

# 10

## Power Basis Theory *A Psychoecological Approach to Power*

FELICIA PRATTO, I-CHING LEE,  
JUDY Y. TAN, and EILEEN V. PITPITAN

Why do people want power? One answer to this question focuses on the peculiar motivations of power-hungry and powerful people (e.g., Fodor, 1985; McClelland, 1975; Winter, 1973). Another answer is that power enables people to get what they want (Boulding, 1989). As absolute control is rare, many social psychologists define power as the potential to influence others, which makes it relational (e.g., Fiske & Berdahl, 2007). Raven's (e.g., 1965) seminal power–interaction model describes six methods of interpersonal influence: (a) coercion, (b) reward, (c) legitimacy, (d) expertise, (e) information, and (f) referent (i.e., affiliation). Although these approaches have shown *how* power motivations and social influence work, they do not address *why* power is a recurrent feature of life and for all people. They also do not explain why structural inequality, a by-product of stable power and coalitions, is typical of societies.

For these reasons, our approach is rather different. The ecological theory we introduce here explains that humans must use power to survive and thrive in the context of environmental constraints and affordances. Power Basis Theory argues that the ontological necessity of power arises from the requirements humans have for survival (their basic needs). Power motivations are what encourage action to meet those needs and are prompted by the psychological apparatus humans have for detecting those needs (sensibilities). Thus, instead of focusing on idiosyncratic power motivations, our theory harnesses ordinary motivations that stem from real and normal needs. Hence, we define power with respect to survival needs in the ecological system rather than with respect to relationships.

According to Power Basis Theory, the kinds of power and desires that recur in human life do so because those kinds of power and motivations address particular basic needs. The universalism of these needs and desires allows people to provide for or anticipate other people's, which creates the possibility of social influence. This possibility allows people to transform one means of meeting a need into another. This *fungibility* among different types of power is what makes power dynamic and interactive with both the physical and the social environment. By understanding the social ecology of fungibility, one can understand power dynamics and stable inequality. Moreover, our ecological analysis presumes that when desires are calibrated with true survival needs and with the ecology, the system is functional, but the inability to meet needs, confusion of desires with needs, and miscalibration between living organisms and the environment can be dysfunctional for both people and their ecology.

We first address what power is and what its relation to needs is, and we then describe the sensation and motivational systems that, when working well, calibrate the needs of the organism to the local ecology. By understanding what people's basic needs are, we are able to predict what forms of power will recur in human life, what the likely sites of power conflict will be and the power tactics and strategies individuals and groups can use, what kinds of moral and ethical issues are likely to arise concerning power, and the implications of our theory for social inequality and power dynamics. We also present new data examining implications of our theory for ethics, power dynamics, group stereotypes, and person perception. The discussion revisits how our theory differs from other theories of power and suggests avenues for research.

## WHAT IS POWER?

There is no consensual definition of *power*, but several conceptions are common in social theory and social science. Social power has been defined as *control over* others, that is, forcing others to do one's will (e.g., Dahl, 1957); as *social influence* or the ability to effect change in others (e.g., Weber, 1946); and conversely as *freedom* or having personal *agency* (Russell, 1938). Feminist theory spotlighted *transformative power* as the ability to help others develop (Wartenberg, 1990). Theorists who consider collectives such as groups and governments define power as the means of sustaining intergroup oppression (e.g., Mills, 1956). The relational and collective views of power emphasize the importance of considering the field or context in which power is exerted or that sustains power inequality itself.

None of these definitions of power seem wrong, but because they are incompatible, we must consider what power is more broadly in order to develop a definition of power that encompasses these conceptions. Let us start with observations about power and everyday life.

The amount of stable power one has corresponds to one's quality of life. The most powerful people on earth can choose to live luxuriously; their food, clothing, housing, and medical care are not only adequate but often superior. They enjoy companionship and popularity; freedom; safety and security; access to beauty, pleasure, and information; and the ability to ensure that they and their progeny

maintain a social presence far beyond the locations they inhabit and even after they die. In contrast, the least powerful people on earth often go without food, housing, good health, and other necessities; are ignored or viewed with suspicion, fear, and hostility; often suffer from violence; have few options and little knowledge that can help them; and are often overlooked or forgotten even before they die.

This association between power and life quality is no coincidence. *Power is, according to our definition, the means to meet survival needs or to create deficits in needs.* However, power is not situated in the person or group as agency, because the means of meeting survival requirements depends jointly on needs, the environment, and human capacities. From the perspective of the needy person, power used to meet needs is *constructive*, and power used to create need deficits or prevent needs from being met is *destructive*. Because power enables people to meet their requirements for survival, power is pertinent to everyday living and survival not only for elites or the very destitute but for everyone. In fact, we argue that the reason that power dynamics recur in all human lives and societies is that power is how people meet their basic needs. Hence, the basis of power is needs.

