Unpacking knowledge integration: a practice-based study in haute cuisine

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Extended abstract

This paper investigates intra-group knowledge integration. We specifically ask: how does knowledge integration happen inside organizations? We investigate this question with a practice-based approach of knowledge (Nicolini 2009, 2011), based on two in-depth case studies in the field of haute cuisine.

Background
Knowledge integration became a central issue for organizations (Grant 1996a, 1996b; Kogut and Zander, 1992; Nonaka and Takeuchi, 1995) ever since knowledge has been considered as the most significant resource for the firm and a critical factor of competitive success. Much of past research conceptualized integration as resting either on explicitation and socialization (for example Nonaka and Takeuchi, 1995, Nonaka and Von Krogh, 2009) or on explicitly articulated knowledge (Crossan et al., 1999), while more tacit elements were left to individual spheres (Enberg et al., 2006). Interestingly, these models actually share a common understanding of knowledge integration as a transfer: they highlight various means of moving pieces of knowledge between individuals and groups. However, Grant (1996b) insisted that transferring is fundamentally different from integrating knowledge, and that the former is even inefficient for integration: "if Grant and Spender wish to write a joint paper together, efficiency is maximized not by Grant learning everything that Spender knows (and vice versa), but by establishing a mode of interaction such that Grant's knowledge of economics is integrated with Spender's knowledge of philosophy, psychology and technology, while minimizing the time spent transferring knowledge between them" (Grant, 1996b: 114). Bechky (2003) and Eisenhardt and Santos (2002) further argued that the frequent amalgamation of integration with transfer is due to "treating 'knowledge' as a given" (Bechky, 2003: 313) stemming from "fundamental inconsistencies in how knowledge is conceptualized and measured" (Eisenhardt and Santos, 2002: 159): that is to say most past studies of knowledge integration...
did not account for how knowledge is enacted in the real everyday doing of actors in organizations. A wide array of practice-oriented research (Carlile, 2002; Cook and Brown, 1999; Gherardi, 2001; Nicolini et al., 2003; Nicolini, 2011) proposes to take an epistemological turn towards a more dynamic and practical understanding of knowledge and preferably refers to "knowing-in-practice", that is to understand knowledge as an ongoing, social and personal phenomena, which is also situated and dynamic. "It is in practice, in fact, that knowledge comes to life, stays alive and fades away" (Nicolini et al. 2003: 26). People mobilize their "knowing" for practice and doing so they also structure and restructure it. Therefore knowing and practicing are fatally interrelated in a dynamic way (Gherardi, 2001; Nicolini, 2011). Adopting this view drives to fruitfully reconsidering integration away from transfer. In seminal practice-based studies on the topic, Carlile (2002, 2004) Bechky (2003), and Barrett and Oborn (2010) already highlighted other forms of knowledge integration across occupational communities: boundary objects, translation, and transformation. These results however relate to knowledge integration as an inter-group phenomenon. Yet, as put forward by Easterby-Smith and his colleagues (Easterby-Smith et al., 2008), they do not inform intra-group phenomena that involve "different kinds of boundaries, each with distinct problems" (Easterby-Smith et al., 2008: 678). Knowledge integration inside groups, and in day to day work, remains to be addressed with a practice approach (Oborn and Dawson, 2010), as, to date, "we still know markedly little about [...] the coordination of [...] knowings" (Nicolini, 2011: 617).

Empirical study
We base our analysis of intra-group knowledge integration on the empirical study of new dish development in the field of haute cuisine. Haute cuisine is the field composed by high-end gourmet restaurants. It is highly institutionalized and responds to very specific rules (Karpik, 2000: Parkhurst-Ferguson, 1998: 20; Rao et al., 2003). In particular, the chef's creativity is institutionally acknowledged as a major factor of success (Durand et al., 2007; Parkhurst-Ferguson, 1998) and the restaurant's success is apparent through rankings in gastronomic guidebooks. New dishes are therefore an occasion for demonstrating the chef's and cooks' excellence and defend competitive positions. Only a few new dishes are introduced each year. They are the result of long lasting efforts and though vital, their creation is a very demanding practice. Alike cooking, it is also a collective practice relying on a highly organized team. Altogether, fine-dining restaurants fit the particular requirements of our research question. They represent a unique opportunity to concentrate on the internal phenomena of integration in crucial situations. In addition, gourmet restaurants also represent a genuine opportunity to observe all the aspects of the organization and workers’
practices, because kitchens are small organizations (between 20 and 40 cooks on average) with short activity cycles (two sittings a day and a seasonally renewed menu).

We conducted two in-depth ethnographic studies (restaurant A and B) to examine the minutiae of knowledge integration in this context. Our data consists in 1000 press articles, two long video documentaries, interviews with the focal chefs and their second-chefs, and direct observation in both restaurants. We address knowledge integration as a matter of interactions, and therefore analyzed the relationships between actors involved in the development of new dishes, their doings, and the material elements they use.

