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Cooking under Fire: Managing Creativity and Innovation in Haute Cuisine

Christel Lane
Cambridge
Sociology
col21@hermes.cam.ac.uk

Daniela Lup
LSE
Management
d.lup@lse.ac.uk

Daniela Lup
LSE
Management
d.lup@lse.ac.uk

Abstract

This study examines the management of innovation process in haute cuisine by looking at both the idea generation and the implementation stage. Although existing research has acknowledged numerous tensions and contradictions across the two stages, the literature on the management of contradictions is still underdeveloped. We conduct an in-depth field investigation of forty British and German restaurants that have successfully managed these tensions. Our analysis of the management of tensions across stages of the innovation process allows us to reconsider existing views and assumptions about the strategic management of tensions and contradictions in organizations. Moreover, the findings reveal how differences in the institutional context of Britain and Germany, specifically the institutions that govern labor markets, affect the efficiency with which restaurants manage the innovation process.

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1. Introduction

The topics of creativity and innovation have generated sustained interest within the organization and management research communities. Innovation is traditionally conceptualized as the production of ideas that are novel and useful, followed by their successful implementation (Amabile et al 1996). Implicit in this conceptualization is that innovation is not reducible to the production of novel ideas but that it requires the implementation of those ideas so that they may be judged by other stakeholders in a given industry. Only when creative ideas have become useful after the process of their successful implementation we can speak of innovation.

While the existing literature has long recognized that creativity and innovation are two distinct stages of the innovation process (West 2002, others), it is still rare that they are examined together (for a similar opinion see Anderson et al. 2013). Notwithstanding their important contribution to illuminating factors that affect creativity and innovation, studies that do not distinguish between the two stages are bound to overlook the possibility that factors with a positive effect on one stage could have a negative impact on the other stage. However, recent research has acknowledged that numerous tensions and contradictions exist across the two stages and that managing these contradictions is a crucial aspect of organizational success. While progress has been made in unveiling tensions and contradictions (Anderson et al. 2013, Shalley and Gilson 2004) the literature on the management of contradictions is still underdeveloped (Smith and Tushman 2005, Van de Ven 1986). Moreover, we also know little about how the institutional environment affects the effective management of tensions and contradictions in the innovation process (Anderson et al. 2013). We address these gaps by conducting an empirical study in the haute cuisine sector, focusing on two primary research questions: How are the

tensions and contradictions of the innovation process managed?; How does the institutional environment impact the effective management of contradictions and tensions?

To answer these questions we investigate creativity and its implementation in the context of haute cuisine in Britain and Germany, specifically looking at the work that takes place in restaurants that have been awarded Michelin stars. Creativity and innovation matter greatly in the high-end restaurant industry because they influence the evaluations received from gastronomic guides and, in consequence, are crucial determinants of sustainable competitive advantage. In this setting, the predominant innovative mode is a chef de cuisine who stays creative and who is able to transmit his vision to the working brigade such that they deliver in a consistent manner.

We are taking Michelin status as a proxy for a restaurant's successful implementation of creative ideas. This approach is recommended by Amabile (1996: 28- 30). She suggests that, because creativity cannot be assessed by objective analysis alone, studies have held products to be creative where appropriate observers, familiar with the products, have judged them to be creative. Hence reliance on the Michelin rating of restaurants is justified to the extent that the award of stars is based on lengthy and thorough evaluation processes by trained inspectors with industry knowledge. Moreover, Michelin's main criteria for awarding stars are originality or an individual signature of chefs, together with the consistently high quality of dishes prepared. These criteria allude to creativity, as well as to its successful implementation, in as far as originality and consistently high quality of meals signify the successful implementation of creative ideas. Michelin's assessment of mainly these two factors then results in the award of one, two or three stars (for details on the rating process, see Lane 2013).

Empirically, we have studied twenty Michelin-starred restaurants in each country, interviewing head chefs or chefs-de cuisine. The in-depth interviews asked chefs to reflect on

the processes involved in the creation of novel ideas and in their implementation, as well as ascertaining the sources of creativity. Our cross-national comparison of British and German starred restaurants enables us to look beyond the impact of organizational contexts and also consider how divergent institutional environments affect the transformation of creative ideas into innovative culinary products. Although Michelin rates restaurants in Britain and Germany in exactly the same way, the outcomes of Michelin's rating of the two national sets of high-end restaurants are very different, with German restaurants significantly more successful in both the overall number of stars awarded and in the number earning two or three stars (Table 1). This raises questions about whether and how divergent organizational and institutional environments may account for any differences in the processes of idea generation and their subsequent implementation.

Table 1: Number of Michelin Stars Awarded in 2013

	UK	Germany
One star	138	209
Two stars	20	36
Three stars	4	10
Total	162	255

Source: Based on figures in Michelin Great Britain 2013 and Michelin Deutschland 2013. This pattern is not a 2013 effect, but is present over time.

Prior research has found that organizations manage contradictions by embracing an ambidextrous framework. Organizational ambidexterity refers to an organization's ability to pursue activities that have contradictory elements, such as exploration and exploitation, flexibility and efficiency (Reisch and Birkinshaw 2008) or, as in our case, creativity and skilful implementation. A review of current research on organizational ambidexterity reveals two types of solutions for solving contradictions: structural and socio-behavioral solutions. Structural

solutions suggest that contradictory tasks are split and placed in different organizational units, while socio-behavioral solutions emphasize the need to have organizational members simultaneously involved in generating new ideas and skilful implementation. The literature further suggests that a structural solution is not suitable for small-size organizations and organizations which operate in dynamic environments. In contrast, our study finds that the Michelin restaurants, although small and under constant demand for innovation, do adopt structural solutions. Concerning the institutional environment, we find that the 'coordinated market' context of Germany is more favorable to this mode of managing innovation, particularly the implementation stage, and we explain why this is the case. Overall, our analysis of the management of tensions across stages of the innovation process allows us to reconsider existing views and assumptions about the strategic management of tensions and contradictions in organizations, thus making a theoretical contribution to this literature. In addition, our study makes an empirical contribution by offering a grounded understanding of the management of culinary innovation.

We start by discussing the relevant literature on tensions and contradictions of the innovation process highlighting prior findings and note that a consideration of the management of the tensions has been largely absent from this literature. Section 3, on research methods, describes how the first author collected and analyzed data. In part 4, we present our empirical field study in which we look at the management of the innovation process and trace the impact of institutional factors, particularly on the implementation stage. We conclude by exploring the significance of our findings to an understanding of the management of creativity and innovation in general, as well as in the context of haute cuisine.

