THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Working for an algorithm

OPEN ACCESS

Working for an Algorithm: Power Asymmetries and Agency in Online Work Settings

Corentin Curchod
University of Edinburgh Business School

Gerardo Patriotta
Warwick Business School

Laurie Cohen
Nottingham University Business School

Nicolas Neysen
HEC Liège

Abstract

Drawing on interviews with 77 high-performing eBay business sellers in France and Belgium, this article investigates the power asymmetries generated by customers' evaluations in online work settings. Sellers revealed a high degree of sensitivity to negative reviews, which, while infrequent, triggered feelings of anxiety and vulnerability. Their accounts exposed power asymmetries at two levels: the transactional level between sellers and customers and the governance level between sellers and eBay. Our findings highlight three main mechanisms underlying power asymmetries in this context. First, online customer evaluations have created a new form of employee monitoring in which power is exercised through the construction of visibility gaps between buyers and sellers and through an implicit coalition between buyers and the platform owner, who join together in the evaluation procedures. Second, by mediating and objectifying relations, algorithms reproduce power asymmetries among the different categories of actors, thereby constraining human agency. Third, online customer evaluations prompt sellers to exploit their practical knowledge of the algorithm to increase their agency. Through the lived experience of working for an algorithm, our findings contribute new understandings of power and agency in online work settings.

Contemporary work settings increasingly rely on customer reviews—peer-generated evaluations of products' and sellers' quality on third-party platforms (Mudambi and Schuff, 2010). Typically associated with online platforms such as eBay, Amazon, Uber, Airbnb, and Yelp, these work settings portray new configurations of power that can be characterized by a number of features. First, in place of traditional dyadic exchanges, customer reviews enact triadic relationships among the platform operator, buyers, and sellers that generate multiple accountabilities. Second, these relationships are mediated by algorithmic evaluation apparatuses that assess performance according to both set metrics (Orlikowski and Scott, 2014) and written feedback (Pavlou and Dimoka, 2006). Third, anonymous customers form part of an invisible "crowd" that impinges on each individual seller's profile and reputation through public online evaluations (Orlikowski and Scott, 2015).

The link between online customer reviews and power is vividly captured in a comment made to us by a seller of videogames working on eBay:

> We eventually realized that there was still a sort of Sword of Damocles hanging over the big sellers. We're in a sort of system where we're not very free. They [eBay] impose things on us—conditions, customer satisfaction and all that—which become totally excessive. Today, it's impossible to be 100% positive, because there's always a client who'll say "terrible service, don't buy here." So, it's difficult to work our way forward, because our hands are tied.

Online reviews produce a power asymmetry because the parties involved have a differential ability to take action. In the quote, the asymmetry stems from sellers being simultaneously accountable to the platform owner, who has the power to impose conditions, and to buyers, who have the power to post negative reviews and comments online. The metaphor of the "Sword of Damocles" expresses the imminent risk of sanctions resulting from the impossibility of fulfilling the ideal norm of 100 percent positive reviews. As a consequence, sellers see themselves as part of an obscure mechanism of algorithm-generated metrics ("a sort of system") that diminishes their agency.

3

Evaluation practices have been linked to the exercise of power in conventional work environments, where power asymmetries are enacted by means of hierarchical observation between a manager and an employee (Foucault, 1977; Townley, 1993; Patriotta and Brown, 2011). Employees in these environments exercise agency through compliance, collective action, or individual resistance (Crozier and Friedberg, 1980; Vallas, 2006; Elmer, 2012). Current theories, however, do not adequately explain power asymmetries or individual agency in online work settings because in these settings, the traditional distinction between managers and employees is blurred, and managerial observation is replaced by algorithmic forms of monitoring. Accordingly, the assumptions made in relation to hierarchical power and subordinates' exercise of agency do not hold in increasingly virtual environments. The purpose of this article is to reframe the conversation around power asymmetry in organizational studies by taking into account this new world of work. We ask what the experience of being evaluated reveals about asymmetries of power in online work settings and how individuals who are subjected to online evaluations deal with algorithm-mediated forms of power.

To investigate these questions, we studied a group of business sellers on the eBay platform. This is a representative setting in which sellers are evaluated by their buyers within a higher-level algorithmic system of sanctions and rewards designed and enforced by the platform owner. We selected a sample of large-volume, high-performing sellers—all of whom had positive ratings above 95 percent—expecting them to report positive experiences of online selling. Instead, we found that online evaluations generated uncertainty and a sense of vulnerability, in response to which they developed practices for reclaiming agency. Our findings suggest new theoretical understandings of the power asymmetries underlying algorithmic evaluation apparatuses and how they influence individual agency.

Power Asymmetries and Evaluations in the Workplace

Power has traditionally been conceived as an asymmetrical relationship (Dahl, 1957) that

rests on the "net ability of a person to withhold rewards from and apply sanctions to others"

(Blau, 1964: 117) and implies that one side has the capacity to overtly or covertly control the

desires of others (Lukes, 1974). Workplace designs influence power asymmetries between

individuals by providing norms, roles, spatial layouts, procedures, and disciplinary

mechanisms that define how power is distributed and affect individuals' capacity to exert

their agency (Pfeffer, 1981; Clegg, 1989; Sewell, 1992). Workplace settings thus constitute

relatively stable configurations of asymmetrical relations that are produced and reproduced

through ongoing interactions (Danzger, 1964; Barley, 1990; Brass and Burkhardt, 1993).

Power asymmetries are maintained over time by means of evaluation mechanisms that

regulate individuals' behaviors and ensure their compliance with predefined standards. In

conventional work settings, evaluations presuppose hierarchical relations: they occur in

contexts of ongoing monitoring punctuated by moments of formal appraisal in which

managers and employees are generally physically present (Murphy and Cleveland, 1995;

Levy and Williams, 2004). Evaluations impose discipline by setting expectations about

individuals' conduct and establishing procedures for assessing conformity. Through

performance appraisals, managers bestow rewards and punishments based on conformity to

set norms that define the attainment (or non-attainment) of organizational objectives

(Townley, 1993; Vallas, 2006). Control over the evaluation system therefore constitutes a

major source of power.

The archetype of monitoring and evaluation of workforces can be found in Bentham's

panopticon, which Foucault used as a model for his conceptualization of hierarchical

observation and normalizing judgment. Foucault (2002: 70) defined panoptic power as "a

type of power that is applied to individuals in the form of continuous individual supervision,

in the form of control, punishment, and compensation, and in the form of correction, that is, the molding and transformation of individuals in terms of certain norms." From this perspective, hierarchical relationships between supervisees and supervisors are enacted through building design, which gives supervisors the power of invisibility—seeing without being seen—and transforms those being supervised into isolated and perfectly visible subjects. The architecture of the panopticon, which was initially conceived for prisons, leads to automatic subservience "as instilled in prisoners who architecturally speaking must assume . . . that they may be under inspection at any time, night or day" (Elmer, 2012: 23). Because they never know when they are being watched, they behave according to the norm. Hence the panopticon model highlights how individuals who are subjected to ongoing scrutiny in their daily routines may internalize behavioral norms and evaluation criteria (Sewell and Barker, 2006).

When norms and physical arrangements are clearly defined, those subordinated to them know what to expect when they deviate. The impersonality of the norm, which is a feature of bureaucracies (Weber, 1978), facilitates the unambiguous assessment of what is right or wrong (Wiltermuth and Flynn, 2013), thereby rendering the distribution of rewards and sanctions understandable and acceptable (Molm, 1990, 1997). Furthermore, sanctions tend to be more effective when they relate to an exhaustive set of norms and expectations, when the link between deviation from these norms and the sanction is transparent, and when there is an automatic application of sanctions if deviation occurs (Foucault, 1977; Wiltermuth and Flynn, 2013). Transparency should lead to discipline, which includes subordinates' acceptance of a higher-order authority without the use of coercive methods (Pfeffer, 1981).

Paradoxically, subordinates' knowledge of rules and sanctions enables deviation from the norm, thus creating scope for individual agency. Subordinates express agency under conditions of power asymmetry by leveraging specific skills to bend the established norms to

their advantage (Mechanic, 1962; Vallas, 2006), by exploiting zones of uncertainty to control actors with greater power (Crozier and Friedberg, 1980), or by expressing opposition through cynicism and storytelling (Prasad and Prasad, 2000; Fleming and Spicer, 2003). Subordinates can also express agency through collective resistance in the form of strike actions or the informal expression of dissent, which is more likely to take place where there is a union presence (Rubin, 1986; Roscigno and Hodson, 2004; Korczynski, 2014). Thus stable norms imply agency because knowledgeable actors are able to exert some degree of control over the network of asymmetrical relationships in which they are embroiled (Sewell, 1992).

Online work environments constitute new arenas in which customers' evaluations replace traditional forms of performance appraisal (Beuscart, Mellet, and Trespeuch, 2016). In these contexts, power asymmetries cannot be adequately described using the framework of hierarchical observation and physical monitoring of subjects. With online customer evaluations, there are no designated employers or employees, actors are not physically collocated, and ongoing assessments are not punctuated by moments of formal appraisals as in traditional settings. Rather, online evaluations open up the interaction space, increase the physical distance between social actors interacting in this space, and often involve dealing with algorithms and pseudonyms rather than physical persons.

Online customer evaluations have important implications for the production and reproduction of power asymmetries. Compared with traditional forms of evaluation, which are characterized by dyadic relationships between a supervisor and a subordinate, online customer evaluations generate two levels of accountability that are connected through algorithmic intermediation. At a transactional level, sellers are made accountable to a diversity of buyers, who evaluate according to their personal experience. At a governance level, sellers are made accountable to the platform owner, who designs and implements the system of rewards and sanctions. For example, the online platform TripAdvisor imposes

7

multiple accountabilities on hotel owners. At a transactional level, "the subjectivity embedded in traveler reviews . . . suggests that multiple evaluation principles are in play" (Scott and Orlikowski, 2012: 36). At a governance level, TripAdvisor applies a ranking algorithm, or "Popularity Index," which serves as a basis for distributing rewards to hoteliers (Scott and Orlikowski, 2012; Orlikowski and Scott, 2014). Individuals who are subjected to this multilevel and potentially contradictory feedback may experience ambiguity with regard to behavioral norms and performance indicators. In online settings, this ambiguity is potentially reinforced by the anonymity of those who post evaluations and by the high frequency of reviews, which are generally posted "on an almost real-time basis" (Orlikowski and Scott, 2014: 885). The social system underpinning online reviews lacks the stability of employer–employee relationships, with important implications for power.

