Taking Credit

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Abstract Taking credit is the process through which organizational members claim responsibility for work activities. We begin by describing a publically disputed case of credit taking and then draw on psychological, situational, and personality constructs to provide a model that may explain when and why organizational members are likely to take credit. We identify testable propositions about the credit-taking process, discuss ethical aspects of credit taking and suggest areas for research on credit taking in organizations.

Keywords Credit · Business ethics · Organizational justice · Psychological ownership · Fraud triangle · Narcissism

Good people do good work without meddling in the distribution of rewards (Confucius, n.d., verse 4.14) There are two classes of people, those who do and those who take credit. My advice is to be a member of the first class; there is much less competition. (Variously attributed to Mahatma Gandhi, Indira Gandhi, Dwight Morrow, and Mark Twain) It is amazing what you can accomplish if you do not care who gets the credit. (Harry Truman)

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The person who appropriates credit redistributes it as he chooses, bound essentially and only by a sensitivity to public perceptions of his fairness. (Jackall 1988, p. 21)

Credit can be a valuable commodity in organizations. Credits—defined as having one's efforts recognized by others—can be exchanged for small privileges (e.g., a day off), banked (e.g., used to enhance a reputation), pointed to for tactical reasons (e.g., during a performance review), accumulated for major rewards (e.g., a promotion), redeemed (e.g., asking for a favor), and traded (e.g., for a leadership opportunity); credit can also be dissipated (e.g., eroded by time and memory) and lost (e.g., by making a major blunder). Because credits are valuable they can also be challenged by aggrieved colleagues who feel the credit belongs to them, either in whole or in part. These credits might be based on perceived contributions to any part of a work activity (project, idea, collaboration, assignment): having the idea, proposing it to someone who matters, refining, and crystallizing the idea, providing support, assigning appropriate resources, and structures for the project, implementing the idea, assuming the risks associated with implementation, doing the hard work required to finish the project, and framing the outcome so that it is seen as worthwhile, both for the organization and for the framer.

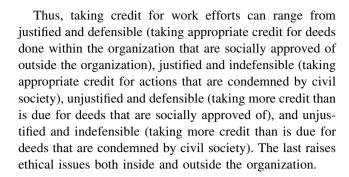
The process of making a bid for credit can take many forms, ranging from the most active (e.g., putting one's name on a document, arranging for a colleague to give you credit in a public setting) and explicit (e.g., written or verbal assertions) to the most passive (e.g., failing to correct the record when someone gives credit to a non-contributor) and implicit (structuring a situation so that the inference is drawn of one's personal responsibility for an effort). The process of bidding for and getting credit can be



simple and quick, as when someone says "When I did this" and the audience agrees: the outcome is credit. But when the claim is implicit it can take some time for an audience to recognize that credit has been claimed and that credit has been given though silence. Attentive audiences may readily detect explicit claims but be less likely to notice more implicit claims.

We argue that taking credit for a work activity is an inherently ethical act that can have personal, organizational, and societal consequences. If the credit is justified and defensible—the credit matches the contribution to the work activity and is worthy of approbation by civil society-then the credit taker is acting ethically. But when unjustified credit is taken—the credit taken exceeds the contribution to the work activity—then someone who is entitled to that credit is diminished, devalued, and denied that to which he or she is entitled. The individual who is wrongfully denied credit may experience that denial as an injustice, a theft, or at least as an undermining of their workplace identity. We note that the ethical aspects of a claim may not be salient for all: those who are bounded ethically (i.e., who intend to be ethical but are psychologically and cognitively limited in their ability to appreciate the ethics of the act; see De Cremer et al. 2010) or for those for whom the ethical aspects of the decision have faded (i.e., have receded in consciousness; see Tenbrunsel and Messick 2004).

The ethics of credit taking in organizations can also have a societal component: doing something that violates widely accepted civil standards is indefensible, even if it is seen as justified within the organization. The distinction between justified and defensible distinguishes between what is deserved within an organization (the credit matches the effort) and what is acceptable in civil society (the effort warrants approbation). We use "defensible" to refer to the extent to which actions meet the standards of civil society. "Justified" here means that what is claimed (credit) matches what has been done (contribution to a work effort). This use of justification is fundamental to many theories, from equity theory (the equality of inputs and rewards; Adams 1965) and Marx's (1847) theory of value to Kant's (1785) categorical imperative and virtue ethics (Taylor 2002). Each of these would recognize that acts such as taking credit for work done by a subordinate (Donaldson 1996; McDonald and Zepp 1988; Metha and Kau 1984) is unjustified because it violates principles of equity, ownership, the ethical rule, and character habits that are to be encouraged. Later, we draw on just such an example of a speechwriter who took sole credit for work done by a team of speechwriters. We contrast this with one of the other team members who takes justified credit for writing some of the speeches.



Some Expected Consequences of Taking Credit

We expect that taking credit has positive and negative emotional, behavioral, and organizational consequences within organizations. The likely positive emotional consequences of taking justified credit include feelings of empowerment and agency, particularly for those who have a history of passivity in work settings. The positive behavioral consequences of justified credit taking may include an employee's increased willingness to collaborate and volunteer for future projects. For organizations, the fair distribution of credit can provide a foundation for a healthy organizational culture, enhanced employee perceptions of justice and a strengthened sense of teamwork. Among the likely negative emotional consequences of unjustified credit taking are the bitterness felt by those whose contributions are devalued, victims' sense of betrayal by colleagues and a debilitating sense of cynicism. The negative behavioral effects of unjustified credit taking may include a reduced willingness to collaborate in the future, retribution to settle a score, increased turnover and the lowered commitment that comes from being undermined by colleagues and supervisors (cf. Duffy et al. 2002; Pozner 2007). For organizations, the unfair distribution of credit can weaken norms of reciprocity and equity, reduce transparency and destroy trust (Brown and Robinson 2011; Fortin and Fellenz 2008; McFarlin and Sweeney 1992).

We use two constructs—social undermining (Duffy et al. 2002) and psychological safety (Edmondson 1999)—to highlight some of these consequences. Duffy et al. (2002, p. 332) define social undermining as "behavior intended to hinder, over time, the ability to establish and maintain positive interpersonal relationships, work related success, and favorable reputation." The unjustified taking of credit is one way in which social undermining can happen in the workplace, particularly when it is successful (i.e., when taking unjustified credit results in receiving credit), as when corporate psychopaths bully by taking credit for another's work (Babiak and Hare 2006). The unjustified taking of credit, when viewed as a type of social undermining, may result in distributive, procedural, and



interactional injustice. The appropriate distribution of credit may accomplish the opposite: taking justified credit is likely to allow individuals to establish and maintain positive interpersonal relationships, experience work-related success, and develop a favorable reputation.

Edmondson (1999) introduced the construct of team psychological safety and has shown that it facilitates team learning. She defines team psychological safety as "a shared belief that the team is safe for interpersonal risk taking" (p. 354). She characterizes the type of climate in safe teams as one dominated by trust and mutual respect. Taking unjustified credit can undermine team psychological safety, reduce trust and poison an organization's culture by undermining norms of reciprocity and equity. Expected consequences include decreased cooperation and organizational citizenship behavior and increased turnover.

Although external stakeholders have not shown much interest in how internal disputes about credit are resolved (Jackson 2001), focusing instead on acts that breach trust between organizations and those with whom organizations are interdependent, insiders do care about unjustified credit taking. Wronged parties complain to business advice columnists (see, e.g., Pinker 2005) and cartoonists poke fun at opportunistic credit takers ("I made a few tweaks to your idea. Now if it fails it was your idea and if it works I can claim the credit"; Adams 2011) and manager's report that they experience unjustified credit taking as stressful (van Zyl and Lazenby 2002). Others have noted that claiming unjustified credit is a source of eroded trust (Simon and Eby 2003) and a form of bullying (Babiak and Hare 2006; Clive 2011) that compromises business ethics and creates threats to the integrity of organizational reward systems (cf. Jackall 1988, p. 21).

While scholars have identified the taking of unjustified credit as an unethical organizational behavior, and some research has suggested ways to think about the process of claiming credit (see, e.g., Bazerman 2006 on self-serving biases; Bazerman's work with colleagues on bounded rationality (Banaji et al. 2003; Bazerman 2006) with colleagues on bounded ethicality; Jackall 1988 on the role of power), we believe this is the first systematic attempt to understand the conditions that lead to and enable credit taking. Following De Cremer et al.'s (2010, p. 2) suggestion that "we need to understand the psychological underpinnings of behavior relevant to ethics in greater detail," we examine the concept of credit and when and why credit is taken. Our purpose is to call attention to a construct of potential interest to the field and some of the ways in which it can be researched. We take the standpoint of the credit taker in the interest of providing a focused and systematic way of thinking about when and why individuals take credit. We acknowledge the role of the audience but focus on the roles of contribution, psychology, situations and personality in the decision being made by potential credit takers. We begin by providing a prototype that we use to anchor our analysis of credit taking, after which we define "credit" and "taking credit" and propose a model that may help explain the phenomenon.

A Prototype

Most of the phenomena discussed in this article appear in a public dispute over claims for speechwriting credit in the George W. Bush White House. Former speechwriter Scully (2007) provides a rich account of the rewards and costs that become apparent when a speechwriter over-reaches and violates the self-effacing norms of the profession. From 1999 to 2004, Scully, Michael Gerson, and John McConnell served as senior speechwriters for President Bush. Scully says (and subsequently confirmed by Frum 2007) that the major speeches, including those from shortly after 9/11, were jointly written by all three on McConnell's computer. But with time, Michael Gerson presented the story as if he did all the writing. Gerson's account became particularly well known as he emerged as a media star.

Scully, commenting on a prepublication draft of a book about those White House years written by Gerson (2007)—made available to Scully by Gerson's publisher—publicly disputed Gerson's claims to single authorship: "without fear of contradiction—because it's all in the presidential records—I can report here that Michael Gerson never wrote a single speech by himself for President Bush. From beginning to end, every notable speech, and a huge proportion of the rest, was written by a team of speechwriters, working in the same office and on the same computer. Few lines of note were written by Mike, and none at all that come to mind from the post-9/11 addresses—not even 'axis of evil'" (Scully 2007, p. 79).

Given the public nature of the claims and the availability of digital records, one might expect that this would be enough to constrain claims, but "the only time Mike appeared disturbed by the approach of public attention was during the preparation of the *New York Times Magazine* account of the making of the joint-session speech, when the magazine's fact-checkers started calling to confirm such details as who wrote what. Fact-checkers of tomorrow will find somewhere in the presidential archives a frantic e-mail from Mike in which a colleague was ordered not to take any further calls from *Times* fact-checks" (Scully 2007, p. 84).

Whatever the facts, this dispute offers a clear illustration of the costs and rewards of taking unjustified credit. "Maybe you have brushed up against such people in your own workplace. If so, you know that it is a peculiar vice, this kind of credit hounding. One is left almost disoriented



by the gall of it. It was amazing that a friend could carry on like this in full view and still act as if nothing were out of order. The sheer pettiness of such conduct served to repel corrective action, because who wants to be drawn into little games of guile and manipulation" (Scully 2007, p. 85)? Scully notes that there "are rewards for such behavior, and in Mike's case the Washington establishment has raised him up as one of its own—a status complete with a columnist's perch at The Washington Post. There is a downside, too, measured in the lost esteem of friends and in the tainting of real gifts and achievement" (Scully 2007, p. 79). Further, "when we are given credit for things we didn't do, or feel tempted to grab at underserved acclaim, we show what we are made of" (Scully 2007, p. 87). Scully concludes his account by saying that "a modest round of merited applause is worth far more than a standing ovation undeserved" (Scully 2007, p. 88).

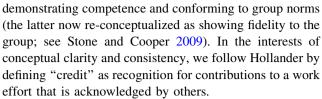
At the other end of the spectrum is the anomalous case of who solved the Poincare Conjecture, a legendary problem in topology (Gessen 2009; Nasar and Gruber 2006). In 2002, Grigory Perelman, a Russian mathematician, posted a compressed solution to the problem on the Internet. The compressed posting allowed another mathematician, John Yau, to elaborate the solution; Yau claimed that the gaps in Perelman's solution were important to fill before the conjecture could be considered solved. The record shows that Yau did contribute to the solution and hence felt a sense of psychological ownership that underpins his claim. The anomaly is that Perelman has since declined to defend a claim for credit and has refused two highly prestigious international awards for his work—the Fields Medal in 2006 and the Clay Millennium Prize in 2010.