2. Theoretical Considerations

Research on organizational creativity has established that creativity and innovation are two distinct concepts and parts of the same process (West 2002, Amabile 1996). Creativity, the first stage in the innovation process, is generally conceptualized as the development of novel ideas, the "thinking of new things" (West 2002).The implementation of creative ideas is the second part of the process, the stage during which novel ideas become products, services or routines (West 2002, West and Farr, 1990)

Despite agreement that creativity and innovation are integral parts of the same process, major theoretical frameworks tend to focus on one stage only, predominantly the idea generation stage. However, researchers have recently warned that unless the two are treated together it is difficult to draw conclusions that could inform the management of innovation in organizations (e.g. Anderson et al. 2014). Managing the innovation process requires an understanding of the factors that affect each of the two stages. To the extent that similar factors affect the two stages in similar ways, either positively or negatively, organizations can strategically decide how to commit resources to enhance the innovation process. Conversely, if factors that affect positively one stage carry negative implications for the other stage, organizations need to understand how to manage the tensions and contradictions between idea creation and implementation. This challenge is most important for smaller organizations in which employees involved in idea generation are also responsible for implementation. Incidentally, these are the same organizations from which high levels of innovation are expected (Damanpour 1992). Relative small size and a constant need to innovate are also features of the haute cuisine restaurants. Below we focus on three aspects which, based on the existing literature, present the highest

potential for tension and/or conflict across the two stages: team composition and engagement; leadership models; institutional environment.

Team composition and engagement

Existing research has provided evidence that democratic engagement of employees with a diversity of knowledge and skills positively affects creativity for a number of reasons. First, the argument behind the "value-in-diversity" thesis is that novel ideas appear either as a recombination of knowledge streams which had not been considered together in the past or as applications in a new setting of ideas developed in another domain (Burt 2004). To the extent that individuals with a variety of information, skills and points of view exchange ideas while working together on a project they are likely to generate more novel solutions than individuals with homogeneous knowledge (Staw 1990; 1995). This appears to be even more important for smaller firms, where a low number of employees already means reduced exposure to knowledge diversity. Second, when diverse members engage in discussing ideas there is an increase in the level of trust. In turn, trust makes members comfortable to bring into discussion new ideas and points of view without the fear of being sanctioned by the majority (Reagans and Zuckerman 2001, others), thus creating a virtuous circle in which diverse knowledge is freely exchanged and mutually appreciated. Third, engaging diverse individuals in the idea generation stage has positive spillover effects as it gives employees a sense of participation and increases their identification with the organizational goals and actions. It thus motivates them to participate more efficiently in both the creative and the implementation stage.

The benefits of diversity and democratic engagement during the implementation stage are less clear. In contrast to idea generation, implementation is more efficient when employees share common understandings regarding how things must be done (Fleming, Mingo, Chen 2007).

Moreover, while the creative stage benefits from allowing a majority to contribute ideas, high levels of involvement could be detrimental to implementation, especially when implementation is based on task interdependence (Langfred 2004; Langfred and Moye 2004). Finally, employees' joint involvement in creation and implementation comes at a cost, as the hard workload of implementation often leaves few resources for creativity (Elsbach and Hargadon 2006).

Leadership models

Leaders can affect the innovation process primarily through their influence on the work context (Shalley and Gilson 2004; see also Tierney 2008 for a review). Leaders can have a positive impact on the idea generation stage if they ensure that employees have sufficient job autonomy such that they experiment and explore alternative ideas (Oldham and Cummings 1996, Zhou 1998). In contrast, hierarchical control and especially the presence of an authority figure (Mullen et al. 1991) have been shown to have a negative impact on idea generation. In a review of the literature on factors that foster or hinder creativity in organizations, Shalley and Gibson (2004) noted that, compared to flatter work arrangements, hierarchical organizational structures might discourage employees from taking creative approaches to their work. The more hierarchical the organization of their work the less safe members feel to express radical ideas or to experiment.

Yet, lower autonomy and a more hierarchical organization could favorably affect implementation. A couple of studies have found that leaders who are more directive and make clear to followers what is expected from them are more effective during the idea implementation stage (Rosing et al 2011). Thus, if the leaders impose a strict schedule that keeps the team under time pressure, they could prevent experimentation during implementation and enhance the activation of routines (Amabile et al. 2003). Last, but not least, leaders can affect the followers'

behavior by serving as role models (Carmeli, Gelbard and Gefen 2010, King and Anderson 1990): a leader who is creative is likely to inspire creative expression in followers, while a leader who extols attention to details is likely to have a positive impact on the implementation of ideas.

Institutional environment

 Many well-known innovations would not have occurred if the institutional contexts in which they appeared had been different (Van de Ven 1986). Despite general recognition that the institutional environment in which organizations are embedded affects creativity and innovation (e.g. Hall and Soskice 2001 on the impact of the institutional characteristics of the two "varieties of capitalism" on organizational innovation strategies), there is still insufficient understanding of the mechanisms through which institutional frameworks influence the two stages of the innovation process (Anderson et al. 2013). It is notable also that among the several studies comparing the performance of firms there is little agreement on how the institutional environments of a liberal or a coordinated market economy affect creativity and innovation. While Vasudeva et al. (2013) show that the innovativeness of firms is enhanced by their location in a coordinated market context (see also Lehrer 2000 and Lange 2009), Casper et al. (1999) and Casper (2009) suggest that the institutional environment of British firms, a typical liberal market setting, is more conducive to innovation than the German one.

These contrasting and rather inconclusive findings may be due to the fact that the innovation process is rarely disaggregated into the phases of 'creative ideas' development and the implementation of these ideas. Casper and Whitley (2004) hint at this possibility when they analyze the influence of institutions that govern labor markets on the type of innovation pursued by entrepreneurial technology firms in Germany, Sweden and the UK. As such, it is possible that different institutional environments favor not innovation in general, but rather different stages of

the innovation process. By paying attention to both phases our paper aims to shed light on this possibility.

Managing tensions and contradictions

To summarize, existing literature suggests specific tensions and contradictions between the idea generation and implementation stages; yet, to the extent that they focus primarily on the creativity stage scholars tend to remain silent on the management of tensions across stages, despite recent calls for a better understanding of these tensions (see for instance Anderson et al. 2013). Research on culinary innovation is no exception. The very few studies investigating creativity in haute cuisine acknowledge that innovation is a multi-stage process (Svejenova et al. 2007, Ottenbacher and Harrington 2007, 2009), but pay little attention to the fact that different stages require different organizational inputs and resources that may create tensions for both the leaders and their team. At the same time, while an institutionalist approach is not new in studies of culinary innovation previous studies have focused primarily on the processes of institutionalization of innovative ideas or techniques, including the role of institutional entrepreneurs (Rao. et al 2003, Svejenova et al 2007, but see Ottenbacher and Harrington 2009 for an exploration of institutional features at the meso level shaping the innovation process in haute cuisine). In contrast, our investigation of creativity and innovation in high end restaurants allows us to get firsthand information on the management of tensions and contradictions and the role of institutional constraints and facilitators.

