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The Performative Experience of Improvisational Cooking: A Critical Reflection

abstract | *This work employs visual ethnography to document a day in the life of a restaurant chef de cuisine, by examining the experience of a culinary practitioner rather than that of a consumer. The research is concerned with situations that may arise when a professional cooks on the spur of the moment, or “improvises,” when creating a new dish. Using theoretical models derived from organizational analysis founded on jazz improvisation metaphors, the author focuses on the improvisational performance of professional food preparation in the restaurant to explore concepts of spontaneous creativity and extemporal organization. Using ethnographic description, the author concentrates on the production phase of the restaurant. The research analyzes how improvisation potentially enhances culinary professionals’ creativity by providing them opportunities to insert variety to standardized processes and thus foster innovation and novelty. This microlevel examination employs a combination of ethnographic methods: on-site fieldwork, participant observation, and the interview. These primary source methods are then linked to theoretical principles found in scholarly literature. The work engages the conceptual frameworks of enskillment, temporality, present moment attention, and critical reflection. The author argues that improvisational cooking is not merely “cooking from nothing,” to paraphrase jazz bassist Charles Mingus, but rather an intuitive faculty that results from skill, experience, and the ability to efficiently access a system of knowledge in the negotiation of extemporaneous situations.*

keywords | *visual ethnography, skilled vision, improvisational metaphor, enskillment, professional cooking*

INTRODUCTION AND METHODS This work is an examination of the sensory foundations and implications of food. Rather than focusing on the gustatory phenomena surrounding food consumption, the research observes the challenges that occur during food preparation. In particular, the research examines situations that occur as a culinary professional prepares a new dish without the use of a written recipe, or how he “improvises.” The work, moreover, documents how critical reflection enhances the development of a researcher’s knowledge of a phenomenon. Critical reflection allows its practitioners to study phenomena with an added perspective that improves the quality of an observed experience by using participant observation

and reflection as primary research strategies.² It allows ethnographers to critically consider their research practices and has the potential to enhance the development of a discipline’s logics through its emphasis on discovery. Reflective ethnography, moreover, allows the observer to enter a phenomenon, participate in it, and then reflect upon it. Though reflection is not inherently critical, it can unearth paradigmatic and structural assumptions when applied critically.³

The research problem was conceived reflecting the experiential nature of a graduate seminar that explored the sensorial phenomena of food. The work is a case study of a single participant whose acquaintance the author made in September 2012 and who agreed to be studied by the author.

The experiment unfolded over the course of a single eight-hour shift in a restaurant kitchen located in downtown Boston, Massachusetts, where the participant was employed as *chef de cuisine*. Though the method of sampling may be contradictory to David Fetterman's large-pool sampling of respondents,⁴ it is nevertheless reflective of an in-depth, microlevel case study of "an experience."⁵ The ethnographic method of the informal interview was periodically conducted in order to later provide a logically consistent structure to the circumstances witnessed. The participant's responses were digitally recorded and subsequently transcribed. A digital camera was used to record systematic observations. Moreover, secondary sources in scholarly literature founded in organizational theory were reviewed and interspersed in the ethnographic narrative to provide additional insight to the phenomena observed. The combination of ethnographic methods was utilized to provide a holistic account of the event. Jason Throop argues that the [periodic] interview highlights reflective processes, while photographic imaging captures prereflective action in real time.⁶

The author restrained from asking persistent questions of his participant in order to facilitate the participant's aim of completing his workload on schedule during the observation. Nevertheless, questions spontaneously arose to gain information regarding the participant's organizational processes and state of mind, as opposed to clarifications regarding the participant's culinary practices. Rather than produce a paper from reflective memory, the author decided to observe the actions of a participant in order to witness spontaneous culinary procedures, all the while mitigating the potential of memory bias. Both the observer and participant's shared experiences as culinary professionals contributed to natural unfolding of events and liberated the participant from the urge to explain basic culinary techniques.

Improvisation is a mechanical skill set used judiciously in the service of art and social order.⁷ Improvisers are performers who possess the vocabulary and talent for direct composition. They

can create intelligible material extemporaneously, because improvisation is the process of making logic out of chaotic, turbulent environments by making fast and irreversible decisions dedicated to innovation and the creation of novelty.⁸ The author suggests that improvisation is a skill that is mastered after long hours of practice, which allows the practitioner the ability to treat the same theme, extempore, from an array of possibilities.⁹ Improvisation, therefore, is the ability to create novel situations by utilizing phrases and variations stored in repertoire to modulate one's performance, and having the skill to readily convey it to one's audience.¹⁰ Improvisation may appear in at least two forms: (1) through creating a complete and extemporal performance employing the language of a repertoire and the logic of a particular genre;¹¹ and (2) through the addition of supplementary material to a scripted, yet incomplete paradigm using the vocabulary and logic of a particular genre while adhering to the work's established structure throughout the performance's duration.¹²

