HELL'S KITCHEN: SANCTIONING VIOLATIONS OF NORMS OF KNOWLEDGE USE IN GOURMET CUISINE

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INTRODUCTION

The functioning of social norms has intrigued scholars from disciplines as diverse as economics (North, 1990), law (Ellickson, 1991), political science (Elster, 1989; Ostrom, 1990), sociology (Coleman, 1990), and psychology (Bettenhausen & Murnighan, 1991). Norms, scholars argue, are only effective if violations are sanctioned (Greif, 1993; Horne, 2004; Ostrom, 1990). Ingram & Clay (2000: 530), for example, note that "it is not sufficient for rules to exist; they must also be enforced."

Sanctioning of norm violations has been studied in laboratory experiments (Fehr & Gintis, 2007), but surprisingly little is known about the determinants of sanctioning in real world settings. This lack of field evidence has raised doubts about the generalizability of laboratory findings (Sigmund, 2007). Scholars note that sanctioning is commonly found in experimental settings but appears to be "relatively rare in real life" (Sigmund, 2007: 598).

In this paper, we investigate what influences the propensity to sanction in a real-world context and how this propensity is related to social exchange. Because field-research on sanctioning is relatively uncommon, we chose to first conduct an exploratory qualitative study. We sought an industry with many comparable actors, the existence of collaborative exchange, and norms to maintain collaboration. The gourmet cuisine industry proved to be ideal for our purposes. Previous research has shown that members of this industry engage in rich knowledge exchange (Fauchart & von Hippel, 2008), and we heard much the same during our qualitative study. "If you get chefs together," one chef told us "they have nothing else to talk about but food. So they are going to share. I mean, we work in our heads."

As in many creative industries, no legal systems of intellectual property rights provide protection for private culinary knowledge, and therefore transferred ideas are subject to misuse and further distribution. Scholars have proposed that in cuisine and other creative industries, norms may provide rules that partially substitute for absent legal protection (Fauchart & von Hippel, 2008; Loshin, 2008; Oliar & Sprigman, 2008). In our qualitative study, chef/owners described such norms as "unwritten laws" or "mental copyrights." In particular, as previously reported by Fauchart & von Hippel (2008), we were told of three central norms for how transferred culinary knowledge should be used. If a chef transfers information about a recipe or a cooking technique to a colleague, expectations are that this colleague: (1) will *not copy exactly* the recipe or cooking technique, but will use it as a source of inspiration to develop something new; (2) in case (s)he wants to serve a recipe similar to that of the original chef, (s)he will *cite the source* of inspiration by writing it in the menu; and (c) will *not pass on* the information to a third party without previously asking for permission to the chef who transferred the information in the first place.

Despite the importance and prevalence of these norms, chefs reported that violations do occur. In one famous example in the Boston area, a chef visited the best restaurants in town and stole signature dishes from each one (Murray, 2008). When such a norm violation occurs, three types of sanctions may be used: (1) refusing future knowledge transfers; (2) refusing future help requests; and (3) sharing negative gossip within the community (Fauchart & von Hippel, 2008).

QUALITATIVE STUDY: TOWARDS A MODEL OF SANCTIONING

To better understand the determinants and effect of sanctioning of norm violations, we engaged in a qualitative study of gourmet chefs. We conducted in-person interviews with chefs from top restaurants in the metropolitan areas around Milan and Boston, with the interviews being conducted in Italian and English respectively.

Chefs reported that sanctions are costly to administer, and thus they seek to avoid them. One way to avoid these costs is simply to ignore a sanction should one occur. Another way, chefs reported, is to avoid transferring knowledge that might obligate sanctioning. Overall, our interview subjects suggested that the *anticipation* of sanctions (even accounting for expectations of normative behavior) reduces their willingness to participate in norm-governed exchange. If such a negative relationship were to be confirms, it would extend previous theory (Gürerk, Irlenbusch, & Rockenbach, 2006; Horne, 2004; Ingram & Clay, 2000; Ostrom, 1990).

Hypothesis 1 (H1). The higher the propensity to sanction a norm violation, the lower the likelihood to participate in the social exchange regulated by the norm.

Despite their dislike for sanctioning, chefs did report that in some circumstances they were more likely to punish violations. Evidence from our qualitative data can be categorized into either social or individual factors, with both influencing the propensity to sanction violations.

Chefs reported two elements that influence their assessment of how a sanction is perceived by other members of their <u>social</u> group, namely (a) the visibility of the violation to other chefs, and (b) the reputation of the violator. According to our informants, a primary factor affecting how other members of the social group will interpret a sanction is the visibility of the initial violation. They reported that they believed the visibility of a violation would *increase* their propensity to sanction a violation. They argued that the visibility of the violation limits the risk their sanctioning action will be misinterpreted. Since the sanction often involves defection from normative practices (e.g., refusing to pass on information or aid), chefs expressed concern that the sanction would be misinterpreted as itself a violation of the norm. They reasoned that if other members of the social group could detect and recognize the initial violation, they would be more likely to accept the sanction as legitimate. Thus, consistent with results from our qualitative inquiry, we hypothesize:

Hypothesis 2 (H2). The higher the visibility of a norm violation, the higher the propensity to sanction it.