To make sense of the management of tensions at various stages of the innovation process we found it useful to relate to the literature on the management of strategic contradiction, and in particular on research focused on organizational ambidexterity. Current research on organizational ambidexterity reveals two types of solutions for solving contradictions: structural

and socio-behavioral solutions. Structural solutions suggest that contradictory tasks are split and placed in different organizational units, such that employees in each unit pursue one type of task and are therefore shielded from inconsistent demands. The success of structural differentiation depends, however, on ensuring high coordination between different units (Tushman and O'Reilly 1996) as well as on some degree of overlap in skill across units (Takeishi 2002). These requirements make structural solutions costly. In contrast, socio-behavioral solutions emphasize the need to create conditions for all organizational members to engage simultaneously in generating new ideas and skilful implementation. To achieve this integration of creativity and implementation at the individual level organizations need to put in place processes that create opportunities and incentives for individuals to switch from creative to more routine tasks and back to creativity. In particular, a context characterized by a combination of disciple-stretch and support-trust has been found to be conducive to behavioral solutions, with every individual working on implementation and, at the same time, being on the lookout for new ideas and solutions (Gibson and Birkinshaw 2004). Such processes are not only necessary for employees, but they should also exist at the top management level (Smith and Tushman 2005, Lubatkin et al. 2006).

In its quest to resolve conflicting goals an organization could in principle consider either type of strategy. However, constraints related to available resources and environmental conditions are thought to affect their choice. Although research on the link between organizational characteristics and choice of ambidexterity strategy is still limited, some authors have suggested that costly structural solutions are less suitable for small organization with limited resources. Indeed, while studies documenting the advantages of structural solutions have been conducted in large firms, behavioral based solutions have been found primarily at the level

of teams, business units (Gibson and Birkinshaw 2004) and in small firms (Lubatkin et al. 2006). Research on the link between environmental characteristics, even though scarce, suggests that structural solutions are better suited for organizations operating in relatively stable environments (Tushman and O'Reilly 1996), while in dynamic and competitive environments firms are better served by behavioral solutions. Understanding therefore what solution works best for a particular type of organization requires careful consideration of both organizational and environmental characteristics. Alternatively, it is possible that a counterintuitive solution is chosen, e.g. structural for small firms or for firms in dynamic environments. Studying cases that depart from expectations may allow us to uncover under-theorized contingencies and thus to enrich the theory.

We believe that organizational ambidexterity is a useful lens with which to understand solutions used by high end restaurants in their attempt to manage creativity and innovation. A focus on ambidexterity is justified to the extent that the interviewed chefs do recognize that their restaurants need to innovate constantly and deliver consistently. They try to maintain a recognized signature and even to set new trends. At the same time, chefs-de-cuisine recruit and retain skilled staff and train them to execute faultless implementation of their own ideas, but pay little regard to employees' creativity potential and application. These role understandings represent tensions which, according to the literature, are likely to be managed by embracing an ambidextrous framework. This approach allows us to take the tensions as given and focus our analysis on the management of these tensions. Observing the ambidextrous solutions, i.e. looking at the concrete mechanisms that help managing tensions and contradictions, but also observing how the institutional environment affects the creation of a successful ambidextrous organization allows us to make a contribution to theory.

3. Research Method

Studying innovation means examining an emergent process from the generation of the initial idea to its embodiment in a product and the social interactions that are part of it. This is best achieved by the adoption of an inductive qualitative method, using a number of case studies that seek to discern and interpret cross-case industry patterns and derive theory from the data (Eisenhardt 1989). Our understanding of haute-cuisine chefs and their role in the innovation process is based on information the first author has collected in a series of personal, in-depth interviews in Britain and Germany. Such interviews best capture chefs' intentions, as well as the meanings they attribute to creativity and innovation.

In each country, twenty interviews with Michelin-starred chefs were conducted. They are the chef patrons of, or are employed in starred restaurants, ranging from very small husband-and-wife operations to very large, highly professionalized ones, usually forming part of top hotels. The restaurants are situated in a range of geographical locations, taking in both small and relatively remote villages and large towns, and restaurants in all three star categories were selected. I also sampled the food chefs produce, in at least some of the forty restaurants, as well as visiting some of the kitchens. These forty interviews with current chefs-de-cuisine were supplemented by four interviews with former Michelin chefs. Interviews with chefs were complemented by one interview each with Michelin Great Britain and Michelin Germany. It was not possible to get a representative sample as, in a number of cases, particularly in Britain, it proved impossible to gain chefs' agreement to participate. Neither sample included chefs one may describe as practicing 'molecular cuisine' although in both countries several chefs employed molecular techniques selectively. The relatively large number of interviews completed and the

purposeful selection of chefs from different types of restaurants in most parts of each country lend the study considerable validity.

Interviews with chefs-de-cuisine lasted between ninety minutes and two hours and took place in their restaurants between 2010 and 2012. Chefs took time out from their hectic schedules and talked to me in a very open and often animated manner. The interviews were semi-structured, permitting more extended answers from chefs where they raised particularly revealing or insightful comments. Only some of the very extensive material gained was used for this paper. The interview data were analyzed by devising a set of thematic categories which were then imposed on the material to discover patterns and to interpret them. The choice of cases (Britain and Germany) for the comparison has been influenced by two considerations. First, Britain and Germany are similar cases in the sense that, in contrast to France, a sustained indigenous tradition of fine dining developed relatively late, i.e. from the 1970s to the 1990s. Second, the focus on these two countries enables the comparison of two different 'varieties of capitalism' and therefore of different social institutional contexts in which innovation occurs, namely Germany's 'coordinated market economy' versus Britain's 'liberal market economy' (Hall and Soskice 2001).

4. Empirical Results

We use chefs' accounts to understand the organization of the innovation process and of the strategies employed for managing tensions. Unless specified otherwise, all quotes presented below are taken from the interviews.

4.1. How is the process of idea creation organized?

In contrast to many other industries, creativity is not developed within teams. Drawing on a multitude of creative inputs from within the organization, commonly associated with the development of novel ideas, is not favored in high-end restaurant kitchens. On the contrary, the chefs-de-cuisine are expected to be and, indeed, consider themselves the main source of creativity. This hierarchical mode of organizing the creative process is a consequence of chefs' Michelin status and is strongly influenced by the external demands and expectation connected with this status. Michelin expect multi-starred chefs to have 'an individual signature', a consistent and recognizable original style. Signature dishes need the application of similar templates, embodied in a "philosophy" and therefore can only be created by the same individual or a small group. As a result, most of the "brigade" members are excluded from the stage of idea generation and the very few who are consulted make only minor contributions. This is illustrated by the following comment from a German two-star chef regarding team contribution to creating new dishes: *'They present their own creations and may contribute to a menu, but I am concerned that my own philosophy is maintained'*. A British two-star chef similarly showed concern for the maintenance of his own style when he 'reigned back' a Noma-trained sous chef who tried to assert his own, more radically innovative ideas, and a British one–star chef, who cheerfully owned up to a '*friendly, but autocratic'* management style, makes it very clear where creativity is developed: '*Creativity comes from the top. I don't want any under me to be creative'*.