Impromptu performers act from imagination rather than from memory, which is a more productive, rather than reproductive, process. Improvisers know the thematic outline and the configurations within a given genre;¹³ however, they create actual material in the moment. Though improvisers produce at amazing speeds from the depths of their imagination, they in fact are not improvisers in the true, free sense since they must adhere to guidelines of their scenarios in order to avoid chaos.¹⁴ In the jazz world, what appears to be improvisation is the deployment of specialized knowledge and experience with notes, chords, and melodies.¹⁵ Similarly, in the professional culinary world, what appears to be improvisational cooking is in fact the application of previously learned culinary techniques to a [pre]-selected group of raw ingredients that are chosen based on their flavor profiles and their compatibility with other victuals. Though it might appear that culinary professionals work from complete imagination, basic rules of food pairing must be adhered to in order to produce dishes that are not only reflective of their

creative intent. Dishes, moreover, must be sellable in order for restaurants to be profitable. Unlike jazz improvisation, which allows complete artistic freedom, improvisational cooking in restaurants requires a delicate balance of art and commerce to assure gustatory and financial success. Nevertheless, mastery, experience, and “common sense” contribute to culinary professionals’ ability to produce dishes that are both novel and pleasing in a similar manner as the aforementioned dimensions aid the jazz musician to produce music that is both innovative and agreeable.

TUESDAY, APRIL 9, 2013: B&G OYSTERS. BOSTON, MASSACHUSETTS B&G Oysters is a modern, yet classic interpretation of the oyster bar. Located in Boston’s South End, B&G has a decidedly casual feel. The menu combines professional service with local seafood that draws on Mediterranean influences as well as New England classics (e.g., fried Ipswich clams, lobster rolls, pan-roasted cobia, and cucumber gazpacho with Jonah crab). The author asked *chef de cuisine* Stephen Oxaal for the rare privilege of observing him cook during the course of a typical day. Oxaal, a culinary graduate with eleven years of professional culinary experience, obliged the request. Oxaal began his B&G career as a line cook in 2007 and has held the title of *chef de cuisine* for the past five years. Previous to his tenure at B&G, Oxaal held the managerial position of *sous chef* in a Texas restaurant.

What follows are the author’s observations, as an ethnographer observing his participant. Time stamp designations chronicle sequential noteworthy occurrences. Though the author intended to maintain an unobtrusive presence in conducting his observations, one situation arose during the course of the experience where his known experience as a culinary professional placed him in the situation of an impromptu culinary collaborator by making a suggestion for an alternative sauce preparation. In that moment, the author found himself in the embodied act of improvisation, switching from the role of an ethnographer to that of a culinary professional.

Similar to phenomena experienced in jazz bands, the solution generated via the free exchange of suggestion facilitated the participant’s ability to process information and thus contributed an innovative solution to a potential dilemma.¹⁶ Moreover, the author employed *skilled vision* in order to fully comprehend and document both Oxaal’s tasks and the context of their interactions.¹⁷

10:30 a.m. I arrive at B&G Oysters at our agreed-upon time to find Oxaal receiving an order from a purveyor. Once finished, Oxaal greets me and shows me my workstation. Oxaal then takes me on a tour of the preparation kitchen. B&G’s prep kitchen is small, approximately 70 to 100 square feet with a ceiling height of six feet and six inches, and located in the restaurant’s basement. The prep kitchen consists of a four-burner gas stove with a conventional oven; an upright combination oven, which contains conventional, convection, and steam heat options; a small island attached to one wall; a door that leads to the outside from which the restaurant receives its deliveries; and a stainless steel double sink. Due to its limited space, every square and linear inch is accounted for. I am told that this is a good day for me to observe Oxaal because it is one of the prep cook’s days off. Normally, the small kitchen houses a total of three people: Oxaal and two prep cooks, plus an assortment of various purveyors, managers, and other staff members who temporarily occupy what is already a petite space for three people.

We climb up the small circular staircase to the dining room, where Oxaal provides me with a tour of the open kitchen. The open kitchen has a formidable presence in the dining room; moreover, it is the first thing one sees upon entering the dining room via the front entrance. The only activity, besides two front-of-house staff members rolling flatware into napkins, is a meeting taking place in the rear of the restaurant. After the tour, Oxaal and I descend back down the stairs and return to the prep kitchen. Oxaal informs me that he will prepare two specials for the evening’s dinner service: a cold appetizer of Florida Gulf

shrimp and an entrée of skate wing. When asked about potential accompaniments, Oxaal reveals his uncertainty; however, he contemplates using some fingerling potatoes and fresh green almonds that arrived with the day's delivery:

I use the special to test a possible new menu item, or to experiment with a new ingredient, or a new technique... utilizing what's in house. We have, what was at the time, fresh Florida Gulf shrimp, which are frozen. [So] we're going to have a special tonight of poached and chilled Florida shrimp with fresh green almonds, pickled fennel, and some spiced peanuts ... but that might change. Then, we'll have skate wing with warm porcini mushroom vinaigrette, grilled fingerling potatoes, and pearl onions—or something—but I actually have to get it prepped first. That can also change.

Frank Barrett, an organizational theorist, argues that jazz music differs from classical music because there is no prescribed performance.¹⁸ Jazz improvisation contains a degree of uncertainty, as the performer is required to perform extempore, compose on the spur of the moment, and produce a coherent product. Playing jazz is simply playing with music theory and the rules that regulate musical progressions. Cooking is governed by similar structures and progression: recipes and techniques. Once competency is achieved in culinary techniques (i.e., knife skills, braising, roasting, recipe formulation), a cook can produce dishes without scripts or models.

