

ON GREED

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ABSTRACT

Greed is a central element in human existence. It is also frequently mentioned as a factor in many recent organizational and financial scandals. Thus, it was surprising to discover that empirical research on greed is rare. In contrast, however, a variety of different literatures present a rich conceptual foundation for understanding the dynamics of greed and greedy behavior. We focus on four of these literatures, broadly defined as historical/philosophical, economic, political, and social psychological/game theoretic, to investigate the concept of greed. We identify and explore three of its major characteristics, i.e., its moral, cognitive, and emotional elements. In addition, we present a decision process model to synthesize and analyze the dynamics of intuition, emotions, and reasoning that contribute to or inhibit greed. In essence, our discussion addresses the genesis, the catalysts, and the ramifications of greed.

Key words: greed, morality, ethics, self-interest, decisions

ON GREED

“I think greed is healthy. You can be greedy and still feel good about yourself.”

Ivan F. Boesky, Commencement address, May 18, 1986,
School of Business Administration, UC Berkeley

“If we're looking for the sources of our troubles, we shouldn't test people for drugs, we should test them for stupidity, ignorance, greed and love of power.”

P.J. O'Rourke, journalist, 1992

“From the top to the bottom of the ladder, greed is aroused ... Nothing can calm it, since its goal is far beyond all it can attain. Reality seems valueless by comparison.”

Emile Durkheim, *Suicide*, book 2, chapter 5 (1897, trans. 1951)

“The greed and selfishness of men are perpetual.”

William Graham Sumner, Sociologist,
“What the Social Classes Owe To Each Other,” 1883.

The fall of Enron was a signal event in corporate America. For six consecutive years Fortune magazine had given Enron its award as *America's Most Innovative Company*. With revenues exceeding \$100 billion in 2000, and over 2200 employees, its bankruptcy in 2001 was a stupendous corporate failure, attributable in great part to its host of illegal activities. Enron, however, was not a solitary event: within only one year of Enron's debacle, an avalanche of corporate accounting scandals involved more than 20 well known U.S. firms (Patsuris, 2002).¹

These kinds of complex events never have singular causes. Yet a common theme behind a variety of unethical and immoral actions, by both individuals and organizations, is greed. Greed is not only one of the seven cardinal sins, it may be “the matriarch of the Deadly Clan,” i.e., the basic root and ultimate source of all seven (Tickle, 2004). (The other six are pride, envy, sloth, gluttony, lust, and anger.) The New Testament suggests that “the love of money is the root

¹ Adelphia communications, AOL Time Warner, Arthur Andersen, Bristol-Myers Squibb, CMS Energy, Duke Energy, Dynegy, El Paso, Global Crossing, Halliburton, Homestore.com, Kmart, Merck, Mirant, Nicor Energy, Peregrine Systems, Qwest Communications, Reliant Energy, Tyco, WorldCom, and Xerox.

of all evil.” Buddhist philosophy is similar: “Whoever is free from attachment knows neither grief nor fear. From greed comes grief; from greed comes fear” (Fetherston, 2000: 30).

The quotes that begin this paper, however, suggest that greed is not completely reprehensible; instead, greed can also act as a central driver behind capitalism and competition. “Greed is good. Greed is right. Greed works.” This is the famous quote by Gordon Gecko, the lead character in the satirical movie, *Wall Street*. It is notable that, as famous as this quote is, it has often been taken out of context, as Gecko went on to say that, “Greed clarifies, cuts through, and captures the essence of the evolutionary spirit. Greed, in all of its forms -- greed for life, for money, for love, for knowledge -- has marked the upward surge of mankind.” Humanity’s evolutionary roots, and its very survival, may have depended on greed. Thus, even with all of its negative connotations, the exercise of greed can have positive consequences.

Yet almost countless examples of executive excess have provoked enormous public condemnation of corporate greed. Paul Samuelson once commented that “an intriguing paradox of the 1990s is that it isn’t called a decade of greed.” The first decade of the 21st century has also witnessed a series of reckless and unbridled acts of greed, from Bernie Madoff’s long-running Ponzi scheme that bilked investors of over \$60 billion to Dennis Kozlowski’s conviction of stealing over \$600 million from Tyco. Even when no laws were broken, American International Group Inc (AIG) infuriated the public by paying its executives \$165 million in bonuses after the company received more than \$170 billion in federal bailout money. Also, as the *Financial Times*’ (2002) noted, while the 25 largest bankruptcies between 1999 and 2001 wiped out \$210 billion in shareholder value and almost 100,000 jobs, the top management teams in these bankrupted firms walked away with a total of \$3.3 billion in compensation. In the same year, *Fortune* reported that executives and directors of 1,035 corporations pocketed \$66 billion even

when their companies' stock prices fell more than 75%; in their "Top 25," 466 executives received \$23 billion from stock sales – an average of almost \$50 million each (Gimein, 2002). Even with all of these examples, we can't be sure that they do not represent the tip of an even bigger iceberg.

Paul Volcker, the former chairman of the Federal Reserve Board, commented that "corporate greed exploded beyond anything that could have been imagined in 1990" (Cassidy, 2002). His successor, Alan Greenspan (Economists, 2002), noted that "an infectious greed seemed to grip much of our business community" because "the avenues to express greed have grown so enormously." More recently, President Obama (2009), in the aftermath of the financial crisis, reflected on "the attitude that's prevailed from Washington to Wall Street to Detroit for too long; an attitude that valued wealth over work, selfishness over sacrifice, and greed over responsibility."

The roots of irrepressible and unbridled greed may rest in the nature of human beings (Robertson, 2001): our instincts for self-preservation may have contributed to the emergence of greed and fueled its widespread existence. Thus, the everyday person is also not exempt: almost everyone feels greed at one time or another (sometimes often). When greedy action continues without bounds, embodying a relentless, unstoppable craving for more, it is seen as truly reprehensible in almost every culture and society. This intense negativity is somewhat paradoxical, however; all too often, observers are willing to castigate what they see as other individuals' greed without recognizing its existence in their own lives.

In spite of its prevalence, research on greed is either surprisingly sparse or buried within the contexts of other domains. Our conceptual analysis of greed suggests that the concept has deep roots in a variety of intellectual and philosophical disciplines. Thus, the first part of this paper

reviews the literature on greed from four different perspectives: historical/philosophical, economic, political, and social psychological/game theoretic. Drawing on these different literatures, we identify and analyze three major characteristics of greed: its moral, cognitive, and emotional elements. We then develop a theoretical model to depict how self-interest and moral intuition evoke different emotions and interact with each other to affect people's cognitive moral reasoning as well as their greed-related decisions. We conclude by discussing the dual dynamics of greed in human interaction, future research directions, and practical implications.

DEFINITIONAL ISSUES

Although greed has a long intellectual history, our review of the literature led to a rather surprising observation: empirical research on the personal and social dynamics of greed is rare (Wang & Murnighan, 2010a). One reason for this lack of research may start with the enormous difficulties that surround the seemingly simple task of defining greed.

Greed can wear a cloak with many different names, e.g., grasping, avarice, covetousness, miserliness, gluttony, lust, overreaching ambition, and/or desire spun out of control (Tickle, 2004). Greed also takes different forms when it is directed toward different goals. Tiger Woods' recent obsessions with sex and mistresses, for example, might be characterized as one form of greed. Greed for knowledge or love, however, focuses on quite different goals, and can result in markedly different forms of action.

Given its potential range and complexity, we restrict our treatment of greed to a general, common perspective, the acquisition of materialistic wealth, which also tends to be most relevant in organizational settings. Merriam-Webster's dictionary defines greed as "a selfish and excessive desire for more of something (as money) than is needed." In his historical analysis of greed, Balot (2001; 1) used a similar definition: "an excessive desire to get more ... a primarily

materialistic type of desire.” Although both definitions are similar, they remain analytically and conceptually ambiguous. For example, what constitutes “excessive” may depend on observers’ idiosyncratic interpretations and/or their own acquisitive tendencies: people with strong materialistic drives, for instance, may view a wide range of seemingly greedy behaviors as reasonable or acceptable, while people with more ascetic tendencies are likely to have an altogether different outlook. Thus, what looks like greed to one person might look like “real needs” to another. As Hobbes noted in the *Leviathan*, “Good, and Evill, are names that signifie our Appetites, and Aversions, which in different tempers, customs, and doctrines of men, are different. (1968: p. 216)”

A further conceptual complication arises in differentiating greed from self-interest: when does self-interested action end and greedy action begin? In previous work, we have concluded that distinguishing between excessive greed and normal self-interest is at best indistinct (Wang, Malhotra, & Murnighan, 2011). For example, the measures we used in our research (e.g., the amount of money individuals kept in a Dictator Game; Forsythe, Horowitz, Savin, & Sefton, 1994) as well as those used in other research (e.g. prisoners’ dilemma and social dilemmas games) might capture self-interest rather than greed. In many situations, self-interest or selfishness seems necessary, but not sufficient for greed. A central issue, then, concerns when self-interest ends and when greed starts; its exact demarcation remains elusive.

