asian Fusion (3); Ethiopian (3); Latin American (3); Mexican (3); Steakhouses (3); American - Traditional (2); Indian (2); Japanese (2); Mediterranean (2); Sushi Bars (2); Tapas Bars (2); Tapas/Small Plates (2); African (1); Barbeque (1); Cafe (1); Cajun/Creole (1); Delis (1); Diners (1); Korean (1); Modern European (1); Pizza (1); Pubs (1); Ramen (1); Southern (1); Spanish (1); Vietnamese (1)				

It is important to highlight that our objective was not to create an exact match to the 83 treated restaurants.¹⁰ While an exact match would be ideal from a purely empirical perspective, it would not make sense from a practical standpoint given that, with very few exceptions,¹¹ all restaurants usually considered as the best in town were actually included in the guide. We hence opted for a more inclusive list that represented the set of all other D.C. restaurants meeting the minimum requirements for inclusion in the guide.

Control group outside D.C. Our second control group is formed by restaurants analogous to the treated restaurants in D.C. but located in a city that is comparable to D.C. in terms of geography and features of the dining scene, but still not covered by Michelin. The city of Boston

⁹ The most prominent food critics write for the Washington Post and Washingtonian Magazine in Washington D.C. and for the Boston Globe and Boston Magazine in Boston.

¹⁰ The 2017 edition of the Michelin Guide featured 106 restaurants, 12 of which were awarded stars. One restaurant was closed within one year from the publication of the guide. We were able to obtain accurate information for the years 2016 and 2017 for a total of 83 restaurants (8 with stars, 75 without stars), which constituted our treated group.

¹¹ www.washingtonpost.com/lifestyle/food/what-Michelin-gets-wrong-about-dcs-dining-scene--starting-with-rasika/ [last accessed: February 29, 2020]

proved to be the ideal candidate.¹² We then built our control group following a coarsened exact matching (CEM) procedure (Iacus et al. 2009), based on the following set of covariates: (1) average Yelp rating pre-guide; (2) cuisine type pre-guide; (3) price level pre-guide; and (4) scores given by local critics. We matched restaurants exactly on price and scores by local critics, while the distribution of Yelp rating and cuisine type was coarsened into strata.¹³ Following this procedure, we matched the 83 Michelin restaurants in Washington D.C. with the exact number of restaurants in Boston. For our identification strategy to work effectively, it was important to make sure that prior to the publication of Michelin, treated and control restaurants were similar with respect to relevant dimensions. As shown in Table 11, matching between the treated and the control groups outside D.C. (Control 2) was very effective on all relevant dimensions with the only difference being in restaurant age (higher for control). On the other hand, the comparison between the treated and control within D.C. (Control 1) revealed significant differences in the average Yelp rating and price level (lower for control). This finding can be explained by the fact that Control 1 is not an exact match but was rather designed to keep track of the behavior of all restaurants potentially at risk of inclusion in the guide. In the light of this finding, we suggest extreme caution in formulating conclusions that are not supported by a comparison with Control 2.

Table 11. Summary statistics for treated and control samples

	Treated (N = 83)		Control 1 DC (N = 143)		Control 2 Boston (N = 83)		Treated vs. Control 1	Treated vs. Control 2
	Mean	S.D.	Mean	S.D.	Mean	S.D.	p-value	p-value
Average Yelp rating (1-5)	3.95	0.29	3.66	0.31	3.92	0.32	0.001	0.304
Average price level (1-4)	2.61	0.68	2.14	0.37	2.64	0.67	0.001	0.409
Average restaurant age (years)	7.15	3.84	7.82	3.67	8.71	3.98	0.098	0.006
Proportion of local reviewers	0.35	0.13	0.38	0.17	0.40	0.31	0.118	0.059
Reviewer experience (number of reviews)	115.08	58.10	121.13	104.36	102.84	56.96	0.318	0.088

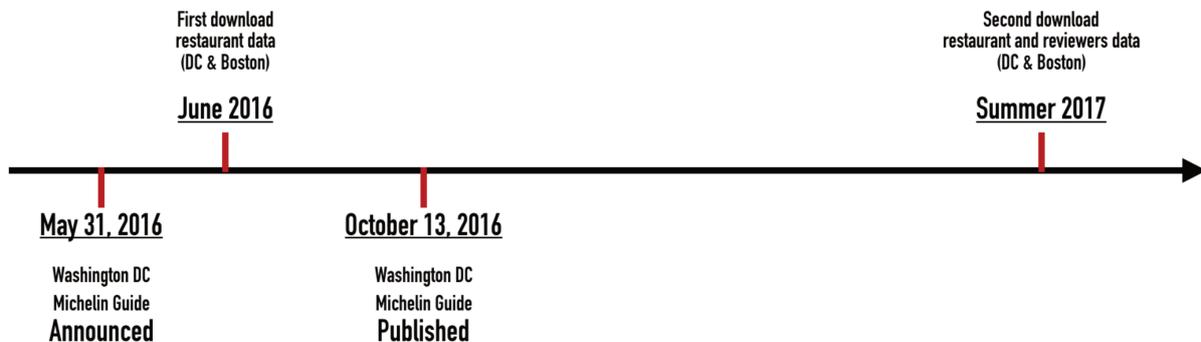
12 Washington and Boston, in 2016, had a comparable population (675,254 vs. 678,430 – US Census Bureau), and a comparable number (1,312 vs. 1,209 – Yelp) of medium and high-end restaurants (average meal price above \$10).

13 In the case of Yelp rating, we used five strata consisting of 0; 3.1; 3.5; 4; 4.5; and 5. For cuisine type, the stratification was based on the cuisine types represented in the treated sample (see Table 1). We coarsened cuisine into three strata based on their representation in the Michelin guide: (1): American-New, Italian, French, Seafood, Asian Fusion, and American-Traditional; (2): Ramen, Belgian, Laotian, Spanish, Thai, Indian, Filipino, Mediterranean, Peruvian, Indian, Vietnamese, Ethiopian, Steakhouse, Tapas Bar, Cajun; and (3): Mexican, Diner, Bar, Cafe, Barbeque, Delis, Pizza).

Data collection

Data collection began in June 2016 right after the announcement of the first edition of the guide. In the time frame between the announcement and the actual publication of the guide, while still ignorant about the restaurants that would have been included in the guide, we collected information about restaurants in D.C. and Boston from Yelp. Information for each restaurant included name, location, cuisine type, price range, ratings, reviews, and menus when available. When menus were not available on Yelp, we searched restaurant websites. This procedure allowed us to compile a list of over 1,500 restaurants located in D.C. and Boston. Between June and September 2017 (approximately one year after the first data collection and before the publication of the second edition of the guide) we conducted a new data collection on Yelp (and restaurant websites when menus were not available through Yelp). With the second data collection after the publication of the guide, we also downloaded all customer reviews that were ever published on Yelp about all restaurants in our sample. We provide an illustrated timeline of the data collection process in Figure 2.

Figure 2: Timeline of data collection



Variables and Measures

Our dataset includes information about restaurants in two US cities, namely Boston and Washington D.C. We describe all variables and measures in Table 12 and report descriptive statistics and correlations in Table 13

Table 12. Variables and measures

Variable	Measure	Operationalization
<i>Independent Variable</i>		
Post-publication	Year of publication of the first Michelin Guide in Washington D.C.	Dummy (0, 1)
Treated	Restaurant included in the first Michelin Guide in Washington D.C.	Dummy (0, 1)
<i>Dependent Variables</i>		
Description Length	Length of dish description	(Log of) number of words in the menu divided by the number of dishes in menu
Natural Authenticity	References to the origin of food in the description of dishes (<i>natural, organic, farmhouse, wild caught, grass fed, local, market, farmed, free range, heirloom, ranch</i>)	Frequency of related words divided by the number of dishes in menu
Craft Authenticity	References to cooking techniques in the description of dishes (<i>sautéed, fricassée, sous-vide, low-temperature, flambé, caramelizée, nappage, pasteurized, gelée, purée, confit, consommé, simmered, smothered, braised</i>)	Frequency of explicit mentions to cooking techniques divided by the number of dishes in menu
Portion Size	References to the size of portions in the description of dishes (<i>big, bigger, biggest, bottomless, bountiful, colossal, endless, enormous, generous, generously, gigantic, ginormous, heaped, heaping, hearty, hefty, huge, largest, loaded, loads, lots, mammoth, massive, mega, oversized, overstuffed, piled, plentiful, plenty, refills, unlimited, and more, king sized, texas sized, thick cut, tons of, with more</i>)	Frequency of words referred to the size of portions divided by the number of dishes in menu
<i>Moderating Variables</i>		
Prior Standing	Focal restaurant appeared in best restaurant lists published by local critics in 2016	Dummy (0, 1)
Reviews_Number	(Log of) number of reviews about focal restaurant	Continuous variable
Reviews_Rating	Average Yelp rating of the focal restaurant	Continuous variable (Min 0, Max 5)
Topic_Food	Proportion of topics related to food on the total of topics discussed in the reviews	Continuous variable (Min 0, Max 1)
Topic_Finedining	Proportion of topics related to fine-dining on the total of topics discussed in the reviews	Continuous variable (Min 0, Max 1)
Reviewer_Expert	(Log of) number of reviews previously written by the customer on Yelp	Continuous variable
Reviewer_Local	Proportion of reviews written by local customers (D.C area for D.C. restaurants, Boston area for Boston restaurants)	Continuous variable (Min 0, Max 1)

Table 13: Descriptive statistics and correlations

Variables	Mean	SD	Min	Max	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Description length	13.38	5.45	2.73	58.6	1.00										
2. Natural Authenticity	0.05	0.09	0	1	0.29	1.00									
3. Craft Authenticity	0.07	0.09	0	0.6	0.37	0.22	1.00								
4. Portion Size	0.03	0.05	0	1	0.19	-0.01	-0.01	1.00							
5. Prior Standing	0.12	0.32	0	1	-0.07	0.11	0.00	-0.05	1.00						
6. Reviews_Number	12.10	12.46	1	83	-0.04	0.01	-0.04	0.00	0.22	1.00					
7. Reviews_Rating	3.81	0.71	1	5	-0.03	0.01	-0.00	0.04	0.13	0.18	1.00				
8. Topic_Food	0.19	0.02	.09	0.33	0.02	-0.09	-0.07	-0.06	0.05	0.16	0.15	1.00			
9. Topic_Finedining	0.01	0.00	.00	0.05	-0.02	0.17	0.13	-0.01	0.13	-0.01	0.10	-0.02	1.00		
10. Reviewer_Expert	99.43	95.58	1	875	0.01	0.03	-0.02	0.02	0.09	0.03	0.02	0.00	-0.09	1.00	
11. Reviewer_Local	0.34	0.35	0	5	-0.03	-0.02	-0.07	-0.01	0.05	-0.02	0.05	0.05	-0.02	0.06	1.00

We use the shock triggered by the entry of Michelin to examine the behavior of restaurants that were included in the guide vis-à-vis those in the two control groups. Our main independent variable is the interaction between two dummies, namely post-publication (equal to 1 after the publication of the guide and 0 before) and treated (equal to 1 for treated restaurants and 0 for control).

We captured restaurants' reactions by looking at how restaurants modified their menu content.¹⁴ In order to determine which changes a restaurant would implement, we built on previous work in the areas of linguistics, taste, and culture by looking at the evolution of restaurant menus in the United States (Jurafsky 2014, Jurafsky et al. 2016, Lakoff 2006, Liberman 2004, Zwicky and Zwicky 1980). The study by Jurafsky and colleagues (2016), in particular, offers key insights on the characteristics of restaurant menus. The authors carefully analyzed the menus of 6,511 restaurants in seven cities in the US (including Washington D.C.), and the 591,980 dishes included in those menus. The results of this study, summarized in a James Beard finalist book and featured in several press releases,¹⁵ offer a rich overview of the distinctive features and trends of restaurant menus. Based on this and other similar work, we identified four relevant features in the menus in our sample. First, high-status restaurants tend to offer a high level of detail in their menus so as to convey a narrative that goes beyond a simple list of ingredients (as exemplified by the case displayed in Figure 1). Next, high-status restaurants provide clear signals of quality for items included in the menu by emphasizing the origin of ingredients on the one hand and the mastery of culinary skills on the other. Finally, high-status restaurants differ from low-status ones in that the latter are more concerned with giving an impression of abundance and highlight the size of portions.

We use *description length* to capture the level of detail provided in menus. The variable is measured as the (log of) number of words used in the menu. Our measure of *natural authenticity* captures the quality of raw materials (Lakoff 2006) by measuring the frequency of words related to the provenance

¹⁴ We restricted the analysis to dinner menus, excluding beverages, so as to be able to compare all restaurants.

¹⁵ The story was featured, among others, by the New York Times, Boston Globe, and Financial Times.

and origin of food as defined by Jurafsky (2014).¹⁶ *Craft authenticity* captures the mastery of skills (Carrol and Wheaton 2009, Rao et al. 2005) as measured by the frequency of words related to cooking techniques. We compiled a list of words based on techniques listed in ‘The Professional Chef’ by The Culinary Institute of America (CIA), one of the classic kitchen references for top chefs in the US. Our fourth variable, *portion size*, is a direct translation of Bourdieu’s (1984) definition of plenty. We used the measure adopted by Jurafsky (2014), i.e., the number of adjectives used to describe the size of portions. All the variables described above are standardized using the number of dishes in each menu.

Our first moderating variable is prior standing, which we measured by relying on rankings and reviews provided by the most prominent intermediaries before the advent of Michelin (local food critics). In particular, based on our understanding of the dining scene of the two cities and on conversations with chefs in both locations, we identified two prominent critics in Washington D.C. (the *Washington Post* and the magazine *Washingtonian*) and two in Boston (the *Boston Globe* and the magazine *Best of Boston*). A restaurant in our sample gets a *prior standing* score of 1 if listed as one of the 2016 best restaurants in town by at least one of the two local critics, otherwise, restaurants get a score of 0.

Our second set of moderators aims at capturing the extent to which other audiences, and in particular customers, reacted to the positive status shock and exerted a higher scrutiny on the organization. To build this measure, we examined online reviews published on Yelp.com. In particular, we focused on the differences between reviews published two months *before* vis-à-vis two months *after* the publication of the Michelin Guide.¹⁷ Starting with this information, we computed six different

¹⁶ In the classification of authenticity by Carrol and Wheaton (2009), natural authenticity could be interpreted as part of what they describe as craft authenticity or alternatively, as moral authenticity to the extent that restaurants want to signal ethical behavior. However, these classifications are not fixed and not universally adopted. Dutton (2003), for instance, would associate natural authenticity with nominal authenticity. Thus, we chose to adapt existing classifications to our empirical context and distinguish between natural and craft authenticity to better represent this dichotomy between raw materials and cooking skills used in the preparation of dishes.

¹⁷ We computed all of these six measures on different time windows, namely one, two, three, and six months before and after the publication of the guide. In the paper, we present the results associated with the 2-month window for one main reason. The 2-month window was small enough to measure customers’ immediate reactions to the entry of Michelin (which was not the case when looking at six months) while at the same time including a sufficient number of reviews for each restaurant (which was not the case when looking at one month). It is worth noting that results for the 2-month window are consistent with those using time windows of one and three months. Note however, that we are relying on the fundamental assumption that the 2-month window enables us to observe how consumers reacted to the entry of Michelin and not to restaurant’s

measures. We started by creating two variables capturing the number of reviews (*reviews_number*) and the average Yelp rating of the restaurant (*reviews_rating*), the underlying rationale being that pressure to modify one's self-presentation should get higher if the number of reviews increases and/or ratings start going down. Next, we examined the actual content of the reviews. To this end, we used an automated content-analysis method (Mohr 1998, Krippendorff 2004). More specifically, we relied on latent Dirichlet allocation (LDA) topic models, a class of statistical models devised by natural language processing scholars (Blei et al. 2003, Steyvers and Griffiths 2007). Such content-analysis data-reduction techniques allowed us to analyze the content of texts and identify 50 topics, which were stable across multiple model runs and exceeded a minimum probability threshold of appearing in the text (Gioia, et al. 2013, Strauss and Corbin 1998). To move from the list of 50 topics to a more parsimonious list capturing four general topics (food, fine dining, service, and features) discussed in the reviews, we performed an iterating coding process, for which we provide illustrative examples in Table 14. In particular, we started with raw topics as descriptive codes. We coded all topics separately and then discussed the results until agreement on a final list of first-order themes was reached. We then went through a second iteration, first individually and then as a team, to divide first-order themes into more abstract and general second-order themes. We used these second-order themes to determine in which proportion each single review of each restaurant in the sample dealt with each of the four general topics. By aggregating review information at the restaurant level, we were able to compute the extent to which the publication reviews of a focal restaurant discussed food (*topic_food*) and fine dining (*topic_finedining*) as opposed to service and features of the restaurant before and after the publication of Michelin, which provided an indication of an increased scrutiny exerted by customers on the restaurant. Finally, we coded information about reviewers of each restaurant, namely the number of reviews they have previously published (*reviewer_expert*) and whether they are local to the area (*reviewer_local*). The intuition behind these measures was that the pressure to modify one's self-presentation should increase if a

responses to Michelin. Unfortunately, however, we cannot completely exclude the possibility that some restaurants immediately reacted to Michelin assessment. This type of event makes these findings correlational in nature.

restaurant is evaluated by reviewers who are more active in their reviewing activity and/or are not familiar with the restaurant.

Table 14: Illustrative examples from coding process

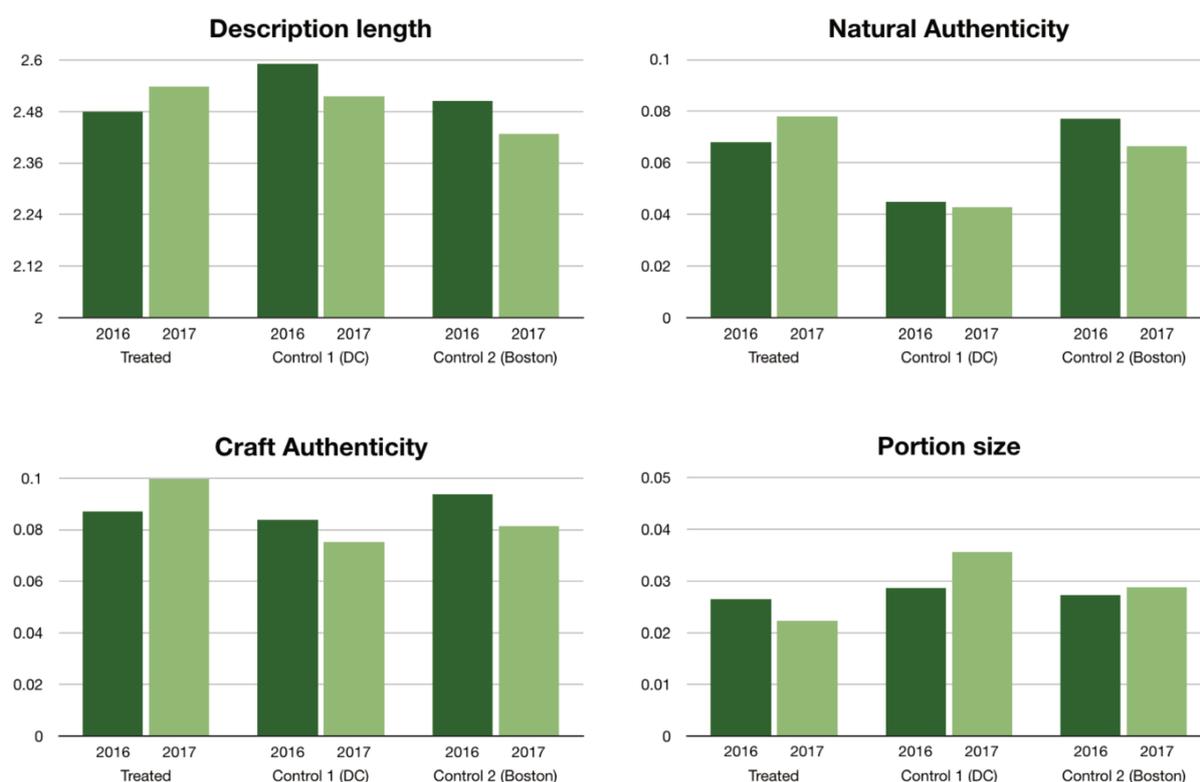
Topic #	Raw topics (first 4 words)	First-order	Second-order	Variable
6	mussel, cuisine, Peruvian, blend, ...	Peruvian food	food-type	Food
11	lobster, roll, oyster, seafood, ...	Seafood	food-type	Food
9	wine, list, glass, bottle, ...	Wine	wine-list	fine-dining
18	course, chef, tasting, main, ...	Menu	tasting-menu	fine-dining
12	great, staff, friendly, atmosphere, ...	Atmosphere	Evaluation	Service
35	customer, manager, rude, card, ...	Payment	Interaction	Service
43	table, wait, reservation, minute, ...	wait time	Reservation	Service
29	dining, room, space, level, ...	Interior	Spaces	Features

Note: the list of topics is not complete, we selected a sample of topics to illustrate the process used to build our variables.