Given this head chef-oriented organizational structure and ethos, it is only the exceptional chef who relies on members of their own brigade for new ideas. When asked 'Who or what inspires you to remain creative?' (multiple answers were given), only five chefs – all British - mentioned members of their brigade. Only one one-star chef mentioned employee participation

in creative work spontaneously. He does 'brainstorming' with his brigade, tries 'to create an *atmosphere of creative professionalism'* and assesses new recruits for their creative potential. When, in 15 cases, I followed up by asking explicitly whether employees contribute valuable new ideas, four additional British chefs answered in the affirmative. However, all of them expressed reservations which minimized employees' creative input or reserved this privilege only for the higher levels of the hierarchy. Thus, according to a London one-star chef: *'When you work in a team, they bring ideas but I take the conceptual lead'*. Another chef told me that members of the brigade make a lot of input regarding techniques, but not regarding '*menu ideas'*. A British two-star chef asks his sous chef to work on new dishes but emphasized that *'senior people are the creative ones'*. A British one-star chef gets inspiration from some employees but not from all: *'You need people who do as they are told, plus the creative* ones'. A chef retired from cooking in a three-star restaurant put it more colorfully: *'You need donkeys and a few thoroughbreds'*.

Among German chefs, creative activity is even more unambiguously located at the top of the hierarchy. According to a German three-star chef, '*One's own creati*ve power is the most *important thing'*. A few German chefs, however, permitted members of their brigade to develop their creativity by practicing on Amuses-bouche, rather than on items on the menu which are the dishes assessed by Michelin inspectors. A three-star chef, when prompted to discuss his employees' participation, told me: *'Some creative beginnings are discernible, but unfortunately only beginnings. I give them some space in designing Amuses Bouche'.* Other remarks by German chefs do not suggest that their management style is less democratic than that of their British colleagues. The slight difference in responses between British and German chefs instead may be due to the fact that there are many more multiple-starred chefs in the German sample

(reflecting a difference in the broader group of all starred chefs, as well as a different response rate). Such chefs may be even more concerned to preserve the 'individual signature' which the Michelin organization rewards with two or three stars and therefore are the least likely to allow their staff to intervene in the creative work.

This fairly low reliance on the creativity of employees also surfaced when chefs were asked what criteria they held to be important when recruiting new chefs. Only one of the forty chefs mentioned a creative disposition although a few looked for passion about food. A British two-star chef informed me*: 'I do not assess chefs for their creative potential [when recruiting], I am not looking for creative chefs, although head and so*us chefs come with ideas'.* An ability to work hard, to be highly committed or completely dedicated and to be able to work in a team were the main qualities head chefs seek when recruiting. Junior chefs with 'big Egos' were explicitly rejected by several chefs. As observed by Wright (2006: 12) – a writer and former AA inspector, the skill that is most cherished in the fine-dining kitchen is the willingness to obey orders: '*A chef's first responsibility is to learn a task and keep repeating it in exactly t*he same *way to precisely the same standard'.*

4.2. *How does the implementation of chefs' creative ideas take place?*

 Unlike idea generation, the implementation stage is collective, involving the chef and the whole brigade. Even if creativity is not expected from employees, high performance is, and the chef-de-cuisine exerts tight control over his employees' output. He stands at the pass and checks every plate that goes out to ascertain that his vision has been faithfully realized. Highly coordinated and disciplined team work is expected by most of the chefs interviewed. A British two-star chef describes it in the following terms: *'[work organization] is still military style: there has to be*

discipline, organization and respect. There have to be boundaries a*nd rules'. 'Yes, you have to be disciplined. I insist on clean uniforms and clean shoes'* (British one-star chef).

Young chefs are recruited with this objective of disciplined team-working in mind. Among the British head chefs five looked for good team players and nine required discipline from their future employees while one chef called himself *'friendly and autocratic'*. Qualities like commitment and complete dedication were prioritized by three British chefs. Five German chefs wanted good team players and three looked for disciplined employees, two called themselves demanding and one confessed to being authoritarian.

However, chefs in both countries also wanted highly motivated and enthusiastic employees and realized that demands for discipline and complete dedication had to be balanced by other leadership qualities, such as a *'human, decent, friendly or fair'* management style. Chefs did not want to be regarded as autocratic disciplinarians but strove to combine the stick with the carrot. Thus a German chef described his management style as 'authoritarian, but very decent *and warm'* and another expressed a similar sentiment: *'Work is disciplined but at the same time it is nice and friendly'*. Nevertheless, in most British and German restaurant kitchens the chef-de-cuisine is a figure of unquestioned authority.

Some lower-level chefs do not necessarily see a tension between concentrating creativity at the top of the organizational hierarchy and often mindless implementation on the lower rungs. It is understood and largely accepted that the head chef, who has earned the restaurant the Michelin stars, must assert a monopoly on creativity in order to project a consistent style to industry stakeholders. They admire and look up to their head chef and hope that, one day, they themselves will hold such an exalted position. Furthermore, many of the younger chefs develop intrinsic satisfaction in the work they do, such as taking pride in the skills deployed in the

preparation and cooking; in the subtle tastes and colorful arrangement of finished products; as well as in the ability to please customers.

Nevertheless, many young chefs dislike the hierarchical style of developing creativity and the merely obedient execution of these ideas by the rest of the brigade. The contrast is particularly stark as employees constantly face an almost Taylorist manner of implementing these ideas. Often prompted by the media and their celebrity chefs, young commis chefs believed that they had entered a creative occupation. Hence they often tend to be bitterly disappointed when they cannot develop their creative impulses. This disenchantment, in both countries, is reflected in an extremely high rate of labor turnover.

4.3. How do chefs-de-cuisine stay creative in a highly pressurized organizational environment and what are the sources of their creativity?

One striking feature of a head chef's work is that he has no shelter from operational pressures and little personal space to allow his/her creativity to unfold. Michelin-starred chefs have to develop novel ideas in a very constraining organizational and work environment. First, the work environment is characterized by heat, steam and noise. British two-star chef Raymond Blanc vividly depicts the negative features of work environment in fine-dining kitchens, where space is often at a premium or where there may be no day light: '... then there is the extreme sauna-like heat of the kitchen which batters your senses, along with the movement all around you. Then there is the noise and the swearing... the professional kitchen brings out savage characteristics. The environment is so unyielding it will extract the worst out of anyone. At the end of the service you are sweating like a pig, you are burnt out and you are pale, turned white by the sheer intensity of the heat and the pressur*e'* (Blanc 2009: 204)

Chefs work very long and anti-social hours, between twelve and sixteen hours per day among the interviewees in our sample. The harsh work environment and the long working hours interact with a mode of work organization characterized by a high working speed, a marked division of labor, together with a tight coordination between all members of the brigade. These aggravating features of the work environment and work organization then lead to a tone of interaction characterized by constant swearing and even some low-level violence. This is illustrated by the following quotations: 'I *shout, and there is a little bit of abuse'* (British two-star chef). ' *I shout if I have to, if I have told people the* same thing for the third time. It happens *once per service'* (British two-star chef). *'I do shout occasionally if I have said something before and before that'* (German three-star chef). German two-star chef Tim Raue explains: *'This rough* manner which occasionally goes substantially below the belt, has something liberating, almost like catharsis. You abuse each other, without taking it too personally. Because you simply need a *vent to get rid of this frenzied pressure'* (Raue 2012: 83). Although not liked by all chefs, this leadership style is nevertheless widely accepted by subordinates.