Credits, Audiences, and Ethics

"Credit" and "taking credit" are terms used in ordinary language. They can be ambiguous and create misunder-standings because they are non-technical terms. To reduce misunderstandings, we begin by defining our constructs. Further, the dependence on audiences needs to be acknowledged, as does the relationship between taking credit and business ethics.

Credits

"Credit" has been part of the field's lexicon at least since its use by the social psychologist Hollander (1958). He defined credit as "an accumulation of positively-disposed impressions residing in the perceptions of relevant others" (p. 120). According to Hollander, candidates for emergent leadership positions are more likely to be recognized as legitimate leaders if they have built credits by



An individual who takes credit is making a conscious bid for an audience's recognition that he or she has made a positive contribution to a work effort. To receive credit means that others have acknowledged that the credit is deserved. We refer to these others as "the audience." No credit exists until the audience recognizes the claim as deserved. Burt (2004, p. 388) presents an equivalent view about ideas: "An idea is as valuable as an audience is willing to credit it with being." Thus, an individual whose bid for credit is successful (i.e., has been acknowledged by an audience) is said to have received credit for his or her work effort.

Audiences

The process of taking credit is interactive with an audience. Audiences vary in their awareness of efforts and in their sensitivity to the ways in which bids are made, just as claimants vary in their awareness of audiences. A claimant who makes a bid has the onus of demonstrating to a target audience that his or her effort is worthwhile.² Some claimants may give little thought to the audience's reaction because he or she may have a strong sense of psychological ownership of a work activity and feel firmly connected to an effort (Pierce et al. 2001). In this case, the claimant may not consider the audience's reactions when making a bid, perhaps taking his or her credit-worthiness for granted. Conversely, someone who wishes to take credit when their contribution is not well known (or when the contribution has been nil-to-marginal) might be particularly concerned



While there may be cases where credit is awarded prior to a conscious bid being made (e.g., not noticing that someone has credited the individual with a contribution, perhaps during a meeting the individual did not attend) these are not cases of taking credit until the claimant becomes aware that credit has been awarded. If the individual receiving the credit then acknowledges it, then we would regard the individual as having taken credit. The claiming here is passive (although letting the audience's perceptions stand is a conscious act). This means that no credit is taken when credit is awarded and the individual remains unaware that credit has been awarded. We expect these situations are uncommon; as a result, we focus on the more common (and the more ethically interesting) cases where an individual exaggerates their contribution or just makes it up. In these cases we regard the credit taking as conscious (and, in some instances, calculative).

² While the individual's contribution must be seen as favorable, the outcome need not be: an unsuccessful effort might be recognized as credit-worthy in a losing cause. For consistency we use "work effort" and "contribution" throughout, rather than "outcome."

with the audience's evaluation of the bid. In these latter cases, the claimant may devote efforts to stage managing.

This dependence on an audience complicates the process of getting credit. Much of the complexity arises from four factors: the success of the bid is uncertain, the process may be managed, audiences may award credit on grounds other than contribution, and there may be multiple audiences. First, making a bid for credit carries risk because a bid may fail, perhaps because the audience has not noticed the contribution. Even well-motivated audiences that intend to be rational may have limited knowledge of the events, constrained attention and truncated processing ability (i.e., audiences operate under conditions of bounded rationality; Simon 1957). As a consequence, some efforts that deserve credit are not noticed and the claimant does not get the credit deserved. At a minimum this can leave an individual feeling underappreciated. Other bids may fail because an attentive audience feels the effort is insufficient to warrant credit or does not think the effort is meritorious. In either case the bid fails. Discrepancies between an individual's claim for credit and the audience's assessment of that claim can create disputes that are risky for a claimant to pursue. As with Scully, much of the room for disputes is created by differences between what is known by an audience and what is felt by contributors.

A second consequence of the dependence on an audience is the possibility of managing the process. Because audiences are boundedly rational, claimants may be able to manage an audience's understanding. Solo efforts that are public pose few difficulties for audiences: audiences at golf tournaments do not waver in deciding that a shot deserves applause. But communal efforts in private settings can make it hard for audiences to sort out who contributed what. Unlike property that can be physically possessed or publically represented to prove title (e.g., share certificates, deeds), the communal efforts of many organizational participants make it hard to adjudicate bids. Work efforts are frequently joint and establishing sufficient connectedness to claim sole or major credit may be both difficult and risky; difficult because efforts are multiparty and risky because cooperation from wronged others may be needed in the future. This provides an opening for the skillful use of impression management, selective disclosure of information, misrepresentation, and opportunistic behavior.

Third, audiences socially construct the criteria for awarding credit, some of which may not be merit based. When credit is awarded on criteria such as place in the hierarchy, the resulting distribution of credit is unlikely to be seen by all as equitable, particularly by those with less power. When this happens—e.g., when a favored individual receives a promotion for a work effort with which he or she had little connection—issues of ethics arise, even if the promotion is justified by a widely acknowledged power-

based logic of the organization. In such cases, actors—including senior executives—can proudly lay claim to the work efforts of others, including subordinates and colleagues. This is a reminder that substantial differences can exist between moral codes inside and outside the organization, one highlighted in Jackall's (1988, p. 6, emphasis in the original) quote from a former executive in a large firm: "what is right in the corporation is not what is right in a man's home or his church. What is right in the corporation is what the guy above you wants from you. That's what morality is in the corporation."

Fourth, audiences can be multiple and heterogeneous, allowing claims for credit to be evaluated using quite different criteria and weights. As a result, peer and subordinate resentments can co-exist with superior-granted credit. Peers and subordinates may know more than do superiors about who did what. This provides ample room for feelings of antipathy towards the recipient of credit and its grantors. Peers may feel resentment because superiors have unfairly favored the credit recipient and subordinates may come to see the recipient as untrustworthy, someone to be avoided and worked around.

Ethics

Taking credit for one's work activity is ethically unproblematic when the credit is justified (again, the credit taken matches the contribution to the work activity) and defensible (again, is acceptable to civil society). Much of our analysis focuses on the ethically problematic situation of credit being claimed when there is insufficient entitlement. It is important that individuals be able to claim credit for their contributions within the workplace so that they can establish a sense of competence and maintain a positive workplace identity. Even here the claiming process can be problematic for those who are entitled to credit, since normative or political factors within the organization may affect a claim for credit. For example, two individuals in a team of five may have done the work but be compelled to share credit with three laggards because of the organization's normative environment.

Our starting point of trying to understand why and when credit is claimed is equally relevant for justified and unjustified claims. Lesser ethical issues arise when those who are entitled to credit are unable to take credit, either because they are not motivated to do so, are uneasy with the risk, uncomfortable with the self-promotion involved or are prevented from doing so by structures and processes within the organization. Ethical issues regarding credit most often arise inside organizations when the credit taken is unjustified—the claim is larger than what is warranted by one's contributions, as with Scully's account of Gerson's credit taking. These unjustified claims are possible for a



variety of reasons. Causality can be ambiguous because multiple contributions (and contributors) make for imperfect judgments of which ones matter most. Audiences can be naïve, only partially engaged, boundedly rational, allowing a claimant to frame and stage manage. Egocentric biases can be a thumb on the scale (Bazerman 2006; Mezulis et al. 2004; Miller and Ross 1975), causing potential claimant's to overvalue their contribution. In addition, the internal logic within organizations may value and reward behaviors that are not ethical and lead to the acceptance of claims that are based on power and position (Jackall 1988).

In the following discussion, we draw on a number of psychological processes that can play a role in the ethics of claiming credit. The recognition of cognitive biases and other similar psychological processes has led to the notion that individuals are bounded ethically (De Cremer et al. 2010; Banaji et al. 2003; Chugh et al. 2005). Just as boundedly rational individuals may intend to be rational but operate under cognitive and attention constraints (Simon 1957), so may individuals intend to be ethical but be constrained—both psychologically and cognitively—in their ability to make ethical decisions. As a result, the decision to make a claim for credit may be evaluated by a boundedly ethical individual predominantly on its probability of success, with less attention paid to the ethics of making the claim. Ethically bounded individuals may then see themselves as ethical but fail to recognize that they are acting unethically. As a result, processes may allow those who make unjustified claims to credit to reduce their ethical awareness to the point that they see themselves as behaving ethically (or at least ease any ethical discomfort by facilitating rationalization through a process of selfdeception).

The latter possibility is consistent with Tenbrunsel and Messick's (2004, p. 204) notion that "psychological processes fade the "ethics" from an ethical dilemma," thereby facilitating a reframing process that abets rationalization. An individual for whom the ethical dimensions have faded will have difficulty seeing the ethical aspects, while an individual with a sense of moral license can acknowledge the act as wrongful but (ironically) feel that he or she can successfully withstand the negative consequences because of his or her prior good behavior (cf. Shapiro et al. 2011). This process is nicely captured by Bazerman et al. (1997, p. 91): "When presented with identical information, individual perceptions of a situation differ dramatically depending on one's role in the situation. People first determine their preference for a certain outcome on the basis of self-interest and then justify this preference on the basis of fairness by changing the importance of attributes affecting what is fair." Thus, a claimant for credit who is boundedly ethical (or for whom the ethical dimension of making a claim for credit has faded) understands that they are making a claim for credit but the ethical dimensions of making that claim have disappeared or diminished.

Research on moral licensing points to a more calculative view of the process. The core idea is that actions in one's past allow one to do things that would normally be discrediting, but because of past good behavior the transgression is not discrediting (Miller and Effron 2010). Miller and Effron suggest that one basis for avoiding discredit is Hollander's (1958) notion of idiosyncratic credits. An individual holding these credits can subsequently deviate from group norms without being discredited. Merritt et al. (2010) have applied the notion to moral situations and Merritt et al. (2012) have shown that strategically pursuing one's moral credentials can allow an individual to manage how their morally dubious behavior is seen. Drawing on this view, an individual might make a claim for credit—even though they are not entitled—when they feel their past behavior will allow them to transgress without harming their reputation. A claimant who is calculating might reason that their unjustified claim will succeed without challenge or, if challenged, the claimant's prior meritorious behavior will uphold their claim to credit.

The preceding discussion points to the ease with which ethical issues can arise when claims for credit are made. Unjustified claims for credit may be made by those who are unethical and opportunistic, but other factors can contribute to the process. Organizational cultures may allow powerful individuals to appropriate credit, cognitive biases can tilt cognitive processes towards the claimant, boundedly ethical thinking can constrain perspective, ethical aspects can fade and moral licensing may allow actors to draw on previous good deeds to permit present transgressions. These are all troubling and can easily lead to over-claiming credit.

Summary

We use "credit taking" to refer to an act in which an individual makes a bid for credit. We use "credit giving" to refer to an audience's acknowledgement that the credit claimed is deserved. "Credit" means that an audience has recognized a claim as deserved. An individual can make a bid (take credit) but no credit exists until an audience has given credit to the credit taker. Thus, credit exists when an audience agrees with a claim (or when an audience gives credit without being asked); there is no credit if an audience disagrees with a claim for credit. Alternatively put, credit exists when there is convergence between what the credit seeker justifiably claims and what the audience acknowledges; when there is divergence there is no credit. Because audiences operate under conditions of bounded rationality, some bids are unfairly rejected (recognition is



deserved but withheld) while others are unfairly accepted (recognition is undeserved but awarded). Ethical issues arise when the credit taken exceeds what is justified by the contribution and when the work efforts are not acceptable to civil society.

A Model of the Credit-Taking Process

Recent surveys of US and Canadian employees report that many organization members have had credit stolen from them in the previous year (or had witnessed the taking of unjustified credit). Percentages ranged from 23 of employees of US organizations to 58 of Canadian employees who saw others taking credit for their work (McGinn 2009) and the 61 of Canadian human resource managers who felt leaders in their organizations took too much credit (Immen 2010). Unjustified credit taking is apparently common enough in our own field to have provided an adequate sample for a study of disputes about credit among co-authors of articles published in our leading journals (Floyd et al. 1994). The latter study points to the competing roles of power, status, merit and collegiality in determining the order of names.

The ethics of taking credit for work done by others has received some attention from academic researchers, primarily as an item in a list of unethical behaviors. For example, Donaldson (1996, p. 53) noted that "stealing credit from a subordinate is nearly an unpardonable sin," a statement supported in several cross-national studies (see, e.g., McDonald and Zepp 1988; Metha and Kau 1984). Taking credit for the work of peers has similarly been viewed as unethical: in a study of Australian and South African managers, Abratt et al. (1992) found that taking

credit for the work of peers was seen as highly unethical. Taking credit for work done by others has also been regarded as a tactic for self-promotion (Dyke 1990) and for impression management (Higgins and Judge 2004; Schlenker 1980).