RESULTS

We start by analyzing the effect of the shock triggered by the entry of Michelin on the behavior of restaurants as captured by changes in their menus. Figure 3 provides a visual overview of the changes we observe across our four dependent variables (*description length*, *natural authenticity*, *craft authenticity*, *portion size*), distinguishing between treated and matched restaurants in both control groups.

Figure 3: Overview of changes in menu features



After the entry of Michelin, in line with Hypothesis 1, we observe that treated restaurants experience an increase across all dependent variables, except for portion size, which decreases as expected. We next examine the data more formally by looking at the effects that the interaction between *post-publication* and *treated* has on our dependent variables. To this end, we employ an ordinary least squares (OLS) regression with restaurant fixed effects and robust standard errors clustered at the restaurant level.

Table 15: Changes in menu features, main results

	Description Length				Natural Authenticity			
	Control 1		Control 2		Control 1		Control 2	
	Coef	Se	Coef	Se	Coef	Se	Coef	Se
Post-publication	-0.074***	0.022	-0.076**	0.034	-0.002	0.004	-0.011	0.010
Post-publication X treated	0.133***	0.042	0.134***	0.049	0.012	0.007	0.021*	0.012
Constant	2.550***	0.009	2.492***	0.012	0.053***	0.002	0.073***	0.003
N	452		356		452		332	
F	7.273		3.846		1.497		1.895	
Adjusted R ²	0.052		0.038		0.010		0.012	

	Craft Authenticity				Portion Size			
	Control 1		Control 2		Control 1		Control 2	
	Coef	Se	Coef	Se	Coef	Se	Coef	Se
Post-publication	-0.008**	0.004	-0.012	0.008	0.007	0.007	0.002	0.003
Post-publication X treated	0.021**	0.008	0.025**	0.011	-0.011	0.008	-0.006	0.005
Constant	0.085***	0.002	0.090***	0.003	0.028***	0.002	0.027***	0.001
N	452		332		452		356	
F	3.482		2.614		1.204		0.785	
Adjusted R ²	0.027		0.024		0.004		0.004	

Note: *** p<0.01, ** p<0.05, * p<0.10. Control 1: Washington DC, Control 2: Boston.

As shown in Table 15, after the publication of Michelin, compared to restaurants in both control groups, treated restaurants increased the length of dish descriptions ($\beta = 0.133$; $p < 0.01$ and $\beta = 0.134$; $p < 0.01$) and emphasized the technical aspects of their cuisine ($\beta = 0.021$; $p < 0.05$ and $\beta = 0.025$; $p < 0.05$). We observe no significant changes in *natural authenticity* and *portion size*, but a marginally significant increase in *natural authenticity* (only compared to Control 2: $\beta = 0.021$; $p < 0.1$).

The analysis presented above incorporated all of the restaurants that were included in the guide without distinguishing between restaurants that were awarded stars and those that were simply included in the guide. Stars are an additional recognition awarded by Michelin to restaurants that offer a particularly good cuisine and are considered to be one of the top achievements in the career of a chef (Di Stefano et al. 2015). Following a middle-status conformity argument (Phillips and Zuckerman 2001) only applied to the context of a rarefied top, one could argue that, *mutatis mutandis*, non-starred restaurants represent middle-status organizations as they can still improve their status position. If this were indeed the case, we should observe a higher propensity to conform in the case of non-starred restaurants compared to the starred ones. To investigate such potential differences in behavior, we replicate the analysis restricting the sample to non-starred restaurants only. Note that this means excluding eight restaurants from our sample of 83 restaurants included in the guide. Results shown in

Table 16 seem to support this intuition. Compared to restaurants in both control groups, not only did treated restaurants describe their dishes in greater detail ($\beta = 0.146$; $p < 0.01$ and $\beta = 0.138$; $p < 0.01$), they also made more references to cooking techniques ($\beta = 0.018$; $p < 0.05$ and $\beta = 0.019$; $p < 0.1$) as we had already observed for the totality of included restaurants. These restaurants also put more emphasis on the origin of ingredients ($\beta = 0.016$; $p < 0.05$ and $\beta = 0.021$; $p < 0.1$) and less emphasis on the size of portions (only compared to Control 2: $\beta = -0.009$; $p < 0.05$). These results are consistent with the idea that restaurants that were included in the guide but did not make it to the top were particularly insecure in their position and hence felt the need to better mark their newly-acquired status.

Table 16: Changes in menu features, excluding starred restaurants

	Description Length				Natural Authenticity			
	Control 1		Control 2		Control 1		Control 2	
	Coeff	Se	Coeff	Se	Coeff	Se	Coeff	Se
Post-publication	-0.074***	0.022	-0.066*	0.036	-0.002	0.004	-0.007	0.011
Post-publication X treated	0.146***	0.044	0.138***	0.053	0.016**	0.007	0.021*	0.012
Constant	2.543***	0.010	2.474***	0.013	0.051***	0.002	0.064***	0.003
N	436		300		436		300	
F	7.666		3.410		2.658		2.749	
Adjusted R ²	0.058		0.038		0.021		0.014	

	Craft Authenticity				Portion Size			
	Control 1		Control 2		Control 1		Control 2	
	Coeff	Se	Coeff	Se	Coeff	Se	Coeff	Se
Post-publication	-0.008**	0.004	-0.009	0.008	0.007	0.007	0.006*	0.003
Post-publication X treated	0.018**	0.007	0.019*	0.010	-0.011	0.008	-0.009**	0.004
Constant	0.086***	0.002	0.090***	0.002	0.027***	0.002	0.024***	0.001
N	436		300		436		300	
F	3.179		1.946		1.183		2.448	
Adjusted R ²	0.024		0.018		0.003		0.024	

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Control 1: Washington DC, Control 2: Boston.

Do All Actors Respond in the Same Way?

We next study the influence of prior standing and subsequent scrutiny on our main effect.¹⁸ First, we add prior standing as a moderator in our model as per equation [2]. As shown in Table 17, contrary to what we observed for treated restaurants in general, treated restaurants with high prior standing reduced their *description length* ($\beta = -0.183$; $p < 0.05$). Results from a split sample analysis (shown in

¹⁸ To facilitate interpretation and make the tables easier to read, we only reported results of the comparison between treated and matched restaurants in Control 2. Results did not change in the case of a comparison with Control 1.

Table 18) reveal that such a reduction is to be ascribed to the lengthening of menus by restaurants with low prior standing, rather than to the shortening of menu by restaurants with high prior standing. On the other hand, we observe that the increase in *craft authenticity* is mainly driven by restaurants with high prior standing ($\beta = 0.073$; $p < 0.1$) as is the decrease in words associated with *portion size* ($\beta = -0.018$; $p < 0.05$). In other words, we observe that restaurants with high prior standing display a striking need to mark their newly acquired status positions despite their relative advantage and security. Hence, as expected by Hypothesis 2, prior standing matters in how organizations react to positive status shocks. However, contrary to middle-status conformity theory expectations (Durand and Kremp 2016, Phillips and Zuckerman 2001,) and to Hypothesis 2, it appears that high prior standing reinforces status anxiety and the need to match expectations of what it means to be part of the elite group.

Table 17: Changes in menu features, with *prior standing* as moderator

	Description Length				Natural Authenticity			
	Model 1		Model 2		Model 1		Model 2	
	Coef	Se	Coef	Se	Coef	Se	Coef	Se
Post-publication	-0.076**	0.034	-0.084**	0.037	-0.011	0.010	-0.012	0.011
Post-publication X treated	0.134***	0.049	0.177***	0.059	0.021*	0.012	0.017	0.013
Post-publication X prior standing			0.099**	0.046			0.013	0.018
Post-publication X treated X prior standing			-0.183**	0.086			-0.002	0.022
Constant	2.492***	0.012	2.492***	0.012	0.073***	0.003	0.073***	0.003
N	332		332		332		332	
F	3.846		2.394		1.895		0.973	
Adjusted R ²	0.038		0.044		0.012		0.010	

	Craft Authenticity				Portion size			
	Model 1		Model 2		Model 1		Model 2	
	Coef	Se	Coef	Se	Coef	Se	Coef	Se
Post-publication	-0.012	0.008	-0.009	0.008	0.002	0.003	0.001	0.004
Post-publication X treated	0.025**	0.011	0.014	0.011	-0.006	0.005	-0.002	0.005
Post-publication X prior standing			-0.041	0.037			0.009	0.006
Post-publication X treated X prior standing			0.058	0.040			-0.016	0.010
Constant	0.090***	0.003	0.090***	0.003	0.027***	0.001	0.027***	0.001
N	332		332		332		332	
F	2.614		1.581		0.785		1.421	
Adjusted R ²	0.024		0.038		0.004		0.006	

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 18: Changes in menu features, with split sample based on *prior standing*

	Description Length				Natural Authenticity			
	Prior Standing: 0		Prior Standing: 1		Prior Standing: 0		Prior Standing: 1	
	Coef	Se	Coef	Se	Coef	Se	Coef	Se
Post-publication	-0.084**	0.037	0.015	0.028	-0.012	0.011	0.001	0.014
Post-publication X treated	0.177***	0.059	-0.006	0.063	0.017	0.013	0.015	0.019
Constant	2.505***	0.014	2.455***	0.024	0.070***	0.004	0.080***	0.005
N	250		82		250		82	
F	4.632		0.160		1.079		0.843	
Adjusted R ²	0.063		-0.024		0.007		0.023	

	Craft Authenticity				Portion size			
	Prior Standing: 0		Prior Standing: 1		Prior Standing: 0		Prior Standing: 1	
	Coef	Se	Coef	Se	Coef	Se	Coef	Se
Post-publication	-0.009	0.008	-0.050	0.036	0.001	0.004	0.010*	0.005
Post-publication X treated	0.014	0.011	0.073*	0.039	-0.002	0.005	-0.018**	0.008
Constant	0.096***	0.003	0.073***	0.007	0.028***	0.001	0.023***	0.003
N	250		82		250		82	
F	0.822		2.270		0.103		2.654	
Adjusted R ²	0.006		0.091		-0.007		0.030	

Note: *** p<0.01, ** p<0.05, * p<0.10.

We next analyze the moderating effects of the increased scrutiny exercised by customers on restaurants that were selected by Michelin. Table 19 reports the results of the analysis including all six review-related measures.¹⁹ Overall, the results from our analyses provide weak support for Hypothesis 3. To begin, we do not find a significant effect of any of our moderators on the main effect exerted by *description length*, *craft authenticity*, and *portion size*, suggesting that these types of changes are likely to be driven by restaurants' attempts to mark their status position independent of consumers' opinions. However, this is not the case with respect to *natural authenticity*. Our results suggest that references to the origin of food became less pronounced when the average Yelp rating increased in the two months following the publication of the guide ($\beta = -0.065$; $p < 0.05$). In line with H3, we interpret this result as a suggestion that treated restaurants read the increase in consumer ratings as a signal that they were operating well and thus feel less pressured to mark their newly acquired status position by making changes in their menus. Our results also show that treated restaurants further increased references to the origin of food when customers' reviews become more focused on food ($\beta = 1.588$; $p < 0.05$). This

¹⁹ Note that the number of observations was reduced due to the lack of review data for some restaurants in our control group. Also, for ease of readability, we report only the coefficients of the 3-way interactions for each review-related measure. However, we computed all of the main effects and 2-way interactions, and our assessment of the 3-way interaction coefficients includes the evaluation of the unreported components.

finding is again consistent with H3: Michelin’s evaluations may lead customers to pay more attention to the quality of food offered by the establishment, and this attention would be reflected in Yelp reviews. As a consequence, restaurants may feel more scrutinized and therefore, primarily mark their status with food-related changes in their menus.

Table 19: Changes in menu features, with customer-level moderators

	Description Length				Natural Authenticity			
	Model 1		Model 2		Model 1		Model 2	
	Coef	Se	Coef	Se	Coef	Se	Coef	Se
Post-publication	-0.076**	0.034	-0.408	0.611	-0.011	0.010	-0.115	0.143
Post-publication X treated	0.137***	0.051	0.407	0.866	0.021*	0.012	-0.092	0.193
Post-publication X treated X								
reviews_number			-0.032	0.060			-0.013	0.014
X reviews_rating			-0.149	0.133			-0.065**	0.032
X topic_food			2.354	3.818			1.588**	0.722
X topic_finedining			1.739	11.168			4.248	2.729
X reviewer_expert			-0.048	0.101			0.019	0.015
X reviewer_local			0.368	0.364			-0.131	0.085
Constant	2.480***	0.013	2.369***	0.506	0.069***	0.003	0.326**	0.148
N		322		322		322		322
F		3.820		0.995		1.853		0.822
Adjusted R ²		0.039		0.055		0.012		0.141

	Craft Authenticity				Portion Size			
	Model 1		Model 2		Model 1		Model 2	
	coef	Se	Coef	Se	coef	Se	Coef	Se
Post-publication	-0.012	0.008	-0.126	0.129	0.002	0.003	0.048	0.058
Post-publication X treated	0.021*	0.011	0.077	0.166	-0.006	0.005	0.005	0.113
Post-publication X treated X								
reviews_number			0.019	0.014			-0.005	0.006
X reviews_rating			-0.028	0.025			-0.011	0.012
X topic_food			-0.077	0.671			-0.113	0.474
X topic_finedining			1.306	2.228			-0.127	1.867
X reviewer_expert			0.008	0.019			0.013	0.008
X reviewer_local			-0.068	0.059			0.007	0.031
Constant	0.091***	0.003	0.262**	0.109	0.026***	0.001	-0.076*	0.044
N		322		322		322		322
F		1.816		1.463		0.648		1.620
Adjusted R ²		0.017		0.065		0.003		0.143

Note: *** p<0.01, ** p<0.05, * p<0.10.

DISCUSSION AND CONCLUSION

How do actors react to changes in their status? Extant studies argue that actors actively seek status because of the high benefits associated with it: high-status firms command higher prices, face lower costs, have easier access to resources, and enjoy greater freedom to deviate from norms (Benjamin and Podolny 1999, Phillips and Zuckerman 2001, Podolny 1993, Sauder et al. 2012). One important assumption of prior work is, however, that status is a relatively stable property of actors. Status hierarchies are self-reinforcing, and once status is attributed, and high-status actors start automatically accruing disproportionate rewards and resources, status positions become more and more difficult to change. This idea implies that high-status actors should not feel particularly compelled to take actions to secure their self-reinforcing position. Building on recent studies putting forward a dynamic view of status, we challenged this assumption and suggested that following a status increase, actors would feel the need to secure their newly acquired positions by making observable changes in their offering with the aim of conforming to the expectations associated with their new high-status positions. We exploited the entry of the Michelin guide in Washington D.C. to illustrate how the genuine attempts of organizations to be perceived as a worthy member of the elite pushes them to modify their menus in order to conform to what they believe audiences expect from high-status players.

Our results suggest that newly awarded high-status restaurants react to their new status position by modifying their self-presentation so as to fit in with this new group. In particular, we found support for a tendency to provide more detailed descriptions of dishes and put more emphasis on the mastery of culinary techniques even when their standing was already consolidated in the market. Restaurants that experienced a smaller status increase (as in the case of those restaurants that were included in the guide but not awarded stars) engage in even deeper changes to their self-presentation. They removed references to mundane aspects, such as portion sizes, in the attempt to distance themselves from their lower status counterparts. They also put additional emphasis on the quality of their ingredients, a tendency that was further exacerbated when customers paid more attention to food when evaluating their experience at the restaurant.

Our findings speak to two areas of broad interest. First, these findings illuminate a little understood aspect of status research, that is the agentic reaction of organizations following a status change. Our study, in particular, sheds light on the active participation of organizations at incarnating the “ethos” of the high-status group, a representation that gets reinforced as actors with newly acquired status positions implement the corresponding changes (Goffman 1959, Jourdan et al. 2017). Notably, high status actors do not simply exploit opportunities that status provides, but they operate changes to align their operations and identity with their perception of what elite status entails. As such, and in combination with the catalytic action of buyers, the study provides a different view on how status dynamics are activated. We draw a parallel with the work by Askin and Bothner (2016) on organizational responses to a status loss. In their study, after losing status, organizations adopted aspirational pricing strategies to communicate their belonging to the high-status group. However, while organizations that lose status use price as an attempt to communicate value without fundamentally altering their inherent quality, we found evidence of a different mechanism in cases of status gains. In our case, firms adjust their operations (sourcing of ingredients, techniques used, etc.) and strive to communicate how much they adhere to what they perceive as the benchmark of elite membership. Complementarily, whereas the bulk of research on status concerns how audiences perceive high status producers (and hence how those accrue rents from these audiences’ positive perceptions), we provide evidence of how producers’ perception of status also alters and directs their behavior. From an empirical standpoint, our identification strategy enabled us to observe how, immediately after the status shock, actors modify their behavior to conform to expectations. This runs contrary to prior research using correlational evidence to show a higher propensity of high-status players to deviate from norms. It also goes against to what we predicted in our Hypothesis 2, on the basis of middle-status conformity theory, for establishments with high prior standing. We find this interesting and surprising, and would like to invite further research aimed at understanding how producers’ perceptions of their own identity and group membership influence their strategic behavior beyond our study on a specific case.