Online customer evaluations also depend on agency being delegated to algorithmic apparatuses that act on behalf of the platform owner. The crowd of customers generates experience-based evaluations that are compiled by the algorithm and used by the platform owner to regulate transactions. Studies on sociomateriality have shown how algorithms are increasingly shaping social relationships at work (Orlikowski and Scott, 2008, 2015). From this perspective, algorithms are "non-human actants" (Latour, 1990) endowed with the ability to evaluate, rank, and reward or punish individuals based on pre-programmed instructions. They not only have the materiality of a calculative object, but they also make participants act and react (Lenglet, 2011; MacKenzie, 2019). As calculative objects, algorithms operate in subtle ways: they are "virtuals" that generate a whole variety of "actuals"; they are compressed and hidden, and we do not encounter them in the way that we encounter traditional rules (Lash, 2007; Beer, 2009, 2017). The increasing reliance on algorithms as instruments for the regulation of social relationships, coupled with the invisibility of

8

algorithmic evaluation apparatuses, is evidence of subtle new ways of exercising power in the workplace.

The emergence of online customer evaluations as a pervasive aspect of work has produced a new context for power in which asymmetries are distributed and elusive, and this configuration of asymmetries has implications for the exercise of individual agency. In online settings, individuals' capacity to circumvent power asymmetries might be affected by the anonymity of customer reviews, the concealment of the platform owner behind the algorithm, and the algorithm itself, which reduces spaces of uncertainty through the ongoing monitoring of interactions on the platform. Current theories of power, because they rely on assumptions of dyadic relationships and hierarchical monitoring, do not hold in this new context. Hence there is a need to develop a fresh understanding of power that accounts for the significant transformations taking place in contemporary work settings. In this paper we investigate the connection between algorithmic-mediated forms of power and individual agency by looking at how sellers on eBay deal with power asymmetries in the context of online evaluations.

Research Context and Methodology

Online Customer Evaluations on eBay

Our empirical setting is the eBay marketplace in France and Belgium, where two of the authors used to live. On eBay, private and business sellers can advertise and sell goods in exchange for a set fee (the "insertion fee") and, if the sale takes place, a percentage of the sale price.[1] Buyers do not pay a fee. The reliability and quality of sellers are monitored through online evaluations whereby customers who have concluded a transaction are invited to

---

[1] The structure and calculation of fees have changed over time. For example, in France, insertion fees for business sellers have been successively withdrawn and reestablished.

provide a rating between one (the lowest) and five (the highest) based on four predefined criteria: "how accurate was the item description?"; "how satisfied were you with the seller's communication?"; "how quickly did the seller dispatch the item?"; and "how reasonable were the postage and packaging charges?" Customers are also invited to leave an overall rating and comments.

These ratings, which are compiled through an algorithm, have a direct impact on sellers for two reasons. First, they are public. A seller with very high ratings will attract more buyers than a seller with low ratings. A feedback score is calculated for every seller based on the number of positive, negative, and neutral ratings the seller has received over time. A positive rating adds one point to the feedback score, and a negative rating subtracts one point. This score is made visible to everyone on the seller's profile. Next to the score, a positive feedback rating indicates the percentage of positive ratings left by buyers in the previous 12 months. Along with the feedback score and rating, the feedback profile page shows recent feedback ratings and comments, any bid retractions, and detailed ratings of sellers.

Second, eBay uses these ratings to manage sellers. Regular sellers with high volumes of sales are granted "PowerSeller" status if they sustain positive ratings above 98 percent over the prior 12 months. This status is associated with privileges such as accounting tools, a dedicated helpline, and a special "PowerSeller" badge next to their listings. eBay also uses ratings to rank sellers in search results. The order of sellers is determined by the algorithm, and detailed ratings are compiled in it. Additionally, eBay calculates a seller level every month (above or below standard) based on a series of requirements, such as a maximum percentage of transactions with defects or a maximum percentage of transactions dispatched late. Sellers whose detailed ratings are persistently below standard are suspended from selling for a certain period of time.

Research Procedure and Data Sources

The initial motivation for this research was an interest in how online sellers, whose relationships with buyers are mediated by an electronic market platform, experienced their work and adapted their practices to the platform's characteristics. While online customer evaluations were not an initial focus for the data collection, sellers' reference to them was so pervasive in our interviews that we came to regard them as an essential element of individuals' experience of work in this setting. We followed a grounded theory methodology (Strauss and Corbin, 1998; Gioia, Corley, and Hamilton, 2013). Our informants conveyed their interpretation of the evaluation system and made many comments about control and autonomy. Based on sellers' accounts related to being evaluated, we identified patterns in the data and inductively developed theoretical insights about the power and agency dynamics underlying online customer evaluations.

Sampling. We selected our interviewees from among the eBay business sellers with the largest number of transactions, signaling high sales activity. This purposeful sampling was appropriate for two reasons. First, it avoided inexperienced sellers, whose judgment could be biased negatively because of not understanding the platform's features or biased positively because of the excitement of starting a business and making a new living from the platform. Second, and relatedly, we expected that informants' extensive experience of the platform would enable them to be reflective and to offer more-nuanced views of online work. Our sample consisted of sellers who had received more than 1,000 evaluations at the time they were interviewed. Information on sellers was readily available on the eBay platform, including their numbers of sales, categories of products, and average evaluation scores. The sample was relatively homogeneous in terms of evaluation scores: all had at least 95 percent positive evaluations, and the vast majority (94 percent of our sample) were above 98 percent. High scores and high sales activity are generally related: the sellers who sell the most are also

those with good evaluation scores. Our sample thus comprised highly active, experienced business sellers with excellent ratings.

We selected business sellers to represent all product categories as listed on eBay websites (see table 1) to avoid ending up with too many sellers dealing in the same type of products and potentially developing similar arguments. We contacted these sellers by phone or e-mail using the details provided on their eBay webpage or in their terms of sale. The method was approved by eBay's headquarters in France and Belgium, whom we contacted before we collected the data.

The sampling design remained the same throughout the process, even when we started to home in on the importance of evaluations. We were confident that our focus on experienced sellers was theoretically appropriate because these were the sellers with the most extensive involvement in the evaluation process, and thus they were most likely to have developed their own coping practices. This was central to our theoretical concerns. As every seller on eBay was in a similar situation, we were able to build a theory of power asymmetry by retaining our original sampling method. This is consistent with the argument that "theoretical sampling . . . is a variation within purposeful sampling" (Coyne, 1997: 629).

[Insert table 1 about here]

Interviews. We carried out 77 interviews with business sellers: 51 interviews were conducted face to face and the remaining 26 by telephone at the interviewees' convenience. All the interviews were conducted in French by the first and fourth authors. Interviews lasted between 20 and 110 minutes (the average duration was 56 minutes), which amounted to 72 hours of interviews in total. We stopped gathering data when no new information emerged from the interviews. This phenomenon of theoretical saturation, which occurs when "no additional data are being found whereby the [researcher] can develop properties of the

12

category" (Glaser and Strauss, 2008: 61), was visible in the decreasing number of new first-order categories emerging from each additional interview.

We followed a semi-structured interview protocol (see the Online Appendix at http://journals.sagepub.com/doi/suppl/10.1177/xxxxxxxxxxxxxxxx) that focused on our informants' experience as business sellers on eBay. We asked questions about their normal working days, the specificities of the eBay marketplace for transactions, their perceptions of eBay as the marketplace owner, and their views on buyers' behavior. We also asked them to elaborate on the good and bad aspects of doing business on eBay, how they adapted their activity to eBay's requirements, and their projects for the future. The interview guide was adapted at an early stage with changes made to the wording and a few new questions added on the future and their interactions with other sellers.

After 15 or so interviews we realized that references to online evaluations were recurrent, but we chose not to reorient the interview guide with a new set of specific questions on evaluations for two reasons. First, we were concerned that this might lead to forced, biased, or unnatural answers from our informants. Second, we were confident that the existing guide was already leading to rich data on experiences of online evaluation, with nearly all of the respondents introducing the topic spontaneously. Instead, we adapted to our informants' flow of arguments by prompting, probing, and clarifying the issue of evaluations and respondents' ways of coping with them. This approach allowed us to obtain rich accounts of sellers' work on eBay and, based on this evidence, to develop new theoretical understandings. All our interviews were recorded and transcribed in full.

Data Analysis

Data analysis followed three steps. We started with first-order open coding (Strauss and Corbin, 1998; Glaser and Strauss, 2008) of all interviews with the business sellers. Our main purpose was to immerse ourselves in the interviews by coding each of them extensively. At

first, we did not have a clear idea of what data would prove to be most salient. The first-order coding was shared between the two authors who conducted the interviews. We ensured reliability and consistency of the coding through the use of several techniques. First, the two authors worked on calibrating the units of meaning (fragments of sentences, sentences, or paragraphs) by coding the four initial interviews together. Second, two interviews were double coded at three points in the coding process to ensure reliability between the raters. We used the NVivo matching tool to assess the percentage of codes that were in agreement. The score was always at least .97, which indicates that the ratings were reliable. Last, consistency was ensured via bimonthly checks for new codes. Each rater carefully reviewed the new codes or code changes proposed by the other for as long as the coding process continued. In the case of disagreements or misunderstandings, adjustments were discussed.

During the second stage, we cycled between further data analysis and consultation with the relevant literature. At this stage, we had established informants' recurring reference to customer reviews. Sellers conveyed their frustration with the practice of being continuously evaluated and made systematic references to asymmetries in their relationships with buyers and eBay. We therefore turned to the literature on power as a guide for theme development. The first three authors worked on collating the first-order categories into second-order themes and, at a later stage, aggregate dimensions (Strauss and Corbin, 1998; Charmaz, 2014). Our objective was to organize the data around broader conceptual topics to identify regularities and develop links between the richness of the case and the theoretical objectives. Moving from raw data to a higher level of abstraction was not a linear process and required several iterations. Intermediate-level coding provided the second-order themes, which "reassemble[d] the data [we had] fractured during initial coding, to give coherence to the emerging analysis" (Charmaz, 2014: 147).