Improvisation exists on a continuum that ranges from *interpretation* through *embellishment* and *variation*, ending in *improvisation*.¹⁹ The implied progression is based on the increased demands placed on the imagination and concentration of an actor.²⁰ In the culinary world, *interpretation* occurs when cooks take minor liberties with a recipe, selecting novel accents of flavor while preparing the dish essentially as it is written. *Embellishment* involves greater imagination. Here, whole components in the original appear

beyond customary expectation. The recipe is rearticulated, yet still recognizable. *Variation* occurs when ingredients or components not in the original recipe are substituted or adapted, yet their relationship to the original remains the same.

Improvisation of a recipe entails its transformation into an article that bears little or no resemblance to the original model, or using models altogether alternative to the intention as the basis for inventing new outcomes. When musicians improvise, they significantly modify portions of songs' melodies or substitute structural segments with new creations that carry slight relationships to the original melody's structure, if any.²¹ When cooks improvise, they methodically alter ingredients or replace components with new creations; however, they must retain some semblance to the original model or the whole composition is rendered unrecognizable. Though allowances are made and at times encouraged when cooking, certain rules within the genre must be adhered to in order to create and execute marketable dishes that appeal to the palate. Jazz improvisers, on the other hand, are granted greater artistic license in their attempt to create novel compositions and are encouraged to push the boundary of acceptability in an attempt to outwit learned habits.²²

In order to execute two specials for the evening's dinner menu, Oxaal will have to rely on his acquired culinary knowledge and past experience to create new dishes, unrehearsed, and have them ready by the evening's service. In order to accomplish his challenge, Oxaal will most likely operate somewhere between variation (of something that has been previously produced) and pure improvisation. Actions that alter, revise, create, and discover are purer enactments of improvisation than are actions that shift, switch, or add.²³ Oxaal's impromptu performance will be significantly influenced by past experiences, present mood, and the local environment, as these all contribute to his creative process. The more Oxaal sacrifices the established direction as determined by a preexisting model (i.e., a recipe), the more he will depend on his own idiosyncratic

direction.²⁴ It is here—in the production of material culture—that differences in prior experience, practice, and knowledge become most apparent and have the greatest impact on end results.

Jazz bassist Charles Mingus insisted, “you can’t improvise on nothing; you’ve gotta improvise on something.”²⁵ In jazz music, that “something” is a melody, such as one that originated in African American blues and gospel songs, rock, or soul music; in culinary expression, that “something” is the recipe. What these two disparate modes of artistic expression have in common is their respective dependence on procedure imposed by a sequence of harmonious actions. Essentially, all behavior has a spontaneous skillfulness analogous to improvisation since it integrates a semi-fresh eventuality with knowledge gained from previous experience.²⁶ Jazz musicians rely on a body of precomposed musical knowledge, which they access in the moment of their performance. The degree to which they can access this knowledge and compose in the moment determines their level of skill and the complexity of the performance.²⁷ As Oxaal engages the situation before him—having to prepare two dishes under my observation for the restaurant’s service—he must apply already learned lessons in a limited amount of time. If Oxaal is not simultaneously improvising and improvising *attentively*, then he is not engaging his trained knowledge system in a semi-fresh application. Oxaal’s ability and proficiency to access his knowledge is a direct indication of his level of expertise, not only as a culinary creator but also as a skilled practitioner. Similarly, had I not engaged in the multisensory practices of coordinating my observational stance with the skilled intention necessary to constantly shift my points of view, I would not have been practicing the mindfulness necessary to embody skilled vision. My presence in Oxaal’s kitchen obliged me to uphold the tacit agreement between us to implement the educated attention required for our mutual social exchange to be successful.²⁸

Improvisation does not manifest out of thin air; rather, it materializes around a single element that provides a pretext for in-the-moment

composition.²⁹ Organizational theorist Karl Weick contends that part of the composition process is conceived from “pre-composed phrases” that become significant retrospectively as embellishments, while part of the organization arrives from the embellishments themselves.³⁰ In component-based cooking, there is little need to create dishes entirely by original design. The genre, as established by Marie-Antoine Carême and elaborated by August Escoffier, is structured around a system of interlocking parts, which are based on established techniques that can be interchanged for the ease of production.³¹ Understanding how the gastronomic system functions provides professionals greater flexibility to compose impromptu once a central component is established, be it a technique, an ingredient, or a flavor pairing. Having chosen the main ingredient for each of his dishes, Oxaal can immediately consider potential accompaniments to highlight or supplement their flavors while simultaneously editing out those he finds undesirable. The ease of Oxaal’s decisions is relative and contingent on his skill set as a culinary professional.

Scholars argue that retrospect is significant in improvisational production.³² In culinary and jazz improvisation, people act in order to think and transmit retrospective sense-making to their improvisation. Culinary practitioners, who think retrospectively, can create dishes from whatever is at hand. Oxaal’s sense-making engages Weick’s conceptual model of retrospect and becomes embodied in improvisation rather than decision making because his intention is loosely linked to execution based on experience. The importance of retrospect in the act of improvisation creates new claims that suggest that not only is improvisation grounded in forms but it is also grounded in memory. Oxaal’s creative process is facilitated by his knowledge of specific techniques that can be applied to his two main ingredients, the shrimp and the skate wing. This may be perplexing for the culinary novice, but Oxaal’s self-observations can provide an objective perspective. Oxaal possesses the procedures and learned techniques of an experienced practitioner; however, the role of

memory in improvisation is paradoxical.³³ Dusya Vera and Mary Crossan argue that memory may encumber improvisation when faced with novel situations by simply reproducing past routines.³⁴ Moreover, overreliance on memory or thought may impede and disrupt well-practiced actions that are better entrusted to embodied actions.³⁵ Nevertheless, when embodied in the act of improvisation, memory becomes an effective source of information because improvisation is often the outcome of the imaginative recombination of previously successful routines of knowledge and action.³⁶ Once Oxaal had the time to focus on his two main ingredients, he was able to narrow down his possible techniques and complementary flavor options vis-à-vis access to his memory, while simultaneously considering novel alternatives. Oxaal's ability to process through his knowledge is a function of learned behavior and at some point becomes ingrained in his mental and physical capacities as embodied functions.