Second, the chef-de-cuisine has to perform many more humdrum roles, in addition to being the creative head of the organization. S/he manages the performance of brigade members both in the kitchen and at the front-of-house, liaises with producers and suppliers, as well as being responsible for menus, accounts management and staff recruitment. Many chefs found this work environment very stressful: *'It is very long hours and da*ys off are spent recuperating instead of on recreation' (A British one-star chef). *'It's so stressful and so hard. It's like* laboring - you just burn yourself out. You get to the point where the ideas aren't coming. It's like writer's block, and sometimes I think, pack it in now, the story's over. But you rest, and then you get back *into it'* (A British one-star chef). A German two-star chef agrees: *'The number of hours I work*

are very difficult to maintain and are very strenuous – you always have to maintain the highest *possible effort'*. Several chefs discussed how difficult it was to remain creative in such an organizational environment, hinting at the tension between creative work and more humdrum execution of ideas: *'Menus change every six weeks which mea*ns you constantly have to innovate in your head. The daily business, however, does not afford sufficient calm. The big problem with creativity is to create space for oneself*'* (German two-star chef). *'One gets the best ideas when* one holds the head free but *it is difficult to hold your head free'* (German three-star chef).

How then, given this highly pressurized work environment and organization, do chefs find the space to constantly develop the creative ideas which the retention of their stars demands? The most prevalent way is for head chefs to escape pressure and develop creative ideas outside the kitchen and restaurant. Going for a long run and similar individual sports was one way for head chefs to insulate themselves from organizational pressures. *'I fi*nd it [creative *space] when I am running and also at home'* (German two-star chef). Once the chef-de-cuisine is well-established and the restaurant has acquired a solid reputation, more structured ways to gain creative space become possible. A second, more hands-on head chef may be employed as was the case in several of the sampled restaurants. The chef proprietor/patron may also gain himself time to think and experiment by creating his own experimental or development kitchen away from the main kitchen - a rare occurrence in our sample.

What then are the sources of head chefs' creativity? They do not entail the diversity of ideas generated within project groups but chefs-de-cuisine nevertheless tap into a variety of sources, primarily external ones. Sources mentioned were sampling the inspirational cooking of colleagues in other Michelin-starred restaurants at home and abroad; the ingredients themselves - their seasonal change and their procurement from exceptional producers, or inspiration found by

strolling around markets or their own garden; customers; nature; looking at art or listening to rock music; as well as chefs' own artistic disposition and innate creativity. The first – with 32 mentions – shows that looking into their peers' saucepans, directly or indirectly, is the most frequent source of inspiration. Where it is not possible to visit the restaurant of an admired colleague, studying his/her cookery book is a related way to seek inspiration, included in the preceding figure. The second strategy – gaining inspiration from the produce and its suppliers – is also very popular, gaining 16 mentions. Smaller numbers of head chefs – seven - let themselves be inspired by art/artists and, in one case, science, or look towards customers – five, or nature – five. These figures refer to all forty chefs interviewed, and no significant differences between British and German chefs are discernible in the sources of creativity mentioned.

4.4. What is the impact of divergent institutional environments in the two countries on successful implementation of creative ideas?

In both Britain and Germany, despite the existence of multiple constraints on creativity and innovation, the overwhelming majority of interviewed chefs – fourteen in Britain and eighteen in Germany - thought their cuisine to be creative or innovative. Yet British chefs have not been as successful as their German counterparts in achieving the award of multiple stars. There is no reason to presume that British chefs are less creative than German ones. Hence the explanation for the lower achievement on the part of British restaurants must be sought elsewhere. As it is expected by the Michelin organization that originality of style is combined with a consistently high quality of dishes served, we investigate what differences exist in the implementation processes that could explain their differential ratings.

As has been indicated above, implementation of the head chef's creative ideas involves the whole brigade and requires meticulous and disciplined team work. The chef-de-cuisine has to communicate his ideas and elicit the cooperation and enthusiasm of all brigade members in their execution, as well as exercising constant control over their output. To this end, s/he must be able to rely on a brigade which has a reasonable degree of stability and cohesion, and, most important, whose members possess a high level of culinary skill. The interviews with chefs in the two countries established that their brigades are very differently constituted. Employees in Germany are predominantly German-born or from German-speaking neighboring countries. In contrast, those in Britain are of highly diverse national origins, with 59 per cent being non-British. The latter is bound to have adverse consequences in terms of a reduced ease of communication, a lesser degree of social cohesion of the brigade and of a higher labor turnover. Some British chefs expressed their deep regret at constant labor turnover. 'No other industry thinks it is acceptable that a key player in a busi*ness stays with it, maybe for a year…and yet they are our biggest assets'* (One-star chef). British chefs-de-cuisine thus have a harder task when trying to convey their creative ideas to brigade members and persuading them to faithfully execute their ideas to a consistently high standard.

The problems caused by high turnover are amplified in Britain by the significantly lower level of qualification achieved by British members of the brigade, including often the chef-de-cuisine him/herself. Implementation of the head chef's creative ideas thus is less reliably skilful. First, of the twenty British head chefs, six were self-taught amateurs, whereas German chefs de cuisine all had the basic apprenticeship qualification and 30 per cent had additionally acquired the qualification of Master craftsman. Second, not only is an insufficient number of young chefs being trained in Britain, but the quality of their training also is significantly lower than that on

which German head chefs can call. While the completion of an apprenticeship was seen as an indispensable requirement for the employment of chefs by all the German interview partners, a significant number of the British head chefs did not think possession of a formal qualification a necessary condition. This reflects their low respect for the training available in recent decades (the two-year course leading to the award of NVQs (National Vocational Qualifications)) and their belief that they themselves are able to implement the necessary training. The manager of a one-star restaurant informed me: *'We look for commitment and interest in Italian food. It is not necessary to have formal training'.* A London two-star chef, as well as a one star chef, shared this opinion: *'I look at their experience, but the CV means* nothing. I look at the human being *first and foremost'. 'Above all, I look for a passion for food….. I* look for very basic skills and techniques. They could be self-*taught'.*

A few British chefs communicated their dismay at the low quality of training: *'It* is still very hard to find good cooks. There is no disciplined process and structure for trainees in this country. The expansion [in the profession] was too rapid to train all new chefs – there was a *vacuum'* (Two-star chef). *'City* & Guilds provided you with the perfect skills base – you just *lacked experience. When they switched to NVQs it all changed. Today it's all about money'* (former Michelin chef). While it is no doubt possible for the head chef to train all new employees to the required standard it nevertheless entails a constant teaching process. Moreover, because of the high turnover, it leaves a significant proportion of the brigade only partially trained at any one point in time. A constantly changing brigade, lacking cohesion, and with an insufficient level of training, is not conducive to the achievement of flawless execution of the head chef's vision. It is unlikely to maintain the consistently high level of quality expected by the Michelin organization when awarding stars. Regardless of the head chef's creativity, passion and

dedication, the implementation of his/her creative ideas, to achieve constant innovation, cannot always be assured with the type of brigade found in British haute cuisine kitchens. It is much harder to achieve consistently high quality, both through all courses of the menu during a given service, and day after day. An explanation for this striking British-German difference in the human resources chefs-de-cuisine can call on during the process of implementing their creative ideas is offered in section 5.