To complete our ecological grounding of power, we must consider not only the basic needs people have but also how their environment and people's ways of interacting with the environment afford the meeting of each need. Typically, people have the ability to detect whether their needs are currently met, through their sensibilities. Some people (e.g., adults more than children) can anticipate needs arising. Detection of need or of the relevant sensation motivates the individual to return to a state in which needs are met through action, as hunger motivates the desire to eat. The motivated action then usually satiates the need, at least temporarily.

Figure 10.1 provides an overview of the sensibility and motivation processes we propose. The top two rows denote conditions of the relevant local ecology and the person. People have a set of recurrent basic needs and typically are equipped with sensibilities to detect those needs. Their environment may afford the meeting of those needs and behaviors that meet those needs to greater or lesser degrees. For example, people need nutrition and calories from food; their needs are signaled by hunger and food cravings. However, some environments have more abundant and more ready-to-eat food than others.

The bottom row of Figure 10.1 denotes the current state of the person. At times, particular needs become increased or even acute. As this occurs, a person's sensibilities are alerted, and motivation becomes active. Motivation combines with the behavioral skill repertoire and environmental affordances to influence what actions the person might take to follow the motivation and succor the need. For example, both the environment and one's behavioral repertoire influence whether one cries, begs, hunts, buys, cooks, forages, gardens, steals, or undertakes a different action in order to eat, and both the environment and the action jointly determine how successful the action is at succoring nutritional needs. Particular behaviors may in turn feed back into the system by changing the behavioral repertoire, by changing the environment, and by satisfying needs and reducing motivation (reducing paths shown with dashed lines in Figure 10.1). In extreme cases, to be discussed later, actions can even change the sensibilities for needs, just as turning up the volume on headphones to hear better can result in deafness.

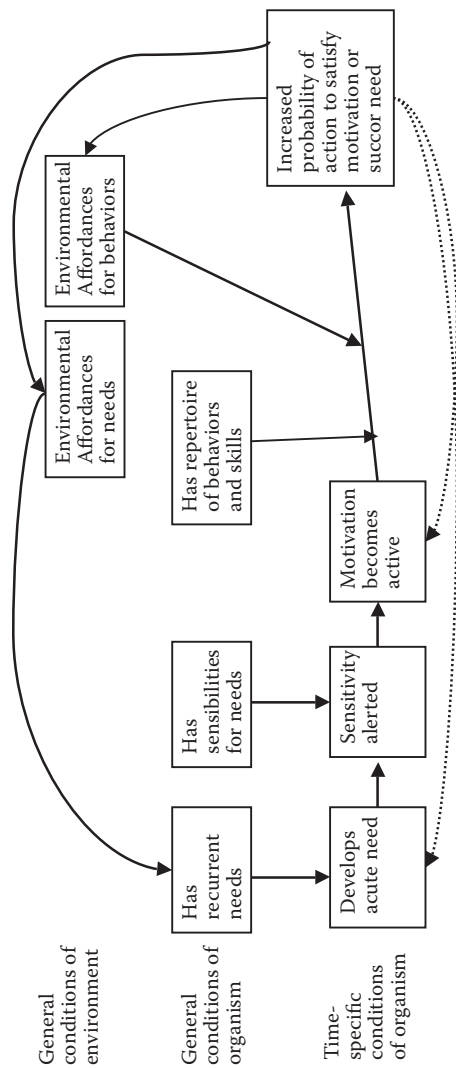


Figure 10.1 Figure Caption Missing?

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Although motivation influences the likelihood of the person performing particular behaviors, motivation does not *determine* behavior. This is because people can choose among skills and behaviors and can set priorities that allow them to change the importance of a given motivation or sensibility. For example, despite a chronically operating hunger-satiation system and particular eating desires, people can learn to modify their eating habits, to fast on purpose, or to prioritize eating for health or politeness over eating to feel full. People's freedom of choice in our theory is determined by the breadth of their behavioral repertoires, by the range of behaviors in their repertoires that work within the given context, and by their ability to ignore, tame, postpone, or mutate their motivations and desires.