Second, and related to the first point, our study contributes to the existing research on organizational conformity. While prior studies rely on a semiotic square associating “done/not done;

disclosed/not disclosed” (Philippe and Durand 2011, Bromley and Powell 2012, Carlos and Lewis 2018), conformity to the ethos of the high-status group can be interpreted as a form of aspirational conformity or an attempt for the organization to adhere to be perceived as a worthy member of the elite. As such, our study participates in broadening the scope of organizational behavior beyond the traditional views of deviance as distance from a population and conformity as passive imitation. We believe our study also adds to recent work on the strategic use of conformity (Durand et al. 2007, Kim and Jensen 2011). If menu modifications are simply interpreted as ceremonial changes, they may point to a deliberate strategy by organizations to show conformity to audience expectations, thus giving them potential freedom to deviate with respect to other dimensions. This type of behavior would be consistent, for example, with what has been observed for symphony orchestras in the United States, which use both conventionality and alignment to avoid the penalties associated with deviance while being distinctive and original at the same time (Durand and Kremp 2016). Ultimately, these ceremonial manifestations of idealized self-presentation must be consistent with and support the material investments made the organization to achieve competitive advantage, an observation that we believe opens fascinating avenues for future research.

This paper, of course, is not without limitations. First of all, our analysis is restricted to a single city and to the comparison between two observations (one *pre* and one *post-treatment* observation). This means that our sample size and the number of observations from which we draw inferences is relatively small. While we adopted several measures to achieve a convincing identification strategy, replicating these results in other geographical areas with larger samples would substantiate and add validity to our results. Second, we found only limited evidence of a significant interaction between expert and customer evaluations. It is worth mentioning, however, that our analysis is exclusively based on customer evaluations published on Yelp, thus ignoring other important online hosts of customer evaluations, such as Google, Tripadvisor, and OpenTable in addition to the evaluations provided by specific types of customers as in the case of food bloggers and influencers.²⁰

²⁰ See for instance: <https://www.charlottemagazine.com/the-case-for-food-criticism-in-charlotte/> [last accessed: February 29, 2020].

Future research could lead to better understanding of how restaurants react to a rapidly evolving landscape by examining the effects of the different providers of online reviews, such as prominent local critics and ordinary customers but also food bloggers and *instagrammers*. Another interesting extension of our work would involve its replication in other settings. While an obvious choice would be to replicate these results in the wine or education industries, which have been frequently investigated by status scholars in the past, we believe these results have a broader appeal and generalizability. Consider, for example, organizations operating in the architecture, design, and art industry as a more general example. Important awards are a common feature of these industries with organizations gaining sudden visibility and prestige. Also, our results may apply at the individual level as well, for music artists, filmmakers, or writers. We also believe that when extending this research to other industries, it may be worth considering how positive status shocks that grant immediate visibility affect the audience of the awarded actor. In some cases, changes may be driven by the need to appeal to different audiences rather than show conformity to the expectations of a single critical audience (Kovács and Sharkey 2014). Finally, a natural development of this study would consist of the examination of the performance implications of what we observe for restaurants. Our data do not allow us to investigate the performance effects of making changes in menus. We tend to believe that the changes operated by restaurants have positive performance effects, by reducing the dissonance between the market identity of the restaurant and the expectation of customers (Wang et al. 2016). Future studies could test such effects as well as identify the associated scope conditions, mechanisms, and moderators.

CHAPTER 3: Addressing online threats to organizational reputation with apologies and excuses

Saverio D. Favaron

INTRODUCTION

The rise of digital media technology over the last few decades has transformed the way in which organizations are evaluated. Information produced by news media organizations is rapidly losing its role as primary force shaping collective judgments about organizations (Deephouse 2000). Similarly, evaluations by experts and critics, recognized for their knowledge of evaluation criteria, appropriate weightings, and appropriate preferences, are losing their appeal to customers in many industries (Karpik 2010). Every day, on a plurality of platforms and websites, individuals disclose information about their interactions with organizations and their products or services (Dellarocas 2003, Kaplan and Haenlein 2010). Digital users are heterogeneous in terms of motivations and expertise. Compared to traditional media or professional critics, they tend to share subjective and partial experiences, have lower concerns for accuracy and balance, and often put emphasis on the emotional content (Etter et al. 2019). As more customers rely on the opinions of their peers for their purchasing choices (Rindova et al. 2005, Simonson and Rosen, 2014), the process of formation of organizational reputation has been profoundly transformed (Etter et al. 2019, George et al. 2016). In light of this change, organizations need to reassess their strategies to manage their reputation.

While management scholars have started to explore the implications of this transformation in social evaluation processes (George et al. 2016, Orlikowski and Scott 2014), few studies have specifically focused on the tools available to organizations to manage their reputation in the new context (Chevalier et al. 2018, Halperin et al. 2018, Proserpio and Zervas 2017, Wang et al. 2016). Two questions have driven most research in this area: 1) what drives organizations to respond to threats to their reputation online?, and 2) are these responses effective in neutralizing the threat and eventually improving the reputation of firms?

Regarding the first question, prior work shows that one of the key drivers of organizational responses, in the form of verbal accounts published online, is a discrepancy between expert and

consumer evaluation, which holds the potential of threatening an organization's market identity (Wang et al. 2016). Regarding the second question, initial evidence on the effectiveness of management responses is mixed. While management responses seem to have a positive effect on reputation (Proserpio and Zervas 2017), once organizations start responding, they are more likely to attract fewer but more detailed negative reviews from guests, as consumers are aware that organizations will scrutinize their online opinions. In some instances, this effect may outweigh the benefits of increased ratings (Chevalier et al. 2018). In general, organizations that consider the opportunity to publicly respond to customers need to balance the benefits of defending their image and the risks of drawing further attention and scrutiny to issues (Veil, Petrun, and Roberts, 2012, Wang et al. 2016).

My objective with this study is to address this trade-off by taking a different perspective. Instead of studying the potential benefits of engaging (or not) with customers online to manage organizational reputation, I will focus on *how* organizations engage with their customers. In particular, drawing on research in the area of impression management, I ask whether common types of verbal accounts (i.e., apology and excuse) are effective tools to manage online threats to reputation, and what drives their adoption by organizations.

To this end, I analyze a sample of over 294,000 reviews and 9,503 management responses published on the Yelp pages of restaurants in Los Angeles. Through the textual analysis of reviews and responses, I study the effectiveness of apologies and excuses in mitigating online threats to the reputation of restaurants. In addition, by means of an scenario-based online experiment administered to restaurant owners and managers, I investigate potential mechanisms driving the adoption of apologies and excuses to engage with customers.

This study aims to provide two contributions to the existing literature. First, the focus on the actions employed by organizations to face online threats to reputation directly contributes to the emerging literature on reputation dynamics in the age of disintermediation (Etter et al. 2019). Second, the shift from the simple occurrence of a public response to the style of responses contributes to literature on ratings and rankings (Espeland and Sauder 2007, Orlikowski and Scott 2014, Wezel et al. 2016). Finding that specific response styles are more effective in mitigating threats to reputation

suggests that the discussion on the benefits of public organizational responses would benefit from the integration of literature on impression and perception management (Conlon and Murray 1996, Elsbach 1994, 2003, Schlenker 1980, Tedeschi 1981).

THEORETICAL FRAMEWORK

The new landscape of reputation formation

One of the most tangible effects on organizations of the rise of digital communication technologies is the substantial change in processes of reputation formation (Etter et al. 2019). Organizational reputation is formed through the interpretation of information cues (Bitektine 2011). These cues can be either disseminated by the organizations themselves (Rindova and Fombrun 1999), or produced by other actors who evaluate and judge organizations (Rindova 1997). Until recently, these other actors, able to shape the reputation of organizations in meaningful ways, were essentially news media or other specialized intermediaries producing guides, ratings, and rankings. Due to their structural position and uncontested credibility, they shaped collective judgements to the point that organizational reputation has been frequently equated with media reputation (Zavyalova et al. 2012). Digital technologies have transformed this process, in that members of organizational audiences now play an active role in disseminating evaluations and *de facto* shaping organizational reputation. Users and customers, by publishing their evaluations online, are now able to “publicly challenge evaluations offered by the media, or even to subvert images projected by organizations themselves to highlight contradictions between communication and action” (Etter et al. 2019, p. 43). This transformation poses great challenges for organizations because content published on social media or review sites is profoundly different from the opinions expressed by expert and critics in media outlets. On the one hand, judgment produced by experts and credible media organizations tends to emphasize informational content, and is the result of accurate and objective evaluations (Orlikowski and Scott 2014). On the other hand, user generated content provides partial, often inaccurate, subjective, and emotionally charged views of customers’ interactions with organizations (Etter et al. 2019). Moreover, these evaluations are produced continuously, almost in real-time, which makes it difficult for organizations to prepare and plan

responses. Scholars have recently started to study the implications of this transformation for organizations (Orlikowski and Scott 2014).

The first implication relates to organizational practices. User-generated content can be harnessed by organizations to improve their processes of problem identification and solution, and the new knowledge should be used to reconfigure practices. In the hospitality industry, for example, hotel and restaurant owners have started to use the content of customer reviews to revise practices and make improvements (Orlikowski and Scott, 2014). Effective monitoring of user generated content, however, requires new capabilities. With social media analytics, for example, companies can monitor customers' feedback (Kaplan and Haenlein, 2011). Hotel chains started collaborations with social media analytics platform, to monitor sentiments and content of customers' opinions. Several large organizations have built internal capabilities to monitor consumers' voice, others have acquired social-media analytics companies²¹.

The second implication, which is the focus of this study, is the need for organizations to reconsider the repertoire of actions available to manage and influence the perception of the public about themselves (Schlenker, 1980). With new evaluations being produced in real time on multiple online sites, a key challenge for organizations is to correct differences between what is perceived by the public and what is desired to be perceived (Leary and Kowalski, 1990), and to find tools to mitigate threats to reputation. Organizations have traditionally been using impression management to maintain a positive public perception (Elsbach and Sutton 1992). Impression management can be effective to manage complaints (Conlon and Murray 1996), to face social movement boycotts (McDonnell and King 2013), to enhance financial outcomes (Schniederjans et al. 2013), or to present organizational performance (Staw et al. 1983). Typically, organizations have multiple channels available for their impression management strategies, such as press releases (Westphal and Zajac 1998) or media such as television or websites (Winter et al. 2003). With the rise of social media and review websites, organizations now

²¹ Apple acquires social media analytics company: <https://www.nytimes.com/2013/12/03/technology/apple-buys-toppsy-a-social-media-analytics-firm.html> [last accessed: April 20, 2020]

have additional tools to deploy organizational impression management by directly engaging with customers online to manage their perception by audiences (Schniederjans et al. 2013, Wang et al 2016). In the next sections, I will discuss these tools and formulate prediction about their effectiveness.

Management Responses and online threats to reputation

Organizational responses to online reviews, commonly called *management responses*, have become a prominent feature of the main customer review websites such as Tripadvisor or Booking.com, which have recognized the importance of giving organizations tools to communicate with their customers, and defend their online reputation. Management and marketing scholars have recently started to investigate how organizations can address reputational threats on social media using management responses (e.g. Chevalier et al. 2018, Proserpio and Zervas 2017, Wang et al. 2016). In different ways, these studies examine whether management responses are used, or are effective, as tools to protect organizational image or reputation. What these studies tell us, is that public responses to customers are used to address devaluations from customers (Wang et al. 2016), and that management responses in general should be advised, as they may discourage future customers from posting negative reviews (Proserpio and Zervas 2017). Reputation management companies and much of the online discussion on how to manage reputational threats online emphasizes the importance of responding to reviews (not only the negative ones) and gives advice on how to respond²².

In this study I will proceed in two stages. In the first stage I will establish whether management responses are truly being used by organizations to address reputational threats. In their study of hotels, Proserpio and Zervas (2017) find that organizations respond to positive, negative, and neutral evaluations at roughly the same rate. In their work on London hotels and Tripadvisor, Wang and coauthors (2016) suggest that management responses are not addressed to negative evaluations *per se*, but rather to instances of devaluations compared to evaluations by experts. If management responses, however, are primarily used to readdress perceptions and restore the image of an organization, they

²² TripAdvisor guidelines on management responses: <https://www.tripadvisor.com/TripAdvisorInsights/w637>. [last accessed: April 20, 2020].

should be more frequent as a reaction to negative evaluations. As we discussed in Chapter 1, the impact of negative online reviews from customers has been extensively proved (Chintagunta et al. 2010, Luca 2016, Ye et al. 2010, Zhu and Zhang 2010). One may think about the effects of negative reviews on websites like Glassdoor or Indeed on the reputation of a firm and its recruitment outcomes. Or may consider doctors' ratings on HealthGrades, and lawyers' scores on Avvo. The effects of negative reviews on reputation are almost immediate, as potential customers rarely invest enough time and effort to go beyond the surface of average ratings, and tend to rely on numerical indicators for their purchasing decisions. The strong impact of negative evaluations on reputation (and performance, as a consequence) is not surprising. Research in psychology and consumer behavior has found that consumers value negative cues more than positive information. This phenomenon, known as negativity bias, is valid in general, as people tend to be more concerned with potential losses (Tversky and Kahneman 1979), negative traits are more heavily weighted than positive traits in person perception (Fiske 1980), and positive product attributes are perceived as less indicative of product quality (Basuroy et al. 2003). But negativity bias is especially relevant in the context of online reviews, where negative evaluations have a stronger effect on purchasing decisions, relative to positive reviews (Basuroy et al. 2003, Chevalier and Mayzlin 2006, Rozin and Royzman 2001, Sen and Lerman 2007). Since potential customers pay more attention to negative evaluations, business owners and managers should also be concerned with negative reviews and their impact on reputation. Therefore, as a baseline hypothesis in this study, I expect organizations to use management responses primarily to address negative evaluations from customers.

Hypothesis 1: The lower the rating of a customer evaluation, the higher the likelihood of a management response.

The strategic dilemma of public responses to customers

The decision to respond to customers online, especially when they publicly criticize an organization, should not be taken lightly. When an organization responds to a complaint, it sends the positive message that it is willing to address potential errors and that it cares about its customers' opinions and satisfaction. A public response, however, can be a double-edge sword for at least three reasons. First,

management responses may draw attention to issues exposed by customers in the public space (Veil et al 2012, Wang et al. 2016). Second, if a response is interpreted as defensive, it could lead potential customers to take the sides of the complainer (Ashforth and Gibbs 1990). Third, customers, and social media users in general, may be more motivated to post their opinions if they perceive they have more impact (Chevalier et al. 2018, Gans et al. 2017).

Given this premise, the challenge for organizations is to mitigate online criticism without drawing excessive attention to it. Management responses should work as fire extinguishers, without fueling new criticism or alienating potential customers. With the present study, I propose that the style of response may be one of the keys to solve this tension. Anecdotal evidence suggests that customers do pay attention to the style and content of management responses²³. Yet, scholars have not investigated the effects of different responses and the reaction of potential customers. Are some styles of responses more effective in how they address a complaint without increasing attention to problems?

I tackle this question with the lens of impression management, an area of research that was established and consolidated long before the recent technological advances and the discussed changes in social evaluation processes (Conlon and Murray 1996, Elsbach 2003, Schlenker 1980, Tedeschi 1981). Management responses can be framed as verbal accounts, which are explanations specifically “designed to influence perceptions of an organization’s responsibility for an event”, issued by focal organizations (Elsbach 2003, p. 307). Verbal accounts, among the common impression management tactics, have received the most attention by scholars, as they are frequently adopted to manage organizational reputation. Verbal accounts (also called *explanations* – Conlon and Murray 1996), can vary significantly, to the extent that they accept or deny responsibility for an event. Apologies are “confessions of responsibility for negative events which include some expression of remorse” (Tedeschi and Norman 1985, p. 299). Excuses are accounts designed to minimize perceptions of responsibility for an event (Elsbach 2003). Other forms of verbal accounts are often considered in the literature, such as denials or justifications (Conlon and Murray 1996, Elsbach 2003). In general,

²³ See, for example: www.brightlocal.com/research/local-consumer-review-survey/

apologies and excuses fall into the broader categories of accommodative and defensive accounts respectively (Ashforth and Lee 1990, Elsbach 1994). With accommodative accounts, organizations accept responsibility for an event, with defensive accounts, organizations minimize or deny their responsibility.

In this study I focus on apologies and excuses as they are more frequently observed in the context of this study (i.e., the restaurant industry), and because they are clearly on the opposite sides of the spectrum with respect to the attribution of responsibility. In the next section, I will focus on the relationship between apology and excuse and their effectiveness in mitigating criticism²⁴.

Apology and Excuse

Apologies have received attention from scholars of psychology, economics, and management (Abeler et al. 2010, Conlon and Murray, 1996, Elsbach et al. 2003, Kim et al. 2004, Chaudhry and Lowenstein 2019, Wang et al. 2018). One possible explanation for the interest of scholars from different disciplines in apologies, is the withstanding debate on the required conditions for its effectiveness. In the economic debate, the key question is why firms apologize given that, as apologies are costless for them, they should be regarded as cheap-talk and thus ignored by customers (Halperin et al. 2018). Economic studies on apology, which mostly rely on a repeated principal-agent setup (Ho 2012), are not conclusive on the benefits of apologizing. For example, recent work on the impact of apology after a negative experience with an Uber ride finds that apologies are effective only when they are complemented with a monetary compensation (Halperin et al. 2018). Yet, a similar study conducted on eBay found that a simple apology yields a better outcome for the firm, measured as the likelihood that a customer will withdraw a negative evaluation from the platform, than a monetary compensation (Abeler et al. 2010). In general, there is agreement in this literature on the fact that apologies are not a panacea. Their efficacy depends on the context and on a number of conditions, including the severity

²⁴ I deliberately chose to focus on criticism, usually appearing in negative reviews. Although positive reviews are common, apology and excuses are more likely to be observed in response to negative reviews from customers. Since organizations are more likely to respond to negative comments from customers, focusing on accounts normally associated with a negative customer experience is appropriate.

of the associated violation. In their study on Uber, for instance, the authors find a U-shaped relationship between the severity of violations and the effectiveness of apology, to the extent that when the customer experience is rated as moderately poor, resorting to apologies may backfire (Halperin et al. 2018).

Recent work in psychology builds on the insight that apologies are not costless, as they carry important information about blame and the attribution of responsibility (Chaudhry and Lowenstein 2019). An apology implies an admission of guilt, whereas excuses deny or deflect culpability. The effectiveness of an apology depends on the balance between the benefits of the potential redemption and the cost of admitting guilt. A number of laboratory experiments suggests that the benefits of apology may outweigh its costs when it addresses competence-based, rather than integrity-based, violations (Kim et al. 2004)²⁵. Denying or minimizing responsibility, on the other hand, backfires in the case of competence based violations. The prior work in the impression management literature follows the literature in psychology as it gives a central role to the perception of responsibility, often contrasting apologies and excuses (sometimes referred to as denials. See Ashforth and Lee 1990, for an example). The body of empirical research on the effectiveness of defensive accounts suggests that organizational responses in which a company takes responsibility for an event are perceived more favorably than excuses (Conlon and Murray 1996, Elsbach 1994). One important feature of the prior literature on impression management, however, is that it usually measures the effectiveness of organizational responses on the basis of repeated interactions, such as the reaction of complainants (Conlon and Murray 1996). In contrast, when managing online threats on reputation in the form of reviews by customers, the target organization that publicly responds to a customer is often more concerned with future potential customers who read reviews, than the actual customer to whom the response is addressed²⁶. This has an important implication on how we measure the effectiveness of an

²⁵ Competence-based violations occur when there is a failure to apply the technical skills necessary to perform a task. Integrity-based violations occur when people breach the ethical and moral standards (Kim, Ferrin, Cooper, and Dirks, 2004; Wang et al. 2018).