The final stage was assembling the second-order themes into aggregate dimensions, which enabled us to inductively develop a conceptual framework that linked the concepts emerging from the data (Gioia, Corley, and Hamilton, 2013). It took several attempts before we found the final structure that is presented here. To theorize further from the aggregate dimensions, we identified relations among dimensions and considered the final coding structure in light of existing theories of power, sociomateriality, and agency. This process enabled us to develop "theory for the substantive area" of our research (Glaser and Strauss, 2008: 114), platform monitoring and online evaluation. To illustrate, statements that revealed sellers' experience of online feedback from their clients were gathered in eight first-order categories, such as "Buyers blackmail through evaluations" and "We receive negative evaluations without being given the opportunity to solve the problem." These first-order categories were grouped into three second-order themes, which were then ordered in one aggregate dimension relating to sellers' experience of power asymmetry vis-à-vis buyers ("Power asymmetries at the transactional level"). This dimension was compared with other dimensions (e.g., "Power asymmetries at the governance level") and exposed to conventional theories of power to identify two mechanisms constitutive of "platform monitoring," which we present in the discussion section.

[Figure 1 about here]

Figure 1 shows the data structure. The emergent conceptual model comprises three core elements. First, sellers conveyed their feeling of being subjected to the power of anonymous and invisible customers; second, they expressed their frustration at being subjected to the power of a distant and indifferent platform owner; and third, they attempted to reclaim agency through collective practices targeting eBay and individual practices aimed at reestablishing symmetry in their relationship with buyers. Below, we elaborate on each of these elements to develop our theoretical narrative.

15

Online Evaluations and Power Asymmetries

Negative evaluations were rare among business sellers: in our sample, only 5 percent of transactions received negative feedback, while 72 out of 77 of our respondents received over 98 percent positive feedback. It surprised us that sellers with this kind of profile, most of whom worked from home and had discretion over the way they organized their days, expressed so much frustration about eBay's online evaluation system. In the next sections, we detail sellers' experience of evaluations on eBay, referring to their accountability to the buyers (at the "transactional level") and to the platform owner (at the "governance level").

Power Asymmetries at the Transactional Level

On eBay, buyers had a unilateral capacity to evaluate sellers. The lack of reciprocity in evaluations generated power asymmetry at a transactional level, which featured pervasively in our interviews with sellers. The asymmetry was manifest as a gap of visibility: buyers remained largely invisible to sellers, while sellers felt entirely visible to buyers. Sellers complained that they were "unable to have an accurate view of buyers," that they were deprived of a "proper thermometer for buyers," and that "nobody knows if a buyer is a bad buyer." A seller explained the implications of being exposed in this way: "The main problem I have is with the level of visibility of these evaluations. Your reputation can be ruined overnight by somebody you don't even know." Here's how a bookseller illustrated the power of hidden buyers:

> The main problem we have is that people hide behind their computer screens and find a lot of excitement in throwing up roadblocks. These people seem to take some malicious delight in shooting you down. They don't realize how difficult it is for us to run a business. (C3)[2]

---

[2] The quote identifiers in parentheses indicate the seller's category as shown in table 1 and a unique number assigned to that interviewee within the category.

Sellers described their relationships with buyers as "impersonal," "cold," and "made of boring exchanges." They explained that they could not know "who was behind an account" and that customers were "just pseudonyms." They could only envisage them performing a series of mandatory actions, as illustrated by a furniture seller:

> I don't know my eBay clients. Not at all. I picture them, but the picture may be biased. They're anonymous. Sometimes, there's no communication at all: they buy, pay for their purchases via the payment system, and receive automatic updates about their order. I ship to the address provided, and that's it, there is no follow-up. For human interactions, I have my shop. (M3)

Some sellers complained that eBay made it impossible to communicate with buyers directly. The system hid buyers' e-mail addresses, and even potential buyers' pseudonyms, during the auction process. These tools buffered buyer–seller relationships and reinforced the visibility gap between the parties, as a seller of collectible medals explained:

> There's a big disadvantage with eBay, and I think it's done on purpose; it's that we don't know, we don't have the details of our clients. We can't contact them directly. We don't have their e-mail address, automatically. That's annoying, because you need to contact them via eBay, always. We have to ask them their e-mail address via eBay if we need to. It's done to control the transactions, to prevent us from dealing directly with buyers, I think. (H4)

Within an environment characterized by invisibility and anonymity, sellers reported different hostile practices that buyers deployed. For example, they complained that most negative evaluations they received were unfair and based on criteria that fell outside their remit, such as speed, cost of shipping, or undelivered items. Buyers made no attempt to understand the origin of problems and tended to systematically lay the blame on sellers. One seller complained that his "reputation and sales [could] drop just because the postman forgot to leave a calling card in the buyer's mailbox." A seller of comic books testified to the "lack of understanding" on the part of buyers:

> If a buyer is unhappy because the item hasn't arrived yet, it's not my fault. The buyer could have chosen a faster shipping option. But when things like this happen, you wouldn't believe how buyers shoot you down. There's a total lack of understanding on their side. (D1)

Another hostile practice was the use of online evaluation as a form of blackmail. Negative reviews were at times used as weapons for obtaining favors. Some sellers talked about buyers who negotiated the price of an item after winning an auction and who threatened retaliation with a negative evaluation if they did not comply. They also recalled situations when they did not react after a buyer failed to pay for a purchase because they feared a negative evaluation. One seller evoked a "system of pressure from the buyer towards the seller," which a seller of jewelry explained this way:

> There are people who blackmail me, who negotiate everything. And I receive negative feedback because I refuse, but what can I do? I can't just accept any request. No later than this morning, I received a message. I sold an item by auction, 19.90 euros, and the woman wants it for 9.90 euros. Or somebody who is not happy with his purchase, so I asked him to return the item to get a refund, but he doesn't want to pay the postage. They all threatened to post negative evaluations. (O4)

Buyers' hostile practices could also take the form of aggressive reactions. Buyers would sometimes "complain when their item hasn't arrived the day after they've ordered it," be "upset if reminded to send the payment on time," and "send insulting e-mails" for trifling matters. Sellers described buyers as "totally free to do what they want" and eBay as "a system of aggression." A seller of collectible toys described the "strong-arm" nature of relationships with eBay buyers:

> The word that comes to my mind when I think of the eBay marketplace is "aggressive." People use strong-arm methods to make themselves heard. Most of the time, it's because they're not used to online shopping and are afraid to be ripped off. Some people don't hesitate to send us messages with things like "you're a crook, you're a thief." Some people have a strong tendency to insult. (U2)

Sellers' perceptions that buyers were hostile made them feel vulnerable. Because buyers often opted for anonymous retaliation rather than constructive discussion, sellers felt deprived of the opportunity to solve problems. Based on their previous sales experience, they believed that meaningful communication could alleviate most issues. Instead, buyers' lack of communication led to negative feelings: sellers recounted the "traumatizing" experience, the

18

"sickening feeling" associated with the experience of being deprived of the benefit of the doubt and denied the opportunity to demonstrate their professionalism, as mentioned by this seller of garden furniture:

> eBay buyers prefer by far posting negative reviews rather than contacting you to inform you why they're not happy. But as a business, I am totally inclined to repair any wrongdoing or to answer any question from a dissatisfied buyer. My main objective is always to satisfy my clients. (N2)

More generally, sellers expressed feelings of being "at the buyers' mercy." They described themselves as being "in a weak position towards buyers," "in a power relationship that is unequal," "with no means of appeal," "vulnerable to whatever the buyer might decide," or "powerless towards abusive buyers." A hardware seller summed up this relationship:

> We, the sellers, can't give buyers negative evaluations. So there's a risk. The buyer has both hands free in the system. And the seller is constrained by it. The buyer is the king, and the seller is under their thumb, somehow. (N3)

Taken together, these accounts suggest that online transactions between buyers and sellers were informed by pervasive power asymmetries. Online evaluations enabled buyers to keep their track record hidden, their identity private, and their direct e-mail confidential. In contrast, the track records and details of sellers were visible to all. This visibility gap was essential for the online market to function, facilitating comparison and competition among sellers. At the same time, it differentially shaped the agentic practices of buyers and sellers on the platform: buyers were able to avoid communication and develop hostile practices, while sellers had limited space for agency, which reinforced their sense of vulnerability and disempowerment.

Power Asymmetries at the Governance Level

At the governance level, power asymmetries stemmed from eBay's capacity to impose sanctions and rewards through highly bureaucratic, automated practices. While sellers

acknowledged that eBay offered a supportive environment for trade, they also complained about the indifference and distance of eBay's staff. Sellers felt disconnected from, and abandoned by, a platform owner who did "not care about what [they thought]," "never asked [them] when changes were implemented," and "refused the possibility of a bottom-up dialogue." They portrayed eBay as "annoyingly, overly self-confident." A seller of car tuning parts explained that eBay failed to recognize sellers' expertise:

> They could take advantage of our experience. They hold all the cards. We business sellers keep giving feedback and ideas about how to improve things on eBay. But do they follow-up? No, nothing! (F1)

Two additional elements increased this feeling of indifference. First, although sellers saw themselves as clients, they felt that eBay relegated them to a subordinate position. They complained that eBay had "reached such a level of power that it [could] just dismiss their clients." A seller bemoaned the "very peculiar relationship" between himself as a customer and eBay as a service provider that is ready and willing to "use the stick" and sanction sellers. Another reflected on this role ambiguity: "For eBay, we're users who pay, but we're not considered as clients. I see myself as a user, full stop. Not a client." In trying to work out his status on the platform, a bookseller realized that role ambiguity formed the basis of a power relationship vis-à-vis eBay, which he described as one of master and servant:

> eBay's relationships with business sellers seem very bizarre to me. I'm not sure if I'm a client, because I'm not treated like a client. Sometimes I wonder if I'm not treated like an employee. When eBay sets objectives you're supposed to meet, it's odd. You're requested to meet targets, as if you were in a firm. But if I'm a boss and ask my employees to meet targets, I'll pay them. But here, we're not paid, we pay. So it's not even like being employed. So it's mere slavery, in fact. (C5)

Second, sellers saw indifference in the fact that when there were problems, eBay systematically sided with buyers: "eBay would not take sellers into consideration, and instead always took the buyers' side" and "played the trust card for the buyers to the extent that they completely disadvantaged and neglected the sellers." In these circumstances, sellers felt they

20

were the victims of "truly uneven treatment of buyers and sellers," illustrated by this seller of sporting goods:

> Until recently I considered that eBay was a partner. But recently I've realized it's not on my side. eBay is on the buyers' side. And it penalizes me. (T1)

eBay was also seen as distant. Sellers explained that each time they encountered a problem with a buyer, staff "withdrew behind" the claim of eBay's neutrality. One jokingly referred to eBay's tendency to hide by saying, "Each time there is a hitch, the eBay people disappear!" eBay's lack of involvement contradicted what sellers expected from a platform owner—an actor taking responsibility for transactions and helping resolve disputes between buyers and sellers. This generated a feeling of distrust toward the platform. One informant expressed his "disappointment" at "eBay retreating behind their platform status, as a neutral intermediary." Another spoke of his exasperation at being told "we're only a platform" and his feeling of "being taken for a complete idiot." A seller of camera equipment explained how "illogical" rules of the game eroded his trust in the company:

> When I started on eBay I had a very high sense of ethics. But I quickly realized that eBay didn't have any. I had two bad experiences, and each time eBay's line was "we're just an intermediary, we're a mere platform." When your partner takes refuge behind all sorts of considerations and dubious subterfuges to avoid responsibility, you don't have to abide by the rules of the game the same way. So from then on, I too played my own illogical game. (E1)

More broadly, sellers referred to eBay as "remote from the field" and "unaware of sellers' real situation." One expressed the view that "operating rules should be decided from the field, and things should be bottom-up, not top-down like now" to avoid "the imposition of totally inappropriate rules." This lack of awareness was vividly captured in the "ivory tower" image used by a seller of industrial equipment:

> I have the feeling that they're in their ivory tower. They decide on things without letting us know their arguments, and without giving us explanations or informing us ahead of these changes. It falls on us and it's like this. It's incredibly annoying, so much so that it blocks the development of our business on eBay. (D3)

21

In this setting, where indifference and distance were the norm, eBay relied on automated practices to govern the marketplace. One informant complained that the algorithm compiled the evaluations automatically and "calculated an average level of satisfaction, which [was] publicly posted on the website." Another denounced the "rotten system" put in place by eBay by which "an algorithm gets businesses closed down" based on "mathematic calculations." A third explained, "When your satisfaction level falls below 95 percent, your account is blocked, without any prior human analysis, because the restrictions are calculated by software programs." A bookseller expressed his frustration at the automaticity of sanctions:

> If the evaluations didn't count in your public profile, this wouldn't be a problem. But you can be kicked off if you have one negative evaluation too many. It's done through calculations that are not properly weighted. It's a badly designed system that leads to conflicts and frustration. There's no human mediation. It's a robot. (C5)

Automaticity did not relate only to sanctions but was also linked to interactions on the platform. Sellers characterized the communication with eBay's staff as robotic. They felt "annoyed" at receiving "answers that [were] always irrelevant." A seller explained that "answers [were] pre-formatted, automatic e-mails" and that "a proper dialogue [was] not possible." A seller of motorcycles linked the "robot-like" communications to perfunctory reliance on rules and procedures:

> I'm not satisfied with replies to my queries, because they are sent by robots. They are automatic e-mails, and they're generally off the mark. As a reply, I sometimes receive an excerpt from the users' manual of rules and procedures, which doesn't answer my questions. (F1)

Sellers saw eBay's pervasive automation as highly bureaucratic. Because of impersonal procedures that they did not always know or understand, they described themselves as "numbers who have to do what [they] have to do, come what may." A seller described eBay as "very virtual, a sort of tool beyond me," an "intangible, enormous machine [standing] ahead of sellers." Another, who had his account suspended, complained about the

22

opacity of his work environment, where decisions were imposed without justification: "I called them, and I had someone who told me there was nothing they could do. . . . I've had my account suspended for a month now, and nobody can give me a rational explanation. . . . I have the feeling they want to eliminate me, but I don't know why." An antique dealer explicitly referred to eBay as a "Kafkaesque bureaucracy":

> That's very impersonal, and I regret it. But that's how it is. It's an enormous machine, where everything is impersonal, and we're just a number, a pseudonym. And it's very like "fill in this form, do this, do that." Frightening sometimes! It's a sort of Kafkaesque bureaucracy, terrifying stuff. This is how it is. This is the problem on eBay, the lack of humanization, of warm contact, of people who would come and tell you "Mister C., there's a slight problem with your account." Something like this. But in fact, it's not even people who decide, it's machines. (A3)

eBay's reliance on automated practices made sellers feel vulnerable. Sellers referred to eBay's imposition of rules as "brutal," "violent," a "diktat," and even an example of "disgusting fascism." They denounced eBay's pressure to "toe the line" and willingness to "kick [them] out" if they failed to comply. A seller explained, "It's never eBay that adapts; it's the seller who adapts to eBay, and this is a problem, I think, because despite everything they say, we're just pawns," A furniture seller reflected on eBay's "own universe of rules":

> With eBay you can't negotiate, because they set the rules, and you're supposed to know them all, to know what you can and can't do. It's amazing how eBay has created its own universe of rules, a sort of specific legal system. It's impressive. And their rules overwrite existing legislation. (M4)

eBay was able to restrict or block accounts unilaterally whenever it was dissatisfied with a seller's performance. Sellers deplored eBay's "authoritarian" or "tough" stance and its detrimental impact. They said that they were systematically "rapped on the knuckles" and "put down" by the platform owner. They complained that eBay would "never give any explanation" when it blocked an account, that there was "no excuse," "no justification," "no ifs and no buts." A clothing seller likened work on eBay to labor camps in Siberia:

> Here's how the evaluation system works: you have four criteria—communication, item description, delivery, and shipping costs. If you have fewer than four out of five

23

in one criterion and you fail to improve within a month, your account is closed. I call this "Siberia." It's like, you know, "You do as you're told or we'll beat you hard." That's nonsense. (G4)

Sellers used other powerful metaphors during the interviews. The image of the "Sword of Damocles," which we mentioned at the beginning of the paper, was evoked by four additional sellers to convey a sense of uncertainty and precariousness in the face of possible sanctions. Another recurrent metaphor was that sellers were "prisoners of eBay." Prisons create closed environments in which specific rules apply, individual liberty is deprived, and monitoring is constant. When applied to eBay, the metaphor depicted sellers' feelings of being caught in a system that expected a great deal from them while keeping them captive, because there was no credible alternative for online selling. Most sellers had invested time to build a reputation on eBay based on consistently positive evaluations. Some indicated to us that if they were able to quit eBay for another platform, they would have to rebuild that reputation from scratch, which would be overly costly. An antique seller portrayed eBay as a voracious beast that was difficult to satisfy and always expected more:

> When you're in the eBay system, you can't do anything but stay. You can't leave the system. It's not comparable to drug addiction, but it's like feeding a beast. The more you feed the beast, the higher its expectations, so you need to feed it more. And there's no credible competitor. It's not like saying "Oh, I'd like to switch, I'd like to move to another platform." It doesn't exist. So after a little while, you become a prisoner of eBay. (A4)

As our findings show, eBay's governance relied on evaluations as a bureaucratic mechanism for the exercise of power. The platform owner's indifference and distance paralleled the buyers' anonymity and invisibility, creating a sense of isolation among sellers. Furthermore, eBay's reliance on automated practices resonated with buyers' tendency to adopt hostile practices and created a sense of helplessness among sellers. These parallels show that eBay and the buyers implicitly formed a coalition of interests that reinforced transactional power asymmetries while keeping sellers under strict monitoring. Under these

24

circumstances, sellers felt caught in a highly impersonal, abstract, and harsh work environment. Power was exercised through norms and procedures, which eBay's algorithm mechanically enforced regardless of individual circumstances. This ultimately undermined sellers' sense of agency on the platform.

Sellers' Working around the Algorithm

Not all of our sellers acquiesced to their precariousness. Of the 77 we interviewed, 41 mentioned their efforts to reclaim their sense of agency. Leaving eBay was an option noted by some, but all sellers acknowledged the superiority of eBay over other online platforms. Creating one's own platform was seen as "super costly" as "you need to pay to be referenced on search engines," and other platforms were described as "less known, not as interesting in terms of reputation," "generating less traffic," "slower to pay sellers," and "even more unpredictable in terms of revenue streams" than eBay. Therefore, sellers engaged in practices to address and mitigate the power asymmetries on eBay—practices we refer to as "working around the algorithm."

Sellers' Collective Practices vis-à-vis eBay

Some sellers reported efforts to initiate collective practices in response to eBay's behavior. They sought to tackle the problem of eBay's indifference and distance by using online discussion forums that had originally been set up by eBay to enable business sellers to ask questions, help each other, and keep eBay informed of technical issues on the website. Subverting these intended purposes, they used the discussion forums as a tool for collective protest against eBay's policy, commiserating and calling on eBay to provide explanations. They also took advantage of these forums to create links with fellow sellers and to "keep themselves informed of others' views." A seller of videogames portrayed the forums as vehicles for combating eBay's competitive framework and promoting a collective mindset:

> We're divided. Sometimes we're competitors, so it's hard to make ourselves heard. We're left in the dark. But with more and more sellers who are victims of eBay's sanctions, we eventually succeeded in building this collective. The problem is that eBay controls the forums, so it's like the Stasi. . . . The objective is to defend our rights, even our legal rights. Unfortunately, there are still too many sellers who don't know about the forums. (V3)

The reference to the Stasi suggests that forums were rigidly monitored and potential dissent was ruthlessly suppressed. Other sellers expressed similar suspicion when they explained that there was "censorship on forums" and that "if you criticize eBay, they kick you out." Even though it "never happened" to them, they believed that "posts disappeared and sellers received warnings."

Some sellers attempted to tackle the problem of automated practices by creating more or less formal associations of sellers who were dissatisfied with the automatic sanctions. In so doing, they sought to address power asymmetries through collective agency. The objectives of these associations consisted of "collectively protecting businesses from eBay's wrongdoings," "setting the record straight," and "reintegrating sellers who [had been] banned by the system." One seller described his hope that a collective of sellers would be more likely than individuals "to be heard, to fight, to impose [their] views so that eBay [could] no longer say 'we decided this . . . we want that . . .'." Some associations used the media to make their voices heard—the president of one of them was interviewed by a French business newspaper—and sometimes succeeded in gaining access to the highest management levels at eBay France. A seller of household linens who founded an association against eBay policy toward the sellers told us:

> We created this association to protect ourselves from eBay's sanctions. We want eBay to be intelligent and reconsider their decisions to ban business sellers. Once they've done this, we'd be happy to build more of a partnership with them. That's the objective of the association, to make them understand things. (M1)

But such collective actions were short-lived. The associations failed to mobilize, and none lasted for more than a few months. The forums failed to become the locus of collective

26

protest that some sellers had wanted. Most sellers, whose revenues heavily depended on eBay sales, expressed their lack of confidence in the forums and their fear of retaliation if a negative rhetoric was developed. Furthermore, because they often worked overtime to keep pace with customers' orders, they saw the associations as excessively time-consuming. Under these circumstances, sellers found more leverage in individual solutions that targeted buyers directly than in collective actions that targeted the platform owner.