11:40 a.m. Oxaal interrupts our observational session to attend a mandatory manager's meeting. While he attends to his other managerial duties, I climb up the small circular staircase to the dining room. Guests begin to fill the tables and seats at the bar. A couple with a noticeable Southern accent is studying the lunch menu, considering the lobster



Figure 1: Impromptu preparation of a standard menu.
Photo by author

roll. The gentleman inquires if he might order the lobster salad without mayonnaise because of his dietary restrictions. After the gentleman's server informs the cook of the request, the server returns to his guests and informs them that the request would not be a problem. The line cook reappears from downstairs with a half-pint plastic container filled with a portion of cooked lobster meat and a stalk of celery. The cook cuts roughly one-third of the celery stalk into small dice then pours the diced celery and lobster meat into a small aluminum mixing bowl. The cook then adds lemon juice, minced lemon zest, salt, and pepper (see figure 1), producing a lobster salad *sans* mayonnaise. Similar to Oxaal's process, the line cook accesses his retrospective memory and expertise to quickly develop a suitable alternative to an established recipe, however, in this example the line cook embodied *variation* rather than improvisation.

Many definitions of *improvisation* tend to blend prescriptive and descriptive elements because management theorists have borrowed heavily from the descriptions of improvisation in the arts in which "effectiveness" and "performance quality" have been embedded.³⁷ Spontaneity is considered a form of thinking;³⁸ however, spontaneity also acknowledges that the creative process does not always lead to creative outcomes. Defining improvisation as a creative process does not focus on the creative outcome that is novel and useful but rather on how one creates in particular situations or events.³⁹ The occasion to improvise may be made on the spot, as in the case of the lobster salad preparation, or it may be an option considered in advance, as in Oxaal's inspirations that are initiated by a purveyor's notification of new products or by passing through a farmer's market and discovering that a fruit or vegetable has just come into season.

In the lobster salad example, the line cook knowingly decided to engage in an extemporaneous process and tried to achieve an effective objective to a situation that was novel, at least to him in that particular moment. The amount of time in which various obligations need to be met does not always provide a basis for the distinction

of improvisation from other forms of performance, e.g., embellishment or variation.⁴⁰ Jazz musicians learn to improvise through the integration of music rules and theory. Integration allows for variation, similar to learning basic recipes. After years of repeating culinary procedures, cooks train themselves to recognize opportunities for introducing variation to standard recipes, similar to how jazz musicians recognize options within the constraints of chords and songs.⁴¹ In the case of the lobster salad, pertinent distinctions had more to do with problems of coordination and time, i.e., adjusting the preparation to a guest's preference while maintaining the constant flow of orders. Restaurant food preparers cannot know in advance a guest's particular preferences or dietary concerns, or even how they will respond to the estimations and moments of coordination that occur in a particular performance. Scholars argue, however, that an evaluation of what has occurred in the past, or what should occur in the future, may influence the behavior regarding the performer's manipulation of a model based on previous experience.⁴² More importantly, *beneficial* improvisation depends on the developed traditional skills in a particular sphere.⁴³

12:15 p.m. Oxaal returns to claim me. We descend the small iron circular staircase and re-enter the prep kitchen. Oxaal begins to prepare his components for the specials and starts by poaching

fingerling potatoes. In a medium-sized pot, Oxaal places potatoes, whole peppercorn, fresh thyme, bay laurel, coriander seeds, lemon peel, and enough water to cover the potatoes. Oxaal informs me that the lemon zest contributes a “fresh note” to the flavor of the potatoes; moreover, Oxaal made the executive decision of “why not?” In affirming both his authority and right to creativity, Oxaal's addition of lemon peel engages Meredith Abarca's concept of the *chiste*.⁴⁴ Abarca argues that recipes exist as templates where possibilities of change within a culinary paradigm illustrate an unprecedented growth of a creative moment in the life of a preparer.⁴⁵ The emphasis on the adherence to established recipes in the name of “authenticity” in a recipe's execution promotes the tendency to erase the *chiste* from versions of the same recipe, this impeding improvisation and hindering innovation and the individual expression of creativity. Rather than focus on “authenticity,” Abarca suggests a conceptual re-evaluation engaging the use of “originality” in culinary production. Similarly, the improvised solo affords the musician opportunities for creative agency by composing in the moment. Enacting various forms of improvisational expression requires actors in either discipline to extend themselves beyond their comfort zone while it offers opportunities for creative growth and learning.