Given these conceptual complexities, it is clear that, in this paper, we cannot resolve greed’s definitional problems. Instead, we attempt to clarify and elaborate the most fundamental and common aspects of greed. In addition, we compare and synthesize different theoretical perspectives to propose a model of the decision process behind greedy action. Although we

recognize its limitations, we use Balot's (2001) definition and its focus on excessive materialistic desires.

Even with these conceptual difficulties, definitions of greed suggest that the negative social consequences of greed focus primarily on its uneven distribution of resources. In human collectives – groups and organizations - one person's greedy action almost always exacts costs on others. As Gandhi noted, "Earth provides enough to satisfy every man's need, but not every man's greed." Aquinas also viewed greed as "a sin directly against one's neighbor, since one man cannot over-abound in external riches, without another man lacking them" (2, 118, ad 1). Chronic feelings of greed can lead to a selfish sense of entitlement over others and a host of other socially undesirable traits, including anxiety, jealousy, inflexibility, and avarice (Kaplan, 1991). In essence, greed creates a sharp, direct conflict between self-interest and others' well-being; we suggest that this inevitable tension is the basis for the common view of greedy action, i.e., that it is socially reprehensible.

Although the publicity that has surrounded recent corporate scandals might suggest that greed is more devastating than ever, greed has surfaced throughout human history. As a result, a conceptual analysis of greed has deep roots in a variety of intellectual disciplines. Thus, we briefly review the broad literature on greed from four different perspectives: historical/philosophical, economic, political, and social psychological/game theoretic. In so doing, we document the importance of the underlying, personal, and interpersonal dynamics of greed in human interaction. Our review also allows us to confirm our initial intuitive assumption, one that echoes the assumptions of ancient philosophers, that everyone feels and is motivated, at least at some time, by greed.

After reviewing these different theoretical perspectives, we discuss three of greed's essential characteristics - its moral, cognitive, and emotional elements - that contribute to the motivational forces that drive (or curb) greedy action. We then review more recent research, which suggests that greed may be motivated by both biological self-interest and socially-acquired moral reasoning (e.g. Haidt, 2007). In particular, recent data suggest that the contextual reinforcement of a self-regarding mindset can block individuals' awareness of the social consequences of their behavior, leading to more self-interested and sometimes greedier behavior (Wang, Zhong, & Murnighan, 2010b). At the same time, moral intuition and moral reasoning provide corrective forces that can block greed's inherent temptations. Finally, we present a model that outlines the interaction of these processes, concluding with a discussion of current challenges and new directions for future research.

BACKGROUND

Historical and Philosophical Perspectives

In his portrait of Callicles, Plato pointed out that greed (pleonexia) is rooted in human physicality (Balot, 2001). For Plato, greed was the origin of war, civil strife and personal immorality. Plato's summary of Socrates' dialogues in *The Republic* suggests two complementary approaches to greed. First, greed leads to immoral and unjust actions. Second, greed even hurts the people whose greedy acts have been successful. Like Solon and Herodotus, Plato argued that justice creates human happiness; greed and injustice undermine and destroy it. Plato emphasized the role of "psychic health" or "psychic harmony" as a structure that fosters justice and inhibits greed within individuals' souls. Thus, a person with a just and healthy soul would necessarily refrain from immoral and greedy behaviors.

Aristotle agreed, echoing Plato's notion that people have natural acquisitive desires (Balot, 2001). Aristotle broadened the conceptualization of greed's targets by including all of the goods of fortune rather than simply material goods. He contended that greed accounted for the drive to obtain more at the expense of communal canons of distributive justice. He suggested that greed was the only vice that led people to break the rules of law and fairness (Shklar, 1990).

Aristotle also discussed the psychology of greed, proposing that greed stems from an irrational desire to pursue bodily pleasure, ignoring the true nature of a good life. He perceived virtues as an intermediate state between excess and deficiency: virtues are ruined by too much or too little but preserved by the mean (Furley, 2003). Aristotle contended that individuals often confuse their true and natural needs of acquiring strictly necessary goods (*telos*) with the perceived needs of maximizing profit. Thus, people may acquire more simply because they want more than others and more than they deserve or need. Aristotle also noted that individuals often judge others' behaviors to be greedy only to justify their own greedy action. This notion is also reflected in an old Dutch proverb, "An inn-keeper trusts his guests only as much as he trusts himself." This makes greed a practical problem of individual behavior as well as a potential virus in a community or society's interactions.

Like Plato and Aristotle, Thucydides treated greed as a universal facet of human nature. His analysis was multi-faceted: on the one hand, he noted greed's negative attributes, e.g., the pursuit of individual self-interest and the cause of mistrust; on the other hand, he may have been the first to note that greed might also drive human progress. He felt, for instance, that greed was the motivator behind Athenian imperialism and the creation of their extensive empire.

David Hume expanded the discourse on greed by focusing on two of its central characteristics, avarice and miserliness. Whereas a miser is retentively greedy, an avaricious

person is acquisitively greedy. Hume (1741/1995) saw greedy people as “men of immense fortunes, without heirs, and on the very brink of the grave, who refuse themselves of the most common necessities of life, and go on heaping possession on possessions, under all the real pressures of the severest poverty (570).” Although Hume treated greed as an inferior passion, he also admitted that it could become a predominant inclination. Like Thucydides, Hume held a somewhat contradictory view about greed. On the one hand, he deemed greed an irreclaimable vice: “the avidity of acquiring goods and possessions for ourselves and our nearest friends is insatiable, perpetual, universal and directly destructive of society” (Hume, 1739/2001: 316). On the other hand, he noted that greed motivates people and could become a virtue in commerce.

Kant defined greedy avarice as “acquiring the means of good living in excess of one’s true needs” (Kant, 1796/1964: 96). He attributed it to self-seeking, especially the insatiable acquisition of wealth for the purpose of sumptuous living (Faust, 2006). Like Hume, Kant defined miserly avarice in terms of stinginess or niggardliness: “to get and keep all the means of good living, but without regard to this enjoyment” (Kant, 1796/1964: 98). Kant argued that both greedy and miserly avarice are duty transgressions that become vices when they are intentionally adopted as basic principles.

This brief summary cannot do justice to philosophy’s extensive analysis of greed. Although scholars like Thucydides and Hume identified positive aspects of greed, they also disparaged its dark side. Most other ancient and contemporary philosophers have viewed greed as iniquitous and immoral, commonly identifying it as the cause of vices, evil, and misery (Faust, 2006). Philosophers also treat it as universal, fundamental, and ubiquitous. It should be no surprise, then, that, in the munificence of the modern corporate world, greed continues to thrive.

Economic Perspectives

The economic literature has long portrayed *homo economicus* as a rational profit maximizer. The assumption of self-interest, which inherently implies the desire to achieve and/or maximize personal utility on a personal level and material gain on an organizational level, is central to many economic models. *Homo economicus* distinguishes neither needs from wants nor intrinsic values from extrinsic commodities. Indeed, maximizing gains suggests unlimited wants and greed (Schwartz, 1986). The goal of maximizing self-interest frees individuals to act with guile, to engage in “the full set of ex ante and ex post efforts to lie, cheat, steal, mislead, disguise, obfuscate, feign, distort and confuse” (Williamson, 1984: 198). An economic approach to greed also leaves little room for the concerns of others: “The noblest of human motivations is greed. I don't mean theft, fraud, tricks, or misrepresentation. By greed I mean people being only or mostly concerned with getting the most they can for themselves and not necessarily concerned about the welfare of others” (Williams, 2000).

The case for greed in economics can be traced to Adam Smith, who helped to build economics on a foundation of self-interest (Stigler, 1975). Individuals, according to Adam Smith, should act selfishly rather than try to do “good” for others because “it is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest” (Smith, 1776/1994: 15), and “nobody but a beggar chooses to depend chiefly upon the benevolence of his fellow-citizens.” The invisible hand of the market operates as a self-constraining system to govern market transactions and regulate self interests. In doing so, it rationalizes selfishness into social virtues, making good emerge as a byproduct of selfishness (Heilbroner, 1980). By greedily pursuing their own self-interest, individuals can promote the interest of the society more than they can via benevolence (Schwartz, 1986). More

recent approaches echo similar ideas, e.g., “persons (should) be conceived as not taking an interest in the interests of those with whom they exchange” (Gauthier, 1986, p. 87).