²⁶ In the hospitality industry, for example, most online review websites do not allow repeated interactions with customers (differently from other social media spaces such as Twitter and Facebook). Hence, complaints in the hospitality sector are often managed privately through private messages, emails, or phone calls. This confirms the intuition that public responses are mostly driven by the intention to influence potential future customers who read reviews.

organizational response in online settings. In the present study, I will evaluate the effectiveness of organizational accounts by looking at their ability to mitigate criticism, and distract attention to the review targeted by the response (see the section *Variables and Measures* for more details). A second important feature of the setting of this study is the nature of customer comments. As already discussed, the type of violation affects the effectiveness of apologies and excuses. Since we focus on a setting where the vast majority of comments pertains to relatively small competence-based violations, I expect accounts in which a company takes ownership for an event to be effective in mitigating customers' criticism. Excuses will have the opposite effect, by drawing attention to the issues raised by customers. Therefore, I hypothesize that:

Hypothesis 2: The use of apologies in management responses is positively associated with a mitigation of customer criticism.

Hypothesis 3: The use of excuses in management responses is negatively associated with a mitigation of customer criticism.

DATA AND METHODS

Empirical context

A good empirical setting for testing our hypotheses is one where online reviews represent a meaningful source of organizational reputation, and where public management responses are observable and not rare. The hospitality industry, and the restaurant industry in particular, meets this requirement. In the first decade of the century, the challenge of managing online reputation was already discussed in press articles²⁷, with restaurants being among the businesses most affected by reviews. Research on the impact of management responses for restaurants is still limited, as most existing work has focused on hotels. This is not surprising, given that the practice of responding to customers is more consolidated for hotels. In recent years, however, management responses have started to take hold for restaurants as well, with the important difference that business owners are often the ones posting public responses (either because they prefer a direct interaction with their customers, or because they do not

²⁷ The relevance of online reviews for firm reputation: <https://www.nytimes.com/2009/07/30/business/smallbusiness/30reputation.html> [last accessed: April 20, 2020]

have the resources to employ a manager in charge of customer relations). This peculiarity of the restaurant business is relevant for our purposes, as it ensures less standardization and greater variance in the approach to management responses²⁸. Two reviews from the dataset used for this study offer an idea of the differences in the style of response. The first, posted by a restaurant manager, is not dissimilar from the standard response we often observe on hotel pages:

Thank you for your review. We continue to work on areas that need improvement and hope to give you a better eating experience. Feel free to let us know at reservations@xxxx. (Response by the business manager of a Japanese restaurant)

The second, written by a restaurant owner, is more direct and better tailored to the specific issues raised by the customer.

Hello Brianna, I'm so sorry our food was not to your liking. I would like to point out that we DO NOT put capers in our carbonara dish. The only pasta dish which has capers is or penne puttanesca. I'm so sorry that some capers got mixed into your carbonara as that is not how we originally make our dish. Thank you so much for your input! (Response by the business manager of an Italian restaurant)

In the crowd of review websites that started to appear in the early 2000s', Yelp was among the first to offer the possibility for businesses to post public responses to customers. Launched in the U.S. in 2004, as of December 2019 Yelp hosted 205 million reviews and had more than 76 million unique monthly users on average²⁹. Despite being available in 32 countries, Yelp has a much stronger presence and popularity in the United States and Canada, where it decided to concentrate investments in recent years³⁰. The influence of Yelp reviews on businesses is not only perceived through references in popular culture. Research has documented a concrete impact of Yelp ratings on the activity of restaurants. Data from Yelp in the Seattle area have showed that a one star decrease in ratings leads to up to 9% lower revenues for restaurants (Luca et al. 2016). Similarly, a study of restaurants in the Bay Area found that an extra half-star average rating on Yelp led to a 19% increase in bookings, on average (Anderson and Magruder 2012). On Yelp, every user with a free account can submit a restaurant review. Once a review has been posted, anyone can access it, without needing a Yelp account. Restaurateurs can publicly respond to customers, and their responses will be visible to anyone looking at the restaurant page.

²⁸ This observation mostly derives from anecdotal evidence personally collected over the last 4 years, in my analyses of restaurant reviews and the review of publications using review data. In the sample used for this study, the percentage of responses posted by business owners is 56.8% of the total.

²⁹ Yelp annual report: <https://www.yelp-press.com/company/fast-facts/default.aspx> [last accessed: April 20, 2020]

³⁰ Yelp, internationalization strategy: <https://diginomica.com/yelp-retreats-to-the-us-homeland-as-international-expansion-fails> [last accessed: April 20, 2020]

Other users reading the review can show appreciation for it by voting the review as *useful*, *funny*, or *cool*. This feature is interesting as it can be used to gauge the attention received by reviews, as I will discuss later. In Figure 5 (Appendix), an example of a Yelp review with a management response is showed.

I collected data from Yelp on all restaurants located in downtown Los Angeles with at least one review. Los Angeles was chosen for the richness and attractiveness of its dining scene (in 2019 the prestigious Michelin guide published a guide of California and awarded stars to 24 restaurants in the city)³¹. Data were collected in May 2019 and include restaurant information (name, average rating, address, price range, cuisine type, hygiene score), review and reviewer details (text, rating, date, number of *useful*, *funny* and *cool* votes, name of reviewer, number of reviews posted by the reviewer, origin of the reviewer), and management response details, when a response has been published (text, author of the response). The final dataset includes 294,053 reviews from 1774 restaurants. The total number of management responses is 9503, from 638 restaurants that responded at least once.

³¹ Michelin guide in California: <https://guide.michelin.com/th/en/article/news-and-views/michelin-guide-california-2019-results#> [last accessed: April 20, 2020]

Variables and Measures

Dependent variables

Management response

Hypothesis 1 is about the likelihood of a public response directed to the customer by the organization. In this case the review is the level of analysis. The variable *management response* is a dichotomous variable equal to 1 if a review receives a public response by the organization and 0 otherwise.

Review approval

With hypothesis 2 and 3, the focus moves from the likelihood of a response to the effects of different types of responses. As I previously discussed, the main problem with responding to customers is that responses draw attention to the review, which often exposes problems with service, food, or other components of the offer. Hence, the goal of the organization should be to show that *it cares* about the opinion of its customers, without directing the attention of potential customers to past errors or issues. If this is true, we can measure the effectiveness of the response strategy by looking at the approval rate of reviews that receive organizational responses. If a certain type of verbal account is associated with a higher approval of the target review by other Yelp users, it may be a sign that the response is generating negative effects for the organization, by leading potential customers to side with the reviewer. One of the distinguishing features of Yelp is the ability for all readers (not only those with an account) to vote for a review, by clicking on *useful*, *funny*, and *cool*, below the text of the review (see Figure 5). The three options are not mutually exclusive. Since the three attributes are all positive, and express an appreciation for the content of the review, I measure *review approval* with the total count of votes for a reviews, which is the sum of the votes for *useful*, *funny*, and *cool* (log-transformed)³².

³² One may argue that relying on this variable to measure the effect of a response is unreliable or incorrect, due to potential reverse causality. Restaurant owners and managers may decide to respond primarily to reviews that are more popular on the restaurant Yelp page. While this is possible in principle, it is unlikely to happen because the management response delay is very small on average (3.5 days in my sample). Hence, by the time restaurants publish their responses, reviews are unlikely to accumulate a meaningful number of votes to be perceived as a stronger threat for the organization. The only exception could be represented by very popular restaurants with several thousands of reviews and a high number of daily readers. However, our results still hold when we exclude very popular restaurants from the sample.

Independent Variables

Review rating

In hypothesis 1, I am interested in the occurrence of management responses, relative to the rating of reviews. On Yelp, users assign a star rating from 1 to 5 (integer only) that complements the text of the review. The variable *review rating* is the numerical rating associated with the review.

Apology and Excuse

Apologies (admissions of responsibility for an event, which include some expression of remorse) and excuses (accounts designed to minimize perceptions of responsibility for an event) have mostly been studied in controlled experiments, where researchers carefully contrasted prototypical apologies, excuses, and other accounts, and then examined customers' reactions. The use of review data in the present study grants higher levels of external validity, compared to laboratory experiments, but poses a greater challenge for internal validity. In real-life settings, it is not always possible to clearly separate constructs and precisely measure variables. The biggest challenge faced in this study was the construction of variables that measure to what extent a management response can be defined as either an apology or an excuse. This is an example of apology, taken from my sample:

Hello Bella, I am so sorry to hear that your experience here at Xxx was not up to par. We always try our best to offer high quality food and service and it breaks our heart to hear that your experience was unsatisfactory. As for the minestrone soup, I am sorry that you thought the food was "inedible". If I remember correctly, at the end of your meal, your party asked us to remove the minestrone soup from the bill. I am sorry our server was unable to do that as she was following strict company policy. If a guest does not enjoy their food, they can let us know at the beginning of the meal and we would more than gladly either switch it out or remove it from your bill. As this was not the case and the food was already more than half eaten, our server could not do anything about this. I apologize for the confusion [...]

Excuses can take several forms. This is one example from my sample:

Jamey we take feedback such as this very seriously. We have conducted an internal investigation with the manager and all employees present on 12/7 and nobody was approached with this sort of complaint. We have also reviewed security camera footage and cannot find any activity that would represent a customer looking at their food and then talking with the manager about it. Since your profile is new and was ostensibly created to submit this negative review, most likely you are part of the group which was angry after repeatedly being asked not to consume soda from our fountain machine without paying for it. If you have a valid issue and would like to discuss personally please contact us.

The key challenge for operationalizing the degree to which a response refers to apology or excuse is the lack of clear objective assessment criteria for measuring them. Given this difficulty, I adopt a consensual assessment approach, which is commonly used for measuring constructs like creativity (Amabile 1982). With this approach, a response provided by a restaurant is considered to be an apology

or an excuse to the extent to which researchers consider it to be an apology or an excuse. While the classic approach works well when the sample size is reasonably small, it becomes exceedingly difficult as the sample size increases. In my sample I am faced with the challenge of evaluating more than 9500 management responses. To overcome the challenge of evaluating a large number of responses and ensure that the construct measurement can be easily scaled to different cities and platforms, I adopt a Machine Learning-based (ML) approach. Prior research has advocated for the use of machine learning techniques for processing large amount of textual information and extracting theoretical evidence through content analysis (Abbasi et al. 2016, Agarwal and Dhar 2014, Choudhury et al. 2018). Specifically, ML based classification models have shown to perform well when trying to replicate human judgement in text (i.e. natural language processing) (e.g. Choudhury et al. 2019, Crowston et al. 2012), images (e.g. Choudhury et al. 2019, Wang et al. 2018) and audio (e.g. Liebman et al. 2019). Following these studies, I built a classification model to evaluate the degree to which a response by relates to an apology or an excuse.

The approach is comprised of two steps: 1) creating a labelled dataset and 2) training the ML model to rate the degree to which a text relates to apology or excuse. In the first step, the author and a researcher familiar with the Yelp platform and the relevant impression management literature, separately labeled a random sample of 1000 responses received from restaurants. The evaluation of the response text was done based on an agreed upon definition of apology and excuse, using a scale from 1 to 5. The rating was then aggregated to a binary variable: low (if the rating is below 3) or high (if the rating is greater than or equal to 3). In the second step, using the labelled data of 1000 responses I trained the classifier model (80% of data was used for training and 20% was used for testing). I used the random forest classifier, which performs reasonably well to classify short text (Shirani-Mehr 2012). The random forest model is an averaging ensemble method for classification. The ensemble is a combination of decision trees built from a bootstrap sample from the training set. I used the implementation of random forests in scikit learn python library, which averages the probabilistic predictions of multiple decision trees (Pedregosa et al. 2011). I followed the standard preprocessing and parameter selection steps (bi-gram model, term frequency–inverse document frequency to select

the 10000 most important features, ten estimators (decision trees) for aggregation - Pedregosa et al. 2011). The final accuracy for the classification of apology was 88.5% and the accuracy of the classifying excuse was 86%. The accuracy scores suggest that the classifier performed well for labelling a response text as an apology and/or an excuse. Table 20 illustrates the probabilistic labels extracted from a response example.

Table 20: Example of an evaluated response and the identified label probabilities

Response text	Response label	Probability of response label
<i>"thank you so much for your review and praise of service and staff. I'm sorry the food didn't bit the mark for you - but we'd love for you to give us another try. I'm sure if you had told your server you were looking for indian food that packs a 'punch' of flavor, they would have suggested a few minor adjustments to your order. Personally, I agree, the butter chicken doesn't pack a punch ..I would recommend you have the chicken tikka masala instead. Really hope you give us another try. And I'm confident that if you let us know before hand what you're looking for, we can service your every need..."</i>	Apology	0.7
	Excuse	0.1

Control variables

Taking advantage of the richness of restaurant and review information offered by Yelp, I added several controls at the restaurant and review level. At the restaurant level, since prices are usually correlated with the level of the restaurant and with the resources available (high-status restaurants are more likely to employ restaurant managers in charge of customer relations), I created a variable *price level* that takes value 1 to 4, according to the categories of price provided by Yelp. Since restaurants have different ages, and we cannot exclude that more recent restaurants are more attuned to dealing with reviews, I added the control variable *restaurant age*. Finally, I controlled for the number of reviews ever written about the restaurant to capture its popularity (*total reviews*). Since reviews can vary significantly in their ability to elicit a response for restaurants, I also controlled for a number of variables at the level of the review. In particular, I controlled for the length of the review (*review length*) by accounting for the number of characters (log-transformed) of each review. I controlled for the experience of the reviewer as well (*reviewer experience*), measured with the total number of reviews posted by the Yelp user who posted the review. The rationale for this control is existing evidence that more experienced reviewers may be perceived as more knowledgeable by readers, and thus able to write more

impactful reviews (Cao et al. 2011). Since restaurateurs may have a different approach with local and non-local customers, I added a control for the origin of the reviewer (*reviewer local*), with a variable equal to 1 if the reviewer specifies being from the Los Angeles area in his Yelp profile, and 0 otherwise. Finally, since emotions are an important component of user generated content (Etter et al. 2019), I decided to control for the emotions expressed by customers in the reviews they write. To control for unobserved effects of the reviewers emotional state and the type of impression that they seek for themselves, I controlled for the tone of the review text. Although I did not formulate specific predictions between emotions and style of response, this could be an interesting avenue for future research. To capture the emotional components of reviews I relied on the IBM Watson™ Tone Analyzer service (IBM 2017). The tone analyzer uses linguistic analysis to detect emotional and language tones in written text. The language tone model has been created by analyzing more than 200,000 sentences from debate forums, speeches, and social media ³³. Using the application-programming interface (API) provided by IBM, I measured the tone of all the reviews in my sample. The identified tone and their definitions are provided in Table 21. Year fixed-effects were also included in our models to rule out unobserved time-varying heterogeneity, and cuisine fixed-effects to control for cultural heterogeneity in the managerial approach to customers, and in their style of response. Table 21 provides a summary of all variables and measures used in the study.

³³ IBM Watson documentation: <https://cloud.ibm.com/docs/tone-analyzer?topic=tone-analyzer-ssbts> [last accessed: April 20, 2020]

Table 21: Description of the variables and their measures

Variable	Measure	Operationalization
<i>Dependent Variables</i>		
Management response	Occurrence of a public management response.	Dummy (0, 1)
Review Approval	Log of sum of useful, funny, and cool votes	Continuous variable
<i>Independent Variables</i>		
Review rating	Numerical rating associated with the review	Discrete variable (1 – 5)
Apology	Probability that a management response can be classified as an apology	Continuous variable (0 - 1)
Excuse	Probability that a management response can be classified as an excuse	Continuous variable (0 - 1)
<i>Control variables</i>		
Restaurant price-level	Price level, according to Yelp	Discrete variable (1 – 4)
Restaurant age	Log of total days since first Yelp review published	Continuous variable
Restaurant total reviews	Log of total number of reviews published on the Yelp restaurant page	Continuous variable
Review length	Log of number of characters of the review	Continuous variable
Reviewer experience	Log of number of reviews previously written by the customer on Yelp	Continuous variable
Reviewer local	Review written by local customer (Los Angeles)	Dummy (0, 1)
Review Analytical	IBM Watson™ Tone Analyzer ³⁴ : an analytical tone indicates a person's reasoning and analytical attitude about things. An analytical person might be perceived as intellectual, rational, systematic, emotionless, or impersonal.	Continuous variable (0- 1)
Anger	IBM Watson™ Tone Analyzer: anger is evoked due to injustice, conflict, humiliation, negligence, or betrayal. If anger is active, the individual attacks the target, verbally or physically. If anger is passive, the person silently sulks and feels tension and hostility.	Continuous variable (0- 1)
Confident	IBM Watson™ Tone Analyzer: a confident tone indicates a person's degree of certainty. A confident person might be perceived as assured, collected, hopeful, or egotistical.	Continuous variable (0- 1)
Fear	IBM Watson™ Tone Analyzer: fear is a response to impending danger. It is a survival mechanism that is triggered as a reaction to some negative stimulus. Fear can be a mild caution or an extreme phobia.	Continuous variable (0- 1)
Joy	IBM Watson™ Tone Analyzer: joy (or happiness) has shades of enjoyment, satisfaction, and pleasure. Joy brings a sense of well-being, inner peace, love, safety, and contentment.	Continuous variable (0- 1)
Sadness	IBM Watson™ Tone Analyzer: sadness indicates a feeling of loss and disadvantage. When a person is quiet, less energetic, and withdrawn, it can be inferred that they feel sadness	Continuous variable (0- 1)
Tentative	IBM Watson™ Tone Analyzer: a tentative tone indicates a person's degree of inhibition. A tentative person might be perceived as questionable, doubtful, or debatable.	Continuous variable (0- 1)

³⁴ IBM Watson documentation: <https://cloud.ibm.com/docs/services/tone-analyzer?topic=tone-analyzer-utgpe#tones-tone> [last accessed: April 20, 2020]

Model Specification

In my dataset, for each of the 1774 restaurants, I have all the reviews ever published on Yelp about that restaurant until the month of May 2019. Each observation is therefore a customer review, and I model whether the focal review receives a public response by the restaurant. I use a logit regression to test Hypothesis 1 and an OLS regression to test Hypothesis 2 and 3. Since the observations are restaurant-review pairs, they may lack independence (Cameron et al. 2011). In particular, responses by each restaurant are unlikely to be independent. Therefore, I estimate robust standard errors clustered at the restaurant level.

RESULTS

In Table 22, I report descriptive statistics and correlations among the variables used in the models for testing Hypothesis 1, about the likelihood of management responses. Correlations between the explanatory variables are generally low, all of them below 0.4.