Next, Oxaal prepares the shrimp to be poached. As Oxaal peels the shrimp, he informs me that he



Figures 2-3: Embodied movements (from left to right): Peeling shrimp, chopping carrots and celery for *mire poix*, and tossing roasted peanuts in spice mixture, at B&G oysters. Photos by author

will make a sauce from the shells and considers making a *nage*.⁴⁶ As the details of the two dishes begin to crystallize, Oxaal explains what is next on our agenda and what he still needs to accomplish:

We're going to poach shrimp in a court bouillon [and then] make a shrimp stock. Then, we're going to set the stock with gelatin. Hopefully it sets-up in time because we're going to cut a cube of what is now our shellfish nage and that's going to be the "sauce." So we'll have the chilled poached shrimp with shellfish nage, and shaved green almonds, which we're going to slice in half and shave them on the mandolin to order. So, we'll have the shrimp with a really umami gelatin, bright citrusy green almond, and something else [the spiced peanuts].

Meanwhile, Oxaal places the shrimp in a large pot of water with spices similar to those used for the potatoes and sets the pot on the stove. To the pot he adds chopped onion, carrot, and celery (see figures 2–3). In another pot Oxaal places the shrimp and enough water to make his shrimp stock. While Oxaal is downstairs doing production, the dining room upstairs is fully immersed in its lunch service. In the midst of preparation, Oxaal is called upstairs to tend to an important issue.

12:30 p.m. Oxaal returns from addressing the issue upstairs. While the potatoes, shrimp, and stock are on the stove, he starts to prepare the porcini vinaigrette. Oxaal informs me that the skate wing will be receiving an ample grating of *bottarga*, which Oxaal keeps frozen. Oxaal notes that *bottarga* is an excellent salt replacement because of the saline quality it acquires during the curing process. After receiving a sample to taste, the author notes that *bottarga* has a flavor quality similar to anchovies; however, Oxaal clarifies that it is much subtler.

As Oxaal prepares his ingredients for the vinaigrette (which consists of chopping dried and reconstituted porcini mushrooms, mincing shallots, zesting and squeezing a lemon, and chopping

chives into fine dice), he updates me on our status regarding the remaining tasks:

We appear to be in good shape. I've been looking at the clock all day... it keeps me on schedule. If we didn't start the shellfish nage until two o'clock, then I'd scrap it and do something else ... Evening pre-meal is at 4:35 sharp! If I don't have everything ready to go, then we're not doing a special.

It's [a function] of knowing how much time you have in-between each project, which is why you're able to multitask ... it's why I always look at the clock. I know that that court bouillon has to come to a boil and steep for a little while before we poach the shrimp. I know that the wine needs to reduce with the shrimp shells. I know that the potatoes still need to poach on low heat. I can make the vinaigrette and still have three projects working simultaneously. The number one thing is getting the shrimp poached and the shrimp shells into that stock, so that they can come to boil and reduce, then add my gelatin as soon as possible.

When asked if any random person would be able to function in his situation, Oxaal replies, "They'd be able [to function] to a certain degree. You need experience, not necessarily a formal education, but you need some type of experience. It can be taught."

In observing the operation of a professional kitchen, one can hardly ignore the centrality of time in shaping the lives of workers. Time is as integral to cooking as is any other ingredient. In order to properly prepare food, the cook must understand the temporal dimensions of the various activities involved.⁴⁷ Time distinguishes a rare steak from one that is charred, bad fish from fresh, or soft-ball sugar from hard-crack. Proper sequences are also important in following a recipe. Culinary sequences take into consideration physical properties and chemical reactions that occur during food preparation. The interchange of culinary processes, or their complete elimination, results in a product

that may be considered unsatisfactory compared to its established model. Synchronization of tasks is more complicated in the restaurant. It is essential for the execution of multiple tasks, or for the coordination of multiple stations in the production of one or multiple plates. Rhythm and tempo may be used to maintain a schedule or chart the production of the preparer. Gary Fine, whose research considers the temporal demands of restaurant work, argues that restaurant life is not structured by the clock *per se* but rather by the events that occur, e.g., lunch, dinner, or banquets. Though this is true for the line cook, I argue that for production cooks, the clock is an integral part of the day. In Oxaal's role as an organizational manager, time is an essential element not only for his production schedule but also for synchronizing his team's activities. Oxaal's peripheral awareness of the activities that occur under his management is essential for mitigating the potential chaos that might occur without his organizational expertise. Furthermore, Oxaal's ability to switch within his own role of manager to the role of laborer is yet another example of improvisation in action.

An obvious characteristic of improvisation is the spontaneity of action.⁴⁸ Oxaal must respond in the moment to various stimuli from his staff, fellow managers, purveyors, my presence, and the projects that are under his direction. Managerial responsibility is spontaneous by nature. Research in chaos theory illustrates that beyond a certain point, "increased knowledge of complex, dynamic systems does little to improve our ability to extend the horizon of predictability of those systems."⁴⁹ Oxaal may know what to do in a particular situation, but he cannot predict the situation that might occur. Thus, the capacity to respond to unforeseen situations in a spontaneous and effective manner is crucial. At any given moment, he must bend, yield, adapt, and respond to situations that are beyond his control. Though Oxaal may start out with a clear idea of what he wants to accomplish in a given day, the unreliable nature of the restaurant requires Oxaal to have the ability and flexibility to respond to unforeseen circumstances.