Although the notion that self-interest governs all human relationships is an oversimplification of the broad spectrum of Adam Smith’s positions (e.g. Schwartz, 1986; Werhane, 2000; Fleischacker, 2004), his ideas on self-interest have played important roles in both lay and economic analyses of greed. In his introduction to *The Wealth of Nations*, Lerner claimed that Adam Smith “gave new dignity to greed and a new sanctification to the predatory impulses” (Lerner, 1937: ix). More recent interpretations also treat greed and envy as the driving forces of human well-being (Engler, 1995). Because the mechanics of self-interest have been fundamental to economics since Adam Smith (Letwin, 1963; Stigler, 1971; Hirschman, 1977), “the vast forces of greed” (Arrow, 1980) have been identified as a basic motive for economic behavior in modern capitalism.²

Even though he was one of its major critics, Karl Marx noted that “this boundless greed after riches, this passionate chase after exchange value, is common to the capitalist and the miser; but while the miser is merely a capitalist gone mad, the capitalist is a rational miser” (Marx, 1967: 153). In his *Economic and Philosophic Manuscript*, Marx (1844) argued that “the only wheels which political economy sets in motion are greed, and the war of avaricious-competition” (Marx, 1844: 1). Thus, even a Marxian view suggests that greed is an essential element in the monetary and political systems of modern capitalism.

Neoclassical economics’ focus on self-interest almost seems to glorify greed. A literal interpretation of self-interest maximization encourages excessive wealth acquisition. Economic

² Popular economic thought has also been influenced by the approach espoused by Ayn Rand. Although some readers view her philosophy as one that supports greed, we view her directives as a push toward pure, unadulterated self-interest - a distinction that can easily blur as excessive wealth is accumulated. We have tried to restrict our focus as much as we can to greed; this means that we have not incorporated her work more extensively.

theory does not clearly distinguish greed from self-interest maximization. In *Capitalism and Freedom*, for instance, Milton Friedman (1962: 133) addressed the pursuit of self-interest in a free economy with a frequently repeated quote: “the only social responsibility of business is to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game.” Adding the notion of bounded rationality (Simon, 1976) can suggest that people may often depart from their preferred ethical standards because of their self-serving perceptions (Chugh et al, 2005). Thus, deception, cheating, and fraud may be particularly likely (cf., Murnighan, Cantelon, and Elyashiv, 2001; Bazerman and Banaji, 2004).

In fact, neoclassical economic approaches to greed pay little attention to ethical issues or other human motivations (Stigler, 1980; Sen, 1987). Repeated exposure to economics and business education also seems to increase self-interested behavior: both economists and economics students behave more self-interestedly than their peers (Marwell & Armes, 1981; Frank, et al, 1993) and MBA students cheat more than their law and non-business students (McCabe, et al, 2006). Although self-selection has often been cited as an alternative explanation to these various research findings (e.g., Frank & Schulze, 2000), our more recent research suggests that experimentally manipulating exposure to the logic of economics can have a potent impact on people’s attitudes toward greed, even for people who have had no prior, formal exposure to economics education (Wang et al, 2011).

Clearly, greed and self-interest are intertwined in economic theory. Although self-interest can be seen as an important foundation of human behavior, greed can be seen as a central motivation and behavioral guide for self-interested individuals. Greed has also been identified as one of the common antecedents of deception (Murnighan, 1991; Lewicki, et al, 1994; Levine, 2000). Thus, its often extreme theoretical stances can suggest that the ideology of economics

implicitly encourages immoral, greedy action. At the same time, greed can enhance and promote economic and social well-being in terms of pecuniary and/or material gains, boosting societal prosperity. Drawing a line between ethicality and profitability, however – a task that economics rarely addresses (e.g., Frank, 1988) – can create a difficult and important tension, particularly in the current corporate world.

Political Perspectives

Greed also has deep roots in the history of politics. Robertson (2001: 140) notes that “Human history has been largely about getting more ... greed detects the metaphoric shift from physical need to political necessity.” A political perspective on greed is similar to the economic view in its focus on self-interest. As early as the 4th and 5th centuries B. C., Sophists proclaimed that political associations were formed for the self-interested reason of mutual defense (Mansbridge, 1990).

Hobbes is often treated as a critical proponent of self-interest: his *Leviathan* (Hobbes, 1651/1950) portrayed humans as being predominantly egoistic (Hampton, 1986; Kavka, 1986). He suggested that self-interest is the prime human motive, and that it emerges in two forms, for economic gains and for personal glory. Thus, people naturally become enemies because “a) sometimes they desire the same objects (“competition”) b) anticipating the possibility of desiring the same objects they seek to pre-empt one another (“difference”); and c) they demand to be valued by others as they see themselves (“glory”)” (Hobbes, 1651/1950; in Gauthier, 2003: 119).

Hobbes asserted that everyone is tempted by desires, and individuals’ comparisons and competition lead to unlimited, insatiable desires, which he did not expect to cease until death. In addition, he suggested that passionate greed naturally limits individuals’ attempts at self-restraint (Schwartz, 1986). Thus, every person may compete against every person, especially when

unlimited greed is unleashed, and the unbridled desire for material or mental gains may lead to endless war of all against all. Clearly, Hobbes was not particularly optimistic: he concluded that self-interest is the most destructive human motive, suggesting that its free operation could devastate mankind (Myers, 1983). To avoid anarchy, he recommended that the state use its sovereignty and power to “bridle men’s ambition, avarice, anger, and other Passions” (1651/1950; xiv: 196).

Machiavelli, another founder of modern political science (McCoy, 1943; Mansfield, 1981), claimed that human nature is driven by an innate and insatiable lust for power. As a result, people are “insatiable, arrogant, crafty, and shifting, and above all else malignant, iniquitous, violent and savage” (Viroli, 1998: 15). Ambition and avarice encourage both acquisitiveness and destructive competition as a means of affirming superiority over one’s enemies (Viroli, 1998). For Machiavelli, an amoral, insatiable hunger for power is unavoidable and the art of war is necessary for political glory. He indicated that rulers must use all means necessary, including deception and conspiracy, to exercise power and keep order. In *The Prince* (1513, xx), he contended that “A man striving in every way to be good will meet his ruin among the great number who are not good.” Thus, a prince must learn “how not to be good and to use his knowledge or refrain from using it as he may need” (Kegley and Raymond, 2002: 22-23). Overall, Machiavelli separated ethics from politics: the doctrine of power acquisition and amoral maneuver was the foundation of his political analysis.

War is a central topic in political science, and both ancient and contemporary political thinkers point to greed as a reason for war. For example, Herodotus cited greed as the fundamental reason behind Persian imperialism. Thucydides reformulated the Herodotean treatment of greed in his analysis of Athenian imperialism (Balot, 2001). Machiavelli also argued

that ambition and avarice are the causes of disorder and war (Viroli, 1998). Recent research has identified greed and unbridled economic acquisition as an essential factor of the Thirty Year's War (e.g., Kegley and Raymond, 2002) as well as contemporary civil wars (Collier & Hoeffler, 2004).

Thus, while political and economic perspectives share the same assumptions of self-interest, early political thinkers like Machiavelli took a more strident, blatant stance on greed. Although they openly confronted the consequences of greed, they did not embrace its ethical problems. Thus, they helped shape and build the notion that people are incorrigibly selfish, greedy, and competitive, requiring strong institutions to control their seemingly insatiable desires.

Social Psychological/Game theoretic Perspectives

Greed also remains one of the oldest and most chronically unresolved questions in social psychology (Robertson, 2001). Much of the social psychological research on greed takes a game theoretic approach, focusing on the payoff matrices of interpersonal interactions. Our review of the literature indicates that empirical research on greed has surfaced most often in the context of prisoners' and social dilemma games (Dawes, 1980), in which economically rational, individual action leads to worse group outcomes than collective, cooperative action.

Social psychology uses prisoners' and social dilemmas to model some of the basic, underlying tensions of groups and societies. In these strategic games, greed and fear provide two clear incentives to defect (Rapoport and Chammah, 1965; Coombs, 1973): a greedy choice of defection leads to higher short-term outcomes than more selfless choices of cooperation while a fearful choice of defection protects an actor from their worst possible payoff.³

³ Social psychologists (e.g. Steinel & De Dreu, 2004) also define greed as the desire to get high personal outcomes; this approach is consistent with the current analysis of prisoners' and social dilemmas.