While recognizing that taking credit has multiple uses, we regard taking credit as an overlooked everyday phenomenon that merits attention for its own sake. It has antecedents—psychological, situational and personality—and consequences—emotional, behavioral and organizational—that are of importance for understanding organizational behavior. Recent work by Pierce et al. (2001) on psychological ownership, Brown et al. (2005) on territoriality and Bazerman (2006) and others (e.g., Epley and Caruso 2004; Tenbrunsel and Messick 2004) on decision making provide constructs that may be useful for understanding credit taking, as does the application of the fraud triangle in forensic accounting (Cressey 1953) and the corrosive effects of narcissism in organizations (Chatterjee and Hambrick 2007).

Our opening paragraphs point to the myriad ways in which credit can be taken—from the active and explicit to the passive and implicit. The routes travelled to take credit, and the factors that affect the likelihood of credit taking, are similarly varied. In the interest of coherence and tractability, we focus on five constructs that we believe are useful for understanding credit taking: psychological ownership, motive, opportunity, the ability to rationalize and narcissism. We expect the first four produce main effects and the fifth acts as a moderator. Figure 1 represents our understanding of the credit-taking process. It is a heuristic device intended to organize the panoply of claims. We draw on these constructs to explain four kinds of bids that we believe are the routes most often travelled by those

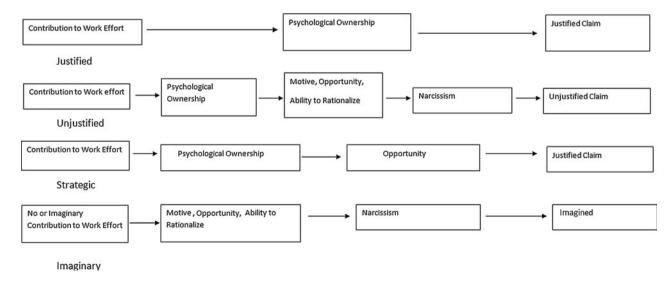


Fig. 1 Four paths to claiming credit

who take credit at work: the credit claimed matches the contribution, the credit claimed exceeds the contribution, the claim is justified and strategically made after some delay and no contribution is made but credit is claimed. We use the four paths (Justified, Unjustified, Strategic, and Imagined) as exemplars of credit taking. They are not exhaustive of the domain since many gradations exist between them. They are presented as pure types meant to help make sense of a rich domain.

The first path, Path J (for Justified) represents the simplest case: a contribution is made, feelings of territoriality and psychological ownership are experienced and a justified claim for credit is asserted (the claim equals the contribution). Claims on this path are not calculative and are driven by a sense of ownership of the work effort: we wrote this manuscript, acknowledged the contributions of others and submitted it with our names on it. Path J raises no ethical issues (and is also the least interesting of the four paths).

Claims that follow Path U (for Unjustified) are calculative and opportunistic: a contribution is made, psychological ownership of the work effort is experienced, and then motive, opportunity, the ability to rationalize and narcissism can each enable the making of an unjustified claim (the claim exceeds the contribution). It is the one taken by those who seek to exaggerate their contribution, as in Michael Gerson's claim to sole authorship. The ethical issue is evident: the claimant is bidding for more than is deserved, denying others their due.

Path S (for Strategic) is a variant on the justified path: a contribution is made, feelings of territoriality and psychological ownership are experienced, a calculation is made about opportunity—most often about whether something is enough of a contribution and whether this is the right time and setting to make a claim—and, after some delay, a justified claim for credit is made (again, the claim equals the contribution). What differentiates the Strategic from the Justified path is that there is a calculative element to the Strategic path: claimants are sensitive to situational factors about thresholds, time, and place. A contributor to a work effort may experience a strong sense of psychological ownership of the effort yet not make a claim for credit; similarly, the absence of a claim may be a response to the claimant's recognition that a normative threshold—what is enough of a contribution to warrant making a claim, or what is an appropriate time or place to do so—first needs to be reached. Further, someone who has done all the work on a project may not explicitly claim credit because to do so violates accepted anti-self-promotion norms of the occupation or organization (Dyke 1990). Mathew Scully is an example of someone who follows this route. He did not make a claim for credit until Michael Gerson had done so, perhaps because Scully was sensitive to the self-effacing norms of the speechwriting profession. While these kinds of claims, when made, are not ethically problematic, an ethical issue does arise if a potential claimant, one who is sensitive to normative constraints, is unable to claim credit because an appropriate opportunity does not arise: the potential claimant foregoes the right to credit that is deserved.

Path I (for Imagined) is the route taken by those who take egregiously unjustified credit: the credit taker has made *no* contribution to the work effort yet claims credit for it. It is the most ethically troubling path: it is a conscious act made without a conscience. Individuals on this path may understand that, on the basis of effort, they are not entitled to claim credit but, responding to motive, opportunity, the ability to rationalize and narcissism, feel that, given factors such as moral license, the overweening sense of deservingness, an organization's normative environment that favors the powerful, an audience's ignorance or the claimant's false memory, they can advance a claim for credit.

The four paths are most readily distinguishable on two factors: first, the match between the contribution and the claim; and two, the degree of attention to the environment. With regard to the match, the four paths differ in the relationship between claim and contribution: claim = contribution (Paths J and S), claim > contribution (Path U) and claim but no contribution (Path I). Second, claimants on the four paths differ in their attention to the environment. Those who follow Path J are attentive to their contribution but are insensitive to the environment. Claimants on Path U take advantage of an environment that may allow them to exaggerate their claim, perhaps because the audience is inattentive or grants them moral license to do so. Those on Path S are sensitive to environmental norms about thresholds, time and place, while claimants on Path I rely on an amoral environment or the audience's ignorance to make their claim.

Despite their conceptual distinctiveness, the four paths may not be readily distinguishable by an audience, particularly audiences that are inattentive. As a result, audiences may accept or reject a claim without appreciating the path the claimant has travelled in making a claim. One result is that sometimes credit is granted when it is not deserved. Asymmetric risks are apparent on each of these paths. A claimant on Path J may deserve credit but be thought of as grasping if the claim was presented at the wrong time or in a heavy-handed way. Claimants travelling Path U risk ridicule and denial of credit. Those on Path S who miscalculate the threshold, timing or place may be scorned, while those on Path I risk being called on it by an incensed colleague who knows that the claimant's contribution was non-existent.



Psychological Ownership

We begin our theoretical development by thinking of credit taking as a deliberate act of territoriality that is rooted in feelings of psychological ownership (although the two can be difficult to distinguish: see Avey et al. 2009). Pierce et al. (2001, p. 299) note that "although ownership is generally experienced toward an object, it can also be felt toward non-physical identities, such as ideas, artistic creations and other people." Some of the early work on the concept of psychological ownership has focused on feelings of ownership towards the organization and its impact on members (Van Dyne and Pierce 2004; Avey et al. 2009). Our focus is on feelings of ownership of work efforts that are based on an individual's contribution. These feelings of ownership are not arrived at in a vacuum; rather, they are products of a sensemaking process (Weick 1995) in which an individual comes to understand that a contribution is his or hers. In making a claim for credit, an individual is implicitly asking an audience to recognize and confirm the legitimacy of his or her feelings of ownership. Psychological ownership plays a role on Paths J, U, and S of our model. On Path J, it is the major explanatory variable in deciding whether or not to make a claim, while on Paths U and S it forms part of the process; claims made on Path I are not rooted in psychological ownership.

Pierce et al. (2001), tracing the idea that we own our work effort (and its products) back to Locke (1690), argue that psychological ownership fulfills a need for efficacy and self-identity. In economic systems that define individual worth in terms of the ability to create and trade work product (Marx 1847), the inability to be associated with one's work effort is likely to be alienating and damaging to an individual's sense of self-esteem and workplace credibility. Separating someone from his or her labor, including its attendant recognition and rewards (both reputational and economic) is socially undermining (Duffy et al. 2002), interferes with the individual's right to ownership of their work and can leave the individual feeling diminished, powerless, unjustly treated (and sometimes speechless).

Feelings of territoriality—either as part of psychological ownership or as a result of it—may explain credit taking when the claim is justified by the contribution (completely, as on Path J, and partially, as on Path S). In highlighting the behavioral aspects of territoriality in organizations, Brown et al. (2005, p. 580) propose that "the stronger an individual's psychological ownership of an object, the greater the likelihood he or she will engage in territorial behavior towards the object." More recently, Brown and Robinson (2011) have suggested that territorial infringements reliably lead to strong emotional and behavioral reactions, such as anger and defensiveness. Further, Avey et al. (2009) see territoriality as a central part of the feeling of

psychological ownership and include it in their definition of psychological ownership. We see the claiming of credit as one form of territorial behavior.

The sense of psychological ownership and feelings of territoriality drive the claiming on Path J. It may not be a conscious process in which all relevant factors are considered. Rather, a sense of ownership is experienced and a claim is made. This is most likely to occur in situations where the claimant is the sole or the most substantial contributor to a work effort. Strong feelings of territoriality are less likely when the claimant understands that the effort is joint and only seeks to have their individual contribution acknowledged.

Claims for credit that arise from feelings of psychological ownership can also travel along Paths U and S. Path S is calculative in the sense that the claimant pays attention to the threshold, location and timing aspects of the opportunity. The claims made on Path S are more innocent than those made on Path U since there is a match between contribution and claim on Path S. Path U is the most calculative path, with a wide range of factors being considered before a claim is made. Feelings of psychological ownership are warranted, since a contribution was made, but the claimant exaggerates the contribution and overstates the claim. The Gerson/Scully example can be seen as just such a case of an exaggerated claim: Gerson said that he wrote the President's speeches because he did write some of them. Psychological ownership (as well as motive, opportunity, the ability to rationalize and narcissism) may have led Gerson to take more credit than was warranted by his contribution. Adding to this may be psychological and cognitive biases that invite the claimant to overweight the value of their contribution. Bounded ethicality (Banaji et al. 2003) or moral fading (Tenbrunsel and Messick 2004) can aid the rationalization (to oneself) of the unjustified claims.

The starting point for claimants on Paths U and S is an assessment of their contribution to a work effort. As with claims made on Path J, Strategic claims are unbiased, while the assessments made on Path U may be biased. One's own contributions may be more readily available in memory than are those of others, providing an easy entry for the self-serving biases of unjustified claims (cf. Banaji et al. 2003; Bazerman 2006; Mezulis et al. 2004). A palpable sense of one's own effort, coupled with an incomplete awareness of the contributions of others, may enhance feelings of psychological ownership that then can be elaborated upon to produce claims for credit beyond what is warranted. A claimant may feel their claim is justified but, given the presence of bias, their claim for credit overreaches that which is justified by their actual contribution. Caruso et al. (2006) offer a straightforward cognitive availability explanation for how these biased claims



may start: self-serving biases begin with cognitive errors that lead to the over-taking of credit, even when the assessor is trying to fairly distribute credit between self and others. This suggests that the initial stage can be an innocent (cognitive) foot in the door, with the credit taker unaware that he or she has claimed an exaggerated role in the process. Caruso et al. (2006) attribute such behavior to individuals paying greater attention to their own contributions (as well as being motivated to see themselves in a favorable light). Caruso et al. (2006) cite the historical case of Nobel Prize winners Frederick Banting and John MacLeod, each of whom downplayed the other's role in the discovery of insulin to magnify his own role. Viewing speechwriting through this cognitive lens, Gerson simply may have been more aware of his own work than those of Scully and McConnell.

Thus, when we remember our own contributions—frequently with the pride that accompanies recollection of hard work in the face of adversity—it can be easy to see the input of others as lesser, worthy of only a cursory nod. As a consequence, the sense of psychological ownership may be visceral for the claimant. This sense of psychological ownership can then grow through self-serving biases in which contributors make internal attributions (e.g., hard work) while making external attributions for the contributions of others (e.g., luck), particularly in situations in which an actor feels a threat to his or her identity (Campbell and Sedikides 1999). In examining when individuals avoid some of the pitfalls associated with selfserving bias, Campbell and Sedikides (1999) note that participants did not deny all responsibility for failure but did seek to take a little more credit than was justified when they were successful. The Campbell and Sedikides (1999) finding also suggests that while the bias may fade, it does not eliminate the moral dimension of credit taking.