1:40 p.m. Oxaal makes the executive decision to eliminate the *nage gelée* component because the *nage* has not sufficiently reduced. Because of the limited amount of space in the walk-in, Oxaal does not feel comfortable allowing the *nage* and gelatin mixture to cool down and remain in the walk-in undisturbed. Once the dinner shift begins to arrive, Oxaal warns me that his kitchen will be in a state of confusion. Rather than exhibit signs of anxiety, Oxaal makes the calm, informed decision to make a fluid gel after a brief consultation with the author.⁵⁰ He disappears for a few moments and returns carrying a plastic pint container labeled "agar."

All production is temporally structured, whether implicitly or explicitly. Temporality is the organizing principle of productive life within organizations, which resonates through the productive structure as much as spatial or hierarchical organizational structures.⁵¹ For production to run efficiently, schedules must be coordinated and production must occur at a rate that permits the organization to achieve its goals—it is these temporal constraints that influence the work experience. Gary Fine's research on the temporal demands of restaurant work argues that the temporal order has both "objective" and experienced effects.⁵² Time passes regardless of workers' conscious acknowledgement. Both "real" and phenomenological time experiences must be considered. Within the temporal organization of production schedules, allowances must be afforded for particular activities to occur. The well-trained performer must respond to possible situations that might emerge while following a "script" or a recipe.

Fine proposes five concepts central to temporal organization that constrain work: (i) *periodicity*, the rhythm of the activity; (ii) *tempo*, the activity's rate or speed; (iii) *timing*, and *synchronization* of activities; (iv) *duration*, the length of an activity; and (v) *sequence*, the ordering of events.⁵³ Fine argues that these concepts allow workers to resolve the various modes in which time might be conceptualized. Though each is external to individuals, they nevertheless affect job performance because of how they are both experienced and negotiated. Oxaal's awareness of

the obdurate nature of the *gelée* given his staff's arrival time raises his concern regarding the time required to set a pan of hot liquid in an area that is heavily trafficked before it has time to set. Oxaal decides to switch from the *gelée* to the fluid gel, for the sake of time. In this moment, Oxaal moves from objective intent to practical execution. The decision does not affect the final dish. In fact, the only two people who were aware of the details of his intentions were Oxaal and the author. Considering Fine's model, though the duration and sequence are external factors to Oxaal as an individual, they would both only affect Oxaal's job performance and satisfaction based on how they were experienced.⁵⁴ Oxaal's negotiation would have become evident only if the allotted time were unpleasant or dysfunctional to the unscheduled situation, for example, "not enough time ... now what?" Though Oxaal realized that he had insufficient time to make a *gelée*, he simultaneously understood that he *could* have enough time to make a fluid gel, just by the spontaneous substitution of agar for gelatin. This substitution constituted a variation of his original intent.

Barrett argues that successful jazz improvisation requires an active exchange between members and their ability to alternate between soloing and supporting.⁵⁵ The sense of community established by jazz musicians allows for collaborations and mentoring practices, which fosters leaning experiences because musicians

borrow ideas from each other by hanging out amongst peers. A similar fraternal structure exists in the culinary world. Cooks regularly frequent friends' establishments to eat, support, or simply hang out. There, they may observe a novel way of executing a familiar recipe or discuss problems that arise in the creation of a new dish. The professional kitchen serves as an informal educational system for the dissemination of knowledge and expertise that extends beyond one's formal education. Though the experience was not intended as a collaborative event, the author's impromptu suggestion was intended as a simple suggestion to a professional peer in the midst of a creative crossroad. Oxaal's reception of the suggestion underscores his ability to surrender his virtuosity and authority in order to best serve his composition. Jazz musicians negotiate, recover, and adapt to each other because their shared task knowledge brings multiple perspectives to the same experience via the observation of associates' performances. Though our respective roles were outlined before the experience began, there was a tacit agreement between both parties that they were in the experience together. Though the author embodied the role of observer, he improvised the role of culinary colleague when he observed that the status of a participant's dish might be in peril.

3:20 p.m. We climb up the small circular staircase one more time. Oxaal informs me that he will work



Figure 4: Considering plating options of skate and shrimp specials.



Figure 5: Running through a skate pick-up before service.

a double shift because the restaurant is short-staffed for dinner service. For his second shift, Oxaal stands in on the entrée station as lead cook, as he is obliged to stand in on any station lacking a team member. Oxaal surveys his station and exchanges the components that were associated with the lunch menu with those that are required for dinner service, particularly the components that were prepared in anticipation of tonight's specials. Oxaal, moreover, assesses what needs to be replenished for the components that carry over from the lunch to the dinner menu. As the members of the line perform similar functions regarding their stations, Oxaal takes a few moments to contemplate possible plating options. Observing the various designs that Oxaal makes on clean plates, I am reminded of musicians who warm up before a performance. In this engrossed moment—one of many that were witnessed throughout the course of the day—Oxaal resembles Dexter Gordon or Dizzy Gillespie running through scales and phrases before a performance (see figure 4–5). Once he has an idea for the skate plating, Oxaal saunters over to the cold appetizer station to work through and show the plating to the line cook, who has been alerted to the additional pick-up that she will be responsible for during the evening.