In Power Basis Theory, the motivational system connects the person's internal state to the environment, and its primary purpose is to alert the person to needs and to motivate actions to succor needs. To the extent that sensibilities and motivations are well calibrated, and the environment affords needs being met, the system works well. However, because people are overly sensitive to losses (e.g., Kahneman, Knetsch, & Thaler, 1990), potential losses may decouple persons' motivations from their objective needs. When motivations are not to meet needs, they function as *desires*—strong wants that may feel necessary to survival but are not. Wanton desires, such as insatiable appetites for designer clothes or sweets, may result in other needs being neglected. In other words, the motivational system can take on a dysfunctional life of its own when it is not calibrated to actual survival needs.

Environmental affordances can constrain whether needs can be met, regardless of the operation of the sensibility-motivation system. For example, even if one shivers and wears a coat, a very cold environment can cause death from hypothermia. In environments that do not readily afford succoring needs, people may adapt their behaviors to meet needs, and these adaptations may or may not succor needs without creating new deficits. For example, people have responded to single-sex environments such as prisons and the military with adaptations such as prison "homosexuality" and prostitution outside all military bases, but these adaptations create other survival problems such as murder and AIDS. Hence, survival and thriving are jointly contingent on the local environment and on motivations and actions.

## NEEDS AND THE BASIC FORMS OF POWER

To this point, we have stated that power motivation originates from basic needs, with the caveat that the motivational system also produces desires that are deleterious to meeting needs. An important second layer to this foundation is that people have *particular* needs that are not simply alternative forms of each other. Rather, each need must be met by need-specific forms of power. Specifying what needs are universal and chronic will tell us what kinds of power one can expect to be universal and recurrent. Our reading about human power relations and considerations of the ecology, physical conditions, and psychological states of human beings has led us to identify a small set of fundamental needs, that is, requirements for survival. In this section we describe each category of basic need, the form of power that corresponds to it, the sensibilities that signal how acute a need is or whether

it is met, and the motivations that lead people to take action to succor their needs. Table 10.1 summarizes these ideas. Table 10.1 also indicates what interpersonal influence tactic from Raven's (1965) model seems to fit each type of power.

*Wholeness, Violence, and Healing.* The most obvious need a human has for surviving is to maintain bodily and psychological functioning. Failure of many bodily and psychological malfunctions, including those due to severe injury and illness, certain memory deficits, and self-disregard (e.g., anorexia and depression), can cause incapacitation and death. As people chronically need wholeness of self in mind and body, the possibility of maiming or killing the body or causing extreme psychological harm implies that violence and its threat will always be forms of destructive power. Conversely, the ability to help others heal through medicinal practice, enabling rest, nursing, psychological therapy, support for self-healing, and the like, will always be potential forms of constructive power.

People generally sense their physical and emotional well-being and can also sense discomfort and pain and feel fear when their well-being is endangered. Because of these sensibilities, one can also wield power by threatening injury or death and by causing physical or psychological pain, especially if one promises relief from such pain. Such methods are called coercion and torture, respectively. Two main motivations that generally help maintain wholeness are to avoid pain and to shelter oneself from danger.

*Resources and Their Control.* To survive, people regularly need certain nutrients, calories, fresh water, and shelter from exposure. These direct material needs can produce indirect needs in terms of the means of production of physical necessities, such as tools for farming, housing, and making clothes. Our universal, chronic need for material resources implies that control of resources and the means to obtain, store, and use them will always be a basis of power (Marx, 1904). Because one's neighbors often have important information about how to acquire resources and how much to acquire, people often use social comparison to gauge their resource needs. In the presence of wealth, these standards may be supersede needs. When people overconsume resources because they anticipate their neighbors' consumption from a common pool or because standards are too high, they can deplete their ecological resources.

*Need to Interact Competently With One's Environment and Knowledge.* Interacting competently with one's environment, including with other people, is a requirement for survival (e.g., Elliot & Dweck, 2005). Knowledge enables the competence to avoid dangers and to obtain necessities. The environment determines what knowledge is required. Individuals have many kinds of knowledge, including useful habits, implicit expectations and assumptions, skills, declarative knowledge, and methods of gaining more knowledge (e.g., research). The sensations of novelty-attention and confusion motivate curiosity and mastery-striving, which in turn motivate behaviors that increase knowledge. Expectancy violations, surprises, and failures also motivate knowledge change or acquisition. Humans store knowledge not only individually but also collectively. Cultural patterns of behavior and creations implicitly store such knowledge as how to build buildings, how to worship, how to make cloth, and what is important to us. Humans also know how to communicate in a wide variety of ways. These are constructive.

Can you define "these" here? For example, "These cultural patterns and methods of communication" or whatever is most

Date in Elliot & Dweck reference is 2006.