Sellers' Individual Practices vis-à-vis Buyers

Our interviews revealed that sellers developed distinctive practices to prevent buyers from posting negative reviews. To tackle the problem of customer anonymity and invisibility, some sellers bypassed the standard modes of interaction and communicated directly with their buyers. In this way, they tried to create a more personal and positive contact than the automatic procedures allowed. They also attempted to recover their capacity to make decisions on a platform that had rendered them passive. One seller explained how his "philosophy of maximizing customer satisfaction" consisted of "always trying to regain control of the relationship with dissatisfied buyers through a compromise." Some sellers contacted buyers who had left a negative evaluation and tried to convince them to withdraw it. Instead of letting buyers decide their fate anonymously, they used eBay's messaging system or contacted them by telephone to "explain why the problem happened" and "find a common ground." They claimed that generally "buyers were understanding" when given the opportunity to talk, and most agreed to withdraw their negative evaluation. A bookseller explained the advantage of "playing the dialogue card":

> Most of the time, the door to dialogue remains open. It's the simplest way to avoid negative evaluations: find a compromise, an arrangement. There's always a way to find a solution. If you're in trouble with a buyer, you need to play the dialogue card and everything that goes with it. (C2)

Some sellers created direct relationships with buyers by contacting them before evaluations were posted. Instead of relying on the automatic e-mails sent by the system during the transaction, they proactively used eBay's messaging system to communicate with buyers, or they personalized the automatic e-mails to add specific information about the transaction. A seller of baby clothes described how she defused potential disputes:

> The way I deal with evaluations is, as soon as I receive a question, I answer within 30 minutes. I tell them that I offer a guarantee; that if they're not satisfied they have a refund. It's 100 percent satisfied, or 100 percent your money back. I also explain the item in detail; I give as much information as possible, in all honesty. I call the clients as soon as I feel there's a need to do so. Lots of communication, really. (B2)

More radically, some sellers chose to avoid faceless and impersonal interaction by meeting their customers face to face—this was possible when buyers and sellers lived near each other. These sellers were excited about their products and saw face-to-face interactions as a way to exchange ideas with like-minded others. Instead of dealing electronically with pseudonyms, they had stimulating discussions with "very nice," "interesting" individuals who sometimes "knew more than [they did] and taught [them] things." Bypassing the algorithmic procedures, sellers were able to create gratifying "human contact." For some, personal interaction was also a way of defusing potential conflict. A seller of motorcycle equipment explained that meetings involved lower risks than online interactions:

> I prefer when I meet buyers face to face, because it's less of a hassle. They see the item, they can touch it, they check the quality, everything. And if they want it, they take it. If they don't, they leave it. Whenever I do this, buyer satisfaction is 100 percent (Q1)

Although it was relatively uncommon due to the international scope of the platform, meeting face to face was a way of reestablishing symmetry in relationships with buyers. Released from the rigidity of procedural, virtual transactions, sellers felt more able to demonstrate their expertise and seriousness. At the same time, buyers were more likely to develop a positive connection with sellers when they ceased to be anonymous.

To tackle the problem of customers' hostile practices, sellers devised ad hoc practices to protect against "bad" buyers. One way of doing this was to neutralize "suspicious profiles" by blocking them before they could initiate a transaction. One seller explained that he developed an ability to "sense suspicious behavior" just by reading buyers' questions, while another explained that some items attracted "bad buyers, those who [were] a real nuisance" and that he selected the items he would put on sale accordingly. "Profile zero" buyers—those new on eBay—were considered to be particularly suspicious. Some sellers explained how they took additional precautions with them, such as sending messages to see how they replied or paying for registered mail with confirmation of receipt in order to "have proof that the item was received." A jeweler told us how he profiled eBay buyers:

> I easily identify the buyers who are not serious on eBay. I simply block them. If a profile looks suspicious to me, long before the sale is done, I block it. Unfortunately, I must do this more and more often. For example, when a buyer starts the transaction by asking a question about the shipping costs. If he's not entirely satisfied with the answer I provide, I block him. Because that's typical of the guy who'll be a real pain in the neck. (O2)

Another practice that sellers applied was to create their own rules and enforce them. Instead of adhering to a scheme that "gently forced sellers to bend over backwards for the buyers," they compelled buyers to abide by their rules. Doing so was a way to "padlock" buyers, as a seller of coin-related items explained:

> Sometimes, people assume they can have things, because in the ad it's not clearly said that they can't have them. This has progressively led me to create my own rules, in a sense. For example, I used to indicate shipping costs only, but somebody told me that it wasn't written anywhere that insurance wasn't included. So you need to adapt your ad. If you receive complaints, you have to adapt your rules to avoid losing money, to make sure that buyers cannot say they're unsatisfied. I think you have to padlock people as much as possible, to force them to be responsible for their own choice. It's a way to limit their room for maneuver. (H2)

By constraining buyers' behavior, sellers increased the space for their own agency. Some wrote extensive terms of trade, which they posted online or sent to buyers, and explained that "when [buyers] bought items from them on eBay, they accepted the terms of

trade." One seller explained how he used his terms of trade to impose relatively long delivery delays compared with the norm on eBay in order to avoid complaints from buyers "who had gotten used to receiving everything the day after they bought it." Another told us that he had set strict payment due dates and would send the items after the payment was received to avoid the risk of unpaid purchases.

A related practice was to systematically open disputes against abusive buyers, which some sellers did if payment was not made by the deadline. Because buyers involved in multiple non-payment disputes could be suspended, this was a way for sellers to sanction those who were prone to use hostile practices. A seller of coins explained his routine way of coping with problem buyers:

> It's very simple. If after 10 days I've not heard from the seller, I open a dispute directly. After 17 days, I terminate the transaction. The sale is cancelled, and eBay refunds my fees. When a buyer gets caught in several disputes, eBay eventually kicks him out (S2)

Although the platform was purposely designed to minimize sellers' agency, the moves described above were ways to redress asymmetries by exploiting small gaps in the system. In a setting that encouraged anonymity, sellers forced buyers to become visible. By contacting buyers directly, they positioned themselves between eBay and the buyers and regained the initiative. Similarly, sellers imposed stricter rules of engagement with buyers by customizing and making explicit their terms of trade. Algorithmic features, such as the formal dispute procedure or blocking tools, could be used to respond to the threat of negative evaluations. By working around the algorithm, sellers created a space within which their own rules applied and thereby made their relationships with buyers less asymmetrical. Instead of accommodating algorithmic procedures, they tried to influence buyers' behavior in a preferred direction.

30

Discussion

In this paper, we asked what sellers' experience of being evaluated reveals about power asymmetries in online work settings and how those subjected to online evaluations cope with algorithm-mediated forms of power. We addressed these questions in the context of a group of high-performing sellers having to deal with customer reviews on the eBay platform. Sellers revealed a high degree of sensitivity to negative reviews, which triggered feelings of anxiety and vulnerability. Our findings highlight three sets of mechanisms through which power operates in online work settings. First, online customer evaluations generate a new form of employee monitoring that is exercised through the construction of gaps of visibility between sellers and buyers and through an implicit coalition between buyers and the platform owner, who join together in the evaluation procedures. Second, algorithms constitute and reproduce power asymmetries by objectifying and mediating relations among the different categories of actors, thereby constraining human agency. Third, online customer evaluations prompt sellers to exploit their practical knowledge of the algorithm to increase their sense of agency. These findings have theoretical implications.

Online Customer Evaluations and Platform Monitoring

Our study provides a novel understanding of employee monitoring in online settings. In traditional settings, employee monitoring takes place in the context of supervisor–subordinate relationships, whereby a supervisor collects information about an employee's performance and behavior through direct observation, informal data gathering, and work sampling (Komaki, 1986; Niehoff and Moorman, 1993; Long, Bendersky, and Morrill, 2011). In contrast, in online settings monitoring results from ongoing interactions among a triad of actors: buyers post online reviews, which are interpreted by the platform's algorithm and provide visible feedback to both the seller and the wider market. These triadic interactions

31

reproduce power asymmetries through two complementary mechanisms: the disaggregation/aggregation of individual agency and the formation of a coalition of interests between a mass of invisible buyers and a distant platform owner.

The gap of visibility between buyers and sellers generates power asymmetries by promoting dynamics of disaggregation/aggregation. On eBay, sellers' perfect visibility facilitates ongoing comparison through ranking and classification. Singled out on the platform by their profile and average score, they are placed in a highly competitive environment in which they need to perform better than others to maintain their reputation and survive. Under these circumstances, sellers are isolated. In contrast, buyers, who can read each other's evaluations, operate in a virtual network of actors who share their opinions and recommendations online. Moreover, eBay's algorithm consolidates the myriad evaluations into an average score, which represents the wisdom of the crowd and aggregates buyers into a unified entity. The perception of being confronted with a collective rather than individuals reinforces sellers' sense of isolation. The mechanism of disaggregation/aggregation therefore enables power asymmetries by generating categories of actors with differential agency and by separating those who monitor from those who are subjected to monitoring.

The second mechanism characterizing platform monitoring is the creation of a coalition of interests between buyers and the platform owner. By posting online reviews, buyers feed the platform owner with information on sellers' performance. The algorithm collects, interprets, and uses reviews to automatically sanction sellers who fail to reach a pre-established threshold. The criteria by which online feedback is quantified and used for the purpose of monitoring are designed and controlled by the platform owner. Consequently, the algorithm not only aggregates buyers as a category but also connects this category with the platform owner. The power asymmetries at governance and transactional levels are mutually reinforcing, thus generating a multiplier effect on sellers' feelings of disempowerment. In the

32

sellers' eyes, buyers' anonymity is amplified by the platform owner's indifference and distance. In addition, buyers' hostile practices are made more oppressive by eBay's blunt procedural practices. In this way, online evaluations produce a "coalition of the invisibles" (buyers and platform owner) and an "isolation of the visibles" (sellers). As for the mechanism of disaggregation/aggregation, the actors' differential ability to form a coalition on the platform represents a further manifestation of power asymmetries.