4:35 p.m. As if by an intuitive force, the three members of the wait staff and the general manager appear at their designated area for the pre-evening meal. After describing some particulars concerning the menu, Oxaal introduces the night's specials (see figure 6):

Chilled Poached Florida Gulf Shrimp / Spiced Peanuts / Green Almonds / Golden Beets / Shellfish Fluid Gel

Cornmeal-Encrusted Skate Wing / Grilled Fingerling Potatoes / Roasted Pearl Onions / Shaved Bottarga / Warm Porcini Vinaigrette

CONCLUSION Professional culinary improvisation is an embodied skill acquired through experience, practice, and cognitive

thought based on previous logics and memory. It does not materialize out of thin air but rather by means of skilled intention by professionals who must make efficient split-second decisions during their performance. As in jazz improvisation, salient conditions that facilitate improvisational thinking and acting on the spur of the moment are expertise as well as the capacity to make sense out of what might appear to be disparate elements. The execution of similar dishes may have been possible by other practitioners; however, their degree of ease and efficiency would have been dependent on the very qualities that were observed in Oxaal.

The author's assessments and projected assertions were not the result of the detached gaze of a casual spectator but rather the educated attention of an intentional observer. Employing multiple senses (e.g., attuned sight, hearing, and reason) in order to gain knowledge through skilled vision is necessary in practicing visual ethnography. This allowed the author the opportunity to better comprehend the day's occurrences compared to applying sight alone. Cognitive sight, moreover, is an essential element of skilled vision. It applies knowledge to an observational process in order to facilitate a situation and extract information from a participant or situation observed. Cognitive sight, furthermore, involves the education of attention as part of the multisensory experience from a phenomenological perspective. The skill informed his active involvement to know when to take a



Figure 6: Final compositions: Skate Wing (foreground), Gulf Shrimp (background). Photo by author.

picture, ask a question, or simply get out of Oxaal's way. By suspending the culinary knowledge gained from the author's fourteen years of professional experience and focusing on apprenticeship, the author offered Oxaal the enhanced opportunity to inhabit his role of participant, and thus increased the participant's capacity to instruct the author for the purpose of this research experiment. Through critical reflection, the author was able to visit particular phenomena with various embedded senses to better analyze observed situations. Critical reflection allowed the author to enter the participant's domain in an effort to fully comprehend their shared experiences. Consequently, the author was able to tack between his roles as observer and author to develop the voice of this work.

The contexts that both the participant and author found themselves alternated between chef-instructor-participant, with respect to Oxaal, and social scientist-apprentice-skilled observer, with respect to the author. The unexpected action of the author switching from his established role as ethnographer to culinary collaborator illustrated improvisation in its pure sense. Similar to jazz combos, shifting performance roles that were independently enacted within the context of the research contributed to the enhancement of both participants' shared experience. Peer-to-peer negotiation, hierarchical relations, and the management of context facilitated their respective mindfulness in order to bring all previous experience to bear in the present moment. Critical reflection compels ethnographers to consider their own comprehensions and interpretations of participants' understandings and encourages the reader to engage with both parties. Critical ethnography relies on the engagement of the self, offers an added dimension to observations, and increases consciousness through analytical examination. The methods and theories explored may also be useful in future research projects. Though improvisation affords extempore creativity, skilled vision contributes to its temporal comprehension.

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NOTES

- 1 A *chef de cuisine* is the person in charge of the daily activities of a professional kitchen whose duties include menu creation, staffing, procuring ingredients, and plating.
- 2 Joseph A. Hegarty, "Achieving Excellence by Means of Critical Reflection and Cultural Imagination in Culinary Arts and Gastronomy," *Journal of Culinary Science & Technology* 9 (2011): 55, 59.
- 3 Hegarty, "Achieving Excellence by Means of Critical Reflection," 58.
- 4 David M. Fetterman, *Ethnography: Step-by-Step* (Los Angeles: Sage Publications, 2010): 35.
- 5 Clifford Geertz defines an "experience" as including a beginning and a conclusion, interspersed with the author's analysis of observed phenomena. Sarah Pink, *Doing Sensory Ethnography* (London: Sage, 2009): 42–43.
- 6 Pink, *Doing Sensory Ethnography*, 43.
- 7 Cristina Grasseni, *Skilled Visions: Between Apprenticeship and Standards* (Oxford: Berghahn, 2007): 1–5. Domenico Pietropaolo, "Improvisation in the Arts," in *Improvisation in the Arts of the Middle Ages and Renaissance*, edited by Timothy J. McGee (Kalamazoo, MI: Medieval Institute Publications, 2003): 2.
- 8 Frank J. Barrett, "Creativity and Improvisation in Jazz and Organizations," *Organization Science* 9, no. 5 (1998): 606. Pietropaolo, "Improvisation in the Arts," 3.
- 9 Pietropaolo's *fluency of rehandling* involves executing quick and clever employment of arguments and turns of phrase that are potentially applicable to many situations; for example, "If I did this, then I *could* do that." Pietropaolo, "Improvisation in the Arts," 9.
- 10 Barrett, "Creativity and Improvisation," 606. Pietropaolo, "Improvisation in the Arts," 10.
- 11 Barrett, "Creativity and Improvisation," 606. Pietropaolo, "Improvisation in the Arts," 11.
- 12 Mary Crossan, "Improvisation in Action," *Organization Science* 9, no. 5 (1998): 594. Barrett, "Creativity and Improvisation," 605–606. Mary Jo Hatch, "Jazz as a Metaphor for Organizing the 21st Century," *Organization Science* 9, no. 5 (1998): 556. Karl E. Weick, "Improvisation as a Mindset for Organizational Analysis," *Organization Science* 9, no. 5 (1998): 546–547.
- 13 Barrett, "Creativity and Improvisation," 605–606.
- 14 Here, I use "chaos" to refer to a state of complete disorder or confusion. Pietropaolo, "Improvisation in the Arts," 4. Dusya Vera and Mary Crossan, "Improvisation and Innovative Performance in Teams," *Organization Science* 16, no. 3 (2005): 207.
- 15 Vera and Crossan, "Improvisation and Innovative Performance," 204.
- 16 Barrett, "Creativity and Improvisation," 605.
- 17 Grasseni defines skilled vision as the application of trained vision and embedded multi-sensory practices in order to gain empirical knowledge. Grasseni, *Skilled Visions*, 1, 4–5.
- 18 Barrett, "Creativity and Improvisation," 607.
- 19 Paul F. Berliner, *Thinking in Jazz: The Infinite Art of Improvisation* (Chicago: The University of Chicago Press, 1994): 66–71.
- 20 Weick, "Improvisation as a Mindset," 544–45.
- 21 Berliner, *Thinking in Jazz*, 67, 270–71.
- 22 Barrett, "Creativity and Improvisation," 609.
- 23 Weick, "Improvisation as a Mindset," 545.
- 24 Ibid.
- 25 Barry Kernfeld interview, *What to Listen for in Jazz*, 119, quoted in Weick, "Improvisation as a Mindset," 546.
- 26 Ibid.
- 27 Hatch, "Jazz as a Metaphor," 565.
- 28 Grasseni, *Skilled Visions*, 8. Sarah Pink, *Doing Visual Ethnography* (London: Sage, 2007): 106–107. Pink, *Doing Sensory Ethnography*, 42–43.
- 29 Barrett, "Creativity and Improvisation," 606. Vera and Crossan, "Improvisation and Innovative Performance," 205.
- 30 Weick, "Improvisation as a Mindset," 546.
- 31 Alain Drouard. "Chefs, Gourmets, and Gourmands: French Cuisine in the 19th and 20th Centuries," in *Food: The History of Taste*, edited by Paul Freedman (Berkeley, CA: University of California Press, 2007): 277, 285–286. Priscilla Parkhurst Ferguson, *Accounting for Taste: The Triumph of French Cuisine* (Chicago: University of Chicago Press, 2004): 67–70.