Cleverly designed experiments have investigated whether fear or greed is more responsible for defection choices. Dawes and his colleagues (Dawes et al, 1986; van de Kragt et al, 1983), for instance, studied two social dilemma games: one that included no fear, i.e., a money-back guarantee for any party that cooperated when others did not; and one that included no greed, which prevented defections from hurting other cooperators. The ‘no fear’ condition allowed defections but cooperation entailed no risk; the ‘no greed’ condition ensured that cooperative choices were never wasted. The results suggested that greed was the primary force behind non-cooperation: removing fear made little difference in cooperation rates but removing greed increased cooperation. Rapoport and Eshed-Levy (1989) investigated the same issue, with a different set of manipulations, and found that both fear and greed motivated non-cooperation but that greed predominated. In a study of a commons dilemma (in which subjects decided how much to take from a common resource), Poppe and Utens (1986) found similar results: greed rather than fear was the primary motivation. Other related research on the volunteer dilemma (e.g., Diekmann, 1985, 1986) also suggests that greed dominates altruism and increases with group size (Murnighan, Kim and Metzger, 1993).

Overall, research on prisoners’ and social dilemmas has found that, as potential individual benefits increase, so does greedy action (Dawes, 1980). In addition, greed has consistently driven decisions more than fear: people are influenced by desires for personal gain more than they are by desires to avoid loss (Dawes et al, 1986; van de Kragt et al, 1983). Thus, regardless of personal traits, everyone can feel and be motivated, at some time, by greed. In other words, situational temptations can encourage greed and lead normal people to act more greedily.

Because prisoners’ and social dilemmas are built on a game theoretic foundation, the social psychological and economic approaches to greed are quite similar. Allport (1954; 5)

defined social psychology as a “scientific attempt to understand and explain how the thoughts, feelings, and behaviors of individuals are influenced by the actual, imagined, or implied presence of other human beings.” In terms of Allport’s criteria, however, social psychological research has not yet specified the basic psychological mechanisms that drive greed. Thus, to capture the most important components of greed, and to uncover some of its critical causal mechanisms, we turn to new research that identifies factors that provoke greed.

THREE BASIC ELEMENTS OF GREED

Thus far, our review makes it clear that greed is a central concept in philosophy and social thought and a central part of human nature. It also suggests that greed contributes to important personal and interpersonal dynamics in human development and interpersonal interaction. As an organizing framework, we focus our analysis on three of the most important social and psychological characteristics of greed: its moral, cognitive, and emotional elements. Unlike previous research, we analyze how these three underlying forces boost or inhibit the incentive or motivational forces of greed rather than focusing on the incentives or the motivation behind greed, which tends to be obvious and evident in most situations. A moral approach to greed focuses primarily on the conflict that greed creates between the self and others; the cognitive and emotional elements represent two other important psychological factors that frequently affect people’s attitudes toward and perceptions of greed.

The Morality of Greed

Historical and philosophical approaches typically treat greed as immoral and inappropriate (e.g. Hume, Kant); contemporary analyses suggest that vice and excess are two essential qualities of greed (Robertson, 2001, p. 14). Adding religious admonitions leads to the clear conclusion, and a general, pervasive belief, that greed is truly wrong. Greedy action that is

directed toward attaining inordinate amounts of valuable objects is seen as reprehensible, behaviorally and perceptually.

Greed's controversial link to self-interest maximization, however, presents an opposite view. The classical literatures of economics, political science and social psychology do not often directly address the enormous negativity surrounding greed; neither do they often discuss its moral characteristics. Our review suggests that morality is an essential part of greed in the history of philosophy. Thus, recent approaches to greed and self-interest, in both economics (Rabin, 1993; Sen, 1987) and political science (Mansbridge, 1990), that have called attention to the transformative power of altruism and morality, offer hope for advances in understanding the dynamics of greed, as have psychology's repeated observations that people are not unitary, self-interested actors (e.g. Markus & Nurius, 1986; Miller, 1999; Batson, 2006). It seems fair to conclude that although greed is a common motivation, it is not universally active. In turn, this conclusion should stimulate questions about the underlying forces that drive or inhibit greedy action.

Strictly speaking, greed may not always involve clearly unethical behavior (e.g., lies and deception). The notorious executives who have recently been sent to jail (e.g. Dennis Kozlowski, Bernard Ebbers, Jeffrey Skilling, and Samuel Waksal) did more than act greedily: they also engaged in theft, fraud, and conspiracy. Although greed is often identified as the underlying cause of their misconduct, they went to prison because of their transgressions. Thus, greed may be a motivating force, but greedy action is not necessarily illegal.

More generally, although many executives have been vehemently condemned by the public and the media for their huge and perhaps "greedy" paychecks, their high salaries are not illegal. As one example, Stanley O'Neal was Merrill Lynch's CEO when they engaged in

extensive, highly risky subprime lending that resulted in huge losses and the sale of the firm to Bank of America. Reports have suggested that O’Neal exposed the firm to tremendous risks to increase his chances of securing huge compensation (\$48 million; Brush, 2010). Although he was ousted in 2007, he has never been charged with any illegal action. Thus, the morality of greed and its relationship to illegal action are clearly debatable. In particular, because of greed’s economic benefits (e.g. economic growth, entrepreneurial spirit), some greedy action may be morally neutral.

Religious and social admonitions, however, suggest that because greed and unethical behavior often supplement and reinforce each other, treating greed as morally neutral might encourage people to embrace greed and, ultimately, increase the likelihood that they would engage in other unethical, illegal, or even immoral behaviors. We have found no direct or clear empirical evidence to support this view, however. Thus, in this paper, we suggest that greed’s basic moral issue resides primarily in the inherent conflict between self-interest and others’ welfare. As a central topic in moral philosophy, the tension between the two is difficult to reconcile: “If all men are moral [altruistic], all will do better than if all are prudent [egoistic]. But any one will always do better if he is prudent than moral” (Gauthier, 1970, p. 175). Logically, however, morality (or being altruistic) may not maximize the good for society (Westen, 1985). At the same time, in a normative sense and in almost all societies, people’s pejorative views of greed often do equate, *a priori*, with immorality.

An evolutionary perspective on self-interest maximization suggests that survival motives and evolutionary selection led people to focus on the maximization of their own self-interest (e.g. Alchian, 1950; Friedman, 1953). Though controversial (e.g. Hodgson, 1993; for reviews), this perspective provides a clear justification for greedy action, particularly in a context of meager

resources. In previous eras, for instance, acquiring and storing more than a person's basic needs could increase chances of continued survival, particularly in perilous environments like those in which the source of one's next meal was uncertain. Even then, however, these kinds of seemingly natural responses may have led to severe and substantial costs for those who inevitably bore the brunt of greed's negative effects: when limited resources are acquired or controlled by a small group of people, the other members of society can become endangered. Thus, even in ancient times, greed was harshly condemned because excessive acquisitiveness "violates the fairness upon which the community's welfare and stability are based" (Hesiod, in Balot, 2001, p.73). The essential social issue is that, almost necessarily, one person's greedy actions almost always impose costs on other people, in terms of opportunities if not substance. This logic also helps to explain why greed is truly reprehensible in almost all societies and why it evokes such tremendous negativity in historical and philosophical thought. Like many other moral issues, greed also produces both cognitive and emotional reactions, which in turn affect individuals' decisions and social interactions.

Greed-Oriented Cognitions

Greed's cognitive impact concentrates on people's perceptions and attitudes toward greed. Even though the general public typically describes greed as reprehensible, greed's positive side can lead individuals' attitudes and perceptions about greed to be particularly malleable (Wang & Murnighan, 2010a). The negative side of greed stimulates rather than sates and can activate what seems like unrelenting, insatiable desires to procure; the positive side leads to social and capitalistic advances. Thus, because greed represents a double-edged sword, people can view it either positively or negatively (Hume, 1739/2001; Smith, 1776). As a result, individuals may use their contextual circumstances to justify either position: when they

themselves are subjugated and/or victimized, they may see greed as immoral and unjust (ala Plato); when they have acquisitive opportunities, they may see greed as more appropriate and acceptable.

Thus, situational forces can lead people to adopt different cognitive attitudes towards greed. The basic logic of capitalism, for instance, suggests that organizations and their members should do what they can (“within the rules of the game,” ala Friedman) to maximize their economic interests. Given the competitive nature of most organizational markets, maximizing self-interest is often consistent with the norm of “doing the right thing,” so much so that not attempting to maximize might seem inappropriate.

The impact of this kind of economic thinking can be quite influential. Frank and his colleagues (Frank, et al., 1993), for example, have shown that economics education can lead people to act more self-interestedly. Others have warned that the assumptions and language of economics may also have similar, unintended negative influences on management practice (e.g., Ferraro, Pfeffer & Sutton, 2005; Ghoshal, 2005; Pfeffer, 2005; Rocha & Ghoshal, 2006). Managers and leaders who have had a heavy dose of economics-oriented training may feel justified in relentlessly pursuing organizational and individual self-interest (Ghoshal, 2005) and, absent restraint, acts of excessive selfishness and greed (Folger & Salvador, 2008). Thus, economics education may have the effect of encouraging positive attitudes toward greed, especially when the push for profits is pervasive, traditional, and taken-for-granted.