Friend (2003) provides evidence from the movie industry that supports the Bazerman (2006) and Campbell and Sedikides (1999) accounts of self-serving biases. He notes that screenwriters are prone to embellishing their claims to credit for screenplays (our Path U) and view themselves as the wronged major contributors—perhaps one reason that a third of the films produced annually in the US go to the Screenwriter's Guild for adjudication of screenwriting credit. Those who lose in these credit contests can feel an acute loss of what is due them when arbitrators' decisions about who wrote what separates them from what they feel is their work.

Feelings of psychological ownership play no role on Path I. It can be difficult to understand the audacious claims for credit made by individuals who contributed nothing. A likely explanation on this path is that feelings of ownership—based on effort and contribution—are replaced by a sense of entitlement—based on a normative

environment—that redistributes credit. Jackall (1988) provides an example of organizations distributing credit on the basis of rank and power, rather than effort. Some understanding of how a sense of ownership can arise in the face of no contribution may be provided by research on elaborated imagination and source monitoring (see, e.g., Garry et al. 1996; Thomas et al. 2003). Originally developed to explain false memory effects regarding sexual abuse, recent work by Sharman and Calacouris (2010) has shown that when individuals think about an achievementrelated activity they can come to believe that they actually performed the activity. In this way, individuals may come to feel that they have contributed to a work activity when all they have done is thought about what they could do. An equivalent idea has been attributed to author Farley Mowat: "I have no difficulty remembering what should have happened." Such memories of past thoughts can endure and lead individuals to think that they should be credited for doing things they have only thought about doing.

Building on this work, we expect that the process of psychological ownership will lead individuals to both claim credit for their work, as in a claim by someone who is responsible for a work effort (Path J), Gerson's exaggerated claim (Path U), and defend against rival claims asserted by others, as in Scully's response to Gerson (Path S), as well as those who have only imagined their contribution (Path I). Perelman's lack of motivation to assert a claim (and to contest Yau's claim) is an exception in search of an explanation. One possibility is that individuals with a stronger sense of identity are less interested in asserting claims: being certain about whom you are and what you have done may lessen the motivation to make a territorial claim.

Proposition 1 The stronger an individual's psychological ownership of a work effort, the more likely the individual will make and defend a claim for credit.

Some features of the work effort may increase the sense of psychological ownership on all four paths. Here, we briefly identify three: the distinctiveness and size of the contributions and the normative contexts in which such feelings develop. Distinctive contributions may increase psychological ownership because they represent strong expressions of the self, the uniqueness of the individual. Those behaviors that are unique to us are what differentiate us from others, thus helping to create our distinctive identity (Brewer 1991). Distinctive contributions need not be large: a low level of effort can produce a contribution that is a strong expression of self. A speech writer may effortlessly coin a phrase that later takes on great significance (e.g., "Axis of evil"). The speech writer may feel a strong sense of psychological attachment to the words, even though the size of the investment may have been



slight. Thus, Yau points out the unique ways in which he contributed to solving the Poincaire Conjecture and screenwriters point to the particularly clever dialogue they inserted into the final screenplay (Friend 2003).

Proposition 1a The more distinct an individual's contribution to a work effort, the stronger an individual's psychological ownership of a work effort.

A second factor that is likely to affect psychological ownership is the size of the contribution. Larger contributions are likely to increase an individual's identification with a work effort, seeing the work activity as one's own, thereby increasing the sense of entitlement to recognition from others. This is consistent with Pierce et al.'s (2001) proposition that the greater the individual employee's investment in a target, the greater the ownership felt toward the target. Size can have an effect that is independent of distinctiveness simply because it is difficult to abandon something in which one is heavily invested. This is consistent with the general finding that the more one invests (in an effort, project, idea, cause) the more an individual (team, organization, state) comes to identify with it (Staw and Ross 1987). Concomitantly, small contributions may temper an actor's willingness to seek credit from an audience, since seeking credit for small efforts can bring scorn or ridicule if the individual is seen as petty (McGinn 2009), grasping and insufficiently team-oriented, as in Scully's view of Gerson.

Thus, efforts may need to reach a quantitative threshold before credit is sought without sullying one's reputation, whether the claimant is following Path J, U, or S. Such contributions can be large in either an absolute or relative sense. Completing 90 % of a project makes that contribution large in an absolute sense whereas doing more than others on a team makes the contribution large relative to the contributions of others. The size of the contribution will not always be determined by the time invested. Obtaining the funding necessary for a project may not have taken the most time but may have been the key to proceeding on the project.

Proposition 1b The larger an individual's contribution to a work effort, the stronger an individual's psychological ownership of a work effort.

Feelings of psychological ownership may be strengthened when the normative context supports such feelings. The normative environment will be supportive of feelings of psychological ownership when it encourages individuals to be associated with their work effort, accepts justified claims to ownership, and rewards claimants for their accomplishment. When the context is not supportive, criteria other than effort and accomplishment may determine who is associated with a contribution and the subsequent rewards. In these circumstances, wronged parties have the choice of voicing their displeasure (or waiting their turn using whatever set of criteria the organization is using to determine creditable contributions). The latter is nicely captured by Jackall (1988, p. 21): "A subordinate whose ideas are appropriated is expected to be a good sport about the matter; not to balk at so being used is one attribute of the good team player."

In considering entitlement to credit, feelings of psychological ownership can be important but because credit is socially constructed, feelings of psychological ownership are likely to be strengthened when the normative context in which they are nurtured supports these feelings (and constrained when the context is unsupportive). An individual who feels a strong sense of psychological ownership and is supported by a normative environment that provides psychological safety (Edmondson 1999) may be more likely to advance a claim for credit than would be true for an individual who works in a normative environment where power—rather than contribution—provides entitlement to credit.

Proposition 1c The more supportive the normative context, the stronger an individual's psychological ownership of a work effort.

The Fraud Triangle

While psychological ownership is the primary explanatory variable for credit claims that follow Path J and plays an important role on Path S, psychological ownership provides only a partial explanation for the claims that follow Path U (and it provides no help in understanding claims that follow Path I). We draw on the fraud triangle (Cressey 1953; Murphy and Dacin 2011; Public Company Accounting Oversight Board 2005) to help explain the credit-taking behavior of those who make claims for credit that follow Path U and the wholly fabricated claims made on Path I. The fraud triangle was developed within forensic accounting as a tool to help narrow the field of suspects who may have taken tangible assets in the workplace. Tangible assets are clearly owned and can be identified since there are paper trails, serial numbers and the like. Investigators begin by looking for those who had the motive and opportunity to commit fraud and a way of explaining the act to themselves. In comparison with tangible assets, the intangible and socially constructed nature of credit can provide even more tempting possibilities for those who want to claim responsibility for a work effort.

Former Enron executive Sherron Watkins has drawn on the framework of the fraud triangle to help explain the unethical behavior at Enron before the fall. Pressures to enhance financial results provided the motive to report that



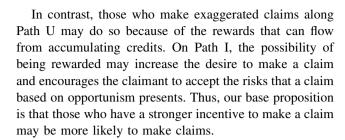
earning's goals had been achieved, the plasticity of accounting rules provided ample opportunity for burying financial details, and the recourse to technically correct accounting practices provided the room to rationalize the misrepresentation (Beenen and Pinto 2009). Watkins asserts that together these encouraged corrupt behaviors (and helped produce the demise of Enron).

Building on this perspective, we argue that motive, opportunity, and the ability to rationalize may provide a useful way of thinking about credit taking on Paths U and I. The fraud triangle argues that all the three components must be present for fraud to occur: the presence of one factor alone would not be sufficient to identify a suspect. Translating literally, this argues for a three-way interaction between motive, opportunity, and the ability to rationalize. But unlike fraud, which does not rely on an audience for possession, we regard each of the three sides of the triangle as a potential foundation for claiming credit, with their conjunction making claims even more likely.

Motive

One base of the fraud triangle is motive, where motive refers to the incentives that exist for making a claim. For forensic accountants, motive serves as a situational clue in fraud investigations that may help identify who would benefit from misrepresentation or theft. For credit-seeking behavior, the motives include the standard list of organizational incentives: enhanced reputations, better performance evaluations, larger bonus pay, faster promotions, and future opportunities. Those who have more credits may have a better chance to make a positive impression and are given greater rewards (Crant and Bateman 1993). Accumulating credits may also provide an individual with the right to deviate from group norms (Hollander 1958) by giving those with moral credits a sense of license or entitlement that permits a transgression to be forgiven because of past good deeds (Miller and Effron 2010). Further, credits may allow greater risk taking, protection from failure, and, as recently reported by Shapiro et al. (2011), make it possible for leaders to violate organizational norms, including taking credit for the accomplishments of others.

Perelman offers an interesting example of someone who was not motivated to take credit for his solution to the Poincaire Conjecture. He may be thought of as a prototypical example of someone who could follow Path J, given the longstanding challenge presented by the Poincaire Conjecture to mathematicians, the originality of his solution and the concomitant sense of psychological ownership. Despite this he did not follow Path J and make a claim, nor did he press a claim along Path S even when there was substantial opportunity to do so.



Proposition 2 The greater the motivation to make a claim, the more likely the individual will make and defend a claim for credit.

Four factors may increase the motivation to make a claim: the valence of the outcome, the presence of individual-based reward systems, deadlines for evaluation, and spoiled reputations. Each represents temptations that some organization members may find difficult to resist (cf. Dunn and Schweitzer 2005). First, the motivation to make and defend a claim for credit may be stronger when the claim is expected to be successful and to lead to formal rewards that are highly valued. Put differently, the motivation to take credit may be lower when the rewards are less attractive. This is consistent with the classic motivational effects of more positively valenced rewards: the more attractive the reward the more likely the behavior (Vroom 1964). Thus, Gerson and Yau saw public recognition as something of value for their reputations and asserted their claims.

Proposition 2a The more favorable the expected reward, the greater the motive to take credit.

An organization's formal reward system is likely to influence an individual's decision to take credit. Organizations that operate career tournaments—such as Enron's "rank and yank" evaluation system described by Watkins, Beenen and Pinto (2009)—can put strong performance pressures on individuals, thereby increasing the likelihood that individuals will claim credit to advance (or survive). Reputational enhancement, getting the attention of gatekeepers, and the attraction of scarce rewards all create pressures to be associated with valued organizational efforts. Thus, screenwriters who compete in reputational tournaments-in which accumulating (literal) screenwriting credits for successful movies increases the chances that they will be asked to work on future projects (Bielby and Bielby 1999)—are motivated to make claims or to challenge claims made by others.

Reward systems that are based on individual results may be particularly likely to encourage aggressive credit claiming. This is especially problematic when there is a mismatch between the unit of the work activity and the unit of rewards (e.g., when the work is team based and the rewards are individual based; cf. Colquitt et al. 2001). Toffler (2003) provides an example of one such



dysfunctional reward system that was in place during the waning days of Arthur Anderson. When she was working there in ethical consulting, the reward system was based on four components—people management, quality, thought leadership and financial performance—which she characterized as "three pebbles and a bolder" (p. 105). She quickly learned to ignore the first three after she saw that generating fees was the only one that was rewarded.

Proposition 2b The more the reward system emphasizes individual results, the greater the motive to take credit.

There may be critical times in individual-based reward systems when individuals choose to make claims, such as just before important milestones. Borrowing from Bolino's (1999) analysis of citizenship behaviors that are timed for impression management purposes, we expect that motivation to claim credit will be greater when critical evaluation moments approach (e.g., performance reviews, promotion decisions). Employees are likely to appreciate the potential benefits of emphasizing accomplishments that have happened recently and strategically time their efforts to create favorable impressions. Performance reviews become part of the individual's career narrative and having one's efforts acknowledged in a formal review or a promotion announcement can help crystallize a previously underdefined reputation.

Proposition 2c The nearer the deadline for evaluation, the greater the motive to take credit.

Finally, individuals whose reputations have suffered may be especially likely to make claims for credit in an attempt to rebuild their images. When past deeds have eroded the way in which an individual is seen, the individual (or allies) may be particularly motivated to repair their reputation by associating the individual with meritorious efforts. Those who have been scapegoated or whose self-esteem has been threatened by a recent failure may be highly motivated to do things that will burnish their reputations (cf. Bolino 1999; Boeker 1992; Cialdini et al. 1976).

Proposition 2d The higher the perceived need to restore one's reputation, the greater the motive to take credit.