We identify four interrelated but non-linear facets of knowledge integration: idea work, comprehending, substantiating, describing.

Idea work is the search for novelty inspired by arts, raw food products, and cooking techniques. We observed that in both restaurants head chefs dedicate special moments to idea work, to extract from the rush of daily practice. Idea work is nonetheless embedded in the context of haute cuisine, and different from what could be in another type of restaurant: the possibilities but also the expectations over haute cuisine as well as the specificities of the restaurant and his chef form a framework in which the chef conducts idea work. We also noticed that idea work is far from being individual. The chef is central, but he involves peers, and also colleagues external to haute cuisine: fragrance designer, gardeners, artists, academics... Last, our data indicate that idea work involves thinking and talking about associations of tastes, techniques, engaging new raw products. It is also rooted in sensorial elements: chefs find inspiration by smelling, tasting, and searching for visual contrasts.

Comprehending is the cooks grasping the chef's initial idea through discussions, or drawings. It involves some of the restaurant's cooks (selected by the chef) who are not part of idea work, and who interact with the chef around an outcome of idea work. They meet either in the restaurant's dining room or more often in the kitchen early in the morning. Chefs evoke their ideas through texts, sketches with color pencils, music pieces, metaphors, analogies, gestures or mimes. Cooks grasp the idea more than they understand it, on the base of sensations and non-cognitive elements. Comprehending is social: it is made possible because all cooks share culinary references, knowledge of gastronomic history, and common experience in the focal restaurant. Yet it is also individual: each one forms his/her own perception of the idea, according to his/her own gastronomic, technical, aesthetical and individual experience and sensibility. In fact this is even a chefs’ expectation because it opens space for personal interpretations and thus mutual enrichment. Thus, comprehending does not lead to a shared and unified understanding.
Substantiating is enacting and challenging an idea through cooking trials. It is distinct from comprehending because it involves different actors, different doings, at different places and moments, with different tools and devices. It can happen in the absence of the chef and does not necessarily follow comprehending in a linear fashion. A selected team of cooks (the second-chef and some station chefs) interacts around smells, tastes, textures, noises, gestures in the kitchen: they cook, exchange and re-cook. Trials are moments of lived work during which cooks compare, confront, and mix their knowledge over and in material elements. Then chefs taste. Sometimes they are satisfied with a result that they think is close to a new dish. Sometimes they are not and further exchange on taste, harmony, cooking degrees, texture, ingredients, seasoning, or aesthetics. This can even lead back to idea work or further comprehending with additional drawings or exchanges around such topics the smell or color of a product. Altogether substantiating involves interacting, using and restructuring individual knowledge on the base of tangible elements available from the kitchen.

Describing consists in formulating the basics of a recipe. It involves mostly the head chef, who writes and draws an intermediary or final version of a "recipe" to portray the dish with a view to transmitting it to the complete kitchen team. However what chefs call a recipe is in fact rather tentative and hardly definitive: it most often carries the principles of the dish (associations and emotions), lists its main ingredients (often no metrics), and indicates its layout (drawing). Describing also consists in naming the dish in order to encapsulate the experience that the chef intended to convey. Naming is therefore crucial to carry the new dish outside of the trial team towards the whole kitchen team and to the restaurant's clients too. Altogether, the recipe sets some rules and makes explicit a culinary universe, but still leaves space for knowledge in practice as cooks retain judgement for certain matters. Therefore, the recipe is a means of only partial transfer and knowing integration is still at stake everyday in the kitchen for the specific cooking of dishes.

**Conclusion**
Within a practice-based approach to knowledge (knowing), we investigate how knowledge integration happens inside organizations; how are actors' knowledge-in-practice made to work together. For this purpose, we conducted ethnographic in-depth studies of two restaurants in the field of haute cuisine and examined how the chef and cooks integrate their respective knowledge for the creation of new dishes. Our results indicate that knowledge integration includes four phenomena: idea work, comprehending, substantiating, and describing. We found that these four facets are analytically distinct but do not necessarily occur in order, nor form a linear process: integration is an open ended combination, which
can imply back loops or simultaneous phenomena. Intra-group knowledge integration may seem fluid, effortless, or smooth; it is nonetheless complex and intricate. We also found that knowledge integration is very different from knowledge transfer; it does not consist in moving pieces of knowledge from the chef to cooks or between cooks. It rather consists in combining different knowledge in a shared practice. Last, we recorded the pivotal role of socio-material elements: physical artefacts, the products in use, the tools, the space, but also the doings, and sensations.

Our study contributes to developing a better understanding of knowledge phenomena in organizations, especially by differentiating between knowledge integration and sharing or transfer. Our study also advances practice-based studies of organizations by highlighting the central role of integration in knowledge dynamics. With this, we contribute to bridging micro and macro perspectives on practice and to demonstrating the analytical power of the practice-based approach, especially to connect lived work and organizational strategic issues.

Selected references


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Management. London: Sage, 139-164.