TABLE 10.1 Type of Power, Sensibilities, and Motivations Corresponding to Basic Needs

Basic Need	Type of Power	Sensibilities	Motivations	IPIM Influence Method	Define IPIM?
Wholeness (healthy functioning of body and psyche)	Harm and its threat; Ability to inflict pain or give pleasure	Sense of well-being; Fear, anticipation of pain; Pain, discomfort	Drive for self-integrity and well-being; Pain avoidance and pleasure seeking	Coercion	
Consume resources	Control of resources	Hunger; Thirst; Feeling cold; Upward comparison	Envy; Acquisitiveness; Greed; Desire for physical comfort	Reward	
To interact competently with one's environment	Knowledge	Confusion; Surprise; Aversion to failure; Pleasure of success	Curiosity; Mastery-striving; Desire for efficacy; Pride over competency	Expertise; Information	
Care from other people	Commitments from others	Empathy; Attachment; Pity; Trust and mistrust	Sense of obligation; Equity; Norm to reciprocate; Loneliness; Desire for companionship	Referent	
To be respected and accepted by a community	Legitimacy	Feeling excluded; Feeling stigmatized or devalued; Feeling of recognition or appreciation; Social anxiety	Desire for social approval; Pursuit for positive self-regard	Legitimacy	
To reproduce	Sexual attractiveness; Symbolic transcendence; Self-expansion	Awe; Sexual arousal; Mortality salience	Sexual desire; Desire for transcendence; Desire to lose or alter self-awareness; Hope		

Knowledge can also be destructive. Personal and cultural habits that are believed to meet needs but that in fact do not meet needs (i.e., superstitions) and may produce deficits (e.g., the belief that one will get rich by gambling) are one form of destructive knowledge. A second form of destructive knowledge is misinformation, including lies, deceptions, and withheld information, because these can lead other people to be incompetent in their environments.

*Care From Others and Obligations.* To survive infancy, all humans require at least three years of intensive physical and emotional care. In addition, nearly everyone needs the care of others during severe illness and extreme old age. Such care includes bodily work, such as providing food, hygiene, clothing, shelter, places to rest, and emotional work to help with psychological challenges of having needs and physical infirmity. To provide such care, most of which must be provided in person, humans usually establish social systems of obligations through families and generational roles in which adults provide care for infants and children and in which younger people care for older people and the infirm.

People's infantile desire for attachment helps us develop the more learned sensibilities that enable caring relationships (e.g., Bowlby, 1973). Through close relationship socialization, we learn empathy, which helps us to imagine others' needs and care about their well-being (e.g., Davis, 1983); pity for those in need, which can motivate a desire to help (e.g., Cialdini et al., 1987; Hendriks & Vingerhoets, 2006); jealousy, which motivates wanting care and commitment (e.g., Desteno & Salovey, 1996; Sharpsteen & Kirkpatrick, 1997); and trust, which motivates us to rely on others (e.g., Rempel, Holmes, & Zanna, 1985). These emotions all motivate caregiving. Two other socialized norms motivate obligations to care: the norms of reciprocity (e.g., Homans, 1961) and paternalism (e.g., Pratto & Walker, 2000).

*Belonging to a Community and Legitimacy.* Belonging to a community aids survival and is adaptive (e.g., Caporael, 1995). As people have a fundamental psychological need to belong (Baumeister & Leary, 1995; McClelland, 1975), welcoming communities are also essential to survival. Several social sensibilities signal whether one is accepted by a particular community: People notice when they are recognized and acknowledged, or they may feel left out, stigmatized, or devalued. People gauge their relative social standing or status fairly accurately (Anderson, Srivastava, Beer, Spataro, & Chatman, 2006). People are motivated to belong because being ostracized is distressful and painful (e.g., Williams, 2007). People desire social approval and praise from others whom they respect or care about, and when they feel devalued, they try to change their community or membership in communities (Baumeister & Leary, 1995). Likewise, people who feel ashamed and humiliated are motivated to repair their social acceptability with behavior that connotes apology, respect for others, and deference.

*Reproduction, Sexual Attractiveness, and Self-Transcendence.* Reproduction is not necessary for a given person's survival unless made so by social conditions (e.g., societies in which women must bear children in order to receive material resources), but for a species, reproduction is necessary for survival. The sensibility of sexual arousal and the motivations of lust and desire for children encourage people to produce babies. However, these are not the only sensibilities and motivations necessary for our species to reproduce. In addition to having material needs,



children require decades to mature and must be socialized to their cultures, so reproduction requires that adults succor their children's needs as well as their own. Quite often, adults must be willing to forego their own needs to attend to those of their children. In short, human reproduction requires that adults be willing to labor for purposes other than their own desires and needs. The motivation to do this is human's desire for self-transcendence.