Opportunity

Opportunity represents a second situational factor that affects the likelihood that credit will be claimed and defended. In ordinary language "opportunity" refers to chance, occasion, circumstance, or opening to do something, a usage that is consistent with its use in the organizational literature (see, e.g., Barsness et al. 2005; Kanter 1977, Chap. 6; Stevenson and Greenberg 2000). This is the

sense of opportunity to which those following Path S are sensitive: is this enough of a contribution, is the timing right and should I make a claim now? But in the language of the fraud triangle, particularly for financial forensic investigators, "opportunity" means access to assets in the absence of control mechanisms such as regular audits, proper oversight, dual signing authority or tight inventory control. It is in this sense that opportunity forms a second side of the fraud triangle, one that applies to Paths U and I. Opportunity also plays a role on Path S, but on this path, opportunity refers to the opening to make a claim that is normatively appropriate.

A letter submitted to a business advice columnist (Pinker 2005) provides an example of how opportunity can arise in a work setting (and the adroit ways in which effort can be framed). Janet, an elementary school teacher, suggested to her principal that a Science Day be organized for senior students. The principal was initially against the idea but agreed to the proposal after being pressed by Janet. Janet organized and supported student projects and arranged for help from local industries and colleges. She kept parents updated and actively promoted the event to them in (unsigned) notes home. On the day of the Science Fair, the principal welcomed the parents and spoke of how hard the school had worked to put on the fair, her hopes of making it an annual event, and her gratitude for the community support. The principal neither mentioned Janet in her speech nor did she give Janet the opportunity to address the parents.

The day was highly successful. Several parents wrote the school expressing their thanks for the day, noting how much their children had gotten out of being involved in the Science Day. The principal then put together a package of these letters and forwarded them to her direct supervisor at the board of education. The supervisor's performance review of the principal praised the principal for her innovative approach to education and her willingness to do more than what was required for the children in her school. Later, the principal gave Janet a favorable performance review, noting that Janet was supportive of the Science Day. The principal saw the Science Day as an opportunity to frame the day's success as something for which she could take credit.

The Cohen et al. (1972) garbage can model of organizational decision-making provides an organizing framework for thinking about how claimants can use opportunities to attach themselves to efforts, particularly when the arena for credit is unoccupied. Where Cohen et al. (1972) see problems, solutions, and decision-makers swirling about, connecting when decision-makers attach favorite solutions to current problems, we see claimants attaching themselves to efforts when the opportunity arises. If we accept Scully's portrayal of the situation in the White



House, Gerson could be seen as exploiting just such a void (on Path U). The norms of the profession—expecting speech writers to remain in the background and to avoid the public eye—allowed Gerson to fill the void and claim sole credit. While Scully had the opportunity to make a claim for credit, the norms of the profession may have made it unlikely that it would occur to Scully to do so, and he would not be able to rationalize this type of claim to himself for this and other reasons; that left Scully with the options of making a claim on Path S or remaining silent.

Proposition 3 The greater the opportunity to take credit, the more likely the individual will make and defend a claim for credit.

Several aspects of situations contribute to the opportunity to take credit. Below we identify five, each of which can provide openings for unjustified claims to credit, and all of which are present in the White House and the school settings: access, complexity, information asymmetry, power differences, and the absence of existing claims. First, because organizational efforts are frequently joint, several individuals can plausibly make claims. For example, the teacher and the principal are both likely to feel a sense of psychological ownership of the Science Day: the teacher proposed the idea and did most of the work, while the principal provided the resources and framed the results. The principal, however, had a better opportunity to take credit for the day because her position gave her easier access to relevant audiences (parents and the district supervisor), the situation was complex (there were many contributors), information asymmetry abounded (the audience-parents and the school board supervisor-did not know who did what), power differences were large (the principal had more formal and informal power than the teacher), and no one else had made a claim.

Privileged access to relevant audiences may increase opportunity, whether on Path U or I, because entrée to those in a position to grant or withhold credit can provide a greater chance to sustain claims. Access allows for the construction of narratives, frequently in circumstances where it is difficult to challenge the claim. As noted long ago by Mechanic (1962), access to persons, information, and instrumentalities provide ways of getting what one wants in organizations. Gerson had easier access to networks, both figuratively and literally, and the principal had easier access to the audience of parents on Science Day and to her supervisor at the Board office.

Proposition 3a The greater the access to relevant audiences, the greater the opportunity to take credit.

Complexity—most often created by multiple contributors, multiple locations, and lengthy processes with multiple iterations—may increase opportunities for claims. Complexity can create uncertainty and confusion for actors and audiences alike, enabling self-serving behavior (Dunning et al. 1989; Sedikides and Strube 1997). This uncertainty makes it more difficult for audiences to disentangle who did (and deserves) what. Indeed, the very complexity of many situations has been identified as an important origin of self-serving biases in ethical decision-making (Rogerson et al. 2011). Complexity provides opportunities for actors to construct credible narratives, as with Gerson on Path U, and the complexity of coordinating large numbers of individuals over months of work provided the principal with the opportunity to take credit.

Proposition 3b The greater the complexity of the work effort, the greater the opportunity to take credit.

Agency theory (Jensen and Meckling 1976) and transaction cost economics (Williamson 1975) both recognize that information asymmetry provides an opportunity for individuals to exploit their privileged knowledge for their own benefit. The degree of information asymmetry between actors and audiences may be a third contributor to opportunity. Audiences may not have the time, ability, or inclination to assess the relative contribution of each individual. When audiences know little about who did what, astute actors can seize the opportunity to make claims about their contributions. Boundedly rational audiences may be willing to accept the story as recounted by the claimant, thus providing an opportunity for individuals to fashion the narrative in their own interest. Gerson and the principal made contributions (to the speeches and the Science Day, respectively) but may have overstated the importance of their contributions (Path U), something that members of the relevant audiences may be unable or unwilling to sort out. In other cases, opportunists may maintain their distance from a project to provide deniability (in case the project fails), but lay claim to and embellish their contribution once the project is a success (Path U, as in the Dilbert cartoon about tweaking an idea quoted earlier, Adams 2011).

Proposition 3c The greater the information asymmetry between actor and audience, the greater the opportunity to take credit.

Power differences may increase opportunity because it improves the chances of sustaining a claim by those with more power. Power's contribution to opportunity is nicely articulated in the opening quote from Jackall (1988), taken from his ethnographic work in corporate settings. There he showed that superiors felt entitled to take credit from their subordinates (but not their superiors) because the organization's norms and reward system gave them the license to do so. In the three corporations that Jackall studied—and in Eichenwald's (2005) account of Enron before the fall—it is



clear that the norms in these organizations justified the taking of credit by those with more power; indeed, the acceptance of this logic seemed necessary for individual survival. Jackall (1988, p. 21) asserts that "credit flows up in this structure and is usually appropriated by the highest ranking officer involved in a successful decision or resolution of a problem; ... authority provides a license to steal ideas, even in front of those who originated them." Similarly, the principal-teacher example illustrates the potential that the power embedded in hierarchy has for taking unjustified credit. Partnership tournaments (such as law and consulting) allow seniors to take the credit and its concomitant rewards, while the juniors who do the backstage work are left to struggle with the vicissitudes of the tournament, perhaps hoping that their turn will come some day (Galanter and Palay 1991).

Proposition 3d The greater the power difference between potential claimants, the greater the opportunity for the more powerful to take credit.

Finally, existing claims can be a barrier to potential claimants; conversely, the absence of existing claims may contribute to the opportunity to make a claim unencumbered by the claims of others. The first claimant for a successful effort might be more likely to receive the credit, a kind of first mover advantage: once asserted it can be hard to dislodge an established narrative. Claims for recognition may not be made immediately, sometimes because of risk aversion—the outcome is not yet known and sometimes because of modesty—the potential claimant may be (or want to be seen as) humble and modest. Delays between efforts and outcomes can create an ownership vacuum into which opportunists can slip. The Perelman-Yau example illustrates a first mover advantage, with Yau stepping up with an assertion of credit. Perelman may have felt that his work spoke for itself and his silence provided the opportunity for Yau.

Proposition 3e The fewer the existing claims, the greater the opportunity to take credit.

Ability to Rationalize

The ability to rationalize—the ease with which one can explain an act to oneself—is a third base of the fraud triangle. The ability to rationalize is not an issue for justified claims to credit since they do not need to be explained to oneself (Paths J and S). Rationalization can abet the unjustified claims of Path U that are based on exaggerated (or, on Path I, non-existent or imagined) contributions, as well as a wide range of unethical activities, such as bribery, corruption and kickbacks (Collins et al. 2009). Of course, the ability to explain a claim to oneself does not necessarily

mean that the claim can be explained easily to others. This is particularly likely to be true for the imagined contributions of Path I.

The ability to rationalize and the other two legs of the fraud triangle can be related. This can be seen in the larger literature on motivated reasoning (see, e.g., Cohen 2003; Haidt 2012). In contrast to conventional accounts about thinking and reasoning—information gathering, assessing the merits of arguments, and then reaching a position on an issue—the motivated reasoning account suggests that we decide what we want and then marshal reasons for supporting what we want. In the realm of credit taking, this would mean that once we decide to take credit for something we then look for grounds that support the taking.

While the concept of the ability to rationalize is underdeveloped in the forensic accounting literature, recent work by Anand et al. (2004) and Murphy and Dacin (2011) has helped illuminate the many ways in which individuals can use their view of the situation to explain their actions to themselves. These rationalizations range from appealing to higher loyalties, necessity, and selective social comparisons, to euphemistic labeling, minimizing the consequences of the act and denial of injury. It is also possible that rationalization will be enabled when credit is incorrectly awarded by another or a claim for justified credit is unreasonably enlarged by a naïve audience. In both instances, the passive nature of the claim may facilitate rationalization. Rationalizing the taking of unjustified credit may be easier than rationalizing theft of goods because the former is not illegal and what is being claimed (credit) only exists when an audience recognizes it.

Rationalization also may operate at a more holistic level, as in the case of moral licensing—where past good behavior may be used as a basis for rationalizing the commitment of a wrongful act (Miller and Effron 2010) or in the case of accumulated idiosyncratic credits that are used to rationalize deviations from acceptable organizational norms (Shapiro et al. 2011). Thus, our base proposition is that individuals may be more likely to make a claim for credit when a rationalization strategy is readily available.

Proposition 4 The easier it is to rationalize a claim, the more likely the individual will make and defend a claim to credit.

Here, we briefly identify three conditions that may affect the ability to rationalize a claim for credit: norms that promote rationalization, gaps between rewards and previous contributions and the salience of contributions. Ariely (2008) points out that many workplaces mix economic and social norms. It may be more difficult to rationalize taking unjustified credit (as on Paths U and I) when social norms are strong: when the workplace is seen as collegial and



psychologically safe, norms of reciprocity may limit a claimant's ability to take unjustified credit because social norms reduce the ability to rationalize the taking. Conversely, an emphasis on economic norms (with their survival of the fittest rationales) may facilitate rationalization. The workplaces described by Jackall (1988), Toffler (2003), and Watkins (in Beenen and Pinto 2009) all exemplify the predominance of economic norms over social norms, a situation that can invite unjustified credit taking.

It may be much easier to rationalize one's claims to credit when rationales of opportunistic claims are embedded in organizational norms. These rationales may vary from "everyone does it" to "you have to in order to survive around here." As Jackall notes, many of these logics tacitly flow down the hierarchy. Murphy and Dacin (2011) argue that such logics allow an action to be viewed as acceptable. Some of this may be benign, as in organizations that have informal heuristics about how credit is assigned; these can facilitate the automatic assignment of credit and its rationalization. For example, the chair of a committee might be viewed as the customarily appropriate person to receive credit for the committee's accomplishments—and have the report named for the chair—even though other members may have made more substantial contributions. Other fields, such as politics, exist on the (usually) unacknowledged work of backstage players. Such heuristics can provide ready ways to rationalize the taking of credit.

The basis for rationalization may be provided by norms within the organization. In the organizations studied by Jackall (1988), credit is claimed by those who are senior and these claims can be seen as appropriate within the norms of the organizations—at least to those in positions to receive some credit for the work of others. Rationalization implies an understanding that some larger norm or ethical standard has been deviated from and that some grounds are required to explain the bid to oneself. When the normative environment accepts an action there is, in effect, no deviance to rationalize. As the ethical dimension of taking credit fades, the claimant's need to rationalize is reduced. This is the kind of ethical fading that can lead to a numbing (Tenbrunsel and Messick 2004) that, over time, mitigates and finally removes the need for rationalization: the behavior becomes routine, taken for granted, acceptable (Kelman and Hamilton 1989).