- 32 Weick, "Improvisation as a Mindset," 547-48.
- 33 Ken Peplowski, "The Process of Improvisation," *Organization Science* 9, no. 5 (1998): 560. Weick, "Improvisation as a Mindset," 547.
- 34 Vera and Crossan, "Improvisation and Innovative Performance," 205.
- 35 John Sutton, Doris McIlwain, Wayne Christensen, and Andrew Geeves, "Applying Intelligence to the Reflexes: Embodied Skills and Habits Between Dreyfus and Descartes," *Journal of the British Society for Phenomenology* 42, no. 1 (2011): 80.
- 36 Ibid.
- 37 Vera and Crossan, "Improvisation and Innovative Performance," 205.
- 38 Sutton, et. al., "Applying Intelligence," 78-79. Weick, "Improvisation as a Mindset," 552.
- 39 Vera and Crossan, "Improvisation and Innovative Performance," 205.
- 40 Stephen Blum, "Recognizing Improvisation," in *In the Course of Performance: Studies in the World of Musical Improvisation*, edited by Bruno Netti and Melinda Russell (Chicago: University of Chicago Press 1998): 27-28.
- 41 Barrett, "Creativity and Improvisation," 606.
- 42 Blum, "Recognizing Improvisation," 27-28. Gary Alan Fine, "Organizational Time: Temporal Demands and the Experience of Work in Restaurant Kitchens," *Social Forces* 69, no. 1 (1990): 96-97.
- 43 Crossan, "Improvisation in Action," 594 (emphasis mine).
- 44 Abarca's *chiste* is derived from the Spanish word *chistar* ("to joke," or "essence"). The *chiste* represents moments of agency that place emphasis on authenticity in new renditions of culinary production. Meredith E. Abarca, "Authentic or Not, It's Original," *Food and Foodways* 1, no. 12 (2004): 4.
- 45 Abarca uses Debra Costello's definition of a recipe to suggest that recipes are models from which multiple interpretations of a single paradigm within an ethnic community can be expressed. See Abarca, "Authentic or Not, It's Original," 3.
- 46 *Nage*, from the French word *nager* ("to swim"), is a concentrated seafood broth made from a reduction of seafood stock and court bouillon, with the optional addition of tomato or, in Ox-aal's case, tomato paste.
- 47 Fine, "Organizational Time," 97, 101.
- 48 Crossan, "Improvisation in Action," 593.
- 49 Crossan, "Improvisation in Action," 595.
- 50 "Fluid gel" is a cross between a sauce, a gel, and a purée. Fluid gels are controlled liquids, which have the properties of all three preparations. Moreover, fluid gels display viscosity and fluidity at the same time, being thick yet still spreadable. Fluid gels behave as solids when undisturbed and flow when exposed to sufficient outside forces. Fluid gels are prepared by combining a base liquid, which may be from a variety of sources (fruits, vegetables, stocks, or purées) with a thixotropic gelling agent such as agar to create a gel. Once set, the gel is then exposed to shear stress, such as blending to break it down.
- 51 Fine, "Organizational Time," 95.
- 52 Ibid, 96.
- 53 Ibid.
- 54 Ibid, 96-97.
- 55 Barrett, "Creativity and Improvisation," 613.