By self-transcendence, we mean a sensation of existing beyond oneself. This sensation can be induced in many ways: by intense sensory experiences, by greatly expanding one's perspective, and by identifying with other people and ideas. The pleasure of self-transcendent experiences, including athletic activity (Jackson, Kimiecik, Ford, & Marsh, 1998), mysticism (Graef, 1965), considering universal truths (Maslow, 1964), falling in love (Aron, Paris, & Aron, 1995), and creative activities (Arndt, Greenberg, Solomon, Pyszczynski, & Schimel, 1999), is highly motivating (e.g., Csikszentmihalyi & LeFevre, 1989; Keltner & Haidt, 2003). Escapism, or forgetting one's self, is appealing for similar reasons but may become detrimental, as with alcoholism (Steele & Josephs, 1988).

## MISCALIBRATION IN THE SENSITIVITY AND MOTIVATIONAL SYSTEMS

Although human's sensibility and motivation systems are largely functional and often correct themselves, we can use Figure 10.1 as a heuristic to predict ways that the systems might malfunction in the long term. People who do not notice or who deny their own needs are unlikely to have appropriate needs met. Another malfunction is to misinterpret one need for another. People may be over- or undersensitive to particular sensibilities or may lack connection between a sensibility and its concomitant motivation. People may not have learned or may have mislearned what behaviors should follow from particular motivations and can lack overall motivation. Finally, people may become insensitive to feedback such that the motivations or sensibilities do not vary with internal states. To provide examples of such miscalibrations, we describe cases within each of the six basic needs.

*The Need for Wholeness of Body and Psyche.* A sense of well-being indicates the fulfillment of wholeness. People with hypochondriasis misinterpret bodily symptoms as possessing a serious disease although medically they are well (American Psychiatric Association, 2000). Conversely, some people are unaware or deny that they are ill. For instance, alcoholics may deny their alcohol abuse, and autistic children and schizophrenics believe their hallucinations reflect reality (Beitman & Nair, 2005). The pain-pleasure aspect of the motivational system can make substances that stimulate pleasure not only appealing but addicting: Substances such as opiates relieve pain temporarily, followed by even more pain and discomfort, which motivates pain relief via another dose (e.g., Goodman, 1990).

*The Need to Consume Resource.* The hunger-satiation feedback loop is one of our most specialized sensibility systems. For example, people are sensitized to their nutritional needs not only by hunger and thirst but by more specialized cravings for foods that meet current nutrient deficits (e.g., Coelho, Polivy, & Herman, 2006).

However, people with diabetes overdetect hunger, and people with Prader-Willi syndrome fail to detect satiation. Fortunately, people with either disease can use artificial sensibilities such as habits, glucose monitors, and appetite suppressants to calibrate their eating with bodily needs (Cox et al., 2006; Malerbi & Matos, 2001; University of Maryland Medical Center, 2006).

*Interact Competently With One's Environment.* A host of sensory and cognitive challenges, from deafness to learning disabilities, can diminish knowledge acquisition, especially without appropriate and intensive stimulation and teaching. Neurological damage can also hamper people's sensibilities and skill sets. Most tragically, children who are extremely neglected or raised with little human contact acquire almost none of the language, social, emotional, and other knowledge necessary for competence, and their motivational systems may also be permanently damaged.

*The Need for Care From Others.* Receiving care from and providing care to others are integral to any close relationship. Infant attachment orients people to receiving and providing care in adulthood (e.g., Bowlby, 1973). Securely attached people give and receive affection to experience happiness and satisfaction in their close relationships. In contrast, insecurely attached people may not detect care, cannot gauge others' intentions, suppress affective reactions, or even avoid intimacy (e.g., Bartholomew & Horowitz, 1991; Mikulincer & Orbach, 1995).

*The Need for Social Approval.* Social cues communicate whether people belong to a certain group or community, which is gauged by self-esteem (Leary & Baumeister, 2000). Those who are constantly being disapproved of may suffer from low self-esteem and develop depression symptoms (Roberts, Gotlib, & Kassel, 1996), experience less positive emotions, or become pessimistic (e.g., Twenge, Baumeister, Tice, & Stucke, 2001), which in turn makes them shy away from social interactions (Pickett & Gardner, 2005). In fact, people who are constantly rejected may behave destructively, such as by acting aggressively (Twenge et al., 2001), which would usually be sanctioned by one's social group.