Our findings extend our understanding of modern forms of employee monitoring. By integrating social actors at transactional and governance levels, online platforms blend two forms of monitoring: network and panoptic. Because it relies on mechanisms of (dis)aggregation, platform monitoring has commonalities with network monitoring. In networks, evaluations take place through subtle readings of signals that are difficult to verify, such as a regular customer who leaves for a competitor or the occasional aggressive clients who raise their voices (Ouchi, 1977, 1980). Word of mouth, or interactions and interpersonal communication among users and potential users of a product, can build and destroy reputations (Mahajan, Muller, and Kerin, 1984). Accordingly, online feedback has been described as "an ancient concept in a modern setting": a modern way to elicit good conduct through word-of-mouth networks (Dellarocas, 2003: 1409). In online settings, monitoring relies on the subjective and potentially contradictory judgments of a myriad of customers, whom the algorithm has turned into evaluators.

Simultaneously, coalitions of interests and reliance on automatic procedures allow the platform owner to exert power over a large population of individuals at the lowest possible cost and by imposing the rationalism of norms, classifications, and rankings, which are key characteristics of panopticon monitoring. Like the panopticon, online evaluations constitute an arrangement whose internal mechanisms produce the asymmetries in which individuals are caught up (Foucault, 1977). By creating gaps of visibility and isolating those who are

being supervised, it is possible to intervene at any moment against, and to exert constant pressure on, individuals. Therefore, online platform monitoring represents a "subtle form of coercion": a routinized subservience that produces docile subjects (Elmer, 2012: 25).

Online platform monitoring is thus a form of post-panopticism whereby "the people operating the levers of power on which the fate of the less volatile partners in the relationship depends can at any moment escape beyond reach—into sheer inaccessibility" (Bauman, 2012: 11). Post-panoptic power, characterized by the coexistence of network and panoptic monitoring, creates ambiguity for those who are subjected to it, generating anxiety. In addition to being part of a large network of users with whom they transact freely, sellers are situated in a formal, hierarchical power structure. They expect to receive feedback from a community of buyers and adjust their behaviors autonomously. Instead, feedback is processed by an algorithm and serves as the basis for automatic sanction procedures. They run their online business independently, yet they are excluded from the chain of agency that links evaluations with sanctions. The outcome is a system that is on the borderline between an enabling and a coercive bureaucracy (Adler and Borys, 1996; Hodson et al., 2013), applying apparently fair rules of exchange while simultaneously creating asymmetries of power and a Kafkaesque work environment in which decisions seem to be arbitrary because they are never explained.

Algorithms and the Sociomateriality of Power

Our second contribution relates to the sociomateriality of power in the context of online platforms. Organizational literature has shown how information technology "has become inextricably intertwined with social relations to weave the fabric of organization" (Zammuto et al., 2007: 752). Algorithms are examples of the sociomaterial entanglement of humans and technology underpinning everyday work practices (Orlikowski, 2000; Orlikowski and Scott, 2015). Entanglement, in this case, means first that technologies produce material

performances, which are accomplished within the scope of human purposes (Pickering, 1993), and second that human agency is contingent on available technologies and is exercised in practice through material means (Leonardi and Barley, 2010; Beane and Orlikowski, 2015). Our study extends sociomaterial understandings of contemporary work by showing how algorithms are implicated in the constitution and reproduction of power asymmetries and how algorithmic performances affect agency at work. In this way, we highlight the dark side of the entanglement of humans and algorithms.

First, algorithms simultaneously constitute and reproduce power asymmetries on online platforms. The algorithm is a "non-human actant": an object endowed with the ability to accomplish ad hoc performances (Latour, 1990; Lanzara and Patriotta, 2007). Algorithmic performances are based on a chain of delegations whereby the designer (platform owner) codifies programs of action that are inscribed into the algorithm and that drive transactions among buyers, sellers, and the platform owner. Programs of action empower some groups of actors by granting them more rights (buyers can evaluate sellers), disempower some others by granting them fewer rights (sellers cannot reciprocate with negative evaluations), and set procedures that regulate interactions on the platform (by imposing evaluation criteria on buyers or downgrading sellers with low scores). When put into practice, the algorithm runs the set of instructions specified in the code. By so doing, it affects the agentic moves of the actors involved. Examples include buyers' hostile practices, which are enabled by the anonymity and invisibility conferred by the algorithm, or eBay's automated practices, which contribute to a dehumanized work environment in which communication with the platform owner is absent. Under these circumstances, the algorithm has structuring properties in that it molds asymmetric relationships on the platform. Through repeated online interactions, social actors perform the programs of action while reproducing power asymmetries on an ongoing basis.

Second, algorithms objectify and script social relations on the platform, which reduces the space for agency at work. Objectification occurs because algorithms consolidate multiple subjective opinions into an authoritative computation. In this work environment, the focus is on percentages of positive ratings, which are recalculated on an ongoing basis as buyers feed the system with new online reviews. Sellers are anxious that one evaluation too many might automatically trigger a status downgrade. The frustration and anxiety sellers experience are partly due to a feeling of being surrounded by things rather than people and hence being unable to communicate and justify their actions.

Algorithms also script interactions. In traditional, non-algorithmic settings, sellers use rhetoric, persuasiveness, or dissimulation to seek support from the market regulator or obtain a desired outcome from their customers (Geertz, 1978; Sherry, 1990). In algorithmic settings, their actions are channeled by predefined categories and automated procedures. At a transactional level, sellers have to follow a script that mechanically leads up to customers' evaluations and makes them feel at buyers' mercy. At a governance level, sellers' solicitations or complaints are replied to in automated, preformatted e-mails. In this work environment, sellers' space for agency is significantly diminished.

The dark side of the algorithm–human entanglement resides in these mechanisms, which can lead to alienation at work. The entanglement of humans and technology can be confrontational, as technology may resist human agency, while humans have to accommodate non-human agency in their activities (Pickering, 1993). But algorithms do more than resist human agency: they constrain it. Resistance and constraint have different qualities. While resistance is diachronic, "as a block arising in practice to this or that passage of goal-oriented practice," constraint is synchronic, "always there, just like the walls of the prison" (Pickering, 1993: 583–584). The rigid instructions encoded in an algorithm are continuously present and hence can feel fixed and intractable. The prison metaphor used by some of our informants

conveys sellers' feeling of being trapped and deprived of their agency: just like the walls of a prison, algorithmic metrics are the material manifestation of agential constraints, and because of algorithmic intermediation, sellers are less able to exercise their skills as sellers than they would be in traditional settings.

We thus propose a sociomateriality of power that conceptualizes the impact of "working for an algorithm." Power asymmetries are embodied in material artifacts—algorithms—that shape social relations on online platforms and delimit the scope of action. Beyond being neutral machines, algorithms are "technologies of power" (Foucault, 1977; Kemmis, 1993). They materialize the needs, wants, and desires of the platform owner; they coordinate the collection, analysis, and interpretation of data; and they enable, as well as constrain, multiple forms of agency on the online platform.

Practices for Increasing Agency

Our third contribution relates to practices for increasing agency in the context of online evaluations. Although individuals who work for online marketplaces can theoretically leave and start anew somewhere else, platforms are generally difficult to escape from because of the lack of alternatives and the problems associated with rebuilding a reputation from scratch on another platform. Most individuals therefore remain within the system and develop their own practices for relieving their anxiety. Our findings enhance our understanding of practice in relation to the exercise of power and the way it is embedded in material configurations (Orlikowski, 2000; Schatzki, Knorr-Cetina, and von Savigny, 2001). They suggest that online workers' practices are rooted in each individual's experiential knowledge of the algorithm.

First, sellers' practices inform our understanding of how individuals cope with new forms of monitoring. Research on power in traditional work settings has emphasized coping mechanisms that rely on either discipline or deviation from the norms. In the first instance, employees, realizing the prospect of being watched at all times, behave as they should for

fear of hierarchical sanctions (Foucault, 1977; Elmer, 2012). In the second instance, workers deliberately develop tactics to elude supervision (Vallas, 2006; Anteby and Chan, 2018) or exploit technological malfunctions to occupy areas of uncertainty (Crozier and Friedberg, 1980). Our findings suggest that, in the context of online platforms, discipline and deviation from the norms acquire different meanings than those generally implied. Discipline is primarily associated with the prospect of market sanctions: slipping down the rankings, losing one's reputation, and ultimately missing trades. Sellers comply with eBay's performance targets because algorithmic procedures systematically link individual monitoring with market functioning. Similarly, deviation from the norms neither eludes supervision nor exploits technological failures. Rather, sellers take advantage of algorithmic features, such as formal disputes, the blocking function, or the possibility of inserting one's own rules of trade on the platform, to gain the upper hand over buyers. We have characterized these efforts as "working around the algorithm," the aim of which is to increase individual autonomy and redress power asymmetries.

Second, our findings advance our understanding of collective agency in the digital workplace. It is generally acknowledged that work practices are developed and sustained through collective engagement (Barnes, 2001; Hodson, 2001): collective agency derives from participation in communities of practice (Brown and Duguid, 1991; Lave and Wenger, 1991), which provide the context for a virtuous circle of learning as individuals share knowledge related to the practice while simultaneously developing a community-related social identity. In turn, this increases mutual trust and fosters further engagement in the community (Melucci, 1995; Brown and Duguid, 2001; Thompson, 2005). The notion of communities of practice implies that individuals rely on the collective to maintain expectations about how they and others will act.

In contrast, our findings suggest that although sellers on an online platform potentially form a virtual community of practice, they are not able to exert collective agency. The ongoing flow of reviews affects sellers' ranking and visibility. This creates a highly competitive work environment in which sellers are encouraged to focus on their individual performance rather than on sharing good practices or engaging in collective actions through associations or unions. Besides, the delegation of agency to a ubiquitous algorithm induces fear that criticisms of the platform owner will be sanctioned. Caught in the crossfire of buyers' hostile practices and algorithmic monitoring, online workers are therefore unlikely to engage in collective resistance. Instead, they rely on their own initiative to exert some influence over individual customers.

A broader theoretical consideration concerns the differential status of sellers, customers, and platform owner as collective actors. Namely, while both eBay and the buyers operate as unitary actors, thanks to the algorithm, sellers' agency is fragmented and dispersed. At the transactional level, buyers are aggregated as a crowd whose individual actions produce collective evaluations, while sellers are constructed as isolated individuals. At the governance level, eBay embodies the unity of the platform, while sellers experience ambiguity of status, unsure of whether they qualify as clients, employees, or victims. These structural conditions ultimately affect sellers' capacity for collective agency; they provide a way of partitioning the triad, a sort of "divide and rule" mechanism designed by the platform owner.