According to our informants, a second factor affecting how other members of a social group will interpret a sanction is the reputation of the violator. Sanctioning a highly reputed industry member increases the risk that the sanction will be seen as illegitimate. Such accounts are consistent with existing reports of the influence of reputed players (Wilson, 1985; Rindova et al., 2005), according to which sanctioning highly reputed players bears a higher social cost, especially in contexts in which reputation is relevant (Rao, Monin, & Durand, 2003). The higher cost derives from the expectation that, when a reputed player is accused, the community will afford them the benefit of the doubt. Our next hypothesis hence postulates:

Hypothesis 3 (H3). The higher the reputation of the violator, the lower the propensity to sanction a norm violation.

Chefs reported two factors that influence their assessment of how a sanction impacts their <u>individual</u> returns from the social exchange governed by the violated norm, namely (a) the severity of the violation, and (b) the degree of competition with the violator. In both cases, chefs were concerned with the sense of damage associated with the violation. According to them, sanctioning becomes worthwhile when the damage caused by the violation is relatively substantial. However, the two cases are different in the degree to which the damage caused by the violation is objectively, vs. potentially, high. The damages associated with a severe violation cannot be anything but substantial. The observation that an individual will be more likely to sanction a more severe violation is consistent with previous literature. Accordingly, we argue:

Hypothesis 4 (H4). The higher the severity of a norm violation, the higher the propensity to sanction it.

Absent an objective measure of severity, chefs estimate the potential damage based on proxies. Competition provides one proxy, as competitors are in a better position to use a rival's knowledge directly and effectively. Following this line of reasoning, one should expect violations perpetrated by competitors to be more likely to be sanctioned. Thus, we hypothesize:

Hypothesis 5 (H5). The higher the degree of competition with the violator, the higher the propensity to sanction a norm violation.

Figure 1 about here

EXPERIMENTAL TEST

To test our proposed analytical framework (see Figure 1), we decided to conduct a scenario-based experiment with real industry players—in our case, Italian high-end chefs. The following sections explain our experimental examination and the tools we relied on to analyze the collected data, as well as the results of our quantitative inquiry. The 2009 Italian edition of the Michelin Guide included 2,529 restaurants; of these, 275 were awarded "stars" for high quality (236 one-star, 34 two-star, and 5 three-star). We invited each of these 2,529 restaurants to participate in our scenario-based experiment. Our response rate was equal to 21.1 percent, with

492 of the 534 surveys returned complete. Our respondents were mainly male (82%), chefowners (78%), in a range of different ages (46 years on average, with a minimum of 23 and a maximum of 80), some of whose restaurants were awarded stars (74 with one star, 16 with two stars, 2 with three stars).

Each chef was mailed a survey that included two randomly assigned scenarios, each followed by questions regarding the propensity the responding chef would sanction norm violations and the likelihood he or she would transfer knowledge to the counterpart. Each scenario described a restaurant and its head chef using on five attributes. We manipulated these attributes separately and randomly both within and between subjects. See Figure 2 for two examples showing the most extreme differences across two scenarios (i.e. the treatments are set so that either they all take high values or they all take low values).

------Figure 2 about here

We manipulated the *visibility* of a potential norm violation by describing the hypothetical restaurant as either "frequently reviewed by local media and customers (among the restaurants with more reviews)", or "rarely reviewed by local media and customers (among the restaurants with fewer reviews)". We manipulated *reputation* by describing the restaurant as either "Zagalin cuisine rating 28. Comments: creative, innovative, unique style" (high reputation), or "Zagalin cuisine rating 20. Comments: lacks imagination, unoriginal, ordinary style" (low reputation). We explained that the rating "Zagalin" (a portmanteau of Zagat and Michelin) could have ranged between 0 and 30. We measured the *severity* of a norm violation by looking at the type of knowledge potentially misappropriated. Based on our interviews, misappropriation of recipes, in particular those of signature dishes, constitutes a more serious offense. We hence used two dummies to distinguish the case of recipes and signature dishes from that of cooking techniques. Finally, we manipulated *competition* based on two separate treatments, geographical proximity and similarity of positioning – describing the hypothetical restaurant as either "physically very close to/distant from your restaurant" or and having a "cuisine style and ambience similar to/very different from your restaurant."