*The Need for Reproduction.* Species and cultures need reproduction to survive, but the sensibilities and motivations that increase reproduction occur within individuals. Social conditions such as poverty and use of child labor, pronatal cultural beliefs, and limited access to artificial birth control encourage people to become parents early and often. The world's population is increasing exponentially (e.g., Ehrlich & Ehrlich, 1991), to the point that it precipitates environmental catastrophes. As a result, the sensibilities producing human life are ruining the ecology that must sustain it. Having many children is easy and may benefit individuals, but because overpopulation impoverishes the earth, a common resource, reproduction is both a social trap and a commons dilemma. To stop overpopulation from destroying environmental sustainability, we must change the timescale of feedback to individuals so that short-term motivations align with long-term need sustainability (e.g., Oskamp, 2006).

*Problems With the Ecology.* Living persons can be miscalibrated with their ecology if the ecology gives feedback on a timescale for which people are not sensitive or if people's senses cannot detect important ecological changes. For example, human industrialization began to warm surface and water temperatures of the earth by 1750, but such anthropomorphic ecological changes predated the

development of scientific means of measuring global temperatures directly by 100 years (Intergovernmental Panel on Climate Change, 2007, p. 8). Another significant kind of miscalibration results from people holding the wrong assumptions about how broad their ecology is. For example, nuclear fallout and global warming demonstrate that because of our shared and moving atmosphere, claims to sovereignty over land and water areas are insufficient for understanding what aspects of the physical environment “belong” to which groups of people. People’s wrong assumptions about who is in their community can also lead to miscalibrations. For example, the reciprocation norm usually limits people taking resources from a common pool, but people are greedy among strangers (Yamagishi & Sato, 1986). Natural resources do not know or care if they are being depleted by “friends” or “strangers.” There are both natural and human reasons that the human–natural ecologies may be miscalibrated in terms of their timescales for feedback, locality or scope of influence, and understanding of their functioning.

## STRESS AND SURVIVAL

There is one other major pervasive possibility of malfunction in the sensibility–feedback system, namely, the stress response. The fight-or-flight stress response allows people to escape from immediate physical danger (e.g., Mason, 1968) and is regulated by the hypothalamic-pituitary-adrenal (HPA) axis. However, prolonged stress from sustained exposure to danger (e.g., constant local assault) can lead to dysregulation of the HPA axis (e.g., Yehuda, Giller, Southwick, & Lowy, 1991).

Chronic stress may result when environmental affordances do not allow a person’s actions to succor needs. For example, social discrimination diminishes belonging (e.g., Mays, Cochran, & Barnes, 2007) and may produce deficits in other needs such as wholeness and resource acquisition. Discrimination may also, depending on the individual’s repertoire of skills and behaviors, trigger coping responses such as hostility and overeating that do not attenuate stress and may create new deficits (e.g., Clark, Anderson, Clark, & Williams, 1999). Over time, stress responses can lead to chronic psychological problems (e.g., helplessness, depression, paranoia) and threaten bodily wholeness by compromising the immune, neuroendocrine, and cardiovascular systems (Cacioppo, 1994; Herbert & Cohen, 1993; Merritt, Bennett, Williams, Edwards, & Sollers, 2006). Social support buffers the negative effects of stress through HPA-axis deactivation (e.g., DeVries, Craft, Glasper, Neigh, & Alexander, 2006). Dissociative states (e.g., amnesia, depersonalization, decreased arousal) may serve as a temporary escape for victims of past trauma (Simeon et al., 2007) by providing another escape or rest from chronic stress. Eliminating chronic stressors such as institutional discrimination and exposure to danger are equally important in reducing the deleterious effects of stress.

These examples illustrate some difficulties in meeting basic needs when the sensibility, motivation, feedback, or environment of a system is miscalibrated. Such problems in a minority of cases do not imply that our analysis of the power–needs system is wrong any more than a refrigerator with a broken temperature gauge fails to be a refrigerator. The most acute problems concern how short-term motivations and responses produce behaviors that are detrimental in the long term.

Date in DeVries,  
Craft, Glasper,  
Neigh, & Alexander  
reference is 2007.

## NEEDS ARE SPECIFIC; BEHAVIORS ARE NOT

People have several distinct basic needs that must be met through concomitant forms of power. This specificity of needs has an important implication: Having a particular need met (e.g., one has enough material resources) does not make one powerful with respect to any other specific needs (e.g., one may still be ostracized). Even within the categories of needs we specified, certain means of fulfilling needs do not substitute for others. For example, fuel that provides warmth to people often cannot be used as food (e.g., coal). Likewise, a strong sense of belonging with one particular person often cannot be completely substituted for attachment with another person. Hence, there are real limits to each kind of power to the extent that one cannot be substituted or traded for another.