Third, our findings extend practice-based studies of online work by revealing how practical knowledge of the algorithm may constitute an instrument of power. Sellers' unconventional practices, such as bypassing the algorithm at a certain stage of the transaction or using certain algorithmic features to influence buyers' behavior, are embedded in technology. Using the platform day in and day out, sellers develop deep knowledge of it. In

contrast, one can assume that buyers, who use the system more sporadically, do not develop a comparable level of familiarity. This asymmetry of knowledge does not relate to the formal, abstract comprehension of the algorithmic instructions, which are generally kept secret by its designers (Orlikowski and Scott, 2015), but to a practical understanding of algorithmic tools. Through "practicing" the algorithm, sellers may be able to figure out the information and interactions it includes and excludes. They can then appropriate these excluded areas with the purpose of increasing their agency. For example, eBay's policy of indifference and non-interference induces sellers to sort it out by themselves and hence gives them an opportunity to bypass the impersonal algorithm and solve problems directly with buyers. Similarly, eBay's reliance on rigid, automatic procedures allows sellers to use some of these procedures against "bad" buyers.

Thus algorithms restrain sellers' agency while at the same time giving them the opportunity to learn from their use—a contrast documented by other scholars. In their study of TripAdvisor, Orlikowski and Scott (2014: 881) talked about how hoteliers "reported a sense of increased vulnerability and loss of control as a result of their new online visibility" through reviews, while simultaneously developing practices in response to such pressure. A core aspect of hoteliers' practices is managing the reviews, for example by manipulating guests' expectations, incorporating online reviews into the ongoing management of the hotel, and responding to bad reviews. Our study suggests that, in addition to managing reviews, online workers exploit their practical understanding of the algorithm to emancipate themselves from the entanglement of humans and technology underpinning their work. In other words, they develop practices *around* the algorithm to cope with working *for* an algorithm.

Implications and Limitations

Our findings can foster naturalistic generalization, as parallels may be drawn between the description of a case and one's own experience in similar contexts (Stake, 1995). The eBay case highlights workers' experience in contexts in which everything is metrified and subjected to evaluation. Metrification is encouraged by the introduction of the ideology of market transparency in the workplace (Power, 1999; Espeland and Sauder, 2007; Orlikowski and Scott, 2015). What was previously the remit of word of mouth and subjective judgment is now quantified, categorized, and compiled to create overall metrics, generating more transparency and simultaneously giving rise to more intrusive forms of monitoring. More and more human activities might become subject to metrification, classification, comparison, and market competition. The findings of this study help us understand the implications of this macro-level tendency for individuals' sense of agency at work.

Our findings can be also analytically generalized by moving beyond the empirical phenomenon to consider the conceptual implications of the case study (Yin, 2018). With the rise of online platforms, evaluation has achieved the status of a public good. By systematically requesting feedback, online algorithms turn social actors such as users, patients, visitors, and students into customers. Through magnifying individual experience beyond what people would normally expect, online evaluations redefine power asymmetries in society between those who can evaluate (the customers) and those who are evaluated. Our insights stress the urgent need to revisit the way we conceptualize power in increasingly customer-based societies by incorporating considerations on the hybrid nature of monitoring and governance: at the intersection of markets and bureaucracies, and through entanglement of social and material components. This research provides a step in this direction.

One limitation of our research relates to the specificities of the case itself, which is a "pure" case of online interactions. Other settings comprise a more mixed set of online–offline

41

interactions. For example, platforms such as RateMyProfessor, Uber, and TripAdvisor rely on online evaluations of offline transactions such as a university course, a taxi journey, or a night in a hotel. As we have shown, when there is an opportunity for the provider and the customer to meet outside of the algorithm, it becomes possible for the provider to influence the buyer's perception. Moreover, the prospect of being evaluated online may change the way transactions are conducted offline (Scott and Orlikowski, 2012). Our point is that online platform monitoring and the sociomateriality of power may play out differently when actors move in and out of the algorithm.

Another limitation concerns the relatively decontextualized nature of our study, which does not differentiate among sellers' backgrounds, gender, nationality, ethnicity, age, or tenure on eBay. Future studies might contextualize further to identify and explain different ways of coping with online customer reviews. In relation to power asymmetries, the reliance on online evaluations generates new cognitive and emotional challenges for those working in algorithm-mediated environments. It is therefore urgent to investigate what makes online workers more resilient and able to cope with these challenges.

Conclusion

Online platforms powered by algorithms and populated by crowds of users who feed personal opinions into the system have become a pervasive phenomenon in contemporary organizations. As a consequence, producers of goods and services can be subjected, with or without their consent, to evaluations by customers, managers, and other stakeholders. The negative evaluation that even high performers occasionally receive reveals the normally concealed power structure within which individuals carry out their daily work. The intrusion of power asymmetries in online settings, generally associated with independence and autonomy, may provoke strong negative feelings of vulnerability and attempts to escape or game the algorithm. Thus online work settings seem to incarnate a post-panoptic world in

which traditional dyadic distinctions between supervisors and supervisees, clients and

employees, and leaders and followers become blurred. In this context, as Bauman (2012: 11)

wrote, the prime technique of power is "escape, slippage, elision and avoidance, the effective

rejection of any territorial confinement with its cumbersome corollaries of order-building,

order-maintenance and the responsibility for the consequences of it all as well as of the

necessity to bear their costs." This study contributes to a better understanding of power

asymmetries in online work settings—a topic that deserves further research.

Acknowledgments

REFERENCES

Adler, P. S., and B. Borys
1996   "Two types of bureaucracy: Enabling and coercive." Administrative Science Quarterly, 41: 61-89.

Anteby, M., and C. K. Chan
2018   "A self-fulfilling cycle of coercive surveillance: Workers' invisibility practices and managerial justification." Organization Science, 29: 247-263.

Barley, S. R.
1990   "The alignment of technology and structure through roles and networks." Administrative Science Quarterly, 35: 61-103.

Barnes, B.
2001   "Practice as collective action." In T. R. Schatzki, K. Knorr-Cetina, and E. Von Savigny (eds.), The Practice Turn in Contemporary Theory: 26–50. London: Routledge.

Bauman, Z.
2012   Liquid Modernity, 2d ed. Cambridge: Polity Press.

Beane, M., and W. J. Orlikowski
2015   "What difference does a robot make? The material enactment of distributed coordination." Organization Science, 26: 1553-1573.

Beer, D.
2009   "Power through the algorithm? Participatory web cultures and the technological unconscious." New Media and Society, 11: 985-1002.

Beer, D.
2017   "The social power of algorithms." Information, Communication and Society, 20: 1-13.

Beuscart, J.-S, K. Mellet, and M. Trespeuch
2016   "Reactivity without legitimacy? Online consumer reviews in the restaurant industry." Journal of Cultural Economy, 9: 458-475.

Blau, P. M.
1964   Exchange and Power in Social Life. New York: Wiley.

Brass, D. J., and M. E. Burkhardt
1993   "Potential power and power use: An investigation of structure and behavior." Academy of Management Journal, 36: 441-470.

Brown, J. S., and P. Duguid
1991   "Organizational learning and communities-of-practice." Organization Science, 2: 40-57.

Brown, J. S., and P. Duguid

2001   "Knowledge and organization: A social-practice perspective." Organization Science, 12: 198-213.

Charmaz, K.
2014   Constructing Grounded Theory, 2d ed. London: Sage.

Clegg, S.
1989   Frameworks of Power. London: Sage.

Coyne, I. T.
1997   "Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries?" Journal of Advanced Nursing, 26: 623-630.

Crozier, M., and E. Friedberg
1980   Actors and Systems: The Politics of Collective Action. Chicago: University of Chicago Press.

Dahl, R. A.
1957   "The concept of power." Behavioral Science, 2: 201-215.

Danzger, M. H.
1964   "Community power structure: Problems and continuties." American Sociological Review, 29: 707-717.

Dellarocas, C.
2003   "The digitization of word of mouth: Promise and challenges of online feedback mechanisms." Management Science, 49: 1407-1424.

Elmer, G.
2012   "Panopticon-discipline-control." In K. Ball, K. Haggerty, and D. Lyon (eds.), Routledge Handbook of Surveillance Studies: 21–29. London: Routledge.

Espeland, W. N., and M. Sauder
2007   "Rankings and reactivity: How public measures recreate social worlds." American Journal of Sociology, 113: 1-40.

Fleming, P., and A. Spicer
2003   "Working at a cynical distance: Implications for power, subjectivity and resistance." Organization, 10: 157-179.

Foucault, M.
1977   Discipline and Punish. London: Penguin Books.

Foucault, M.
2002   "Truth and juridical forms." In J. D. Faubion (ed.), Power: The Essential Works of Michel Foucault 1954–1984, vol. 3: 1–89. London: Allen Lane.

Geertz, C.

1978 "The bazaar economy: Information and search in peasant marketing." American Economic Review, 68: 28-32.

Gioia, D. A., K. G. Corley, and A. L. Hamilton
2013 "Seeking qualitative rigor in inductive research: Notes on the Gioia methodology." Organizational Research Methods, 16: 15-31.

Glaser, B. G., and A. L. Strauss
2008 The Discovery of Grounded Theory: Strategies for Qualitative Research. New Brunswick, NJ: Aldine Transaction.

Hodson, R.
2001 Dignity at Work. Cambridge: Cambridge University Press.

Hodson, R., V. J. Roscigno, A. Martin, and S. H. Lopez
2013 "The ascension of Kafkaesque bureaucracy in private sector organizations." Human Relations, 66: 1249-1273.

Kemmis, S.
1993 "Foucault, Habermas and evaluation." Curriculum Studies, 1: 35-54.

Komaki, J. L.
1986 "Toward effective supervision: An operant analysis and comparison of managers at work." Journal of Applied Psychology, 71: 270-279.

Korczynski, M.
2014 Songs of the Factory: Pop Music, Culture, and Resistance. Ithaca, NY: Cornell University Press.

Lanzara, G. F., and G. Patriotta
2007 "The institutionalization of knowledge in an automotive factory: Templates, inscriptions, and the problem of durability." Organization Studies, 28: 635-660.

Lash, S.
2007 "Power after hegemony: Cultural studies in mutation?" Theory, Culture and Society, 24: 55-78.