One recent paper (Wang et al, 2011) empirically tested and supported these propositions, suggesting that studying economics, and its focus on self-interest maximization, can lead people to view greed as increasingly positive and beneficial (Frank, et al, 1993). In a series of 3 studies, this research demonstrated that economics education not only affected people’s attitudes but also

their greedy behavior: Study 1 showed that economics majors and students who had taken multiple economics courses kept significantly more and shared significantly less money when they played the role of dictator in a Dictator Game (Forsythe et al, 1994) ; Study 2 indicated that economics education was associated with more positive attitudes towards greed and towards one's own greedy behavior; and Study 3 showed that a short statement on the benefits of self-interest could bolster greed's moral acceptability for people who had no formal economics education.

The difficulty in defining greed, however, makes empirical operationalizations of greedy behavior problematic. Previous research has attempted to measure greed in a variety of behavioral and economics games, including prisoners' dilemmas, social dilemmas, and Dictator games (e.g., Dawes et al, 1986; van de Kragt et al, 1983; Poppe and Utens, 1986; Rapoport and Eshed-Levy, 1989; Forsythe et al, 1994). Although clearly distinguishing greed from pure self-interest is difficult (if not impossible), people often act in ways that depart from the predictions of most economic models, in the direction of being socially responsible and cooperative. In the Dictator game, for example, the 'dictator' controls a monetary endowment (e.g., \$10) and can share any portion of it, from nothing to the entire \$10, with an anonymous other person whom they will never meet. The rational choice models of economics predict that rational dictators will be neither generous nor altruistic, but will keep all of the money they control and send none of it to the recipients. Observations from a host of experiments, however, have shown that people often share some of their endowment (although almost never more than half; e.g., Forsythe et al, 1994) even when the experimental procedures preserve their anonymity, both from the recipient and the experimenter (Hoffman, McCabe, & Smith, 1996). Although the monetary amounts in these experiments are typically small, Carpenter, Verhoogen, and Burks (2005) compared the

choices of dictators who were endowed with \$10 or with \$100 and found that the proportional value of their mean offers did not change significantly when their endowments increased. Thus, although the necessarily small stakes in most experiments may not always activate true greed, especially the type of greed that people typically condemn, independent dictators who do not need to share their endowments still tend to share them; at the same time, equal divisions are rare, suggesting a clear tendency toward self-interested, if not greedy action.

In testing their self-impression management model, Murnighan et al. (2001) preserved experimenter-participant anonymity in a Dictator game and found that people gave more to their anonymous counterparts when they were more personally responsible for their choice, i.e., when they had no constraints and could not attribute their decision to external forces. They also found that people making these dictator decisions were cognizant of the meaning of their own actions, as boosting self-awareness by introducing a large mirror, right in front of them – a manipulation that has been used repeatedly to intensify self-awareness (e.g., Wicklund, 1975) – led to no differences in their decisions. More recent research supports the predictions of the self-impression management model in a moral context by showing that people are less likely to cheat when they are the sole beneficiary of deception. However, the likelihood of self-interested action increases when the benefits can be split with another person, even an anonymous stranger (Wiltermuth, 2010).

A central implication of the self-impression management model is that contexts that can stimulate cognitive self-awareness are likely to lead people to take more responsibility for their own actions. The theory suggests that cognitive awareness stimulates different mindsets that are particularly influential, especially at the moment of the decision. These different cognitive mindsets, although subtle in many contexts, can affect not only people's attitudes toward and

perceptions of greed, but also their greedy behavior. Thus, they can either encourage or suppress greed.

For example, self-impression management theory (Murnighan et al., 2001) suggests that individuals with a mindset to create and maintain a positive sense of identity will act in socially approved ways, even when they are acting by themselves, without any possibility of monitoring. Activating this mindset should curb a person's greedy and selfish behaviors. In a similar context, however, subtly activating a self-interested or a merely calculative mindset can lead people to feel positively about their own greedy actions even though greed is clearly socially disapproved. For example, Williamson (1993) noted, "a failure to appreciate the limits of calculativeness purportedly gives rise to excesses." Recent research (Wang, Zhong, & Murnighan, 2010b) supports this claim, showing that, in a series of 5 experiments, people acted more self-interestedly and unethically after engaging in a strictly calculative task. More specifically, people who engaged in two different calculation tasks – to activate a calculative mindset – then kept more money for themselves in a Dictator game or were more likely to use deception in two different behavioral games (a modified ultimatum game and the 'cheating' game; Gneezy, 2005). Two final experiments suggest that a calculative mindset leads people to focus more on numbers rather than on the social aspects of their decisions, resulting in less consideration of the consequences of their behavior on others and greater self-interested and unethical action.

Variations in social and situational contexts can activate different cognitive mindsets (Gollwitzer, 1996; Fitzsimons & Bargh, 2003; Bargh, 2006). As noted, the moral element of greed focuses on the interpersonal context that surrounds greedy action: greed does not exist in a social vacuum: one person's substantive gains from greedy action can lead to losses for known victims, unidentified people, or the general public. Because of the social norms surrounding

greed, most people understand these basic, interactive effects. Thus, succumbing to or resisting greed may depend on people's cognitions at the time of their decisions; their mindset can focus more on the self or the social context, with the latter, we predict, restricting the likelihood and/or the severity of greedy action and the former encouraging it.

In the strategic context of negotiations, for instance, people often exhibit the well-known "fixed-pie bias," i.e., viewing outcomes as zero-sum: what one person gains, another loses (e.g., Neale and Bazerman, 1991). This suggests that a strategic, negotiation-oriented mindset that stimulates perceptions of self-dependence or self-interest can lead to overly competitive negotiation tactics (Hrebeck & Thompson, 1996), which may spill over to become outright greed. In contrast, we would expect that mindsets that activate perceptions of outcome interdependence, which may increase dramatically when involved others are connected, familiar, or attractive, will limit greedy action.

The classic definition of mindset (*Einstellung*) suggests that the mechanisms mediating a mindset reside in people's cognitive processes (Gollwitzer, 1990). But the activation of a particular mindset can depend on remarkably subtle processes (Bargh, 1996). A host of recent social psychological experiments, for instance, have shown that priming can markedly influence subsequent behavior in the moral and ethical domain. Gino and Pierce (2009a), for instance, showed that people were more likely to engage in unethical behavior (e.g., cheating by overstating their performance in an anagram task) when about \$7,000 in cash was in the room with them, easily seen. Kern and Chugh (2009) found that priming people with a potential loss led them to engage in more unethical behavior than priming them with a potential gain. Zhong and Liljenquist (2006) primed participants with an implicit threat to their moral self-image by asking them to recall unethical behaviors (versus ethical behaviors in another condition). People

who recalled unethical behaviors not only completed more cleansing-related words in a word-fragment completion task (wash versus wish when presented with w-sh), but were also more likely to choose antiseptic wipes rather than pencils as their take-home gift. They also found that people who were allowed to physically cleanse themselves after unethical recall reported reduced guilt and shame compared to people who were not allowed to cleanse themselves physically. Zhong and Liljenquist conclude that an implicit threat to viewing oneself as ethical may result in physical efforts to assuage or regulate the consequent negative emotions.

Although the impact of subtle cues that activate a set of cognitions can be potent, when multiple mindsets are activated, one mindset can interfere with another, even for the same person. In our own research (Wang et al, 2010b), for example, we implicitly encouraged a calculative mindset by asking people to engage in intense calculations; this led to greedy and/or unethical behavior. In our last two experiments, however, we were able to completely remove these negative effects by subtly introducing additional stimuli that activated a more social, interpersonal mindset: we simply asked people to choose from among four family pictures, one of which ostensibly depicted the members of the family in the business that was part of their calculative task. This small intervention completely eliminated the self-interested and unethical effects of a calculative mindset.

These findings suggest that the dynamic interaction between or among different mindsets is critically important for understanding moral and ethical decision-making processes. We address these issues in the next section of this paper. To summarize the cognitive aspects of greed, however, we suggest that cognitive mindsets can have important and markedly different effects on greed and, subsequently, on greedy action. In addition, resisting greed may require a mindset that at least subtly considers an action's social consequences. These kinds of mindsets

lead individuals to take the perspective of other people and possibly feel empathy for them. Thus, when people realize how their greedy actions can have broad, negative social effects, we expect that they will be less likely to engage in greedy action. Darwin (1874/1998) called these mindsets social instincts, which people acquire through social learning. We suggest that the key to a social instinct is its ability to suppress pro-greed mindsets and dampen people's instinctive self-interest so that moral motives and more socially approved behavior can flourish (Richard, 1986).