Table 22: Descriptive statistics and correlations (Hypothesis 1)

Variable	Mean	SD	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Response	0.03	0.17	0	1	1.00							
(2) Review rating	3.90	1.24	1	5	-0.08	1.00						
(3) Price level	2.06	0.66	1	4	0.01	0.02	1.00					
(4) Restaurant age (log)	7.80	0.69	1.94	8.55	-0.09	-0.06	-0.07	1.00				
(5) N. reviews (log)	6.82	1.31	1	9.00	-0.07	0.05	0.22	0.39	1.00			
(6) R. length (log)	6.09	0.83	2.19	8.67	0.01	-0.16	0.11	0.00	0.07	1.00		
(7) Reviewer exp. (log)	3.88	1.70	0	9.44	-0.05	-0.00	-0.00	0.09	0.08	0.34	1.00	
(8) Reviewer local	0.41	0.49	0	1	-0.00	-0.02	-0.01	-0.03	-0.06	-0.01	-0.02	1.00

In Table 23, I report the results of the logit regression used to test Hypothesis 1. Regarding the estimates for the control variables, I do not find significant effects for variables at the restaurant level (price level, the age of the restaurant, and the total number of reviews). On the contrary, I find some

significant estimates for review-level controls. First, restaurants are more likely to respond to longer reviews, which is not surprising as longer reviews tend to be more detailed and analytical about issues. Second, the experience of the reviewer (measured with the total number of review posted) is negatively associated with the likelihood of response. Although the size of the effect is relatively small, this result is surprising because we would expect restaurants to be more concerned with reviews by more experienced customers. In model 3, I add the independent variable, review rating. The estimate for review rating ($\beta = -0.259$, $p\text{-value}=0.000$) is significant and consistent with Hypothesis 1: reviews associated with higher numerical ratings are less likely to be responded to by restaurants. Therefore, restaurants are significantly more likely to post public management responses when ratings are lower. This result confirms the baseline expectation that public response, in the restaurant settings, are mostly used as a tool to address the reputational threats posed by negative results. This result is important as it provides the basis to proceed with the analysis, and explore possible links between the style of management responses and the mitigation effect.

Table 23: Occurrence of management response

	Model 1		Model 2		Model 3	
	Coeff.	SE	Coeff.	SE	Coeff.	SE
<i>Restaurant-level controls</i>						
Restaurant price	-0.154	0.165	-0.177	0.166	-0.169	0.164
Restaurant age	-0.091	0.163	-0.079	0.163	-0.148	0.170
Restaurant total reviews	-0.128	0.111	-0.130	0.111	-0.112	0.111
<i>Review-level controls</i>						
Review length			0.248***	0.027	0.138***	0.028
Reviewer experience			-0.085***	0.021	-0.055***	0.015
Reviewer local			0.059	0.047	0.036	0.048
<i>Independent variable</i>						
Review rating					-0.259***	0.061
Year fixed-effects		Yes		Yes		Yes
Cuisine fixed-effects		Yes		Yes		Yes
Constant	-0.507	1.248	-1.818	1.266	0.073	1.428
N	262,329		262,329		262,329	
Log pseudolikelihood	-34403.3		-34228.2		-33685.2	
Pseudo R ²	0.158		0.162		0.176	

Note: Logit regression. The dependent variable is the occurrence of a management response. Standard errors are clustered at the restaurant level. (01 - ***, .05 - **, .1 - *)

For the second part of the study, I restrict the analysis to reviews that received a public response by the restaurant, which leads to a sample of 9503 reviews.

Table 24 shows summary statistics and correlations for the variables used in the regression models testing Hypothesis 2 and Hypothesis 3. Correlation levels are not concerning. Only two values are above 0.4. These are the correlations between the joy and sadness tone in the review and their rating: joy correlates with higher ratings, while sadness correlates with lower ratings. These correlations seem to confirm the quality of the algorithm used for detecting emotions in the reviews.

In Table 25, I report the results of the OLS regression analyses with *review approval* as dependent variable. Higher levels of approval by readers are interpreted as a sign that management responses may not have worked as expected in mitigating criticism. Regarding the estimates for control variables, we observe that longer reviews, reviews written by more experienced customers and reviews written by local customers get higher approval by review readers. In Model 3, I add our independent variables: apology and excuse. The estimate of the coefficient for apology is negative and significant ($\beta=-0.133$, $p\text{-value}<0.01$), which suggests that when the apology component of the management response is higher, the level of approval of the target review is lower. This result is consistent with Hypothesis 2. Regarding excuse, we observe the opposite result. Management responses with a higher component of excuse, in which restaurants minimize their responsibility, are associated with a higher approval of the target review ($\beta=-0.164$, $p\text{-value}<0.05$). This result suggests that excuses may backfire, and is consistent with Hypothesis 3.

Table 24: Summary statistics and correlations (Hypotheses 2 and 3)

Variables	Mean	S.D.	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
(1) Review approval	0.58	0.90	0.00	5.61	1.00																	
(2) Apology	0.34	0.35	0.00	1.00	-0.06	1.00																
(3) Excuse	0.11	0.15	0.00	1.00	0.03	0.24	1.00															
(4) Price level	2.09	0.62	1.00	4.00	0.05	-0.09	-0.08	1.00														
(5) Restaurant age	7.47	0.80	3.71	8.51	-0.04	0.08	-0.01	0.16	1.00													
(6) Total reviews	6.33	1.20	1.10	8.82	-0.06	0.13	-0.04	0.35	0.50	1.00												
(7) Review length	6.14	0.81	3.37	8.59	0.24	0.13	0.08	0.11	-0.03	0.05	1.00											
(8) Reviewer exp.	3.44	1.72	0.00	8.91	0.33	-0.09	0.02	0.07	-0.01	0.00	0.34	1.00										
(9) Reviewer local	0.89	0.31	0.00	1.00	0.05	0.02	0.02	0.02	-0.02	-0.04	0.07	0.03	1.00									
(10) Review rating	3.39	1.55	1.00	5.00	0.04	-0.75	-0.27	0.11	-0.07	-0.06	-0.14	0.10	-0.03	1.00								
(11) Rev. analytical	0.20	0.32	0.00	0.99	-0.04	0.09	0.05	-0.02	0.03	0.00	0.03	-0.01	0.02	-0.11	1.00							
(12) Rev. anger	0.04	0.16	0.00	0.83	0.00	0.21	0.08	-0.05	0.04	0.04	0.10	-0.07	0.03	-0.27	0.01	1.00						
(13) Rev. confident	0.20	0.35	0.00	1.00	-0.06	-0.17	-0.10	0.02	0.01	-0.02	-0.24	-0.13	-0.03	0.20	-0.03	-0.04	1.00					
(14) Rev. fear	0.02	0.10	0.00	0.71	0.01	0.06	0.03	-0.02	0.00	-0.01	0.08	-0.01	0.01	-0.09	0.01	0.30	-0.03	1.00				
(15) Rev. joy	0.55	0.31	0.00	1.00	0.06	-0.51	-0.18	0.13	-0.05	0.01	0.04	0.12	0.00	0.63	-0.08	-0.19	0.12	-0.05	1.00			
(16) Rev. sadness	0.17	0.27	0.00	1.00	0.02	0.39	0.13	-0.05	0.01	0.02	0.29	-0.01	0.01	-0.45	0.06	0.16	-0.16	0.16	-0.34	1.00		
(17) Rev. tentative	0.29	0.38	0.00	0.99	0.02	0.15	0.07	-0.04	-0.04	-0.02	0.11	0.08	0.03	-0.18	0.04	0.02	-0.43	0.02	-0.10	0.12	1.00	

Table 25: Effects on Review approval

	Model 1		Model 2		Model 3	
	Coeff.	SE	Coeff.	SE	Coeff.	SE
<i>Restaurant-level controls</i>						
Restaurant price	0.114***	0.034	0.023	0.031	0.023	0.031
Restaurant age	-0.014	0.028	0.011	0.021	0.010	0.021
Restaurant total reviews	-0.066***	0.022	-0.043***	0.014	-0.039***	0.014
<i>Review-level controls</i>						
Review length			0.166***	0.015	0.167***	0.015
Reviewer experience			0.145***	0.007	0.144***	0.007
Reviewer local			0.074***	0.027	0.074***	0.027
Review rating			0.002	0.009	-0.013	0.011
Review analytical			-0.099***	0.032	-0.099***	0.032
Review anger			0.069	0.071	0.071	0.071
Review confident			0.003	0.030	0.004	0.030
Review fear			0.025	0.119	0.013	0.119
Review joy			0.011	0.035	0.003	0.035
Review sadness			-0.040	0.038	-0.029	0.038
Review tentative			-0.037	0.026	-0.036	0.026
<i>Independent variables</i>						
Apology					-0.133***	0.050
Excuse					0.164**	0.081
Year fixed-effects	Yes		Yes		Yes	
Cuisine fixed-effects	Yes		Yes		Yes	
Constant	1.134***	0.416	-0.867**	0.389	-0.849**	0.394
N	9,503		9,503		9,503	
F	2.784		34.942		31.812	
R ²	0.010		0.138		0.140	

Note: .01 - ***; .05 - **; .1 - *;

I conducted a number of additional robustness analyses to substantiate these initial results. First, regarding the measure of the dependent variable, the results in Table 25 rely on a measure that sums the number of *useful*, *cool*, and *funny* votes. However, it can be argued that *useful* votes are those that better capture the degree of appreciation by readers. Therefore, I replicate the analyses using an alternative measure of the dependent variable that only considers the number of *useful* votes of the review. The results obtained with this analysis not only confirmed the original results but also showed stronger effects in the predicted direction for both apology ($\beta=-0.184$, $p\text{-value}<0.01$) and excuse ($\beta=0.244$, $p\text{-value}<0.05$). Second, my measures of apology and excuse are based on the probability that

a response is identified as such. This implies that we could have instances where a response is a mix of apology and excuse that we are not capturing, and this type of hybrid responses could be driving our results. To rule out this explanation, I built the new variable *justification* that is equal to 1 when a response contains a significant component of apology (apology component higher than the average in the sample) and excuse (excuse component higher than the average in the sample). I used *justification* as independent variable. The estimate of the coefficient for *justification* can be safely considered as not significant ($\beta=0.019$, $p\text{-value}=0.706$). Finally, an important concern in this study is the fact that I keep all the reviews in the sample, from 1 to 5 stars, while my hypotheses and the discussion of the results are based on the assumption that the reviews that get responses contain element of criticism. 5-star reviews, in particular, could falsify the results since they typically do not criticize elements of the offer. To mitigate this concern, I conducted the analyses removing from the sample all the 5-star reviews. The results mostly confirm the original findings (apology: $\beta=-0.188$, $p\text{-value}=0.00$; excuse: $\beta=0.159$, $p\text{-value}=0.06$).

Mechanisms behind the results

One of the key assumptions behind the results is that the vast majority of the violations that occur in the restaurant setting is related to competence, rather than integrity. If this is true, it could explain the better effectiveness of apology vis-à-vis excuse in management responses. Integrity-related violations in the restaurant industry could be, for example, those about food safety. We know these violations are sometimes exposed in customer reviews, which led public health departments to partner with review platforms to enhance their inspection activity³⁵. However, these violations are likely to be a negligible fraction of the total violations, especially in the city of Los Angeles, which is known to be at the forefront in terms of transparency and disclosure about hygiene scores (Jin and Leslie 2003, Dai and Luca 2019).

³⁵ <https://www.theatlantic.com/magazine/archive/2013/07/youll-never-throw-up-in-this-town-again/309383/> [last accessed: April 20, 2020]

A second related assumption, that needs to be tested, is that restaurant managers and owners that respond to customers are aware of the relative effectiveness of apologies and excuse, and deliberately choose apologies to address some types of violation. When we refer to the category of competence-based violations (i.e., violations that involve a failure to apply the skills necessary to perform a task), we can differentiate violations in terms of their manageability (Wang et al. 2016). For instance, for a restaurant, serving a dish at the right temperature should be easier than having a server learn a new language to better communicate with patrons. Are restaurants more likely to resort to apologies to address complaints about more manageable features of the offer?

To answer this question, and provide insights about potential mechanisms at work in the use of management responses, I conducted a scenario-based online experiment in the restaurant industry (Di Stefano et al. 2015), addressed to restaurant owners and managers of restaurants in France. In the survey, participants were exposed to a hypothetical online review (scenario), where I manipulated content, rating, style, and experience of the reviewer. I then asked our respondents about: (1) the likelihood that they would respond to customers with apology (“To what extent would you apologize?”), (2) the likelihood that they would respond to customers with an excuse (“To what extent would you minimize the responsibility of the restaurant?”), and (3) the perceived degree of manageability of the issues presented in the review (“To what extent does your restaurant have the means to correct the problem?”). All variables were measured on a 7-point Likert scale. I assigned two scenarios per respondent to allow for within-respondent comparisons and capture the effect of feedback features beyond the attitude of the single individual. I received a total of 217 scenarios, for which respondents completed the survey. The randomized experimental design ensures that treatments are orthogonal to attributes of the respondents. Table 26 shows the results of an OLS regression with fixed effects and robust standard errors clustered at the respondent level. The two dependent variables are: 1) likelihood of apology and 2) likelihood of response.

Table 26: Drivers of Apology and Excuse (OLS - Survey-based experiment)

	Apology				Excuse			
	Model 1		Model 2		Model 1		Model 2	
	Coeff	SE	Coeff	SE	Coeff	SE	Coeff	SE
Review rating	0.553**	0.276	0.528*	0.278	-0.287	0.241	-0.263	0.235
Review length	0.604**	0.301	0.637**	0.303	0.141	0.226	0.108	0.224
Reviewer experience	0.187	0.286	0.176	0.277	-0.608**	0.297	-0.596**	0.292
Service content (v. Food)	0.145	0.258	0.231	0.247	0.170	0.253	0.086	0.242
Perceived manageability			0.325**	0.128			-0.322***	0.099
Restaurant fixed-effects	Yes		Yes		Yes		Yes	
Constant	4.316***	0.283	2.387***	0.830	3.567***	0.201	5.480***	0.619
N	217		217		217		217	
F	3.016		3.945		1.247		3.169	
Adjusted R ²	0.089		0.129		0.051		0.097	
R ² (ω)	0.106		0.149		0.068		0.118	

note: .01 - ***; .05 - **; .1 - *;

Results in Table 26 suggest that the perceived manageability of the issues exposed by customers may indeed explain, at least partially, why restaurants decide to accept or deflect their responsibility. When an issue is perceived as more manageable by the organization, apology is more likely to be used in the response ($\beta=0.325$, $p<0.05$), and excuse is less likely to be used ($\beta=-0.325$, $p<0.01$). Interestingly, we also observe that: 1) apologies are favored in response to lower ratings, and longer reviews, and 2) excuses are less likely to be used to respond to more experienced customers.

DISCUSSION AND CONCLUSION

In this paper, I study how organizations use impression management in response to customer evaluations in online settings. Through the analysis of 294 thousand reviews and over 9,500 responses published on the Yelp pages of Los Angeles restaurants, I find that management responses are primarily used by restaurants to address negative evaluations from customers, potentially as a tool to defend themselves from reputational threats. Drawing on the literature on impression management, I find that apologies are more effective than excuses in mitigating the threat of negative evaluations from customers. With the support of an online experiment conducted in the French restaurant industry, I also find initial evidence of a strategic use of impression management tactics to manage online threats.

Results point to a preference for apologies vis-à-vis excuses in response to issues that are perceived as more manageable.

This study aims to make three distinct contributions. The first contribution relates to organizational reputation, and more specifically to the new reputation dynamics that emerged with the rise of social media. Whereas the literature has theoretically clarified how traditional processes of reputation formation have been challenged by social media and algorithms (Etter et al. 2019, Orlikowski and Scott 2014), little is known about how organizations are using or extending their repertoire of actions to manage new reputational threats. Classic impression management tactics may serve the purpose of mitigating these threats, particularly when used strategically to match the type of violations they address.

The second contribution directly relates to the literature on ratings and rankings. Previous work has offered contradictory evidence on the benefits of public organizational responses to customers in review websites (Chevalier et al. 2018, Proserpio and Zervas 2017, Wang et al. 2016). Should organization respond to defend their reputation, running the risk of attracting further attention to the issues raised by customers? With the present study, instead of comparing strategies where organizations do or do not respond, we moved the focus to the type of response chosen by the organization. The finding that apologies may be more effective than excuses, paired with the evidence that apologies are preferred in response to threats about more manageable features of the offer, indicates that the discussion on the benefits of public organizational responses should move to a deeper level analysis (i.e., how responses are crafted and matched to criticism).

The third contribution relates to the setting of this study. What we know about ratings and organizational responses mostly comes from the analysis of data from the hotel industry, where organizational responses are more frequent and allow for carefully identified studies that compare establishments rated on multiple review platforms (Chevalier et al. 2018, Proserpio and Zervas 2017). The merit of studying organizational responses in the restaurant industry is the lower level of standardization of responses, which offers the opportunity to meaningfully compare and contrast the effectiveness of different approaches to organizational responses. With more industries and small

businesses being affected by online reviews³⁶, I believe studying organizational responses in the restaurant industry, which is mostly made of small and independent organizations, offers a more accurate representation of what strategies could work for small businesses that strive to protect and enhance their online reputation.

Several limitations of this study open opportunities for research. First, the quality of the measure of effectiveness employed in this study depends on some key assumptions about the behavior of organizations and customers. Researchers could examine the impact of different types of responses on more objective measures such as future ratings or reservations. This approach would require additional data collections from different sources, but would surely substantiate the arguments proposed in this paper.

Second, I limited my analysis to only two styles of responses. Although apologies and excuses are frequently used in the restaurant setting, a more comprehensive analysis could investigate the effectiveness of other verbal accounts such as denials or justifications. Future studies could also explore the effects of combinations of multiple verbal accounts. In addition, it might be worth studying the impact of standardized responses that are clearly perceived as ceremonial. I suspect the frequent use of standardized responses, even when they are framed as apologies, could have a less positive impact on organizational reputation.

Third, my study is mainly focused on the use of responses to address criticism. However, verbal accounts such as *entitlements* and *enhancements* can be used in response to positive events (Elsbach 2003). These accounts are used to increase the perception of responsibility or to increase the positiveness of an event. In the context of online reviews, it could be worth studying the effects of responding to positive reviews, a practice that is established especially in the hotel industry. Do the thank-you-like responses to 5-star reviews have any positive effect for the organization?

³⁶ According to the latest Yelp data (December 2019), 77% of the reviews published on Yelp are about businesses outside hospitality. <https://www.yelp-press.com/company/fast-facts/default.aspx>

Finally, an obvious limitation of the study is related to its data and to the generalizability of its results. Except for the experimental section of the empirics, where I can at least argue for some causality in the effects, the analysis of archival data is mostly correlational. The findings remain valid and interesting, but need further investigation in different settings and with different identification strategies. A promising identification strategy would consist in comparing restaurants that appear in multiple review websites that differ only for the presence of management responses. In the restaurant industry, one could compare the same restaurant on TripAdvisor (where restaurants can post management responses) and OpenTable (where management responses are not available to restaurants). Regarding generalizability, my analysis is limited to a sample of less than 2000 restaurants in a small geographical area. While this limitation is common to other similar studies, it leaves open questions about specificities of the market that may affect the results. New studies using restaurant data from other cities in other countries and continents would definitely advance our understanding of how organizations manage reputational threats in online settings.

CONCLUSION

How are the behavior and the strategic choices of organizations affected by the democratization of evaluation processes? With the three essays presented in this dissertation I sought to provide answers to this question.