Latour, B.
1990 "Technology is society made durable." Sociological Review, 38: 103-131.

Lave, J., and E. Wenger
1991 Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press.

Lenglet, M.
2011 "Conflicting codes and codings: How algorithmic trading is reshaping financial regulation." Theory, Culture and Society, 28: 44-66.

Leonardi, P. M., and S. R. Barley

2010   "What's under construction here? Social action, materiality, and power in constructivist studies of technology and organizing." Academy of Management Annals, 4: 1-51.

Levy, P. E., and J. R. Williams
2004   "The social context of performance appraisal: A review and framework for the future." Journal of Management, 30: 881-905.

Long, C. P., C. Bendersky, and C. Morrill
2011   "Fairness monitoring: Linking managerial controls and fairness judgments in organizations." Academy of Management Journal, 54: 1045-1068.

Lukes, S.
1974   Power: A Radical View. London: Macmillan.

MacKenzie, D.
2019   "How algorithms interact: Goffman's 'interaction order' in automated trading." Theory, Culture and Society, 36: 39-59.

Mahajan, V., E. Muller, and R. A. Kerin
1984   "Introduction strategy for new products with positive and negative word-of-mouth." Management Science, 30: 1389-1404.

Mechanic, D.
1962   "Sources of power of lower participants in complex organizations." Administrative Science Quarterly, 7: 349-364.

Melucci, A.
1995   "The process of collective identity." In H. Johnston and B. Klandermans (eds.), Social Movements and Culture. Minneapolis: University of Minnesota Press.

Molm, L. D.
1990   "Structure, action, and outcomes: The dynamics of power in social exchange." American Sociological Review, 55: 427-447.

Molm, L. D.
1997   "Risk and power use: Constraints on the use of coercion in exchange." American Sociological Review, 62: 113-133.

Mudambi, S. M., and D. Schuff
2010   "What makes a helpful online review? A study of customer reviews on Amazon.com." MIS Quarterly, 34: 185-200.

Murphy, K. R., and J. N. Cleveland
1995   Understanding Performance Appraisal: Social, Organizational, and Goal-based Perspectives. Thousand Oaks, CA: Sage.

Niehoff, B. P., and R. H. Moorman

1993 "Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior." Academy of Management Journal, 36: 527-556.

Orlikowski, W. J.
2000 "Using technology and constituting structures: A practice lens for studying technology in organizations." Organization Science, 11: 404-428.

Orlikowski, W. J., and S. V. Scott
2008 "Sociomateriality: Challenging the separation of technology, work and organization." Academy of Management Annals, 2: 433-474.

Orlikowski, W. J., and S. V. Scott
2014 "What happens when evaluation goes online? Exploring apparatuses of valuation in the travel sector." Organization Science, 25: 868-891.

Orlikowski, W. J., and S. V. Scott
2015 "The algorithm and the crowd: Considering the materiality of service innovation." MIS Quarterly, 39: 201-216.

Ouchi, W. G.
1977 "The relationship between organizational structure and organizational control." Administrative Science Quarterly, 22: 95-113.

Ouchi, W. G.
1980 "Markets, bureaucracies, and clans." Administrative Science Quarterly, 25: 129-141.

Patriotta, G., and A. D. Brown
2011 "Sensemaking, metaphors and performance evaluation." Scandinavian Journal of Management, 27: 34-43.

Pavlou, P. A., and A. Dimoka
2006 "The nature and role of feedback text comments in online marketplaces: Implications for trust building, price premiums, and seller differentiation." Information Systems Research, 17: 392-414.

Pfeffer, J.
1981 Power in Organizations. Marshfield, MA: Pitman.

Pickering, A.
1993 "The mangle of practice: Agency and emergence in the sociology of science." American Journal of Sociology, 99: 559-589.

Power, M.
1999 The Audit Society: Rituals of Verification. Oxford: Oxford University Press.

Prasad, P., and A. Prasad
2000 "Stretching the iron cage: The constitution and implications of routine workplace resistance." Organization Science, 11: 387-403.

Roscigno, V. J., and R. Hodson
2004   "The organizational and social foundations of worker resistance." American Sociological Review, 69: 14-39.

Rubin, B. A.
1986   "Class struggle American style: Unions, strikes and wages." American Sociological Review, 51: 618-633.

Schatzki, T. R., K. Knorr-Cetina, and E. von Savigny
2001   The Practice Turn in Contemporary Theory. London: Routledge.

Scott, S. V., and W. J. Orlikowski
2012   "Reconfiguring relations of accountability: Materialization of social media in the travel sector." Accounting, Organizations and Society, 37: 26-40.

Sewell, G., and J. R. Barker
2006   "Coercion versus care: Using irony to make sense of organizational surveillance." Academy of Management Review, 31: 934-961.

Sewell, W. H., Jr.
1992   "A theory of structure: Duality, agency, and transformation." American Journal of Sociology, 98: 1-29.

Sherry, J. F.
1990   "A sociocultural analysis of a midwestern American flea market." Journal of Consumer Research, 17: 13-30.

Stake, R. E.
1995   The Art of Case Study Research. Thousand Oaks, CA: Sage.

Strauss, A., and J. Corbin
1998   Basics of Qualitative Research, 2d ed. Thousand Oaks, CA: Sage.

Thompson, M.
2005   "Structural and epistemic parameters in communities of practice." Organization Science, 16: 151-164.

Townley, B.
1993   "Performance appraisal and the emergence of management." Journal of Management Studies, 30: 221-238.

Vallas, S. P.
2006   "Empowerment redux: Structure, agency, and the remaking of managerial authority." American Journal of Sociology, 111: 1677-1717.

Weber, M.
1978   Economy and Society. Berkeley, CA: University of California Press.

Wiltermuth, S. S., and F. J. Flynn

2013 "Power, moral clarity, and punishment in the workplace." Academy of Management Journal, 56: 1002-1023.

Yin, R. K.
2018 Case Study Research and Applications: Design and Methods, 6th ed. Thousand Oaks, CA: Sage.

Zammuto, R. F., T. L. Griffith, A. Majchrzak, D. J. Dougherty, and S. Faraj
2007 "Information technology and the changing fabric of organization." Organization Science, 18: 749-762.

Authors' Biographies

Corentin Curchod is a senior lecturer (eq. associate professor) in strategy and organization at the University of Edinburgh Business School, 29 Buccleuch Place, Edinburgh EH8 9JS, UK (e-mail: corentin.curchod@ed.ac.uk). His current research focuses on identity work, power and governance in relation to market relationships and technological change. He earned his Ph.D. in management from the École Polytechnique.

Gerardo Patriotta is a professor of organization studies at the Warwick Business School, Scarman Road, Coventry CV4 7AL, UK (e-mail: Gerardo.Patriotta@wbs.ac.uk). His work has combined sociological and organizational theory to understand the work practices and behaviors of shopfloor operators, courtroom judges, business consultants, global bank managers, air force pilots, e-market sellers, chefs, and news workers, among others. He received his Ph.D. in industrial and business studies from the University of Warwick.

Laurie Cohen is a professor of work and organization at Nottingham University Business School, Jubilee Campus, Wollaton Road, Nottingham NH8 1BB, UK (e-mail: laurie.cohen@nottingham.ac.uk). Her research focuses on career-making over the lifespan, and research methods in the study of career, focusing on interpretive approaches and the use of narrative. She received her Ph.D. in organization studies from Sheffield Hallam University.

Nicolas Neysen is the digital transformation lead at HEC Liège, Rue Louvrex 14, BE-4000 Liège, Belgium (e-mail: Nicolas.Neysen@uliege.be). He earned his Ph.D. in management from Université Catholique de Louvain. Before joining HEC Liège, he worked as a strategy consultant for Accenture in Brussels and in Luxembourg.

Table 1. Number of Sellers Interviewed per Category of Items

eBay product categories	Code in text	Number of sellers
Art and antiques	A	4
Baby items	B	2
Books, comics and magazines	C	7
Business, office and industrial	D	5
Cameras and photography	E	2
Cars and vehicles	F	4
Clothes, shoes and accessories	G	4
Coins	H	5
Collectables	I	3
Computers	J	2
DVDs, films, TV	K	2
Health and beauty	L	3
Furniture	M	4
Home, garden and DIY	N	5
Jewelry and watches	O	4
Mobile phones and communication	P	2
Motorcycles and parts	Q	2
Music and musical instruments	R	4
Postcards and stamps	S	3
Sporting goods and holidays	T	3
Toys and games	U	3
Videogames and consoles	V	4
Total all categories		**77**

Figure 1. Data coding structure.

First-order Categories

- Buyers "hide behind their computers" versus "we are entirely visible"
- Relations with buyers are impersonal
- The system makes it difficult to communicate directly with buyers

- Buyers' negative evaluations are mostly unfair
- Buyers blackmail through evaluations
- Dissatisfied buyers tend to react aggressively

- We receive negative evaluations without being given the opportunity to solve the problem
- With evaluations, we are at buyers' mercy

- eBay does not really care about our problems and opinions—indifference
- Despite being eBay's clients, we're not considered by eBay
- eBay is systematically on the buyers' side, not on our side
- eBay "hides" behind its platform status and does not face up to its responsibilities
- eBay is far away from our daily concerns—Ivory tower

- Automaticity of sanctions based on calculation
- Automated and irrelevant replies to our queries
- eBay as an impersonal, robotized bureaucracy

- eBay imposes its rules upon us—"diktat"
- eBay can restrict or block our accounts unilaterally
- Metaphors to express vulnerability and being locked in (prison, Sword of Damocles, etc.)

- Using the online forums to create a collective reaction to eBay
- Creating associations to put pressure on eBay

- Playing the dialogue card and finding compromise in the face of problems
- Reassuring buyers with lots of communications to prevent problems from happening
- Meeting customers face to face
- Finding ways to neutralize suspicious buyers
- Padlocking buyers by imposing own rules
- Systematically opening disputes against abusive buyers

Second-order Themes

- Buyers' anonymity and invisibility
- Buyers' hostile practices
- Sellers' vulnerability to buyers' evaluations
- eBay's indifference and distance
- eBay's automated practices
- Sellers' vulnerability to eBay's procedures
- Sellers' collective practices vis-à-vis eBay
- Sellers' individual practices vis-à-vis buyers

Aggregate Dimensions

- Power asymmetries at the transactional level
- Power asymmetries at the governance level
- Sellers' working around the algorithm

53