Our dependent variable, *knowledge transfer likelihood*, was measured as the self-assessed likelihood that the respondent would transfer culinary knowledge to the chef described in the scenario. Our intermediate variable, *propensity to sanction*, is the respondent's propensity to sanction a norm violation committed by the chef described in the scenario. In particular, we asked the surveyed chefs to identify the propensity (measured on a seven-point Likert scale) that, should the chef described in the scenario commit a norm violation, they would sanction it using each of three types of sanctions previously described.

Our randomized experimental design insures that our treatments are orthogonal to subject attributes and thus we can estimate unbiased coefficients for our treated variables. Our use of two scenarios per respondent allows us to accurately estimate the effect of our intermediate construct. Consider the following two equations, where i indicates subjects and j indicates scenarios:

$$Y_{i,j} = bM_{ij} + \beta X_{ij} + BZ_i + \delta_i + \theta_j + \varepsilon_{ij}$$
(1)

$$M_{i,j} = \beta \boldsymbol{X}_{ij} + B \boldsymbol{Z}_i + d_i + \vartheta_j + e_{ij}$$
(2)

The dependent variable **Y** (*knowledge transfer likelihood*) is a function of the intermediate variable **M** (*propensity to sanction*), the vector of treatments **X** (*visibility*, *reputation, geographical proximity, similarity of positioning*), and the vector of other independent variables **Z** (*recipe, signature*, and all controls). The intermediate variable **M** (*propensity to sanction*) is a function of the vector of treatments **X** and the vector of independent variables **Z**. Both equations also include the potential for unknown disturbance terms for the subject i (δ_i and d_i), the scenario j (θ_i and ϑ_j), and the observation (ε_{ij} and e_{ij}).

The random administration of treatments to the different subjects causes the treatments to be uncorrelated with the subject or method disturbance terms in both equations 1 and 2. Thus, estimates based on OLS should be unbiased. However, when we insert the effect of the intermediate variable **M** into the main equation, our estimates will be biased by any correlations between the subject or method disturbance terms of equation 1 and equation 2 (Shaver, 2005). Fortunately, by looking at the differences in the subject's responses across the two scenarios, we can eliminate the subject and method disturbance terms. As a result, we estimate:

$$Y'_{i,j} = bM'_{ij} + \beta X'_{ij} + \varepsilon_{ij}$$
(3)

$$M'_{i,j} = \beta X'_{ij} + e_{ij} \tag{4}$$

RESULTS

Consistent with H1, we find evidence that the propensity to sanction decreases the propensity for a chef to transfer knowledge, or, in other words, the likelihood that the individual will participate in the social exchange regulated by the norm. Unfortunately, we do not find support for H2: despite directional, the effect of the *visibility* of the violator's behavior on the propensity to sanction is not statistically significant. We find support for H3: the propensity to sanction of the *reputation* of the violator. Our results also offer support in favor of H4: a higher *severity* of norm violation increases the propensity to sanction. Finally, we also find partial support for H5: a higher degree of *competition* between the enforcer and the violator (as measured only by geographical proximity) increases the propensity to sanction.

DISCUSSION AND CONCLUSIONS

Previous research argues overwhelmingly that sanctions support the functioning of norms. Yet, we contend in this article that at least one important exception exists. Using data from a qualitative study of social norms operating in the gourmet cuisine industry, we report evidence that actors dislike sanctioning so much that they may choose to avoid social exchange when they foresee administering a sanction, should a norm violation occur. Combining our grounded evidence and previous research, we develop a set of hypotheses predicting when actors will sanction others and how the anticipation of a higher propensity to sanction influences participation in social exchange. We test the resulting model based on data from a scenario-based field experiment. We show that both social and individual factors influence the intention to sanction a norm violation. Notably, we find evidence that, when actors are more likely to sanction violations, they are less likely to participate in social exchange.

REFERENCES AVAILABLE FROM THE AUTHORS



FIGURE 1. The proposed explanatory framework

> FIGURE 2. Sample Scenarios

Characteristics	- Zagalin food score: 28*. Comments:	Characteristics	- Zagalin food score: 20*. Comments: "lacks	
of restaurant:	"creative", "innovative", "unique style"	of restaurant:	immagination", "unoriginal", "ordinary style"	
	- Geographically very close to your		- Geographically very distant from your	
	restaurant		restaurant	
	- Cuisine style and ambience similar to your		- Cuisine style and ambience very different	
	restaurant		from your restaurant	
	- Frequently reviewed by local media and		- Rarely reviewed by local media and	
	customers (among the restaurants with more		consumers (among the restaurants with fewer	
	reviews)		reviews)	
Chef:	- Chef has 20 years of experience in the	Chef:	- Chef has 1 year of experience in the	
	industry		industry	
This rating is eq	uivalent to a rating from Zagat TM . It ranges from 0	* This rating is eq	uivalent to a rating from Zagat TM . It ranges from (
to 30.			to 30.	