In the first chapter, through the theoretical lens of attentional selection, I found that the responsiveness of decision makers to consumer feedback shared online is not only explained by cognitive or cost-benefit considerations, as the prior literature would suggest. With a scenario-based experiment conducted in the restaurant industry, I found that the emotional reactions of business owners to the feedback they receive can significantly interfere with a rational approach. Under some circumstances, emotions can lead decision makers to act against the interest of the organization. In the second chapter, building on recent work proposing a dynamic view of status hierarchies, I investigated the reactions of organizations that experience a positive status shock. I found that newly awarded organizations do not merely exploit the opportunities afforded by the higher status, but actively respond by making visible changes to their offering. They do so with the aim of securing their status position, and align their identity with the expectations associated with the position. The extent of these changes is affected by the concurrent evaluations by consumers: if consumers react to the status shock by increasing their scrutiny of the organization, these will feel more compelled to make changes and ensure conformity to expectations.

In the third chapter, adding to recent theoretical work on the management of reputation in the *digital age*, I studied how organizations use public responses to address the reputation threats posed by consumer evaluations. By analyzing a sample of consumer reviews and public responses posted by restaurants on Yelp, I found that apologies (i.e., verbal accounts that imply responsibility for an event) are more effective than excuses (i.e., verbal accounts that deny responsibility) in mitigating reputational threats. Also, restaurants seem to choose the type of response strategically to match the type of violations exposed by customers: more manageable violations are more likely to be targeted with apologies.

What I learned, and the basis for future research

Writing a dissertation is an extraordinary learning process. Motivated by the desire to provide answers to new research questions, one is eager to read and draw connection between theories, to find new data sources, to learn new methodologies. In this process, which takes years from the first proposal to its completion, it is easy to get absorbed in the intellectual twists and turns that are the foundation of the scientific method. For every question that gets a partial answer, new questions arise, new data collections and analyses are envisioned. Therefore, now that it is time to write the conclusions of this dissertation, I feel that what I managed to accomplish is only a portion of a larger research endeavor. I take this opportunity to reflect on the three main take-aways that resulted from the work presented in this dissertation. These considerations might be useful for scholars and practitioners interested in the subject of social evaluations, in relation with their impact on firm strategy. They will certainly be useful for me, as they constitute the basis for future work that will expand my dissertation's research.

One: Coexistence of multiple sources of evaluation

Advances in information technologies have rapidly transformed processes of social evaluation. Our decisions as consumers are increasingly informed by the opinions of peers, shared on social media and company or review websites. While it may be tempting to assume that experts' opinions have lost their influence on organizations and individuals, consistent with the idea of a "death of expertise" (Nichols 2017), in most cases consumer ratings still co-exist with professional ratings in many industries. In the travel industry, professional travel guides compete with travelers' reviews on TripAdvisor and Booking.com; in the movie industry, professional critics publish weekly reviews on newspapers, competing with evaluations by moviegoers on IMDb; in the book industry, professional critics publish reviews and assign annual awards, while readers share their evaluations on a daily basis on Goodreads and Amazon. I believe this consideration has two implications for the study of firms' responses to evaluations. First, a wise approach to the subject should consider the joint effect of evaluations issued by both experts and amateurs. As I discussed in Chapter 2, in the restaurant industry prestigious dining guides still exert their influence on restaurants and consumers, despite the proliferation of websites that host consumer reviews. The choices of firms may be partly informed by the opinions of experts, and

partly by consumers. Understanding under what conditions firms may be better off giving more credit to experts and consumers in their strategic choices should be the object of further investigation. Second, the co-existence of expert and amateur evaluations in many real-life settings should lead researchers to focus their attention on the reciprocal influence between the two group of evaluators. For example, anecdotal evidence suggests that expert critics may change their assessment criteria to be perceived as closer to the taste of consumers, and retain their influence (the Michelin Guide, for instance, added new categories and started to assign stars to more casual establishments). Is this a winning strategy for expert evaluators in the long run? Or will they further dilute their influence on consumers? In a society where everyone is a critic, our demand for expert and credible assessments of the quality may finally increase, as a reaction to a convergence between professional and amateur evaluations.

Two: Multiple levels of analyses

Interviews and data analysis performed for all three essays, repeatedly pointed to the importance of examining the impact of consumer feedback from multiple levels of analysis. First, complementing the organizational level with the individual level. Even when feedback is about the organization, some individuals will be in charge of the initial screening of feedback. They will be the first to read a negative review or a comment on social media, and their decision about what to do (or not to do) with that feedback might have effects at the level of the organization. Second, complementing the organizational level with the level of feedback itself (and the associated responses). The results of the study in Chapter 3, for example, suggest that a contribution to research on organizational reputation could come from matching the style of a firm's public responses to the types of criticism they address. In a similar vein, research work on the crowdsourcing of ideas has emphasized the importance of the tone and style of feedback to understand firm-level outcomes. Third, combining individual level and feedback level may open new opportunities for research. For instance, in line with the results in Chapter 3, one could formulate hypotheses about differences in the style of public responses of business owners and managers. A response by a manager, trained to engage with consumers, may be more polite and less emotionally charged, but also less authentic. On the other hand, responses by business owners might

be more direct, but also appear as more authentic. These are just some examples that indicate why, I believe, a better understanding of the dynamics of feedback and organizational responses requires to embrace research at multiple levels of analysis.

Three: The temporal dimension of feedback

Throughout my research for this dissertation, I often found myself reflecting on the important role of the temporal dimension of feedback. One of the key findings of the study presented in Chapter 1, is that prompt responses to feedback may be emotion-driven, and thus backfire by leading decision makers to ignore relevant information. The obvious implication would be to assess feedback with a cool head, in order to reduce the impact of emotions in driving a response. Therefore, the timing of individual reactions to feedback seems to play an important role in determining strategic responses.

A second aspect related to the temporal dimension is how firms react to feedback at different stages of their life cycle. This aspect was not directly explored in this dissertation, but we could easily think about examples that directly apply to the restaurant industry. For example, newer restaurants could be more inclined to listen to their customers, in order to correct practices and be better *synchronized* with the expectations and taste of their audience. In the initial phases, restaurant owners may also be more responsive to customers on review platforms, possibly favoring more accommodative styles of responses. In other industries, similar patterns may be observed. Startups might be more willing to follow the advice of early users and customers to improve their products or processes. If organizational responsiveness to feedback is stronger in the early stages of organizational life, some questions naturally arise. For example, to what extent, and under what conditions, is it beneficial to incorporate early feedback from users and customers? What is the impact of negative (versus positive) evaluations early on? And what its strategic and behavioral implications, linked with aspiration levels? Some of these questions will be at the core of my future research.

BIBLIOGRAPHY

- Abbasi A, Sarker S, Chiang RH (2016) Big data research in information systems: Toward an inclusive research agenda. *J. Association Information Systems*. 17(2):3.
- Abeler J, Calaki J, Andree K, Basek C (2010) The power of apology. *Economics Letters*. 107(2):233-255.
- Agarwal R, Dhar V (2014). Big data, data science, and analytics: The opportunity and challenge for IS research. *Information Systems Research*. 25(3):443-448.
- Alicke MD (2000) Culpable control and the psychology of blame. *Psych. Bull.* 126(4):556-574.
- Ashforth BE, Gibbs BW (1990) The double-edge of organizational legitimation. *Organ. Sci.* 1(2):177-94.
- Ashforth BE, Lee RT (1990) Defensive behavior in organizations: A preliminary model. *Human Relations*. 43(7):621-48.
- Ashkanasy NM, Humphrey RH, Huy QN (2017) Integrating emotions and affect in theories of management. *Acad. Management Rev.* 42(2):175-189.
- Askin N, Bothner MS (2016) Status-aspirational pricing: The “Chivas Regal” strategy in US higher education, 2006-2012. *Admin. Sci. Quart.* 61(2):217-253.
- Aspers P, Godart F (2013) Sociology of fashion: Order and change. *Annual Rev. Soc.* 39: 171-192.
- Audia PG, Locke EA (2003) Benefiting from negative feedback. *Human Res. Management Rev.* 13:631-646.
- Azoulay P, Stuart T, Wang Y (2013) Matthew: Effect or fable? *Management Sci.* 60(1):92-109.
- Baron RA (1988) Negative effects of destructive criticism: Impact on conflict, self-efficacy, and task performance. *J. Appl. Psych.* 73:199-207.
- Baron RA (1993) Criticism (informal negative feedback) as a source of perceived unfairness in organizations: Effects, mechanisms, and countermeasures. Cropanzano R, ed. *Justice in the workplace: Approaching fairness in human resource management* (Erlba, Hillsdale), 155-170.
- Baron RM, Kenny DA (1986) The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Personality Soc. Psych.* 51:1173-1182.
- Basuroy S, Chatterjee S, Ravid SA (2003) How critical are critical reviews? The box office effects of film critics, star power, and budgets. *J. marketing*. 67(4):103-17.
- Baum JA, Oliver C (1992) Institutional embeddedness and the dynamics of organizational populations. *Amer. Sociol. Rev.* 540-559.
- Baumeister RF, Heatherton TF, Tice DM (1994) *Losing control: How and why people fail at self-regulation*. (Academic Press, San Diego, CA)
- Bazerman MH, Tenbrunsel AE, Wade-Benzoni KA (1998) Negotiating with yourself and losing: Making decisions with competing internal preferences. *Acad. Management Rev.* 23(2):225-241.
- Benjamin BA, Podolny JM (1999) Status, quality, and social order in the California wine industry. *Admin. Sci. Quart.* 44(3):563-589.
- Berkowitz L, Macaulay JR (1961) Some effects of differences in status level and status stability. *Human Relations*. 14(2):135-148.
- Bitektine A (2011) Toward a theory of social judgments of organizations: The case of legitimacy, reputation, and status. *Acad. Management Rev.* 36:151-179.
- Blei DM, Ng AY, Jordan MI (2003) Latent dirichlet allocation. *J. Machine Learning Res.* 3:993-1022.
- Bodenhausen GV (1993) Emotions, arousal, and stereotypic judgments: a heuristic model of affect and stereotyping. Mackie DM, Hamilton DL, eds. *Affect, cognition, and stereotyping: Interactive processes in group perception* (Academic Press, San Diego, CA), 13-37.

- Bohns VK, Flynn FJ (2013) Guilt by design: Structuring organizations to elicit guilt as an affective reaction to failure. *Organ. Sci.* 24(4):1157–1173.
- Botelho TL (2017) From audience to evaluator: The effect of social influence in opt-in evaluation processes. *Acad. Management Proc.* <https://doi.org/10.5465/ambpp.2017.80>.
- Botelho TL (2018) Here's an Opportunity: Knowledge Sharing Among Competitors as a Response to Buy-in Uncertainty. *Organ. Sci.* 29(6):1033-1055.
- Bothner MS, Kim YK, Smith EB (2011) How does status affect performance? Status as an asset vs. status as a liability in the PGA and NASCAR. *Organ. Sci.* 23(2):416–433.
- Bouquet C, Birkinshaw J (2008) Weight versus voice: How foreign subsidiaries gain attention from corporate headquarters. *Acad. Management J.* 51(3):577-601.
- Bourdieu P (1984) *Distinction: A Social Critique of the Judgement of Taste* (Harvard University Press, Cambridge, MA).
- Bourdieu P (1993) *The field of cultural production: Essays on art and literature* (Columbia University Press, New York, NY).
- Bowers AH, Greve HR, Mitsuhashi H (2017) Look at me: Overt status-seeking behavior and competitive emergence among securities analysts. *Emergence.* 28(50):351–382.
- Brett JF, Atwater LE (2001) 360° feedback: Accuracy, reactions, and perceptions of usefulness. *J. Appl. Psych.* 86(5):930–942.
- Bright Local (2018) Local consumer review survey. <https://www.brightlocal.com/learn/local-consumer-review-survey> (last accessed: May 3rd, 2019).
- Bromley P, Powell WW (2012) From smoke and mirrors to walking the talk: Decoupling in the contemporary world. *Acad. Management ann.* 6(1):483–530.
- Cameron AC, Gelbach JB, Miller DL (2011) Robust inference with multiway clustering. *J. Business & Econ. Statistics.* 29(2):238-4
- Cao Q, Duan W, Gan Q (2011) Exploring determinants of voting for the “helpfulness” of online user reviews: A text mining approach. *Dec. Support Syst.* 50(2):511–521.
- Cardon MS, Wincent J, Singh J, Drnovsek M. (2009) The nature and experience of entrepreneurial passion. *Acad. Management Rev.* 34(3):511-532.
- Carlos WC, Lewis BW (2018) Strategic silence: Withholding certification status as a hypocrisy avoidance tactic. *Admin. Sci. Quart.* 63(1):130–169.
- Carroll GR, Wheaton DR (2009) The organizational construction of authenticity: An examination of contemporary food and dining in the US. *Res. Organ. Behavior.* 29:255–282.
- Chatterjee A, Hambrick DC (2007) It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. *Admin. Sci. Quarterly.* 52(3):351-86.
- Chatterji AK, Toffel MW (2010) How firms respond to being rated. *Strategic Management J.* 31(9):917-945.
- Chaudhry SJ, Loewenstein G (2019) Thanking, apologizing, bragging, and blaming: Responsibility exchange theory and the currency of communication. *Psychological review.* 2019 Apr;126(3):313.
- Chevalier JA, Dover Y, Mayzlin D (2018) Channels of Impact: User reviews when quality is dynamic and managers respond. *Marketing Sci.* 37(5):688-709.
- Chevalier JA, Mayzlin D (2006) The effect of word of mouth on sales: Online book reviews. *J. Marketing Res.* 43(3):345–354.
- Chintagunta PK, Gopinath S, Venkataraman S (2010). The effects of online user reviews on movie box office performance: Accounting for sequential rollout and aggregation across local markets. *Market. Sci.* 29(5):944–957.

- Choudhury P, Allen R, Endres M (2018) Developing Theory Using Machine Learning Methods. *SSRN Electronic Journal* (MI), 1–48.
- Choudhury P, Wang D, Carlson NA, Khanna T (2019) Machine Learning Approaches to Facial and Text Analysis: Discovering CEO Oral Communication Styles. *Strategic Management J.* 40(11):1705–1732.
- Cole JR, Singer B (1991) A theory of limited differences: explaining the productivity puzzle in science. Zuckerman H, Cole JR, Bruer JT, eds. *In the Outer Circle: Women in the Scientific Community* (Norton, New York, NY), 277–310.
- Conlon DE, Murray NM (1996) Customer perceptions of corporate responses to product complaints: The role of explanations. *Acad. Management J.* 39(4):1040–1056.
- Correll SJ, Ridgeway CL, Zuckerman EW, Jank S, Jordan-Bloch S, Nakagawa S (2017) It's the conventional thought that counts: How third-order inference produces status advantage. *Amer. Sociol. Rev.* 82(2):297–327.
- Crowston K, Allen EE, Heckman R (2012) Using Natural Language Processing Technology for Qualitative Data Analysis. *International J. Soc. Res. Methodology.* 15(6):523–543.
- Dai D, Luca M (2019) Digitizing Disclosure: The Case of Restaurant Hygiene Scores. Harvard Business School NOM Unit Working Paper. Feb 23(18-088).
- Deephouse DL (2000) Media reputation as a strategic resource: An integration of mass communication and resource-based theories. *J. management.* 26(6):1091-112.
- Dellarocas C (2003) The digitization of word of mouth: Promise and challenges of online feedback mechanisms. *Management sci.* 49(10):1407–24.
- Demetry D (2013) Regimes of meaning: The intersection of space and time in kitchen cultures. *J. Contemporary Ethnography.* 42(5):576–607.
- Derryberry D, Tucker DM (1994) Motivating the focus of attention. Niedenthal PM, Kitayama S, eds. *The hearts eye: Emotional influence in perception and attention.* (Academic Press, San Diego, CA), 167-196.
- Di Stefano G, King AA, Verona G (2015) Sanctioning in the wild: Rational calculus and retributive instincts in gourmet cuisine. *Acad. Management J.* 58(3):906–931.
- Di Stefano, G., & Gutierrez, C. (2018) Under a magnifying glass: On the use of experiments in strategy research. *Strategic Organ.* <https://doi.org/10.1177/1476127018803840>.
- Durand R, Kremp PA (2016) Classical deviation: Organizational and individual status as antecedents of conformity. *Acad. Management J.* 59(1):65-89.
- Durand R, Rao H, Monin P (2007) Code and conduct in French cuisine: Impact of code changes on external evaluations. *Strategic Management J.* 28(5):455-72.
- Elfenbein HA (2007) Emotion in Organizations: A Review and Theoretical Integration. *Acad. Management Ann.* 1(1):315–386.
- Elsbach KD (1994) Managing organizational legitimacy in the California cattle industry: The construction and effectiveness of verbal accounts. *Admin. Sci. Quart.* 1:57-88.
- Elsbach KD (2003) Organizational perception management. *Res. Org. Behavior.* (1)25:297-332.
- Elsbach KD, Sutton RI (1992) Acquiring organizational legitimacy through illegitimate actions: A marriage of institutional and impression management theories. *Acad. Management J.* 35(4):699-738.
- Ertug G, Yogev T, Lee YG, Hedström P (2016) The art of representation: How audience-specific reputations affect success in the contemporary art field. *Acad. Management J.* 59(1):113–134.
- Espeland WN, Sauder M (2007) Rankings and reactivity: How public measures recreate social worlds. *American J Sociol.* 113(1):1-40.
- Etter M, Ravasi D, Colleoni E (2019) Social media and the formation of organizational reputation. *Acad. Management Rev.* 44(1):28-52.

- Fauchart E, von Hippel E (2008) Norms-based intellectual property systems: The case of French chefs. *Organ. Sci.* 19(2):187–201.
- Ferguson PP (1998) A cultural field in the making: Gastronomy in 19th century France. *Amer. J. Sociol.* 104(3):597–641.
- Ferguson PP (2008) Michelin in America. *Gastronomica.* 8(1):49-55.
- Fiske ST (1980) Attention and weight in person perception: The impact of negative and extreme behavior. *J. Personality Soc. Psych.* 38(6):889.
- Florey AT, Harrison DA (2000) Responses to informal accommodation requests from employees with disabilities: Multistudy evidence on willingness to comply. *Acad. Management J.* 43(2):224–233.
- Fourcade M, Healy K (2017) Seeing Like a Market. *Socio-Econ. Rev.* 15(1):9–29.
- Fowler GA (2017). When 4.3 stars is average: The Internet’s grade-inflation problem. <https://www.wsj.com/articles/when-4-3-stars-is-average-the-internets-grade-inflation-problem-1491414200> (last accessed: May 3rd, 2019).
- Fox S, Spector PE (1999) A model of work frustration-aggression. *J. Organ. Behav.* 20(6): 915–931.
- Frijda NH (1986) *The emotions.* (Cambridge University Press, Cambridge, UK).
- Gans JS, Goldfarb A, Lederman M (2017) Exit, tweets and loyalty. *National Bureau of Economic Research*; 2017 Jan 12.
- George G, Dahlander L, Graffin S, Sim S (2016) Reputation and status: Expanding the role of social evaluation in management research. *Acad. Management J.* 59: 1–13.
- Gergaud O, Guzman LM, Verardi V (2007) Stardust over Paris gastronomic restaurants. *J. Wine Economics.* 2(1):24-39.
- Gergaud O, Storchmann K, Verardi V (2015) Expert opinion and product quality: Evidence from New York City restaurants. *Economic Inquiry.* 53(2):812–835.
- Gioia DA, Corley KG, Hamilton AL (2013) Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organ. Res. Methods.* 16:15–31.
- Goffman E (1959) *The presentation of self in everyday life* (Garden City, NY).
- Goldberg A, Hannan MT, Kovács B (2016) What does it mean to span cultural boundaries? Variety and atypicality in cultural consumption. *Amer. Sociol. Rev.* 81(2):215-41.
- Gomez C, Kirkman BL, Shapiro DL (2000) The impact of collectivism and in-group/out-group membership on the evaluation generosity of team members. *Acad. Management J.* 43(6):1097–1106.
- Goode WJ (1978) *The Celebration of Heroes: Prestige as a Control System* (Univ. Calif. Press, Berkeley, CA).
- Gould RV (2002) The origins of status hierarchies: A formal theory and empirical test. *Amer. J. Sociol.* 107(5):1143–1178.
- Greve HR (2008) A behavioral theory of firm growth: Sequential attention to size and performance goals. *Acad. Management J.* 51(3):476-94.
- Guo Y, Barnes SJ, Jia Q (2017) Mining meaning from online ratings and reviews: Tourist satisfaction analysis using latent dirichlet allocation. *Tour. Management* 59:467-83.
- Haas MR, Criscuolo P, George G (2015) Which problems to solve? Online knowledge sharing and attention allocation in organizations. *Acad. Management J.* 58(3):680–711.
- Halperin B, Ho B, List JA, Muir I (2019) Toward an understanding of the economics of apologies: evidence from a large-scale natural field experiment. *National Bureau of Economic Research*; 2019 Mar 21.
- Hansen MT, Haas MR (2001) Competing for attention in knowledge markets: Electronic document dissemination in a management consulting company. *Admin. Sci. Quart.* 46(1):1-28.