While our focus has been at the individual level, unjustified credit can also be taken by collectivities, such as organizations as a whole. Annual reports, press releases, and other communications with external audiences can portray organizations as agents of change, despite the exogenous factors that can overwhelm agency (Bettman and Weitz 1983; Staw et al. 1983). Although insiders may understand that these claims for credit are overstated, they

can provide the imitative grounds for the organization's members to rationalize his or her own exaggerated claims, as on Paths U and I (Anand et al. 2004): when institutions enact norms of opportunistic credit taking, individual members may be likely to follow suit.

Proposition 4a The stronger the organizational norm to take unjustified credit, the greater the likelihood that individuals will rationalize a claim for credit.

Equity theory (Adams 1965) may provide an (ironic) rationalization for balancing the ledger between inputs and rewards (Anand et al. 2004). Those who feel that their past contributions have not been fairly recognized may feel more entitled to take future credit, even when unjustified. Just as employees who have been unfairly treated may use their sense of inequitable treatment as the basis for theft (Greenberg 1990), so too may those who feel neglected for their past contributions take some unjustified credit as a way of evening the score (perhaps followed by an act of cleansing as contrition, Zhong and Liljenquist 2006). Equity theory is primarily a motivational theory but it can also provide the basis for justifying a claim for credit. We also note that this close association between motivation and rationalization will not always hold. A claimant might be motivated to claim credit because of an upcoming performance appraisal and then rely on an equity theory-based rationalization to justify the claim to themselves.

Proposition 4b The greater the perceived gap between a potential claimant's past contributions and the credits received, the greater the likelihood that individuals will rationalize a claim for credit.

The differential salience of one's own contributions may abet the ability to rationalize. As noted earlier, it can be easy to see one's own work as especially important when individuals think about their contributions. The rationalization process may be further aided by psychological processes such as the self-serving biases described by Bazerman (2006) that fade the ethical dimensions of the decision (Tenbrunsel and Messick 2004).

Proposition 4c The greater the salience of an individual's contributions to the claimant, the greater the likelihood the individual will rationalize a claim for credit.

Narcissism

Several aspects of personality are likely to play moderating roles in the credit-taking process. Three individual differences that are likely to affect the probability of credit taking are dominance, conscientiousness, and narcissism. Here, we use the construct of narcissism to illustrate ways in which personality can moderate the effects of the



previously identified factors in the credit-taking process. Narcissism can be seen as both a personality disorder and a dimension of personality. As described by Ellis (1898), narcissism includes tendencies toward excessive self-admiration, seeing others as extensions of oneself and approval seeking. Psychometrically, there are four components of narcissism: entitlement, authority, arrogance, and self-absorption (Emmons 1987). The entitlement component of narcissism provides the most direct entry to seeing why narcissistic individuals may be more prone to taking credit than are others who are less narcissistic. Scale items such as "I will never be satisfied until I get all that I deserve" and "I insist upon getting the respect that is due me" (Raskin and Hall 1979) point to likely connections between narcissism and credit taking. While narcissists may have an inflated sense of self, their self-image may be quite fragile and in need of constant reinforcement, bolstering and validation by others (Morf and Rhodewalt 2001). This fragility may explain why narcissists also tend to diminish the contributions of those who outperform them (Morf and Rhodewalt 1993).

At the other end are those individuals who avoid taking credit and actively seek opportunities for others to get the credit. Meyerson (2001, 2003) describes quiet leaders who make efforts to ensure that subordinates get and receive the credit that would ordinarily go to themselves. While the reputations of such quiet leaders can be enhanced—they may be seen as excellent at developing future leaders—their personal visibility may suffer, including receiving less direct credit for their efforts.

A fragile ego and a tendency to underappreciate the contributions of others, when coupled with the narcissist's increased tendency to workplace deviance (Judge et al. 2006), suggests that narcissists may be chronic first movers who make claims for credit as a way of calling attention to themselves, even when the claims are non-existent (Path I) or exaggerated (Path U). In the organization-level literature, highly narcissistic CEOs (e.g., those who's pictures and words are prominent in annual reports and press releases) are more likely to make bolder decisions, pursue more expensive and more grandiose strategies, make larger and riskier acquisitions that produce more volatile performance, and are emboldened by media praise (Chatterjee and Hambrick 2007, 2011). Highly visible successes may help confirm self-views of worth and draw attention to the narcissist. Such behaviors are consistent with the idea that narcissists seek settings in which they can get attention for their bold efforts. While we view personality as a moderator of the relationship between contributions and claims, this suggests a main effect for narcissism.

Proposition 5 The more narcissistic the individual, the more likely the individual will make and defend a claim for credit.

Narcissism may also affect the level of contribution or the threshold needed before an individual makes a claim for credit. Organizational members may have very different standards for deciding when a claim is warranted, some seeing small accomplishments as deserving approbation, while others await the end of a major project before making a claim. We have noted that narcissists may have lower thresholds for making claims. More modest individuals may be less disposed to claim credit, preferring to be the organizational equivalent of the anonymous donor (or in Perelman's case, not challenging a rival's lesser claim). Although this may be true along all four paths, we expect that the moderating effect of narcissism may be most pronounced on Paths U and I.

Proposition 5a Narcissism moderates the relationship between contribution and unjustified claims, with more narcissistic individuals making claims for smaller contributions than may less narcissistic individuals.

Summary

We have presented the process of taking credit as one in which individuals make a bid for an audience's approbation on the basis of their psychological state, situational cues, and personality. We have argued that individuals may be more likely to take and defend claims to credit when some or all these are present. Psychological ownership may be most useful in explaining why justified claims to credit are made (Paths J and S), psychological ownership, and an environmentally sensitive form of opportunity may be the primary factors in explaining justified but delayed claims (Path S), while motive, opportunity, the ability to rationalize and narcissism may be useful in explaining unjustified claims to credit (Paths U and I). While the usefulness of these lenses for explaining credit taking has not been directly tested, each is supported by indirect evidence that suggests that it may help explain and predict credit taking in organizations.

The Ethics of Taking Credit

Jackall's (1988, p. 6) stark distinction between ethics inside and outside organizations and the four opening quotes point to some very mixed views about the ethics of credit taking. While all four suggest that credit taking can be a problem, their advice is quite different: it is better to do the work and not worry about getting the credit (Confucius, Gandhi, Truman), versus just take the credit when you can (Jackall). That taking credit continues to be a problem is evident in a recent article in the business press about organizational politics: Johnson (2012, p. 12) says that



those seeking to run many large organizations "spend their entire time backstabbing, stealing credit from rivals and waging turf wars." Given such competition for credit and the conflicting advice about credit taking, it is not surprising that individuals can be confused about the ethics of taking credit. Workplace advice columns regularly feature ethical issues that are concerned with when and how to take credit. One column recently posed this question: "You're asked by your boss to come up with a strategy for launching a tough, new product. You seek the input of a new junior who comes up with some brilliant tactics you never would have thought of. Your report gets rave reviews—and you get all the credit. You know that sharing the accolades would help your subordinate—but might also make you look not so smart after all. Do you give the junior credit, or quietly enjoy your success?" (Globe and Mail 2006, C2)

All 16 printed responses said that the credit should be shared right away, either publicly or with the advice seeker's boss, arguing that it is the right thing to do, would set a good example and raise the quality of team culture, cooperation, motivation, and loyalty. Others pointed to a more calculative side: it would enhance the advice seeker's reputation for generosity, fairness, skill in developing a subordinate, and being a trustworthy team player, as well as the attraction that others would have for working with the advice seeker (and the possibility that the subordinate may someday be the boss). Some did see the fair apportionment of credit as an ethical issue, arguing that failing to credit the subordinate was equivalent to theft, an underhandedness that was likely to discourage future contributions, abet a bad culture or risk later exposure.

These responses point to the complex interplay of ethics and self-interest, doing the right thing and seizing the opportunity. Tournament, contest, or other survival of the fittest rationales tend to stress the opportunity dimension and underplay the ethical dimension of organizational dilemmas (cf. Ariely 2008; van Zyl and Lazenby 2002). Individuals who see credit taking as instrumental to their career progress may simply not see the ethical side of it, or if they do, choose to ignore both. In contrast, those who are removed from the situation read columns on business ethics, reflect on the dilemmas posed by them, and take the time to write in may be more likely to be sensitive to the ethical dimension than those who are just trying to advance in career tournaments (cf. Cooper et al. 1993). This contrast is consistent with the more general finding that compared to action takers, advice givers are more psychologically distant, more idealistic, place greater emphasis on ends, and are less pragmatic about the situation (Danziger et al. 2012).

Thus far our main concern has been with the antecedents of credit taking. We have used variants on "the justified taking of credit" throughout this article; embedded in the phrase is a judgment about fairness (and, as noted by one reader of an earlier version of this manuscript, less concern about the defensibility of the work effort outside the workplace). Separating someone from the fruit of their labor, including its attendant recognition and rewards, is a situation loaded with moral difficulties. Some would see the taking of credit as an ethical decision. For example, virtue ethics (Taylor 2002) focuses on strategies that individuals can use to develop desirable character traits such as honesty and fairness; taking unjustified credit is unlikely to develop these virtues. In Rawls' (1971) theory of distributive justice, it is likely that ethical individuals would select a rule that entitled all to be associated with their effort and accomplishments. Such a view would also be central to entitlement theory (Nozick 1974), where the ability to trade one's labor and talents forms a legitimate basis of exchange. Taking credit from another would be to come by the credit and the attendant rewards other than by fair exchange.

Two systematic ways of thinking about the ethics of taking credit within the organization are teleological and deontological perspectives (Cole et al. 2000). A teleological approach would assess the appropriateness of the credit taking by evaluating the outcome. It is likely that many schemes for apportioning credit are decided on the basis that the apportionment is for the greater good of the work group, department or organization, even if this is not fair to some individuals. A point-in-time analysis might justify this type of conclusion but over the longer run individuals who are not appropriately recognized may be more likely to withdraw or exit, doing harm to the team, unit, or organization. While teleological approaches can produce ethical outcomes if all consequences are fully considered, they can also support rationalizations that are used to justify outcomes that are unfair to some individuals.

Kant's (1785, 1788) categorical and practical imperatives and their deontological derivatives (see, e.g., Broad 1930; Zuboff 2005) provide a second basis for the ethical guidance sought by those with the conscience to wonder about what to do about justifiably seeking credit: "Act only according to that maxim whereby you can at the same time will that it should become a universal law." In our domain, this means that taking credit in a given situation is to will the act to be a universal law. From this perspective, an ethical credit taker would not take more credit than is due because to do so would be to will this to be a universal law. Kant's practical imperative, which requires that individuals be treated as an end rather than as a means to an end, perhaps captures the sentiment more directly. Using someone by taking credit for his or her contributions to access the associated rewards contravenes the practical imperative. Those who consistently adopt a deontological



approach may be less likely to be accused by the aggrieved, such as Scully, more likely to be admired by their colleagues, such as the quiet leaders described by Meyerson (2001, 2003), and more likely to give credit to the teacher and to the junior employee in the examples above (but perhaps more likely to suffer in career tournaments that reward short-term success in credit taking). Adopting a deontological approach may be easier when organizational cultures and norms encourage collegial behavior, promote a sense of psychological safety and discourage the monomaniacal pursuit of self-interest (cf. Greve et al. 2010; Kaptein 2010; Weber and Murnighan 2008).

The categorical imperative also addresses the defensible aspect of ethical credit taking since it discourages acts that are unethical in the world outside the organization. Acting on the categorical imperative may help to reduce boundedly ethical decision-making because it asks an actor inside the organization whether he or she would be able to defend the act in civil society. Zuboff (2005, p. 91) translates the categorical imperative into practical terms for a business audience by suggesting that "the next time you're poised to participate in a wrong that's cloaked as normal, ask yourself how you'd explain this to your children" (or to viewers if you were continuously broadcast). This translation is meant to be a check on an actor's temptation to do whatever is necessary to progress in a career tournament or do whatever the person above wants (Jackall 1988, p. 6). As a case in point, Gerson, McConnell and Scully might have paused mid-speech writing and asked "is this something I can defend outside the walls of the White House?"

Ways Forward

We have examined some possible antecedents of credit taking in the interest of beginning the process of systematically thinking about an everyday organizational phenomenon. We have argued that taking credit is rooted in feelings of psychological ownership, particularly when justified credit is taken. We have also contended that taking unjustified credit may stem from feelings of psychological ownership, the presence of motive, opportunity, the ability to rationalize and narcissism. We believe that these constructs may provide useful starting points for research on when credit is taken.