5. Discussion of Results

Our study poses two research questions: How are the tensions and contradictions in the innovation process managed?; How does the institutional environment impact the effective management of contradictions and tensions? We find that, despite displaying enough features that would recommend a socio-behavioral solution for managing tensions across stages, the solution used by high end restaurants is primarily structural. Furthermore, we find that the institutional environment in which the restaurants operate affect the efficiency of their chosen solution. Below we discuss the results in detail, emphasizing both commonalities with and differences from existing research.

Structural aspects: To the extent that only a small minority of employees, and in many cases only the chef-de-cuisine, is involved in idea generation, while the majority is involved solely in implementation, the solution adopted by high end restaurants is similar to dual structure solutions observed in larger organizations studied in the innovation literature. The difference however is that the creative minority does not benefit from the advantage of task specialization meant to protect and enhance their creativity. In fact, creative members are the most involved in both

stages, thus defeating the main purpose of task separation. Implementation details are carefully thought through and managed by the chef-de-cuisine who, when not working himself on producing dishes during the service time, checks the dishes produced by the other members to ensure perfect execution.

Our finding of a dual structure is intriguing because it goes against the received insight that small firms are less likely to adopt structural solutions (Gibson and Birkinshaw 2008, Lubatkin et al. 2006). While it is true that the size of the creative group is very small in professional kitchens – in most cases it is only the chef-de-cuisine -, the presence of a structural solution shows that the relationship between resources and choice of solution might not necessarily be a direct one and that other considerations affect the choice. In the case of high end restaurants it makes sense to separate creativity and innovation to ensure purity of style, i.e. signature. Indeed, important industry stakeholders, such as gastronomic guides, require and reward individual signatures of head chefs. Changing dishes frequently while maintaining a distinctive signature requires not only a small separate creative group, but also one that is hierarchically organized and totally under the control of a single person – the Michelin chef.

Socio-behavioral aspects and leadership: The organizational context of the professional kitchen contains the four contextual attributes described by Gibson and Birkinshaw (2004) as necessary ingredients for organizational ambidexterity: discipline, stretch, support and trust. Yet, in our setting these ingredients are not used for developing ambidextrous individual employees, who engage simultaneously in generation of new ideas and high quality implementation, but rather as management tools to ensure primarily high performance implementation (see also Ghoshal and Bartlett 1994 for an analysis of how these four dimensions of organizational context affect

behavior). The chefs in our sample show a clear understanding of the fact that an autocratic management style that emphasizes perfection in implementation (stretch and discipline) cannot elicit employees' motivation and commitment and therefore try to moderate the autocratic element of their style with a supportive stance (support and trust). While the achievement of such a precarious combination of management styles was largely successful among the chefs interviewed for this study, it is by no means always successful in the industry. This has been revealed by chefs' memoirs, as well as being attested to by the dismal record of labor turnover.

Our finding that the presence of stretch-discipline and support-trust can be used for enhancing the benefits of structural separation rather than developing "contextual ambidexterity" resonates with Gibson and Birkinshaw's point that mere presence of these dimensions does not guarantee that employees will simultaneously engage in creativity and implementation. Gibson and Birkinshaw (2004) note situations in which contextual ambidexterity is not achieved because not enough time has passed for these dimensions to fully develop. In contrast, in the high-end restaurant contextual ambidexterity is not desired by the head chef. S/he is not interested and at times even hostile to any creative attempts coming from members of the brigade, with the exception of a small number of staff who occasionally are allowed to suggest minor ideas or practice on Amuses-bouche. This accentuates the point we made above that the ambidextrous solution chosen by restaurants primarily depends on its ability to satisfy the external demands, namely high quality implementation of signature dishes.

It is noteworthy to observe the importance of leadership in our setting, but also the ways in which leadership aspects differ from received opinion. In the professional kitchen the head chef is the primary point of coordination and integration across stages. Existing research has focused on characteristics and processes that enable the top management team to overcome

cognitive biases such as risk aversion, myopia or uncertainty avoidance and to achieve

behavioral integration (Lubatkin et al. 2006, Smith and Tushman 2005). As the restaurants in our

sample are not generally managed by a team, ours is a particular case described by Smith and

Tushman (2005) as leader-centric. The literature suggests that organizations in which

coordination and integration occur at the leader level are likely to become successful innovators

if the leader seeks the opinion of advisors with different points of view and ensures that the

members feel free to speak their mind. However, this is not the case in our setting. While a few

of the interviewed chefs do mention members of their team providing advice during the creation

of new dishes, the main sources of information regarding new products, methods, ingredients and

trends are external to the organization and are represented by peers, suppliers or loyal clients.

Again, such a solution makes sense given the main imperative under which the leader operates,

that is ensuring that new ideas are in line with the personal signature.

So why does a structural solution make sense for managing contradictions in the

professional kitchen? The data analysis presented above shows a pattern which suggests that the

answer is related to what the respondents call "own style". The style is not primarily defined in

relation to type of food, style of cooking or national roots (although these are certainly present)

but it is rather idiosyncratic and a reflection of one's personal identity. Indeed, some interviewed

chefs found it difficult to answer questions related to their cooking style (e.g. French, Modern

British, Neue Deutsche Küche), yet found it easy to describe dishes that represent their personal

style. Moreover, when asked about the pressure they face to follow new trends, they were

adamant that they disregard trends and fashion and use new techniques and ingredients only if

they "go" with their style. The style seems at the same time to fuel tensions and contradictions,

but also to help managing them. In particular, we note that contradictions and tensions are

managed with an eye on preserving the original style. Table summarizes the contradictions and tensions present in our setting and the prevalent reaction to a particular contradiction, along with the main rationale given to justify those reactions. Comparing the contradictions and their solutions and consequences it is clear that main imperative that guides the management of contradictions is preserving the original style, ensuring that creativity and implementation are in line with the personal signature. It should be emphasized here that the management of tension does not mean than the tensions are necessarily resolved. Chefs have to live with many of the contradictions and often find this stressful. Other members also have a hard time accepting this situation.

Contradiction/Tension		Solution/Consequence	Rationale
Prescribed by literature	Actual		
Diversity of opinions is conducive to creativity	Little consultation with organizational members	External sources of inspiration and consultation	-Members need to stay focused on implementation primarily
Members' involvement in creativity opportunities for dialogue and thus creates trust	Little consultation & involvement	Trust is created by having the chef involved in implementation, teaching, training, offering inspiration.	-members cannot be creative in the same style as the head chef
Members' involvement in both stages increases motivation and identification with the organization and decreases turnover	Very low to no involvement in generating creativity	Only those highly motivated to learn from the master remain; a high turnover, but also highly likely that the very few who survive in the long run make a good contribution	-being involved in routine implementation is the only way to ensure that the personal style is preserved
Individual involvement in creativity and routine tasks results in suboptimal outcomes for both	The head chef is simultaneously creative and involved in humdrum tasks	Getting "time out"; cooking "in the head"	
Leaders display distinct leadership style	The head chef is simultaneously a creative leader and an authoritarian leader		
Autocratic style & unfriendly behavior reduces trust and motivation	The chef is demanding and at times violent	Balance the autocratic style with that of a friendly teacher/master	

Institutional context: The results discussed so far were present in both national restaurant industries. They point to very similar organizational arrangements, primarily inherited from the French, as well as to the common constraints experienced as Michelin-starred chefs. Our comparison, however, makes clear that, because British and German top restaurants are embedded in different institutional environments, there are also discrepancies both in the organization of labor, particularly in the skilling process and the ethos that shapes the organizational ecology of the industry.