- Hareli S, Hess U (2008) The role of causal attribution in hurt feelings and related social emotions elicited in reaction to other's feedback about failure. *Cognition Emotion* 22(5):862–880.
- Hawass H (2010) Exploring the determinants of the reconfiguration capability: a dynamic capability perspective. *Europ. J. Innov. Management* 13(4):409–438.
- Hayes AF (2013) *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (The Guilford Press, New York, NY).
- Ho B (2012) Apologies as signals: with evidence from a trust game. *Management Sci.* 58(1):141-58.
- Hoch SJ, Loewenstein GF (1991) Time-inconsistent preferences and consumer self-control. *J. Consumer Res.* 17(4):492–507.
- Hodgkinson GP, Healey MP (2011) Psychological foundations of dynamic capabilities: Reflexion and reflection in strategic management. *Strategic Management J.* 32(13):1500–1516.
- Hoffman AJ, Ocasio W (2001) Not all events are attended equally: Toward a middle-range theory of industry attention to external events. *Organ. Sci.* 12(4):414-34.
- Hussain S, Ahmed W, Jafar RM, Rabnawaz A, Jianzhou Y (2017) eWOM source credibility, perceived risk and food product customer's information adoption. *Computers in Human Behavior.* 66:96–102.
- Huy QN (1999) Emotional capability, emotional intelligence, and radical change. *Acad. Management Rev.* 24(2):325-45.
- Huy QN (2002) Emotional balancing of organizational continuity and radical change: The contribution of middle managers. *Admin. Sci. Quart.* 47(1):31-69.
- Huy QN (2011) How middle managers' group-focus emotions and social identities influence strategy implementation. *Strategic Management J.* 32(13):1387-410.
- Huy QN (2012) Emotions in strategic organization: Opportunities for impactful research. *Strategic Organ.* 10(3):240–247.
- Iacobucci D, Ostrom A (1993) Gender differences in the impact of core and relational aspects of services on the evaluation of service encounters. *J. consumer psych.* 2(3):257-86.
- Iacus SM, King G, Porro G (2009) CEM: software for coarsened exact matching. *J. Statistical Software.* 30.
- Ilgen DR, Fisher CD, Taylor MS (1979) Consequences of individual feedback on behavior in organizations *J. Appl. Psych.* 64(4):349–371.
- Iyer A, Schmader T, Lickel B (2007) Why individuals protest the perceived transgressions of their country: The role of anger, shame, and guilt. *Personality Soc. Psych. Bull.* 33(4):572–587.
- Jin GZ, Leslie P (2009) Reputational incentives for restaurant hygiene. *Amer. Econ. J. Microeconomics.* 1(1):237-67.
- Johnson EJ, Tversky A (1983) Affect, generalization, and the perception of risk. *J. Personality Soc. Psych.* 45(1):20–31.
- Jourdan J, Durand R, Thornton PH (2017) The price of admission: Organizational deference as strategic behavior. *Amer. J. Sociol.* 123(1):232–275.
- Jurafsky D (2014) *The language of food: A linguist reads the menu* (WW Norton & Company, New York, NY).
- Jurafsky D, Chahuneau V, Routledge BR, Smith NA (2016) Linguistic markers of status in food culture: Bordieu's distinction in a menu corpus. *J. Cultural Analytics.*
- Kahneman D, Frederick S (2002) Representativeness revisited: Attribute substitution in intuitive judgment. Gilovich T, Griffin D, Kahneman D, eds. *Heuristics & biases: The psychology of intuitive judgment* (Cambridge University Press, New York, NY), 49-81.
- Kaplan AM, Haenlein M (2010) Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons.* 53(1):59-68.

- Kaplan S (2008) Cognition, capabilities, and incentives: Assessing firm response to the fiber-optic revolution. *Acad. Management J.* 51(4):672–695.
- Karpik L (2010) *The economics of singularities* (Princeton University Press, Princeton, NJ).
- Kim BK, Jensen M (2011) How product order affects market identity: Repertoire ordering in the US opera market. *Admin. Sci. Quart.* 56(2):238–256.
- Kim PH, Ferrin DL, Cooper CD, Dirks KT (2004) Removing the shadow of suspicion: the effects of apology versus denial for repairing competence-versus integrity-based trust violations. *J. Applied Psych.* 89(1):104.
- Kohler U, Karlson KB, Holm A (2011) Comparing coefficients of nested nonlinear probability models using khb. *Stata J.* 11(3):420–438.
- Kovács B, Carroll GR, Lehman DW (2013) Authenticity and consumer value ratings: Empirical tests from the restaurant domain. *Organ. Sci.* 25(2):458–478.
- Kovács B, Hannan MT (2010) The consequences of category spanning depend on contrast. *Categories in markets: Origins and evolution* (Emerald Group Publishing Limited, Bingley, UK), 175–201.
- Kovács B, Johnson R (2014) Contrasting alternative explanations for the consequences of category spanning: A study of restaurant reviews and menus in San Francisco. *Strategic Organ.* 12(1):7–37.
- Kovács B, Sharkey AJ (2014) The paradox of publicity: How awards can negatively affect the evaluation of quality. *Admin. Sci. Quart.* 59(1):1–33.
- Krings R, Jacobshagen N, Elfering A, Semmer NK (2015) Subtly offending feedback. *J. Appl. Soc. Psych.* 45(4):191–202.
- Krippendorff K (2004) *Content Analysis: An Introduction to Its Methodology* (Sage, Thousand Oaks, CA).
- Lakoff R (2006) Identity à la carte: You are what you eat. *Studies in Interactional Sociolinguistics.* 23:142–165.
- Lazarus RS (1991) *Emotion and adaptation* (Oxford University Press, New York, NY).
- Lazarus RS, Cohen-Charash Y (2001) Discrete emotions in organizational life. Payne RL, Cooper CL, eds. *Emotions at Work: Theory, Res. Appl. Management* (John Wiley & Sons, New York), 45–81.
- Leach CW, Iyer A, Pedersen A (2006) Anger and guilt about in group advantage explain the willingness for political action. *Personality Soc. Psych. Bull.* 32(9):1232–1245.
- Leary MR, Kowalski RM (1990) Impression management: A literature review and two-component model. *Psychological Bull.* 107(1):34.
- Leary MR, Springer CA (2001) Hurt feelings: The neglected emotion. Kowalski R, ed. *Aversive behaviors and interpersonal transgression* (American Psychological Association, Washington, DC), 151–175
- Leary MR, Springer CA, Negel L, Ansell E, Evans K (1998) The causes, phenomenology, and consequences of hurt feelings. *J. Personality Soc. Psych.* 74(5):1225–1237.
- Lebel RD (2017) Moving beyond fight and flight: A contingent model of how the emotional regulation of anger and fear sparks proactivity. *Acad. Management Rev.* 42(2):190–206.
- Lerner JS, Li Y, Valdesolo P, Kassam KS (2015) Emotion and decision making. *Ann. Rev. Psych.* 66:799–823.
- Levy SE, Duan W, Boo S (2013) An analysis of one-star online reviews and responses in the Washington, D.C., lodging market. *Cornell Hospit. Quart.* 54(1):49–63.
- Lewis HB (1971) *Shame and guilt in neurosis* (International Universities Press, New York, NY).
- Lieberman M. Modification as social anxiety, *Language Log* (May 16, 2004).
- Lieberman MD (2003) Reflective and reflexive judgment processes: A social cognitive neuroscience approach. Forgas JP, Williams KR, von Hippel W, eds. *Social judgments: Implicit and explicit processes* (Cambridge University Press New York, NY), 44–67.

- Liebman E, Saar-Tsechansky M, Stone P (2019) The Right Music at the Right Time: Adaptive Personalized Playlists Based on Sequence Modeling. *MIS Quarterly*. 43(3):765–786.
- Liu Y, Huang X, An A, Yu X (2008) Modeling and predicting the helpfulness of online reviews. Proceedings of the 8th IEEE international conference on data mining (443–452).
- Loewenstein G (1996) Out of control: visceral influences on behavior. *Organ. Behav. Human Decision Processes* 65(3):272–292.
- Loewenstein G, Lerner JS (2003) The role of affect in decision making. *Handbook of affective science* (Oxford University Press, Oxford, UK), 619-642
- Loewenstein G, O'Donoghue T, Bhatia S (2015) Modeling the interplay between affect and deliberation. *Decision* 22(2):55–81.
- Loewenstein G, Weber EU, Hsee CK, Welch N (2001) Risk as feelings. *Psych. Bull.* 127(2):267–86.
- Luca M (2016) Reviews, reputation, and revenue: The case of Yelp.com. Working paper, Harvard Business School, Boston, No. 12–016.
- Lynn FB, Podolny JM, Tao L (2009) A sociological (de) construction of the relationship between status and quality. *Amer. J. Sociol.* 115(3):755-804.
- Malter D (2014) On the causality and cause of returns to organizational status: Evidence from the Grands Crus Classés of the Médoc. *Admin. Sci. Quart.* 59(2):271-300.
- Martins LL (2005) A model of the effects of reputational rankings on organizational change. *Organ. Sci.* 16(6):701-20.
- McDonnell MH, King B (2013) Keeping up appearances: Reputational threat and impression management after social movement boycotts. *Admin. Sci. Quart.* 58(3):387-419.
- Mohr JW (1998) Measuring meaning structures. *Annual Rev. Sociol.* 24:345–370.
- Mollick E, Nanda R (2015) Wisdom or madness? Comparing crowds with expert evaluation in funding the arts. *Management Sci.* 62(6):1533–1553.
- Nambisan S, Baron RA (2010) Different roles, different strokes: Organizing virtual customer environments to promote two types of customer contributions. *Organ. Sci.* 21(2): 554–572.
- Nelissen RM, Zeelenberg M (2009) Moral emotions as determinants of third-party punishment: Anger, guilt and the functions of altruistic sanctions. *Judg. Dec. making* 4(7):543–553.
- Nichols T (2017) *The death of expertise: The campaign against established knowledge and why it matters*. Oxford University Press, Oxford, UK).
- Niedenthal PM, Kitayama S. 1994. *The hearts eye: Emotional influence in perception and attention* (Academic Press, San Diego, CA).
- Ocasio W (2011) Attention to attention. *Organ. Sci.* 22(5):1286–1296.
- Olson D, Waguespack D (2014) Social influence and competition among critics. *Acad. Management Proc.* <https://doi.org/10.5465/ambpp.2014.15829abstract>
- Orlikowski WJ, Scott SV (2014) What happens when evaluation goes online? Exploring apparatuses of valuation in the travel sector. *Organ. Sci.* 25(3):868–891.
- Park DY, Podolny JM (2000) The competitive dynamics of status and niche width: US investment banking, 1920-1949. *Indust. Corporate Change.* 9(3):377-414.
- Parkhurst D, Law K, Niebur E (2002) Modeling the role of salience in the allocation of overt visual attention. *Vision Res.* 42(1):107–123.
- Pashler H (1998) *The psychology of attention* (MIT Press, Cambridge, MA).
- Pedregosa F, Varoquaux G, Gramfort A, Michel V, Thirion B, Grisel O, Blondel M, Prettenhofer P, Weiss R, Dubourg V, Vanderplas J, Passos A, Cournapeau D, Brucher M, Perrot M, Duchesnay É (2011) Scikit-Learn: Machine Learning in Python. *J. Machine Learning Res.*

- Petty RE, Cacioppo JT (1986) The elaboration likelihood model of persuasion. *Communication and persuasion* (Springer, New York, NY), 1-24.
- Phelps EA, Lempert KM, Sokol-Hessner P (2014) Emotion and decision making: multiple modulatory neural circuits. *Annual Rev. Neurosci.* 37:263–288.
- Philippe D, Durand R (2011) The impact of norm-conforming behaviors on firm reputation. *Strategic Management J.* 32(9):969–993.
- Phillips DJ, Turco CJ, Zuckerman EW (2013) Betrayal as market barrier: Identity-based limits to diversification among high-status corporate law firms. *Amer. J. Sociol.* 118(4):1023–1054.
- Phillips DJ, Zuckerman EW (2001) Middle-status conformity: Theoretical restatement and empirical demonstration in two markets. *Amer. J. Sociol.* 107(2):379-429.
- Piazza A, Castellucci F (2014) Status in organization and management theory. *J. Management.* 40(1):287-315.
- Piezunka H, Dahlander L (2015) Distant search, narrow attention: How crowding alters organizations' filtering of suggestions in crowdsourcing. *Acad. Management J.* 58(3):856–880.
- Piezunka H, Lee W, Haynes R, Bothner MS (2018) Escalation of competition into conflict in competitive networks of Formula One drivers. *Proceedings of the National Academy of Sciences.* 115(15):E3361-3367.
- Podolny JM (1993) A status-based model of market competition. *Amer. J. Sociol.* 98(4):829–872.
- Podolny JM, Stuart TE, Hannan MT (1996) Networks, knowledge, and niches: Competition in the worldwide semiconductor industry, 1984-1991. *Amer. J. Sociol.* 102(3):659–689.
- Porac JF, Thomas H, Wilson F, Paton D, Kanfer A (1995) Rivalry and the industry model of Scottish knitwear producers. *Admin. Sci. Quart.* 40(2):203–227.
- Preacher KJ, Hayes AF (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behav. Res. Methods, Instruments, & Computers*, 36(4):717–731.
- Proserpio D, Zervas G (2017) Online Reputation Management: Estimating the Impact of Management Responses on Consumer Reviews. *Marketing Sci.* 36(5):645–665.
- Rao H, Monin P, Durand R (2003) Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy. *Amer. J. Sociol.* 108(4):95–843.
- Rao H, Monin P, Durand R (2005) Border crossing: Bricolage and the erosion of categorical boundaries in French gastronomy. *Amer. Sociol. Rev.* 70(6):968–991.
- Raver JL, Jensen JM, Lee J, O'Reilly J (2012) Destructive criticism revisited: Appraisals, task outcomes, and the moderating role of competitiveness. *Appl. Psych.* 61(2):177–203.
- ReviewTrackers (2018) 2018 ReviewTrackers Online Reviews Survey. <https://www.reviewtrackers.com/online-reviews-survey/> (last accessed: May 3rd, 2019).
- Rick S, Loewenstein G (2008) The role of emotion in economic behavior. Lewis M, Haviland-Jones JM, Barrett LF, eds. *The handbook of emotion*, 3rd ed. (Guilford Press, New York, NY), 138–156.
- Ridgeway CL, Erickson KG (2000) Creating and spreading status beliefs. *Amer. J. Sociol.* 106(3):579–615.
- Rindova VP (1997) Part VII: Managing reputation: Pursuing everyday excellence: The image cascade and the formation of corporate reputations. *Corporate reputation review.* 1(2):188-94.
- Rindova VP, Fombrun CJ (1999) Constructing competitive advantage: the role of firm–constituent interactions. *Strategic Management J.* 20(8):691-710.
- Rindova VP, Williamson IO, Petkova AP, Sever JM (2005) Being good or being known: An empirical examination of the dimensions, antecedents, and consequences of organizational reputation. *Acad. Management J.* 48(6):1033-49

- Rodell JB, Judge TA (2009) Can “good” stressors spark “bad” behaviors? The mediating role of emotions in links of challenge and hindrance stressors with citizenship and counterproductive behaviors. *J. Appl. Psych.* 94(6):1438–1451.
- Roseman IJ, Wiest C, Swartz TS (1994) Phenomenology, behaviors, and goals differentiate discrete emotions. *J. Personality Soc. Psych.* 67(2):206–221.
- Rozin P, Royzman EB (2001) Negativity bias, negativity dominance, and contagion. *Personality Soc. Psych. Rev.* 5(4):296–320.
- Rullani F, Haefliger S (2013) The periphery on stage: The intra-organizational dynamics in online communities of creation. *Res. Policy* 42(4):941–53.
- Sauder M (2006) Third parties and status position: How the characteristics of status systems matter. *Theory and Society.* 35(3):299–321.
- Sauder M, Lynn F, Podolny JM (2012) Status: Insights from organizational sociology. *Annual Rev. Sociol.* 38:267–283.
- Scherer, K.R., & Ceschi, G (2000) Criteria for emotion recognition from verbal and nonverbal expression: Studying baggage loss in the airport. *Personality Soc. Psych. Bull.* 26(3): 327–339.
- Schindler RM, Bickart B (2012) Perceived helpfulness of online consumer reviews: The role of message content and style. *J. Consumer Behav.* 11(3):234–43.
- Schlenker BR (1980) *Impression management* (Brooks/Cole Publishing Company, Monterey, CA).
- Schlenker BR (2002) Self-presentation. Leary MR, Tangney JP, eds. *Handbook of self and identity* (Guilford Press, New York, NY), 492–518.
- Schminke M, Ambrose ML, Noel TW (1997) The effect of ethical frameworks on perceptions of organizational justice. *Acad. Management J.* 40(5):1190–1207.
- Schniederjans D, Cao ES, Schniederjans M (2013) Enhancing financial performance with social media: An impression management perspective. *Decision Support Systems.* 55(4):911–918.
- Sen S, Lerman D (2007) Why are you telling me this? An examination into negative consumer reviews on the web. *J. Interactive marketing* 21(4):76–94.
- Sharkey AJ, Kovács B (2018) The many gifts of status: How attending to audience reactions drives the use of status. *Management Sci.* 64(11):5422–5443.
- Shepherd DA, McMullen JS, Ocasio WO (2017). Is that an opportunity? An attention model of top managers' opportunity beliefs for strategic action. *Strategic Management J.* 38(3):626–644.
- Shepherd DA, Wiklund J, Haynie JM (2009) Moving forward: Balancing the financial and emotional costs of business failure. *J. business vent.* 24(2):134–48.
- Shiffrin RM, Schneider W (1977) Controlled and automatic human information processing: II Perceptual learning, automatic attending and a general theory. *Psych. Rev.* 84(2): 127–190.
- Simcoe TS, Waguespack DM (2011) Status, quality, and attention: What's in a (missing) name? *Management Sci.* 57(2):274–290.
- Simon HA (1983) *Reason in Human Affairs* (Stanford University Press, Stanford, CA).
- Simonson I, Rosen E (2014) *Absolute value: What really influences customers in the age of (nearly) perfect information* (Harper Business, New York, NY).
- Slooman SA (1996) The empirical case for two systems of reasoning. *Psych. Bull.* 119(1):3–22.
- Smith ER, DeCoster J (2000) Dual process models in social and cognitive psychology: Conceptual integration and links to underlying memory systems. *Personality Soc. Psych. Rev.* 4(2):108–131.
- Smith RH, Webster JM, Parrot WG, Eyre HL (2002) The role of public exposure in moral and nonmoral shame and guilt. *J. Personality Soc. Psych.* 83(1):138–159.