A wide range of methods could be used to increase our understanding of the credit-taking process, including qualitative methods, archival and survey research, scenario-based methodologies and experimental procedures. Qualitative research may be particularly useful for understanding how more successful long-lived teams deal with issues of credit that arise after theft or breach of trust (e.g., retaliation, forgiveness). The consequences of theft and

breach may be especially harmful in knowledge-based enterprises where there are few tangible outputs. Because teamwork depends on trust and psychological safety, an individual who takes credit that belongs to the team can be seen as failing to display the integrity that is part of being a team member (Mayer et al. 1995). Comparing the process of credit taking in successful long-lived teams and that of less successful short-lived teams, may be one way of examining how teams deal with the struggles of credit taking. Thus, our first suggestion is to use qualitative methods that focus on knowledge-based teams and ask how the five factors affect credit taking and the ways in which teams that vary in success and longevity deal with issues that arise from credit taking. The question to be asked is how variance in success and longevity both causes and is affected by the way team members' deal with issues of credit.

Archival research may be another attractive way to examine whether and how our model accounts for credit taking. We have used several examples to illustrate the effects of the five factors in credit taking. The model emerged from our attempts to make sense of these examples but it would be useful to draw on a wider range of cases to assess whether our model exhausts the useful ways of thinking about taking credit. Archival research may be particularly helpful in finding counter-examples, ones where the conditions for credit taking are present but individuals do not claim credit, as in Perelman's failure to press his claim for credit (and in the Gandhi and others' opening quote about those who do the work and those who take the credit). A number of situations might exist (other than when there is a secondary market for credit) where individuals are willing to see others take credit for their work, as when an individual no longer feels a need for the rewards that credit may provide, such as those individuals who have entered the generative phase of their career (Levinson 1978). Identifying such cases may help pinpoint the boundaries for the model of credit taking presented above.

Survey methods and scenario-based research also could be used to assess the contributions to credit taking of the five factors we have identified, plus others uncovered by qualitative and archival research. Such work may rely on self- and other-reports about contributions and bids, with all the cognitive biases this can entail (Bazerman 2006). Better control over measurement issues can be gained using experimental procedures to manipulate factors such as size of contribution and reward, power differences and past inequities, examine the moderating effect of narcissism, and observe their separate and joint effects on whether, how, when, and in what portions credit is taken and defended. Each of these approaches would be sensible to pursue once qualitative and archival research has helped fill



out our understanding of the factors that influence the taking of credit. While it would be tempting to quickly enter the laboratory and manipulate or measure each factor, we think it would be wiser to first use qualitative and archival procedures to assess the completeness of the account we have presented (cf. Cialdini 1980).

While we have focused on the conditions that promote credit taking, we noted at the outset that we expect that the way in which credit is taken and given can have important consequences for both individuals and organizations. Before closing we would like to return to the issue of consequences and the process questions that underlie them. Unfair recognition of one individual may diminish other individuals' feeling of worth and identity, negatively impact organizational justice systems, undermine interpersonal relationships, erode feelings of psychological safety and break-down trust. How credit is given is a particularly critical practical issue, especially in collective situations. Sometimes violations of fairness can be healthy for team well-being. For example, when one team member is in a better position to redeem credit, perhaps because of privileged access to gatekeepers, then the whole team may benefit when one individual takes the credit. Similarly, heuristics such as "the chair of the committee gets the credit" might be viewed as fair if the heuristic is understood beforehand and consistently followed. But negative consequences are likely when one member of a work group gets credit that is neither distributed nor accepted by the rest of the team. The research question here is to understand how the process of taking credit affects individuals, groups, and organizations.

Secondary markets for credit can ameliorate some feelings of unfairness. Speechwriters, key aids, and backroom operatives all understand that they will not receive public credit for their work. Similarly, mentors may allow protégés to take full credit for a shared accomplishment because they understand that they will receive credit in a secondary market that acknowledges employee development (as well as the simple pleasures that flow from seeing a protégé flourish). The functioning of these secondary markets and their impact on individuals represent another research area that contains interesting process questions at the individual, group, and organizational levels.

A final process issue of interest is how disputes over credit can be resolved when they arise. While Scully found a national platform from which to correct the record, the teacher's main recourse was to write an anonymous letter to a business advice columnist. We suspect that most aggrieved parties just sit with their silent rage. Recognizing the problem, a variety of institutions such as universities, professional associations (e.g., the American Psychological Association 2002) and publishers of professional journals have developed formal procedures that are intended to

resolve disputes about credit. We noted earlier that the Screenwriter's Guild of America has a formal process for dealing with conflicting claims for screenwriting (Friend 2003). When a movie is finished a studio submits a tentative apportionment of writing credit to the Guild, after which screenwriters can formally dispute the apportionment of credit. An arbitration hearing is held if one or more persons challenge the apportionment (and is automatic if someone in a position of power-producer or directorclaims screenwriting credit). Friend (2003) points out that the arbitration process often pits members against each other, gives rise to prolonged underground discussions about who really wrote what, and has not resulted in much satisfaction with the process. Others, such as the Journal of the American Medical Association, have detailed documents that are intended to guide authors through authorship disputes, and formulas have been suggested for deciding on the order of authorship for publications (Winston 1985; Fine and Kurdek 1993). The existence of guidelines has not eliminated the discontent (Sandler and Russell 2005) and what remains unknown is whether any of these procedures, guidelines, and formulas is useful in reducing or resolving disputes over credit.

Throughout we have noted that the taking of credit is a process that can be influenced by cognitive and psychological processes that allow unjustified claims to credit to be viewed as appropriate by the claimant (Banaji et al. 2003; Chugh et al. 2005; De Cremer et al. 2010). These processes may allow those who make unjustified claims to see themselves as behaving ethically and to fade the ethical dimension of their decision (Tenbrunsel and Messick 2004), thereby facilitating rationalization. Self-serving bias and false memory effects are psychological processes that can affect how individuals view their contribution to an effort and entitlement to credit. Since credit requires audience recognition, we expect that psychological process will play an important role in understanding the process. In closing, we simply note that it seems likely that other cognitive and psychological processes will be found that play roles in contributing to making unjustified claims seem ethical to claimants.

Conclusion

The process of taking credit can have significant emotional, motivational, and ethical consequences for individuals, groups, organizations, and civil society. We have suggested ways of thinking about credit taking in organizations that draw on psychological, situational, and personality constructs. Our interest is in making a start in understanding some of the dynamics of the process. While credit taking in organizations has not received much research attention, we



think an understanding of the process can help illuminate an everyday aspect of organizational behavior that matters to organization members.

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References

- Abratt, R. D., Nel, D., & Higgs, N. S. (1992). An examination of the ethical beliefs of managers using selected scenarios in a cross-cultural environment. *Journal of Business Ethics*, 11, 29–35.
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 2, pp. 267–299). New York: Academic Press.
- Adams, S. (2011). September 19, Dilbert.
- American Psychological Association. (2002). Ethical principles of psychologists and code of conduct. American Psychologist, 57, 1060–1073.
- Anand, V., Ashforth, B. E., & Joshi, M. (2004). Business as usual: The acceptance and perpetuations of corruption in organizations. *Academy of Management Executive*, 18, 39–53.
- Ariely, D. (2008). *Predictably irrational: The hidden forces that shape our decisions.* New York: HarperCollins.
- Avey, J. B., Avolio, B. J., Crossley, C. D., & Luthans, F. (2009). Psychological ownership: Theoretical extensions measurement, and relation to work outcomes. *Journal of Organizational Behaviour*, 30, 173–191.
- Babiak, P., & Hare, R. (2006). *Snakes in suits: When psychopaths go to work*. New York: Harper Collins.
- Banaji, M., Bazerman, M., & Chugh, D. (2003). How (un)ethical Are You? *Harvard Business Review*, 81, 56-64.
- Barsness, Z. I., Diekmann, K. A., & Seidel, M. D. L. (2005). Motivation and opportunity: The role of remote work, demographic dissimilarity, and social network centrality in impression management. Academy of Management Journal, 48, 401–419.
- Bazerman, M. (2006). Judgment in managerial decision making. New York: Wiley.
- Bazerman, M. H., Morgan, K. P., & Lowenstein, G. F. (1997). The impossibility of auditor independence. *Sloan Management Review*, 38(4), 89–94.
- Beenen, G., & Pinto, J. (2009). Resisting organizational-level corruption: An interview with Sherron Watkins. Academy of Management Learning and Education, 8, 275–289.
- Bettman, J. R., & Weitz, B. A. (1983). Attributions in the board room: Causal reasoning in corporate annual reports. *Administrative Science Quarterly*, 28, 165–183.
- Bielby, W. T., & Bielby, D. D. (1999). Organizational mediation of project-based labor markets: Talent agencies and the careers of screenwriters. *American Sociological Review*, 64, 64–85.
- Boeker, W. (1992). Power and managerial dismissal: Scapegoating at the top. *Administrative Science Quarterly*, 37, 400–421.
- Bolino, M. C. (1999). Citizenship and impression management: Good soldiers or bad actors? Academy of Management Review, 26, 82–98.

- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17, 475–482.
- Broad, C. D. (1930). Five types of ethical theory. New York: Harcourt Brace.
- Brown, G., Lawrence, T., & Robinson, S. L. (2005). Territoriality in organizations. Academy of Management Review, 30, 577–594.
- Brown, G., & Robinson, S. L. (2011). Reactions to territorial infringement. *Organization Science*, 22, 210–224.
- Burt, R. S. (2004). Structural holes and good ideas. American Journal of Sociology, 110, 349–399.
- Campbell, W. K., & Sedikides, C. (1999). Self-threat magnifies the self-serving bias: A meta-analytic integration. *Review of General Psychology*, 3, 23–43.
- Caruso, E. M., Epley, N., & Bazerman, M. (2006). The costs and benefits of undoing egocentric responsibility assessments in groups. *Journal of Personality and Social Psychology*, 91, 857–871.
- Chatterjee, A., & Hambrick, D. C. (2007). It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. Administrative Science Quarterly, 52, 351–386.
- Chatterjee, A., & Hambrick, D. C. (2011). Executive personality, capability cues, and risk taking: How narcissistic CEOs react to their successes and stumbles. Administrative Science Quarterly, 56, 202–237
- Chugh, D., Banaji, M., & Bazerman, M. (2005). Bounded ethicality as a psychological barrier to recognizing conflicts of interest. In D. Moore, M. Cain, G. Lowenstein, & M. Bazerman (Eds.), Conflicts of interest: Problems and solutions from law, medicine, and organizational settings. London: Cambridge University Press
- Cialdini, R. B. (1980). Full cycle social psychology. In L. Bickman (Ed.), Applied social psychology annual (Vol. 1, pp. 21–47). Beverly Hills, CA: SAGE.
- Cialdini, R. B., Borden, R. J., Thorne, A., Walker, M. R., Freeman, S., & Sloan, L. R. (1976). Basking in reflected glory: Three (football) field studies. *Journal of Personality and Social Psychology*, 34, 366–375.
- Clive, R. B. (2011). Corporate psychopaths: Bullying and unfair supervision in the workplace. *Journal of Business Ethics*, 100, 367–379.
- Cohen, G. L. (2003). Party over policy: The dominating impact of group influence on political beliefs. *Journal of Personality and Social Psychology*, 85, 808–822.
- Cohen, M. D., March, J., & Olsen, J. (1972). A garbage can model of organizational choice. Administrative Science Quarterly, 17, 1–25.
- Cole, D., Sirgy, M. J., & Bird, M. M. (2000). How do managers make teleological evaluations in ethical dilemmas? Testing part of and extending the Hunt–Vitell model. *Journal of Business Ethics*, 26, 259–269.
- Collins, J. D., Uhlenbruck, K., & Rodriguez, P. (2009). Why firms engage in corruption: A top management perspective. *Journal of Business Ethics*, 87, 89–108.
- Colquitt, J. A., Wesson, M. J., Porter, C., Conlon, D., & Ng, K. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86, 425–445.
- Confucius. no date, The Lun Yü.
- Cooper, W. H., Graham, W. J., & Dyke, L. S. (1993). Tournament players. Research in Personnel and Human Resource Management, 11, 83–132.
- Crant, M. J., & Bateman, T. S. (1993). Assignment of credit and blame for performance outcomes. *Academy of Management Journal*, 36, 7–27.