The Emotionality of Greed

People can feel their emotional reactions, sometimes without being consciously aware of their emotions' influence on their subsequent cognitions or behaviors (Barsade, Ramarajan, & Westen, 2009). Even though emotions are signals to others (e.g. Darwin, 1872/1965), we suggest that the emotional aspects of greed are primarily internal; they can either augment or conflict with an individual's cognitions about greed.

We also suggest that greed's emotional aspects can generally be broken down into pre- and post-greed emotions. By its very nature, greed evokes strong emotions (Loewenstein, 2000; Elster, 1998) that can contribute to tempting physical impulses, e.g. excitement, lust, eagerness, thrill, and exhilaration. Loewenstein (1996) suggested that emotions differentiate what people really want from what they think they should do. His analysis focused on the effects of visceral reactions - hunger, thirst, desire, and other cravings - on impulsivity and self-control. He identified two defining characteristics of visceral reactions that, in some sense, sound as if he was describing greed, as they have: "1) a direct hedonic impact; and 2) an effect on the relative desirability of different goods and actions" (p. 272). These conceptual connections to greed are

also consistent with Aristotle's argument that greed promotes an irrational desire to pursue bodily pleasure that leads people to ignore the nature of their real needs (Balot, 2001).

Although philosophers view greed and greedy action as immoral and deplorable and suggest that it will ultimately make people unhappy, the immediate satisfaction of greedy impulses seems to naturally lead to (at least) short-term happiness (Wang & Murnighan, 2010a). The satisfaction of an intense (even potentially irrational) desire is an exciting feeling that is completely consistent with Metcalfe and Mischel's (1999) "hot" system, which leads people to be intensive and impulsive, hot-headed and emotionally overwhelmed, at least in the short-term. Bazerman, Tenbrunsel, and Wade-Benzoni (1998) drew on contemporary thought on opposite selves (Freud, 1923; Inhelder & Piage, 1958; Strotz, 1956) to describe these overwhelming emotions as part of a "want-self," which is emotional, impulsive, and hot-headed, unlike the other side of individuals' basic nature, i.e., their rational, cognitive, thoughtful, and cool-headed "should-self." Similarly, Wang and Murnighan (2010c) suggested that these intense, often impetuous emotions can block effective, rational cognition (e.g., moral reasoning) and dominate a person's decision processes. Hot "want" emotions activate our short-term acquisitive, self-interest and lead people to turn a blind eye to their concerns for others, and even their own long term interests (Tenbrunsel, et al, 2008); their activation can completely dominate a person's thoughts, and possibly their actions. These emotions often lead to more than simple, self-interested judgments and decisions; it is at exactly these times that they can lead to greed.

Like all intense emotions, hot, "want" emotions typically dissipate. The intense hedonic pleasure associated with greed tends to peak at the moment of an action/decision or immediately after it, but it also fades fairly quickly afterwards (Bazerman, et al, 1998), especially in retrospect (Wang & Murnighan, 2010a). In addition, self-reflection following greedy behavior can lead to

feelings of guilt and regret (Wang & Murnighan, 2010a), which can outweigh short-term satisfaction or acquisitive excitement and undermine previously hot feelings (Solon and Herodotus, in Balot, 2001, p. 236). The psychological literature on the self (e.g., Baumeister, 1998) indicates that people anticipate their subsequent feelings (Mellers et al, 1999), even as they are about to engage in current behavior. More specifically, when people face decisions that can reflect on their sense of self, they tend to make choices that reinforce their own self-images (e.g., Murnighan et al, 2001). Thus, greed can produce temporally paradoxical feelings: strong, short-term excitement followed by long-term guilt.

Research suggests that generosity, altruism, and the accumulation of wealth can all lead to happiness (Easterlin, 1973, 2001; Isen, Horn & Roensen, 1973; Rosenhen, Underwood & Moore, 1974; Konow & Earley, 2008). Attractive material objects activate greed; their possession (not necessarily their consumption) can satisfy greedy motivations. Although greedy motivations and actions can create a burst of short-term happiness, reflection can create guilt, regret, empathy, and other feelings that are inconsistent with happiness, as these emotions are often negative moral regulation signals (Detert, Treviño, & Sweitzer, 2008). The fact that people anticipate these feelings (Zeelenberg, 1999) can contribute to blunting greedy action in the first place. Thus, when people think, *a priori*, about their likely *post hoc* feelings, i.e., anticipated guilt, greedy action becomes less likely (Wang & Murnighan, 2010a). Experienced individuals typically have thoughts of their likely *post hoc*, intuitive emotions, prior to their decisions (Damasio, 1995; 1998); these thoughts can compete with the similarly intuitive but positive reactions that are associated with intensely desirable objects (Lowenstein, 1996).

The important theoretical and empirical question, then, becomes an identification of when and why one intuitive emotion is more likely to surface and dominate the other, i.e., the forces

that determine whether people decide to succumb to or resist their greed. We suggest that this question can be approached, if not yet understood, by investigating the interaction of conscious and automatic decision processes, as well as the interplay among greed-related emotions, intuition, and cognition.

THE PROCESS OF GREEDY DECISION MAKING

Although greed is rarely discussed in the literature of moral decision making, self-interest is one of its central topics because moral issues typically involve self-other interactions (Turiel, 1983; Westen, 1985). Kohlberg, for example, defined morality as “the reciprocity between the individual and others in his social environment” (Kohlberg & Mayer 1972: p. 129). Kohlberg (1969) and Piaget (1932)’s perspectives both suggest that morality and moral development represent the understanding and resolution that emerge from the inevitable conflicts between the self and others (Gilligan, 1977). As a result, theories and research, explicitly or implicitly, recognize that ethical decisions lead to legally and morally acceptable behaviors based on current social and moral norms (e.g., Jones, 1991; Trevino, et, al, 2006). This view is also consistent with the perspectives of moral philosophy and theology, which suggest that ethical choices should be socially appropriate (Beauchamp & Bowie, 2004).

In this paper, we suggest that self-other tension may be particularly relevant in greed-related decisions in organizations because many of the moral decisions in organizations reflect an economic conflict between the self and others. For instance, executives can choose whether to contribute to the firm in a responsible way, or to contribute strategically to benefit themselves economically. (Stanley O'Neal of Merrill Lynch, mentioned earlier, may be a perfect example.) Similarly, companies can choose whether to put their customers’ interests first, particularly in the short run, even though doing so might hurt the next quarter’s returns (e.g., running additional,

costly clinical tests before launching a new medication). The wide array of examples that fit these contingencies helps explain why greed may be a constant organizational concern, particularly in the wake of so many corporate scandals.

As the most cited and most tested model of moral reasoning (Trevino, 1992), Kohlberg (1969)'s moral development theory provides an important foundation for subsequent models of moral and ethical decision-making. Kohlberg's theory (1969) proposes that, during their moral development, children progress from being egoists, i.e. making decisions only on the basis of an action's expected negative or positive effects on the self, to caring about others' interests and taking others' perspectives. As they mature, children use social learning to construct a more advanced moral reasoning system. A person's fully developed moral system allows them to use moral reasoning to evaluate and judge the appropriateness of self-interested action, and to choose their actions accordingly. In sum, Kohlberg's theory links moral development to children's cognitive development: their moral reasoning matures when they acquire perspective-taking skills. This suggests that moral development increases an individual's awareness of greed's negative consequences on others, helping them curb their initial inclinations toward greedy action.

In contrast, Haidt's (2001) social intuitionist model paints a markedly different picture: it suggests that moral situations activate immediate, intuitive reactions that typically include moral judgments *instantaneously*. His model suggests that, after making a conscious judgment or behavioral choice (not necessarily always in line with their immediate moral intuition), people use moral reasoning to justify their decisions. This is consistent with arguments that emotional and visceral reactions precede or accompany rather than follow cognitive evaluations and social judgments (e.g. Damasio, 1995; Lowenstein, et al, 1999).

We suggest that greedy behavior is the product of both reasoning and intuitive processes, as well as an interaction between emotions and cognition. Several recent models (Chugh & Bazerman, 2006; Moore & Loewenstein, 2004; Murnighan et al., 2001) suggest that immediate, automatic moral intuitions tend to be self-interested, as self-interest is a fundamental, basic, and instinctual response to external stimuli. We suggest that these immediate, self-interested intuitions are automatically attached to self-focused, hot emotions. Temperance requires both conscious, deliberative thought that adds social and normative concerns, and cooler rather than hot emotions for moral self-regulation (Detert, Treviño, & Sweitzer, 2008; Moore, 2008). This creates a self-morality battle, within an individual, pitting the strength of self-interested, intuitive desires against the constraints established by social learning.