Behaviors, however, do not always have the same specificity as needs. Perhaps for efficiency, people have invented a number of behavioral patterns that fulfill many needs at once. For example, sharing a meal can not only provide nutrition but also affirm one's legitimacy and sense of affiliation and provide knowledge or a chance to verify knowledge, elicit care, and expand oneself. This implies that for a given person, several needs may be met by engaging in one behavior. In our learning histories, then, we may learn to misassociate behaviors that meet one need with a different need. For example, if we grow up sharing meals that provide food and a sense of belonging, we could come to presume that eating is what one does when one is lonely. However, eating alone when one is lonely will not fulfill the need to belong and could produce additional problems (e.g., overweight) as well. The multipurpose efficiency of certain behaviors may miseducate people about what their needs are or how they can be met.

The fact that a given behavior can meet different needs also implies that different people may perform the behavior to meet different needs. For example, one person may participate in a dinner party to learn from the expertise of other guests, another to forge a social alliance, another to feel respected, and another to pave the way for a sexual encounter. Because a person may meet several needs with one action, and different individuals can meet different needs by one action, one cannot deduce from performance of a particular behavior what power motive or needs are driving it.

## THE SOCIAL DYNAMICS OF POWER

Power Basis Theory outlines two major forms of social power dynamics. First, because needs are universal and can sometimes be detected or assumed for others, people can anticipate others' needs and desires. Therefore, people can influence others by creating need deficits and desires in others, by offering to meet needs and desires, and by enabling others to meet or preventing others from meeting their needs. This is social influence. Second, people determine what kinds of power become fungible with other kinds through their willingness to engage in transactions that transfer power from one kind or party to another and by allowing particular power transactions. This is economics. Although laws and cultural mores may prohibit particular transactions that use one form of power to gain another form

(e.g., sex for money), it takes only two participating parties to establish fungibility between kinds of power. Adults from a wide variety of occupations and nationalities have provided us with examples of how people use each of the kinds of power to gain another kind of power (see Table 10.2). High fungibility implies that anyone with one form of power can become advantaged in other forms. Therefore, another means of governing power is to influence fungibility for particular parties or kinds of power. This is government.

We know of no general theories that explain how fungible different kinds of power are or what the conditions are that influence how fungible kinds of power are. Nonetheless, men's domains of power—force, legitimacy, and resources—appear to be much more fungible than women's domains of power—obligations to others and sexual access—which are less fungible because they are largely personal. Pratto and Walker (2004) postulated that the reason that relationships among men are more volatile and lethal than relationships among women, and the reason that gender inequality is relatively stable, is these differences in fungibility in gendered domains of power.

## INEQUALITY

Fungibility is also the key to understanding structural inequality. Naturally, any party that has access to more than one form of power has more options and more potential for advantage. But groups and individuals who are advantaged in highly fungible kinds of power have even more behavioral options. So long as they are willing to engage in the behaviors that would enable a form of power they possess to gain more power (e.g., to use force, to sell assets, to endorse politicians), they can retain their relative advantage. Maintenance of such power is not a given, as other parties may also be attempting to meet needs and perhaps gain advantages as well. Rather, power maintenance depends on the ability and willingness to exercise power on one's own behalf, sometimes by limiting competitor's power. We can expect structural inequality to often be group based because the need to belong and self-transcendence motivate group formation and social categories, and coalitions extend the reach of power across actors.

A fungibility advantage can create an upward power spiral. U.S. history provides a good example. The colonial powers smoothed the way for the United States by reducing competition from eastern Native Americans and Atlantic pirates. The American revolutionaries were able and willing to use violence to gain control of abundant natural resources and establish legal legitimacy (in some eyes). Americans gained knowledge from immigrants and through innovation and theft (e.g., the cotton gin) to become even more economically productive via industrialization. The United States has used war and the threat of violence to maintain advantaged economic relations with many other nations but has rarely entered into colonial relations, which would give the United States greater obligations. U.S. power has generally increased up to now.

Limited fungibility can also produce a downward spiral of power, and such spirals show how tenuous disadvantaged people are. The role of women in nearly all societies obliges them to provide care to family members and sexual access only to

TABLE 10.2 Examples of How an Individual or Group Could Use the Form of Power in the Rows to Gain the Form of Power in the Columns