The cross-national comparison involved moves away from a consideration of organizational factors and instead focuses on the divergent institutional environment which shapes the innovation process. As posited by the Varieties of Capitalism approach (Hall and Soskice 2001), institutional forces mold enterprise performance in either a positive or a negative manner. The focus falls predominantly on one national-level institution, namely the system of vocational education and training (VET) and the cultural significance of skill enshrined in such systems. The notion of craft skill has had a very different history and institutionalized form in Britain and Germany. In Britain, the handicraft form and the related modes of organization died out with the guild system early on in the process of industrialization, as did a progression from apprentice via journeyman to the level of master craftsman. The notion of craft which survived in some industries into the earlier post WWII decades was prominent particularly for its translation of autonomy into worker control over the labor process. In Germany, in contrast, the abolition of guilds occurred much later and forms of handicraft were kept alive and institutionalized in a whole range of occupations, even after the end of the guild system. Hence the notion of skill remains strongly connected with craft knowledge and competence, acquired in a prolonged process of training and always certified. The notion of certified craft skill has turned into a key

and strategic component of German business life, as well as of culture more generally. In Britain, in contrast, wide-spread skill shortages, despite or perhaps because of periodic political 'quick fixes' to remedy the situation through new methods of training, have remained endemic in the economy. The concept of skill consequently has a much lower cultural validation. These divergent histories and cultural understandings of the notion of craft skill in the two societies also have entered the haute cuisine kitchen, affecting the implementation process.

Although skill training is embraced by chefs in both countries, the divergent manner in which it is accomplished merits attention. In Germany, aspiring chefs invariably execute the time-served apprenticeship. The majority of the German chefs I interviewed provided systematic apprenticeship training to one or more apprentices. A striving for a high level of craftsmanship is illustrated by the following quotations from two German three-star chefs: ' *I cannot imagine* working *at something that does not challenge me …… with regard to craftsmanship. I believe in perfectly executed craftsmanship'*; [There is a constant striving for] *'unconditional precision'*. Consequently many German chefs, during the recruitment process, looked not only for the right human qualities of their applicants but also stressed expertise, competence, or a prior placement with a renowned chef. British chefs-de-cuisine put low emphasis on these features.

The difference between a German apprenticeship-based system of VET and a British training system awarding NVQs is expressed in the mode of training and of certification, with strong ramifications for the content and quality of training received. (Although the notion of an apprenticeship has been resurrected to some extent in the past years the effects of this measure were not yet discernible during the interviews in 2010-12). Training is based in tertiary further education colleges, and practical experience in an actual restaurant kitchen is not part of the course. The German system, in contrast, is a dual one where apprentices receive the bulk of their

training in actual restaurant kitchens and get theoretical instruction during one week day in vocational schools. While German apprentice chefs follow a national, legally binding curriculum, thus guarding the quality and consistency of the training given, this is not the case in Britain. The content and quality of training is highly uneven between colleges, depending on very variable training kitchens and teaching staff. The best British colleges have their own competently staffed kitchens catering for a variety of functions. There exist only a handful of colleges with a high reputation in the industry (based on OFSTED rating), among which the following stand out: Westminster Kingsway College's School of Hospitality, Birmingham College of Food, and the department of hospitality in Kendal College/Cumbria (Yes Chef! Magazine, 22, 2012: 74-75 and 23, 2012: 64-65). Moreover, these colleges turn out insufficient numbers of young people who subsequently seek employment in professional kitchens. British chefs de cuisine therefore cannot always recruit chefs trained in British institutions. Although the employment of foreign-born chefs makes up for the insufficient availability of indigenous chefs their employment cannot compensate for the deficiency of the domestic institution of VET. It may even amplify the negative effects by introducing a multitude of heterogeneous training standards. Hence chefs-de-cuisine are unable to draw on an assured skills base, and training in British restaurant kitchens mostly has to occur on a more informal basis. Older British chefs de cuisine still had enjoyed training under the City and Guilds scheme which was widely rated as excellent, and many of these chefs regarded NVQs with scorn.

Instead, British head chefs put a high value on an applicant's readiness and willingness to learn from those above them in the hierarchy. In both countries, recruiting head chefs put strong emphasis on the right personality, i.e. one that promises that the applicant becomes a disciplined team player. But in Germany this is a requirement additional to a completed apprenticeship

which is taken for granted. In Britain, in contrast, certified training is not considered a necessary prerequisite for employment by all head chefs. *'We look for commitment and interest in Italian food. It is not necessary to have formal training'* (one-star chef). *'I look at their experience, but* the CV means nothing. I look at the hum*an being first and foremost'* (A London two-star chef).

6. Conclusion

Our study seeks to augment and amend theory in the field of creativity and innovation in the light of data drawn from the haute cuisine restaurant field. First, in contrast to most existing theory, we disaggregate the innovation process by considering the stage of idea creation separately from that of the implementation process. We have shown that the two stages require different inputs and work structures. The way of resolving the tensions between the two different sets of organizational requirements is to perform them at different organizational levels (structural solution). This renders the chef-de-cuisine the creative head of the organization who behaves more like an artist than a member of a collaborative team. This way of approaching the 'creativity imperative' occurs not only to resolve organizational tensions but also is called forth, as well as buttressed by, the demand of gastronomic guides for an 'individual signature'. We further show that this separation by the head chef from the rest of the team does not impede the process of idea generation. In fact, in getting their ideas primarily from outside the organization starred chef manage to reap the benefits of boundary spanners (e.g. Burt 2004) in a very specific way: not only are they exposed to diversity, but they also control the flow of novelty such that only solutions aligned with the organizational identity are allowed in. Nevertheless, this hybrid style is precarious and requires an astute and often stressful balancing act by the chef-de-cuisine which, as industry turnover indicates, is by no means always guaranteed. Ambidexterity

additionally is often highly stressful for the head chef who has to stay creative in the face of executing a range of routine operational tasks.