- Sobel ME (1982) Asymptotic confidence intervals for indirect effects in structural equation models. *Soc. Methodology* 13:290–312.
- Sorenson O (2014) Status and reputation: Synonyms or separate concepts? *Strategic Organ.* 12(1):62–69.
- Sparks BA, Browning V (2011) The impact of online reviews on hotel booking intentions and perception of trust. *Tourism management.* 32(6):1310–1323.
- Srivastava RK, McInish TH, Wood RA, Capraro AJ (1997) The value of corporate reputation: Evidence from the equity markets. *Corporate Reputation Rev.* 1(1):61–8.
- Staw BM, McKechnie PI, Puffer SM (1983) The justification of organizational performance. *Admin. Sci. Quart.* 1:582–600.
- Stevens R, Moray N, Bruneel J, Clarysse B (2015) Attention allocation to multiple goals: The case of for-profit social enterprises. *Strategic Management J.* 36(7):1006–1016.
- Steyvers M, Griffiths T (2007) Probabilistic topic models. Landauer T, McNamara D, Dennis S, Kintsch W, eds. *Latent Semantic Analysis: A Road to Meaning* (Lawrence Erlbaum Associates, Mahwah, NJ), 424–440.
- Strack F, Deutsch R (2004) Reflective and impulsive determinants of social behavior. *Personality Soc. Psych. Rev.* 8(3): 220–247.
- Strauss A, Corbin JM (1998) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (Sage, Thousand Oaks, CA).
- Sullivan BN (2010) Competition and beyond: Problems and attention allocation in the organizational rulemaking process. *Organ. Sci.* 21(2):432–450.
- Tangney JP (1991) Moral affect: The good, the bad, and the ugly. *J. Personality Soc. Psych.* 61(4):598–607.
- Tangney JP (1999) The self-conscious emotions: Shame, guilt, embarrassment and pride. Dagleish T, Power M, eds. *Handbook of cognition and emotion* (Wiley, Chichester, UK), 541–568.
- Tangney JP, Wagner P, Fletcher C, Gramzow R (1992) Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *J. Personality Soc. Psych.* 62(4): 669–675.
- Tedeschi JT (2013) *Impression management theory and social psychological research.* Academic Press, New York, NY).
- Tedeschi JT, Felson RB (1994) *Violence, aggression, and coercive actions* (American Psychological Association, Washington, DC)
- Tedeschi JT, Norman N (1985) Social power, self-presentation, and the self. Schlenker BR, eds. *The Self and Social Life* (McGraw Hill, New York, NY), 293–322.
- Tiedens LZ, Linton S (2001) Judgment under emotional certainty and uncertainty: the effects of specific emotions on information processing. *J. Personality Soc. Psych.* 81(6):973–988.
- Tracy JL, Robins RW (2006) Appraisal antecedents of shame and guilt: Support for a theoretical model. *J. Personality Soc. Psych. Bull.* 32(10):1339–1351.
- Tversky A, Kahneman D (1979) Prospect theory: An analysis of decision under risk. *Econometrica.* 47(2):263–91.
- Umphress EE, Simmons AL, Folger R, Ren R, Bobocel R (2013) Observer reactions to interpersonal injustice: The roles of perpetrator intent and victim perception. *J. Organ. Behav.* 34(3):327–349.
- van Knippenberg D, Dahlander L, Haas MR, George G (2015) Information, attention, and decision making. *Acad. Management J.* 58:649–657.
- Veil SR, Petrun EL, Roberts HA (2012) Issue management gone awry: When not to respond to an online reputation threat. *Corporate Reputation Review.* 15:319–332.
- Waguespack DM, Sorenson O (2011). The ratings game: Asymmetry in classification. *Organ. Sci.* 22(3):541–53.

- Wang L, Restubog S, Shao B, Lu V, Van Kleef GA (2018) Does anger expression help or harm leader effectiveness? The role of competence-based versus integrity-based violations and abusive supervision. *Acad. Management J.* 61(3):1050-72.
- Wang P, Jensen M (2019) A bridge too far: Divestiture as a strategic reaction to status inconsistency. *Management Sci.* 65(2):859–878.
- Wang Q, Li B, Singh PV (2018) Copycats vs. Original Mobile Apps: A Machine Learning Copycat-Detection Method and Empirical Analysis. *Information Systems Research.* 29(2):273–291.
- Wang T, Wezel FC, Forgues B (2016) Protecting market identity: When and how do organizations respond to consumers' devaluations? *Acad. Management J.* 59(1):135–162.
- Wang Y, Chaudhry A (2018) When and how managers' responses to online reviews affect subsequent reviews. *J. Marketing Res.* 55(2):163–177.
- Washington M, Zajac EJ (2005) Status evolution and competition: Theory and evidence. *Acad. Management J.* 48(2):282–296.
- Westphal JD, Zajac EJ (1998) The symbolic management of stockholders: Corporate governance reforms and shareholder reactions. *Admin. Sci. Quart.* 1:127-53.
- Wilden R, Gudergan SP, Nielsen BB, Lings I (2013) Dynamic capabilities and performance: strategy, structure and environment. *Long Range Plann.* 46(1-2): 72–96.
- Winter SJ, Saunders C, Hart P (2003) Electronic window dressing: Impression management with websites. *Europ. J. Information Systems.* 12(4):309-22.
- Wolfe JM, Horowitz TS (2004) What attributes guide the deployment of visual attention and how do they do it? *Nature Rev. Neurosci.* 5(6):495–501.
- Wolff-Mann E (2016) When did a 4-star review become a bad review? <http://time.com/money/page/online-reviews-trust-fix/> (last accessed: May 3rd, 2019).
- Wooldridge JM (2010) *Econometric analysis of cross section and panel data* (MIT press, Cambridge, MA).
- Ye Q, Law R, Gu B (2009) The impact of online user reviews on hotel room sales. *Internat. J. Hospitality Management* 28(1):180–182.
- Zavyalova A, Pfarrer MD, Reger RK, Shapiro DL (2012) Managing the message: The effects of firm actions and industry spillovers on media coverage following wrongdoing. *Acad. Management J.* 55(5):1079-101.
- Zhu F, Zhang X (2010) Impact of online consumer reviews on sales: The moderating role of product and consumer characteristics. *J. Marketing* 74(2):133–148.
- Zwicky AD, Zwicky AM (1980) America's national dish: The style of restaurant menus. *Amer. Speech.* 55(2): 83–92.

APPENDIX

Figure 4: Example of menu descriptions

MENU NOTES

ROASTED BANANA BAVAROIS

I was working on a truffle dish around the holidays when we happened upon this combination. I wanted something lighter than the traditional garlic or potato that might get paired with the truffles and started thinking about other ingredients that had depth and which make work with the truffles' earthiness. Sea urchin is what came to mind with its unctuousness and that feeling of "breath of ocean". In order not to overpower the sea urchin, we needed a medium that wasn't too savory. I often get chocolate undertones with truffles, and had been joking with my pastry chef about doing a banana-truffle dessert and figured that would be the obvious choice.

BOSTON MACKEREL

As we move into Fall, I wanted to make a fish course that, as the second course would be an early transition, much like summer to fall and lighter into richer. The richness and bigger flavor profile of mackerel is something I think of more in the fall and winter. Needing the garnish to have some intensity but also brightness of flavor, the South of France is used for inspiration. A little sweetness with the carrots and orange, a touch of brine from the olive, and cumin-spiced socca tie the dish together.

GARBURE

Garbure, the classic cabbage and meat stew, is one of the first dishes I ordered when I went to France as a stagiaire in 1998. I always hesitate to explain garbure to people because it's a stew that is more of a knife and fork type dish. In the southwest of France where the duck is king, the more upscale versions generally include duck confit. In order to make our version a little lighter I use slices of duck breast with confit of cabbage and La Ratte potatoes which provide the stewiness, and of course foie gras emulsion for richness and depth.

LOBSTER CASSOULET

I was once tasked with using Japanese adzuki beans to come up with a dish. The American in me said "Pork and Beans", the French in me said "Cassoulet". The fact that it is a Japanese bean drew me to Lobster Cassoulet. The lobster is poached in oil made with the roasted shells and herbs to give off a very savory depth in flavor. The beans are heated in stock flavored with bonito flakes, providing the depth and smokiness of a meat stock but much cleaner in flavor. It has all of the complexity of its western muse, but with a refinement and delicacy that is very Japanese to me.

KUROGE BEEF

Kuroge beef is special. It is one of those foods that you can do so much with and simultaneously need to make sure you don't ruin it. Frequently, with Kuroge I think of the sense of taste - sweet, sour, salty, bitter-fresh (umami) - and decide which accents to use. Moving into Fall, the use of potato, sunchokes, butternut squash, kale and persimmon are highlights for the dish.

CONCORD GRAPE ISPAHAN

Pierre Hermé is a giant in the modern pastry world and, some would say, singularly responsible for the resurgent popularity of macarons which he began to focus on while Pastry Chef at Ladurée in the 90s. One of his signature creations was inspired by the Iranian city of Isfahan, renowned for its gardens and roses. Titled 'Isfahan,' it featured flavors of raspberry, rose and lychee. I've drawn inspiration from Chef Hermé's approach to building flavor and creating pastries and pay homage to his signature creation here. My Isfahan replaces raspberry with autumn's concord grape, whose brightness marries nicely with the floral notes of the rose and lychee. A touch of cardamom nods at Iranian cuisine and accents the grape's tannins.

SAINT HONORÉ

I officially began my pastry career studying classic French technique at The French Culinary Institute in Manhattan. We studied the great canon of French desserts, including Gâteau St. Honoré, a choux-based cream tart named for the patron saint of bakers. In my inexperienced opinion, it was complicated to execute and seemed old-fashioned. I was sure it was the product of another era - the French version of a jello fruit salad. To my chagrin, I was assigned the cake as part of my graduation exam and even had to make them in miniature for display. Months later while apprenticing in France, I discovered the St. Honoré is still highly beloved in its native country. As my skill in and knowledge of pastry has grown, so has my appreciation of this classic gâteau.

— ERIC ZIEBOLD, Chef

— ANNE SPECKER, Pastry Chef

Figure 5: Example of Yelp review and management response

 **Tom K.**
Hong Kong Island, Hong Kong
0 friends
89 reviews
9 photos

★☆☆☆☆ 11/3/2018

Our reference is Barcelona Spain and among other restaurants as cities as New York.

Here at Paella they serve pre - made up-heated not fresh dishes and the Sangria was a watery excuse for the real stuff.
The dishes came in very fast which means it was just reheated old food.

We ordered:

Mushrooms with chorizo - very pre heated with a hard surface.

Artichoke with Spanish cured came - ok

Fried chicken croquettes - ok

Small parts of Scallop - worst ever. Very warm. It was cancelled

Shrimp with Garlic Sauce - served very warm. Not OK

Slices of domestic salt cured ham - thick dry slices, not very good.

This place can not be recommended. The ambiance ok but all the staff ran around, like headless hens, pulling the plates away from the table which is not good at all.

Our comments have been commented by the management. Our review still stands and I understand the truth hurts.
You you should perhaps learn and change.
We are world travelers and are frequently in Spain and many other countries which are our references.

Good luck.

 Useful 1  Funny  Cool

 **Comment from Tudor B. of LA Paella**
Business Owner

11/5/2018 · Tom,

I am sorry but your review is very insulting, we do NOT precook any item on our menu whatsoever. Our staff has been with us since 1995 and are very fast and efficient. All our ingredients are fresh and cooked when ordered.

After 20 years in this business and having worked in high end Restaurants in Spain you are the 1st person to complain about Champinones con Chorizo (Mushrooms with Spanish red sausage) Gambas Al Ajillo (shrimp in Garlic Sauce) and Vieiras al Ajillo (Scallops sauteed with garlic and chile pod) . All these taps are under HOT Caliente in our Menu under Small Spanish Bites - Tapas so when you ordered it was well written how it will be cooked. And tell me what is the point to preheat the taps when it takes 3-4 min to cook???

In Spain we a saying "Grande es el Jardín de Dios".... Anyway Nice Try!!

[Read less](#)

Titre : Réponses stratégiques de l'entreprise aux évaluations

Mots clés : entreprise, réponse, feedback, restaurants

Abstract : L'émergence de la technologie des médias digitaux durant les dernières décennies a transformé la manière dont les organisations sont évaluées. Chaque jour, dans de multiples plateformes et sites web, des individus divulguent des informations sur leurs interactions avec des organisations. En comparaison des critiques professionnels traditionnels, les utilisateurs et les consommateurs digitaux tendent à partager des expériences subjectives et partiales, à être moins enclins à être pondérés, et souvent à donner plus d'importance au contenu émotionnel. Alors que davantage de consommateurs s'appuient sur cette information pour leurs choix d'achat, les entreprises dans beaucoup de secteurs se trouvent dans une position où il est difficile d'ignorer les opinions exprimées en ligne par les consommateurs. Dans cette thèse, j'étudie la manière dont les stratégies et les comportements des organisations sont influencées par cette «démocratisation» des processus d'évaluation. Le contexte empirique de mes analyses est celui du secteur de la restauration.

Dans le premier chapitre, j'étudie les commentaires en ligne comme source d'information pour les restaurants, qui peuvent avoir l'opportunité d'apprendre des problèmes et d'améliorations potentielles. J'examine quelles sont les caractéristiques des feedbacks des consommateurs qui ont le plus de chances d'être prises en considération par les restaurants ciblés. A partir d'une expérimentation en ligne dans le secteur de la restauration haut-de-gamme en France, je trouve que les preneurs de décision allouent leur attention aux feedbacks desquels on attend qu'ils aient le plus fort effet sur la réputation et la performance du restaurant. Cependant, je trouve également des éléments corroborant un effet «perturbation» provenant des émotions évoquées par certaines caractéristiques des feedbacks. Dans le deuxième chapitre, j'analyse les effets de l'interaction entre les évaluations des amateurs et des experts. En particulier, j'étudie l'entrée d'un évaluateur expert (i.e. le guide Michelin) sur le marché, et la manière dont il pousse certaines organisations à faire des choix stratégiques qui signalent leurs aspirations. En construisant sur la littérature sur le statut organisationnel, je trouve que certains restaurants mieux évalués par le guide Michelin font des changements dans leur offre en visant à s'auto-identifier avec le groupe d'élite. Ces changements consistent à adopter ou à exclure certaines caractéristiques affichées dans les menus. De plus, en utilisant les techniques du «topic modeling» appliquées à des commentaires sur Yelp, j'observe que certaines réactions des consommateurs à propos de l'entrée du guide Michelin font que les restaurants apparaissent plus ou moins sensibles aux évaluations de l'expert. Dans le troisième chapitre, je me concentre sur la manière dont les organisations utilisent des réponses publiques adressées aux consommateurs pour répondre aux critiques en ligne. Les études récentes n'offrent pas de conclusion nette sur les bénéfices en termes de réputation des réponses publiques aux commentaires. Ces réponses peuvent réduire la probabilité de recevoir des commentaires négatifs dans le futur mais, dans le même temps, elles attirent l'attention sur les problèmes en question. M'appuyant sur la littérature existante sur la réputation et sur l'«impression management», je propose que les organisations peuvent résoudre cet arbitrage en utilisant stratégiquement les différents types de réponses verbales (ex: l'excuse). Bien que les réponses publiques adressées aux consommateurs puissent être contre-productives, adapter le style des réponses publiques aux caractéristiques des commentaires des consommateurs peut être une stratégie optimale pour les organisations. Dans cette étude, j'analyse les commentaires pour des restaurants situés en France et aux États-Unis en utilisant des modèles économétriques standards appuyés sur des techniques de «supervised learning».

Title : Firms' strategic responses to evaluations

Keywords : firm, response, feedback, restaurant industry

Abstract : The rise of digital media technology over the last decades has transformed the way in which organizations are evaluated. Judgments by experts and critics, recognized for their knowledge of evaluation criteria, appropriate weightings, and appropriate preferences, are losing their appeal to customers in many industries. Every day, on a plurality of platforms and websites, individuals disclose information about their interactions with organizations and their products or services. Compared to traditional media or professional critics, digital users and customers tend to share subjective and partial experiences, have lower concerns for accuracy and balance, and often put emphasis on the emotional content. As more customers rely on this information for their purchasing choices, firms in many industries find themselves in a position where it is hard to ignore the opinions expressed online by customers as inconsequential. In this thesis, I study how the strategies and behaviors of organizations are affected by this “democratization” of evaluation process. The empirical setting for my analyses is the restaurant industry.

In the first chapter, I study online reviews as a source of information for restaurants, which may learn about problems, errors, or improvement opportunities. I examine what features of customer feedback make it more likely to be considered by target restaurants. With an online experiment in the French restaurant industry, I find that decision makers allocate attention to feedback that is expected to have a stronger impact on the reputation and performance of the restaurant. However, I also find evidence of a “disturbance” effect of the emotions evoked by certain feedback features. With this chapter I emphasize the importance of incorporating affective mechanisms in the study of attention, and shed light on how individual-level emotions impact organizational-level outcomes. In the second chapter, I analyze the effects of the interaction between amateur and expert evaluations. In particular, I study the entry of an expert evaluator (i.e., Michelin guide) in a market, and how it pushes some organizations to make strategic choices that signal their aspirations. Drawing on literature on organizational status, I find that restaurants better rated by Michelin make changes to their offer with the aim to self-identify with the elite group. These changes consist in the adoption or removal of certain features displayed in their menus. In addition, by using topic modeling techniques applied to Yelp reviews, I observe that customers' reactions to the entry of Michelin make restaurants more or less sensitive to the expert's evaluations. In the third chapter, I focus on how organizations use public responses to customers to address criticism in online settings. Recent studies are not conclusive on the reputational benefits of public responses to reviews. These responses may reduce the likelihood of future negative reviews while, at the same time, draw attention to problems. Building on existing literature on reputation and impression management, I propose that organizations may resolve this trade-off by making a strategic use of different types of verbal accounts (e.g., apology). Although public responses to customers may be counterproductive, adapting the style of public responses to the features of customer reviews might be an optimal strategy for organizations. For this study I analyze restaurant reviews in France and the United States using standard econometric models supported by supervised learning techniques.