- Cressey, D. R. (1953). Other people's money. Glencoe, IL: Free Press. Danziger, S., Montal, R., & Barkan, R. (2012). Idealistic advice and pragmatic choice: A psychological distance account. Journal of Personality and Social Psychology, 102, 1105–1117.
- De Cremer, D., Tenbrunsel, A. E., & van Dijke, M. (2010). Regulating ethical failures: Insights from psychology. *Journal of Business Ethics*, 95, 1–6.
- Donaldson, T. (1996). Values in Tension. *Harvard Business Review*, 74, 48–62.
- Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social undermining in the workplace. Academy of Management Journal. 45, 331–351.
- Dunn, J., & Schweitzer, M. E. (2005). Why good employees make unethical decisions: The role of reward systems, organizational culture, and managerial oversight. In R. E. Kidwell Jr. & C. L. Martin (Eds.), *Managing organizational deviance* (pp. 39–68). Thousand Oaks, CA: SAGE.
- Dunning, D. J., Meyerowitz, A., & Holzberg, A. D. (1989). Ambiguity and self-evaluation: The role of idiosyncratic trait definitions in self-serving assessments of ability. *Journal of Personality and Social Psychology*, 57, 1082–1090.
- Dyke, L. S. (1990). Self-promotion in organizations, Unpublished doctoral dissertation. Kingston: Queen's University.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44, 350–383.
- Eichenwald, K. (2005). Conspiracy of fools. New York: Broadway Books
- Ellis, H. (1898). Auto-erotism: A psychological study. *Alienist and Neurologist*, 19, 260–299.
- Emmons, R. (1987). Narcissism: Theory and measurement. *Journal of Personality and Social Psychology*, 52, 11–17.
- Epley, N., & Caruso, E. M. (2004). Egocentric ethics. Social Justice Research, 17, 171–188.
- Fine, M. A., & Kurdek, L. A. (1993). Reflections on determining authorship credit and authorship order on faculty-student collaborations. *American Psychologist*, 48, 1141–1147.
- Floyd, W. W., Schroeder, D. M., & Finn, D. M. (1994). Only if I am first author: Conflict over credit in management scholarship. *Academy of Management Journal*, 37, 734–747.
- Fortin, M., & Fellenz, M. R. (2008). Hypocrisies of fairness: Towards a more reflexive ethical base in organizational justice research and practice. *Journal of Business Ethics*, 78, 415–433.
- Friend, T. (2003, October 20). Credit Grab, *The New Yorker*, 161–169.
- Frum. D. J. (2007, November). David Frum's diary. *National Review* (online)
- Galanter, M., & Palay, T. (1991). Tournament of lawyers: Transformation of the big law firm. Chicago: University of Chicago Press.
- Garry, M., Manning, C. G., Loftus, E. F., & Sherman, S. J. (1996). Imagination inflation: Imagining a childhood event inflates confidence that it occurred. *Psychonomic Bulletin & Review*, 3, 208–214.
- Gerson, M. J. (2007). Heroic conservatism: Why republicans need to embrace America's ideals (and why they deserve to fail if they don't). New York: HarperOne.
- Gessen, M. (2009). Perfect rigor: A genius and the mathematical breakthrough of the century. New York: Houghton Mifflin Harcourt.
- Globe and Mail. (2006, October 1). Workplace ethics, C2, Toronto, Canada.
- Greenberg, J. (1990). Employee theft as a reaction to underpayment inequity: The hidden cost of pay cuts. *Journal of Applied Psychology*, 75, 561–568.
- Greve, H. R., Palmer, D., & Pozner, J. E. (2010). Organizations gone wild. Academy of Management Annals, 4, 53–107.

- Haidt, J. (2012). The righteous mind why good people are divided by politics and religion. New York: Pantheon.
- Higgins, C. A., & Judge, T. A. (2004). The effect of applicant influence tactics on recruiter perceptions of fit and hiring recommendations: A field study. *Journal of Applied Psychology*, 89, 622–632.
- Hollander, E. P. (1958). Conformity, status, and idiosyncrasy credit. *Psychological Review*, 65, 117–127.
- Immen, W. (2010, March 5). When leaders become glory hounds. Globe and Mail, B15–16.
- Jackall, R. (1988). Moral mazes: The world of corporate managers. New York: Oxford University Press.
- Jackson, T. (2001). Cultural values and management ethics: A 10-nation study. Human Relations, 54, 1267–1302.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360.
- Johnson, L. (2012). The lunatics have taken over the boardroom. Financial Times, March 7.
- Judge, T., LePine, J., & Rich, B. L. (2006). Loving yourself abundantly: relationship of the narcissistic personality to self- and other perceptions of workplace deviance, leadership, and task and contextual performance. *Journal of Applied Psychology*, 91, 762–776.
- Kant, I. (1785). Groundwork of the metaphysic of morals, various editions. Cambridge: Cambridge University Press.
- Kant, I. (1788). Critique of practical reason, various editions. Cambridge: Cambridge University Press.
- Kanter, R. M. (1977). *Men and women of the corporation*. New York: Basic Books.
- Kaptein, M. (2010). The ethics of organizations: A longitudinal study of the US working population. *Journal of Business Ethics*, 92, 601–618.
- Kelman, H. C., & Hamilton, L. (1989). Crimes of obedience. New Haven, CT: Yale University Press.
- Levinson, D. J. (1978). *The seasons of a man's life*. New York: Ballantine.
- Locke, J. (1690). Two treatises on government. Oxford: Oxford University Press.
- Marx, K. (1847). Wage, labour and capital, various editions. Moscow: Progress Publishers.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709–734.
- McDonald, G. M., & Zepp, R. (1988). Ethical perceptions of Hong Kong Chinese business managers. *Journal of Business Ethics*, 7, 835–845.
- McFarlin, D. B., & Sweeney, P. D. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Journal*, *35*, 626–637.
- McGinn, D. (2009, November 17) Brilliant Idea! I'll Steal It. *Globe and Mail*, L1–2.
- Mechanic, D. (1962). Sources of power for lower participants in complex organizations. *Administrative Science Quarterly*, 7, 349–364.
- Merritt, A. C., Effron, D., Fein, S., Savitsky, K., Tuller, D., & Monin, B. (2012). The strategic pursuit of moral credentials. *Journal of Experimental Social Psychology*, 48, 774–777.
- Merritt, A. C., Effron, D. A., & Monin, B. (2010). Moral self-licensing: When being good frees us to be bad. Social and Personality Psychology Compass, 4, 344–357.
- Metha, S., & Kau, S. (1984). Marketing executives' perceptions of unethical practices. *Singapore Management Review*, 6, 25–35.
- Meyerson, D. E. (2001) Radical change, the quiet way, *Harvard Business Review*, 92–100.



- Meyerson, D. E. (2003). Tempered radicals: How everyday leaders inspire changes at work. New York: McGraw-Hill.
- Mezulis, A., Abramson, L., Hyde, J., & Hankin, B. (2004). Is there a universal positivity bias in attributions? A meta-analytic review of individual, developmental, and cultural differences in the selfserving attributional bias. *Psychological Bulletin*, 130, 711–747.
- Miller, D. T., & Effron, D. A. (2010). Psychological license: When it is needed and how it functions. Advances in Experimental Social Psychology, 43, 115–155.
- Miller, D. T., & Ross, M. (1975). Self-serving bias in the attribution of causality: Fact or fiction? *Psychological Bulletin*, 82, 213–225.
- Morf, C., & Rhodewalt, F. (1993). Narcissism and self-evaluation maintenance. Explorations in Object Relations. *Personality and Social Psychology Bulletin*, 19, 668–676.
- Morf, C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism. A dynamic self-regulatory processing model. *Psychological Inquiry*, 12, 177–196.
- Murphy, P. R., & Dacin, M. T. (2011). Psychological pathways to fraud: Understanding and preventing fraud in organizations. *Journal of Business Ethics*, *101*, 601–618.
- Nasar, S., & Gruber, D. (2006, August 28). Manifold destiny, The New Yorker, 44–57.
- Nozick, R. (1974). *Anarchy, state and utopia*. New York: Basic Books.
- Pierce, J., Kostova, T., & Dirks, K. (2001). Toward a theory of psychological ownership in organizations. Academy of Management Review, 26, 298–310.
- Pinker, S. (2005, May 25). Problem Solving, *The Globe and Mail*, C5.Pozner, J. E. (2007). Stigma and settling up: An integrated approach to the consequences of organizational misconduct for organizational elites. *Journal of Business Ethics*, 80, 141–150.
- Public Company Accounting Oversight Board. (2005). Consideration of fraud in a financial statement audit, AU Section 316. www.pcaobus.org.
- Raskin, R. N., & Hall, C. S. (1979). Narcissistic personality inventory. Psychological Reports, 45, 590.
- Rawls, J. (1971). A theory of justice. Cambridge, MA: Belknap Press. Rogerson, M. D., Gottlieb, M. C., Handelsman, M. M., Knapp, S., & Younggren, J. (2011). Nonrarional processes in ethical decision making. American Psychologist, 66, 614–623.
- Sandler, J., & Russell, B. (2005). Faculty-student collaboration: Ethics and satisfaction in authorship credit. *Ethics and Behaviour*, 15, 65–80.
- Schlenker, B. R. (1980). *Impression management: The self-concept, social identity, and interpersonal relations.* Monterey, CA: Brooks/Cole.
- Scully, M. (2007). Present at the creation. *The Atlantic*, 300, 77–88.
 Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 29, pp. 209–269). New York: Academic Press.
- Shapiro, D. L., Boss, A. D., Salas, S., Tangirala, S., & Von Glinow, M. A. (2011). When are transgressing leaders punitively judged? An Empirical Test. *Journal of Applied Psychology*, 96, 412–422.

- Sharman, S. J., & Calacouris, D. S. (2010). Do people's motives influence their susceptibility to imagination inflation? *Experimental Psychology*, *57*, 77–82.
- Simon, H. A. (1957). Models of man. New York: Wiley.
- Simon, S. A., & Eby, L. T. (2003). A typology of negative mentoring experiences: A multidimensional scaling study. *Human Rela*tions, 56, 1083–1106.
- Staw, B. M., McKechnie, P. I., & Pfuffer, S. M. (1983). The justification of organizational performance. Administrative Science Quarterly, 28, 582–600.
- Staw, B. M., & Ross, J. (1987). Behavior in escalation situations: Antecedents, prototypes and solutions. *Research in Organizational Behavior*, *9*, 39–78.
- Stevenson, W. B., & Greenberg, D. (2000). Agency and social networks: Strategies of action in a social structure of position, opposition, and opportunity. Administrative Science Quarterly, 45, 651–678.
- Stone, T. H., & Cooper, W. H. (2009). Emerging credits. *The Leadership Quarterly*, 20, 785–798.
- Taylor, R. (2002). An introduction to virtue ethics. Amherst, MA: Prometheus Books.
- Tenbrunsel, A., & Messick, D. (2004). Ethical fading: The role of self-deception in unethical behavior. Social Justice Research, 17, 223–236.
- Thomas, A. K., Bulevich, J. B., & Loftus, E. F. (2003). Exploring the role of repetition and sensory elaboration in the imagination inflation effect. *Memory and Cognition*, *31*, 630–640.
- Toffler, B. L. (2003). Final accounting: Ambition, greed, and the fall of Arthur Andersen. New York: Broadway Books.
- Van Dyne, L., & Pierce, J. L. (2004). Psychological ownership and feelings of possession: Three field studies predicting employee attitudes and organizational citizenship behavior. *Journal of Organizational Behaviour*, 25, 439–459.
- van Zyl, E., & Lazenby, K. (2002). The relation between ethical behaviour and workstress amongst a group of managers working in affirmative action positions. *Journal of Business Ethics*, 40, 111–119.
- Vroom, V. H. (1964). Work and motivation. New York: Wiley.
- Weber, J. M., & Murnighan, J. K. (2008). Dilemmas. *Journal of Personality and Social Psychology*, 95, 1340–1353.
- Weick, K. (1995). Sensemaking in organizations. Thousand Oaks, CA: SAGE.
- Williamson, O. (1975). Markets and hierarchies: Analysis and antitrust implications. New York: Free Press.
- Winston, R. (1985). A suggested procedure for determining order of authorship in research publications. *Journal of Counseling and Development*, 63, 515–518.
- Zhong, C.-B., & Liljenquist, K. (2006). Washing away your sins: Threatened morality and physical cleansing. *Science*, 313, 1451–1452.
- Zuboff, S. (2005, January). A starter kit for business ethics. Fast Company, 91.