Haidt (2007) takes a similar approach, suggesting that people are selfish but morally motivated. He concludes that morality is a major evolutionary development for intensely social species (Haidt, 2001). As a result, mature, socially conscious, evolved individuals often consider social motivations beyond self-interest. Similarly, Moore and Loewenstein (2004) proposed that self-interest is automatic, viscerally compelling, and usually unconscious, and that caring about others or abiding by ethical and professional obligations typically requires thoughtful, controlled decision processes. These perspectives suggest that unsuppressed self-interest will reduce the likelihood of ethical decision making and increase the likelihood of greedy action (Murnighan, Cantelon & Elyashiv, 2001; Chugh & Bazerman, 2006).

Several models of ethical decision-making (Jones, 1991; Murnighan et al., 2001; Chugh, Banaji, & Bazerman, 2005) also suggest that people may not be completely aware of the ethical characteristics or consequences of their decisions. Instead, their cognitive constraints bias their ethical judgment toward self-interest, either consciously or unconsciously (Murnighan et al.,

2001; Chugh & Bazerman, 2006). Perceptions of inequity, for instance, can make greedy and ethical action seem appropriate (Greenberg, 1990; 1993; Gino & Pierce, 2009b). When impulsive greed and self-interested justifications dominate consciousness, they can crowd out social considerations and negate the restraining forces of moral development and social norms against greed.

We suggest that the suppression of self-interest depends on a desire that is as basic and as instinctual as self-interest, i.e., the desire to be socially accepted. At birth, human beings are some of the world's most helpless creatures. This creates tremendous dependence, which, when satisfied, generates strong social attachments. At the same time, the presence of a tremendously talented cortex allows people to remember and learn, and a considerable amount of an individual's critical learning is social: people soon realize that, to satisfy their need for self-preservation, they need the help of other people. (Sociopaths are an obvious exception.) Because of the importance of social context, social and moral reasoning become key functions of the prefrontal cortex, and a damaged cortex can result in the impairment of social and moral behavior even when basic cognitive abilities are not lost (Anderson, Bechara, Damasio, Tranel, & Damasio, 1999).

As people age, this strong social orientation soon develops into social and moral development, which are inextricably linked and provide a countervailing force for the naturally strong, instinctive drives of self-interest. Freud's drive-instinct and developmental models also suggest that the ego must manage the self-interested, libidinal, and aggressive id, and balance its influences with those of the super ego (Freud, 1923; 1939). Thus, after self-interested intuition emerges, a second intuitive reaction is socio-moral, and the internal battle is joined. If one intuition clearly dominates the other, an immediate decision will ensue. Post-decision

deliberations and reflections (and potential regret), however, can subsequently reverse initial decision tendencies, in either direction. In addition, the processes of rationalization and justifications can also start almost immediately (Haidt, 2001). In general, then, we suggest that greedy decision making represents a struggle between instinctive self-interest and socio-moral concerns and needs (e.g., Murray, 1938), and that this process is limited by bounded rationality (Simon, 1957) and people's bounded awareness of ethicality (Murnighan et al., 2001; Chugh & Bazerman, 2006). Thus, when people do not realize the ethical consequences of their potential actions, or if they implicitly or explicitly structure situations to avoid having to make a moral decision, they can act self-interestedly and either not realize it or not admit to it.

Thus, it appears that, on the one hand, greed is the result of instinctual and intuitive forces that have translated self-preservation into self-interest and, at least occasionally, into greed. This process is primarily associated with temptation and hot "want" emotions, i.e., desirability-driven hedonics. Acquisitiveness is so natural that many people who are inordinately wealthy still seem to be driven to acquire.

On the other hand, the development of socio-moral connections provides an antidote to relentless, unfettered greed. In addition, people either learn or are born with the ability to feel guilt, and their socially sharpened cortex makes emotions part of their social and moral intuition (Damasio, 1995; 1998), which allows them to learn to anticipate feelings of guilt, even before they have taken a greedy action. Thus, knowing moral norms, and caring for them as a result of their social associations, can lead to early self-recrimination (e.g., as a result of upsetting one's parents, often because of doing something "wrong") that creates a memory that can then be re-activated before making important decisions.

This “dual process” model is like many others, which have deep roots in philosophy and intellectual thought (e.g., including Aristotle, Hobbes, Rousseau, and Hume). More recent dual process models identify two types of cognitive reasoning, rule-based and associative⁴ (Sloman, 1996, Stanovich & West, 2002). A rule-based system uses symbolically represented, intentionally accessed knowledge to guide reasoning (Smith & DeCoster, 2000); it primarily deals with analytical, rational, and explicit thought processes. In contrast, an associative system operates preconsciously (Bargh, 1994), is typically difficult to control or modify (Kahneman, 2002), and involves automatic and tactical thought processes, exerting few, if any, cognitive demands. Bazerman, Tenbrunsel, and Wade-Benzoni (1998) extended this approach to their dual-self model, which described and distinguished a rational, cognitive, thoughtful, and cool-headed ‘should-self’ from an emotional, impulsive, and hot-headed ‘want-self.’ Monin, Pizarro, and Beer (2007) essentially argued that systematic moral reasoning is often critical to solve complex moral dilemmas that involve conflicting moral values, and that affective reactions are people’s natural, dominant responses to appalling moral transgressions. More recently, Brief (2012) suggests that automatic emotional responses often drive deontological judgments (i.e., decisions regarding what is morally forbidden) and that more controlled cognitive processes typically get involved when people make consequential judgments (e.g., utilitarian decisions).

Although greed is often seen as a moral transgression, temptations are inevitable and can feel irresistible. Thus, our dual-process approach to greed identifies two competing thought processes: self-interest versus socio-morality. Both have roots in instinct; thus, both can feel completely intuitive. Thus, unlike other dual-process models, we suggest that these two processes can be activated almost immediately, with self-interest having a split-second edge over

⁴ Other notions of dual models interpret them as automatic vs. controlled processes (e.g. Fazio, 1986; Eagly & Chaiken, 1993; Greenwald, et al, 2002).

socio-morality. We also expect that both drives can be part of individuals' subsequent, conscious reasoning processes.

Figure 1 depicts our model⁵ of the process. After encountering a moral situation that activates greed, we suggest that people experience two conflicting motivations and intuitions. As noted, both of them are emotionally-based, with self-interest evoking hot emotions and socio-morality evoking less extreme, cooler emotions like those of other conscious or moral emotions (Tangney, Stuewig & Mashek, 2007; Eisenberg, 2000). Wang and Murnighan (2010c) called these "warm emotions," as they tend to be less intense and are generally experienced consciously⁶ (Tangney, Stuewig & Mashek, 2007; Eisenberg, 2000). Thus, depending on the impact of the situation, and its morality, the decision process can be a mix of cognitions and emotions that vary in magnitude.

For important moral decisions that immediately provoke moral awareness, people are likely to be aware of the emergence of these emotions and cognitions; their influence can be strong and long-lasting. In self-reflection, the most representative warm emotions related to greed are empathy, guilt⁷, and regret; all three are positively correlated with moral behavior and moral character (e.g., Eisenberg, 2000; Hoffman, 1998; Walker & Pitts, 1998). In the presence of others, people are also likely to experience moral emotions such as embarrassment and shame because their greedy actions are often viewed as moral transgressions (Warren & Smith-Crowe, 2008). Although hot emotions can amplify temptation and stimulate greedy behavior, a moral

⁵ Moral judgments about greed can also be an interpersonal process (Haidt, 2001). For the sake of conceptual clarity, we focus on individual decision makers in our model.

⁶ Barsade, et al (2009) noted that even when people are conscious of their emotions, they may still not be completely conscious of their source or their consequences. This suggests that conscious processes may be a subset of the processes that influence people's behavior. Thus, our distinction between hot and warm emotions is actually relative.

⁷ Research suggests that guilt is particularly effective in curbing one's greed (Wang & Murnighan, 2010a) as it typically leads to helping behavior even toward people who are unrelated to the source of the guilt feelings (Freedman, Wallington, & Bless, 1967; Regan, 1971; Regan, Williams, & Sparling, 1972).

emotion like guilt can also create internal feelings, which, when strong enough, will effectively limit greed and other self-interested actions (Wang & Murnighan, 2010c).