Our analysis also shows that the innovation process is not merely shaped by the organizational context in which it occurs, but also by the institutional environment in which business organizations are located. Here we confirm the usefulness of a distinction between a liberal and a coordinated market economy, as introduced by Hall and Soskice (2001). Although institutional structuring of organizational activities is widely endorsed in the literatures on Varieties of Capitalism/Comparative Capitalisms it is not always empirically demonstrated, nor are the precise links between institutional settings and the development of innovative capabilities necessarily explored. Our multi-level analysis of the innovation process tries to fill these theoretical and empirical gaps. In doing so, we have shown that, while there are no differences between the two national sets of restaurants in the institutional shaping at the stage of developing creative ideas there are more institutional supports during the implementation stage for German, than for British chefs-de-cuisine. These assure the higher quality standards for outputs we have seen in many other German industries and induce the Michelin organization to bestow more stars in Germany than in Britain. We thus have demonstrated that innovation is not a homogenous process but requires different inputs and practices at different stages. For businesses in the haute cuisine sector such institutional supports are available in a coordinated but not in a liberal market. We conclude by noting that the current research in organizational creativity does not account very well for models of creative production like the one discussed in this paper. To the extent that the haute cuisine sector is the only place with such an organization of the creative process, the limitation may appear minor. It is clear however that the creative production in haute cuisine restaurants shares many features with other types of creative organizations (e.g. fashion). It also

shares some features with scientific production. Future studies must look not only into the particularities of these more hierarchical models of organizing creativity and innovation, but also into the possibility of using these models in more traditional industries and organizations.

References:

Allen M.M.C. 2013, Comparative capitalisms and the institutional embeddedness of innovative capabilities', Socio-Economic Review, 11, 4: 771-794.

Amabile, T.M. 1996, Creativity in Context. Boulder, Colorado: Westview Press.

Amabile, T. M., R. Conti, H. Coon, J. Lazenby, and M. Herron. 1996. "Assessing the work environment for creativity." Academy of Management Journal, 39: 1154–1184.

Blanc, R. 2008, A Taste of my Life, Transworld Publishers.

Boyer, R. 2003, 'The embedded innovation systems of Germany and Japan', K. Yamamura and W. Streeck eds., The End of Diversity? Prospects for German and Japanese Capitalism. Ithaca and London: Cornell University Press.

Burt, R. S. 2004. "Structural holes and good ideas". American Journal of Sociology. 110(2): 349-

Casper, S., Lehrer M. and Soskice D.1999, 'Can High-technology industries prosper in Germany? Institutional frameworks and the evolution of the German software and biotechnology industries', Industry and Innovation, 6, 5: 5-24.

Casper, S. 2009, 'Can new-technology firms succeed in coordinated market economies? A response to Hermann and Lange, Socio-Economic Review, 7 ,2: 209-15.

Damanpour, Fariborz. "Organizational size and innovation." Organization studies 13, no. 3 (1992): 375-402.

Eisenhardt, K.M. 1989. "Building Theories from Case Study research", The Academy of Management Review, 14, 4: 532-50.

Elsbach, K. D., and A. B. Hargadon. 2006. "Enhancing creativity through 'mindless' work: A framework of workday design". Organization Science. 17: 470–483.

Fleming, L., S. Mingo, and D. Chen. 2007. "Collaborative brokerage, generative creativity, and creative success". Administrative Science quarterly. 52(3): 443 – 475

Gibson, Cristina B., and Julian Birkinshaw. "The antecedents, consequences, and mediating role of organizational ambidexterity." Academy of management Journal 47, no. 2 (2004): 209-226.

Godart, F. (2012). Unveiling fashion: business, culture, and identity in the most glamorous industry. Palgrave Macmillan.

Hackman J. R., G Oldham, R Janson, K Purdy. 1975. "A new strategy for job enrichment". California Management Review 17: 57-71

Hall, P. A. and Soskice, D. eds. 2001, Varieties of Capitalism. The Institutional Foundations of Comparative Advantage. Oxford: OUP.

Heinze, T., P. Shapira, J. D. Rogers, J. M. Senker. 2009. Organizational and institutional influences on creativity in scientific research. Research Policy, 38:) 610–623

Lane, C. 2013. "Taste makers in the fine-dining restaurant industry: The attribution of aesthetic and economic value by gastronomic guides". Poetics. 41(4). 342-365

Lane, C. 2014, *The Cultivation of Taste. Chefs' organization of fine dining*. Oxford: OUP.

Lange, K. 2009, 'Institutional embeddedness and the strategic leeway of actors: the case of the German therapeutic biotech industry', Socio-Economic Review, 7, ?:181-207.

Langfred, C. W., and N. A. Moye. 2004. "Effects of task autonomy on performance: an extended model considering motivational, informational, and structural mechanisms". Journal of Applied Psychology, 89(6), 934 – 945

Lehrer, M. 2000, 'Has Germany finally fixed its high-technology problem? The recent boom in German technology-based entrepreneurship', California Management Review, 42: 89-107.

Lubatkin, Michael H., Zeki Simsek, Yan Ling, and John F. Veiga. "Ambidexterity and performance in small-to medium-sized firms: The pivotal role of top management team behavioral integration." Journal of management 32, no. 5 (2006): 646-672.

Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. Academy of Management Journal, 39,607–634.

Ottenbacher, M.C. and Harrington, R. J. 2007. 'the innovation development process of Michelin-starred chefs', International Journal of Contemporary Hospitality Management, 19, 6: 444-460.

Ottenbacher, M.C. and Harrington, R. 2009, 'Institutional and contextual Factors: potential drivers of the culinary innovation process', Tourism and Hospitality Research July: 235-249,

Raisch, Sebastian, and Julian Birkinshaw. "Organizational ambidexterity: Antecedents, outcomes, and moderators." Journal of Management 34, no. 3 (2008): 375-409.

Rao, H., Monin, P. and Durand R. 2003, 'Institutional change in Toque Ville: nouvelle cuisine as an identity movement in French gastronomy', American Journal of Sociology, 108: 795-843.

Raue, T. 2012, Ich weiss was Hunger ist. Von der Strassengang in die Sterneküche. München/Zürich: Piper Verlag..

Reagans, R., & Zuckerman, E. W. (2001). Networks, diversity, and productivity: The social capital of corporate R&D teams. Organization science, 12(4), 502-517.

Shalley, C. E., & Gilbson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. The Leadership Quarterly, 15(1), 33-53.

Shalley, C. E., J. Zhou, and G. R. Oldham. 2004 "Effects of personal and contextual characteristics on creativity: Where should we go from here?" Journal of Management, 30: 933–958.

Staw, B. M. (1990). An evolutionary approach to creativity and innovation.

Svejenova, S. , Mazzo, C. and Planellas M. 2007, 'Cooking up change in haute cuisine', Journal of Organizational Behaviour, 28: 531-561.

Tushman, Michael L., and Charles A. O'Reilly III. "Ambidextrous organizations: managing evolutionary and revolutionary change." California management review38, no. 4 (1996).

Vasudeva G., A. Zaheer, and E. Hernandez. 2013. "The Embeddedness of Networks: Institutions, Structural Holes, and Innovativeness in the Fuel Cell Industry". Organization Science 24(3):

Whitley, R. 2000, 'The institutional structuring of innovation strategies: business systems, firm types and Patterns of technical change in different market economies, Organization Studies, 21:

Wright, S. 2006, Tough Cookies. London: Profile Books.

Zhou, J. (1998). Feedback valence, feedback style, task autonomy, and achievement orientation: Interactive effects on creative performance, Journal of Applied Psychology, 83, 261–276.