The second part of the model suggests that the interaction between the two intuitive reactions (self-interest vs. socio-morality) and their associated emotions (hot vs. warm) will lead to an initial behavioral tendency (sometimes as fast as the blink of a thought), followed quickly and immediately by more conscious moral reasoning.⁸ These more deliberative processes can augment, reverse, or justify initial behavioral tendencies. Consistent with Haidt (2001), we suggest that moral reasoning often serves to justify previous moral judgments, particularly when individuals engage in greedy action. In addition, we also suggest that initial moral judgments do not always equal to final behaviors. Thus, people not only use moral reasoning to justify their immoral actions, they also rely on these kinds of deliberations to make decisions that reject or overturn their initial tendencies (Pizarro & Bloom, 2003). In addition, the complexity (Monin, et al, 2007) and nature (Brief, 2012) of a moral situation often determine how moral reasoning and/or intuitive reactions will be weighed and how they will interact with each other in a person's decision process. This suggests that greedy decisions can be as complicated as complex moral dilemmas. We suggest, however, that for many of these decisions, greed is fairly straightforward: it is part of the difficult, internal battle between socio-moral righteousness and seemingly irresistible temptation.

After a decision and after taking action, people are remarkably good at justifying their choices. Perceived inequities or unfairness, for instance, can stimulate reciprocal unethical conduct. Thus, people steal in the name of justice (Greenberg, 1990; 1993) and engage in deviant acts when their organizations cannot live up to their original expectations (Kemper, 1966). We

⁸ Moral reasoning can also be subject to the influence of different situational or conditional moods and affect, which tend to be relatively ephemeral compared with the hot and warm emotions that we have discussed here. For the sake of conceptual clarity, we do not include them in our model.

suggest that the justifications people use depend on the activations and interconnections of their cognitive mindsets, their initial inclinations, and their ultimate decisions and actions. In most cases, we predict that all three will be consistent and will lead to commensurate justifications. In the end, however, it is only the ultimate action that requires a cogent rationalization.

DISCUSSION AND CONCLUSIONS

This paper reviews the historical and intellectual roots of greed. Given the array of rich literatures on greed, it seems clear that our empirical understanding of the concept pales by comparison. This may be the result of several factors. First, the absence of a clear and precise definition provides a tremendous challenge for empirically studying greed. It also means that much of our understanding of greed primarily depends on lay conceptualizations and philosophical approaches. Although people have no difficulty condemning greed, and may tacitly agree on what constitutes greed, a precise, scientific definition remains elusive and subject to idiosyncratic interpretations and indistinct objective criteria. Although excessiveness seems to be a basic, central, and necessary characteristic of greed, a determination of excessiveness itself appears conceptually and empirically problematic. In addition, greed's dual nature (e.g., its potentially salutary effects on economic prosperity vs. its moral grounding) also makes a clear conceptualization challenging. In particular, the distinction between greed and self-interest maximization remains a continuous challenge (Wang, et al, 2010). All of these issues suggest that, even if previous researchers were interested in studying greed, its lack of decisional clarity and the resulting problems in developing valid empirical measures of greed may have dampened their ardor. In many ways, studying other issues may be easier.

In this paper, we have opted for conceptual simplicity and clarity and, as a result, have limited our analysis to materialistic desires. An overall understanding of the broad concept of

greed is far more challenging. Although materialistic desires probably represent its most commonly considered and accepted form, greed for love or knowledge or understanding or loyalty – in fact, any other strong desire – can also be considered important parts of the general concept. This suggests that human beings are often driven by a wide array of potentially strong desires, which can serve as the real ends of human actions (Westen, 1985). These multi-faceted drives provide an even larger potential agenda for future research on greed, and all of them face the definitional challenge.

By restricting our focus to materialistic greed, we identified three major aspects of greed - moral, cognitive and emotional - and introduced a process model to analyze the interaction of some of its key factors. Rather than addressing the most obvious motivational aspects of greed, we conceptualize greed as a sophisticated social phenomenon that often involves a set of internal battles: e.g. the self vs. others; cognitions vs. emotions; and hot vs. warm emotions. The decision to succumb or to resist greed seems to be a product of these internal battles. Although in need of additional empirical tests, our model has a variety of implications and a wide variety of avenues for future investigation. For instance, research that explored the dynamic interaction between the cognitive and emotional factors that contributed to greed would be particularly foundational. Because many greedy decisions tend to be made fast, cognitive and emotional effects can be implicit or subconscious (Barsade, et al, 2009; Bargh, 2006; Bargh, 1994). How to investigate these subconscious processes and their interaction with more conscious decision processes presents a significant challenge as well as significant potential for future research.

The assumptions of ancient philosophers suggest that people are all motivated, at least some of the time, by greed. Despite society's strong, uniform negative consensus about greed, it is also often believed to be innate and inevitable. Even before birth, for instance, babies absorb

as much as they can from their mothers (Hauser, 2006). Thus, as Robertson (2001; 3) has noted, greed is “a force deeply rooted in our constitution as human animals.” It is also eminently possible that, as a result of natural selection, people are genetically pre-disposed to be selfish and even greedy because of their need to promote the proliferation of their genes. Our review suggests that this perspective is consistent with many disciplines’ assumptions about the nature of humanity, particularly economics and political science. Thus, Hobbes (1651), Adam Smith (1776), Edgeworth (1881), and Machiavelli (1965) all assumed that self-interest would remain not just active throughout individuals’ lives, but unrestrained.

These views and assumptions may have exerted considerable social influence on people’s education and on their general beliefs, even though potent alternatives are available. Sociobiology, for example, suggests that, instead of favoring selfish genes, natural selection is likely to choose individuals who care for their own lives and those of their relatives (Hamilton, 1964). Thus, genes that sacrifice themselves to protect many related siblings may be more likely to be favored in the gene pool (Westen, 1985). Even though kin are clearly limited in number, these observations suggest that social cooperation may be critical for survival, even in only a limited sense that encompasses close relations. In addition, more than any other species, people engage in many acts of reciprocal altruism (Trivers, 1971).

All of these observations suggest that the darkest side of human nature might be far from universally applicable and, instead, describe only a select few. In addition, these observations suggest that individuals actually do well when they share (e.g., van Beest, Steinel, & Murnighan, 2011). More specifically, this suggests that socially-aware individuals not only develop concerns about their own social actions, but these concerns may also be experienced as intensely personal, without any social impact (Murnighan, et al, 2001). Thus, social concerns may become personal

concerns, with individuals focusing on what their actions say about their own character, even when they act privately and can never be observed. The ultimate outcome of these kinds of processes may be socially contributing individuals who make their contributions more to satisfy themselves than to satisfy others. This kind of model has the potential to be self-sustaining, and may provide important avenues to limit greed's excessiveness. It is certainly worthy of considerable research.

Finally, the practical implications of understanding greed may be critical, particularly in the aftermath of the recent financial crisis. Prior to the meltdown of 2008 (and its aftermath), many broker-dealers invested in high-risk collateralized debt obligations (CDOs), hoping to reap higher returns than their competitors in a rapidly growing market environment. This helped fuel the supply of subprime mortgages and provided an incentive for mortgage brokers to make loans to customers who did not have the ability to repay them (Wilson, 2007). This example perfectly fits Plato's moral arguments against greed (Frost, 1962): individual greed benefits one person at the expense of others, with systemic greed damaging an entire system.

The recent corporate scandals also suggest that greed may be contagious, and capable of corrupting entire organizational and economic systems. Ghoshal (2005) and others (Ghoshal and Moran's, 1996; Ferraro, Pfeffer & Sutton, 2005; Ghoshal, 2005; Pfeffer, 2005; Rocha & Ghoshal, 2006) have presented cogent critiques of an economics approach to business education, warning that executives and leaders with heavy economics-oriented training may feel justified in relentlessly pursuing organizational and individual self-interest (Ghoshal, 2005) and, absent restraint, acts of excessive selfishness and greed (Folger & Salvador, 2008). Our current model primarily focuses on individual decision makers and individual factors in greedy decision making. Compounding this to the level of the economic system requires that greed pervade many

situations and many institutions, including (but without being limited to) group interactions, organizational cultures, industrial norms, and legalistic constraints (or their relaxation or absence). A true understanding of greed's pervasive effects might start with individuals and their decisions, but its broad implications will also need to incorporate the dynamics of organizations, economic systems, societies, countries, and even the grand global economy. These serious challenges also offer opportunities for creative, dedicated researchers across different disciplines.

In the end, if greed is a basic aspect of human nature, and an inseparable part of human desires, generally, as we and others have argued, its understanding and ultimately its control will require far more research than it has currently attracted. Even with its definitional difficulties, we can't help thinking that extensive research on greed could be particularly fruitful.

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FIGURE 1. THE PROCESS OF GREEDY DECISION-MAKING