	Knowledge	Force	Legitimacy	Resources	Asymmetric Obligations	Sexuality
Knowledge		Speed traps; Develop weapons; Terror alerts; Using intimidation knowledge to hurt others	Using “intelligence” to justify foreign policy; Investigative journalism; Scientific publications to increase reputation	Insider stock trading; Identity theft; Patent expert; Hacking computers; Winning at Jeopardy game	Blackmail	Use personal knowledge to persuade someone into sexual actions or relationships
Force	Torture; Police interrogation		U.S. invasion of Iraq to promote democracy; Boxer winning title; Honor killing	Colonization; U.S. wars of expansion; Robbery	Conscription; Domestic violence to keep spouse in marriage	Rape
Legitimacy	9/11 Commission; Legacy admissions to college; Management access to knowledge	Police harassment; Liberation movements; Israeli–Palestinian violence; Marital rape; Parents physically punishing their children		De Beers “fair trade” diamonds; President rolls back environmental laws to help his friends mine; TV evangelists soliciting contributions; Politicians receiving contributions	Elders’ positions in their villages; John Gotti in the “family”; Cult members’ dominance of women	Use high status to entice sexual relationship

Resources	Buying a computer or Internet access; Paying tuition for college; Pay experts	Scabs during a labor strike; Hiring private security guards	Teenagers' buying popular clothing; The rich get on boards of corporations; Political contributions	Government controls water and makes people buy it; Saudis' control of oil gets influence over United States	Prostitution; Cosmetic surgery; Spas
Asymmetric obligations	Patriot Act; Retired police officers get the police to run license numbers through their system; False friends	Winners of wars ask losers of war to disarm	Nonviolent protests by oppressed people to draw sympathy to their cause; Nepotism; Vote for your friend	Labor strikes for wages; A couple's in-laws move in with them; Alimony; Bill Clinton asked Vernon Jordan to get Monica Lewinsky a job	Posturing indifference to a relationship to gain sexual access; A surviving brother taking his deceased brother's wife
Sexuality	Use intimate relationship to get disclosure of state or corporate secrets	Making two rivals fight for sexual favors	Women marrying "up" to increase their social status	Prostitutes using wages to care for their children or parents	



their husbands, neither of which is very fungible to other parties or for other kinds of power. Press reports from Iraq after the U.S.-led 2003 invasion show how tenuous this makes women's positions and those of their dependents. When invaders or locals kill women's husbands, these women not only lose the family breadwinner but may no longer be seen as legitimate family members entitled to family assets by their in-laws. Because women are not allowed to work, some have turned to illicit prostitution to support their families, for which they could easily suffer murder as punishment for violation of local religious and cultural customs. The relationships among people and their needs are what give fungibility these dynamic ripple effects.

## SOME IMPLICATIONS OF POWER BASIS THEORY

### *Social Judgments to Aid Survival: Power and Trust*

With its fundamentally ecological view of how people interact with others and the natural environment, Power Basis Theory implies that people's social perceptions should help them navigate meeting their own needs and avoiding destructive power. In fact, we believe that most people know that power can be both destructive and constructive, and so people are concerned about not only who has or lacks power but whether others are likely to behave constructively or destructively toward others (e.g., Peeters & Czapinski, 1990). One's sense of whether another person or group would use power only for its own benefit, or to benefit one or harm one, is *trust*. In fact, in scores of psychological studies, two dimensions of social judgment recur: power and trust. Although power is sometimes more specifically called status, agency, competence, dominance, or self-profitability, and trust is sometimes called warmth, communion, evaluation, likability, morality, or other-profitability, these two basic dimensions can be found in group stereotypes (Eagly & Steffen, 1984; Fiske, Cuddy, Glick, & Xu, 2002; Leach, Ellemers, & Barreto, 2007), semantic meaning (Nier, Gaertner, & Gorcheva, 2006; Osgood, Suci, & Tannenbaum, 1957), trait judgments (e.g., Peeters & Czapinski, 1990), interpersonal perception (e.g., Wiggins, 1979), and implicit personality theory (e.g., Vonk, 1993).

### *Societal Governance of Power*

Our ecological perspective points out that the context of individual and group power not just is interpersonal but can include societies and even international relations. In fact, because the ways power is used and distributed impact whole societies, societies are confronted with the problem of how to govern the use of power. One could use the parameters of Power Basis Theory to analyze politics and governments. For example, one might analyze how governments restrain particular forms of power (e.g., violence) and enable or constrain fungibility of different kinds of power. Comparative politics could reveal how well political processes allow political actors to monopolize the means of meeting needs, to concentrate power, or to prevent concentrations of power. Obviously such a study is beyond our scope here, but studying perceptions of political individuals and groups in the



context of whose needs are met and political procedures may prove a fruitful way to understand political processes.

In addition to formal governance, societies have ethical systems, which provide self-guides, social standards, and emotions to help govern how people use power. The elements of Power Basis Theory can also be used to delineate forms of formal ethical systems and cultural mores. One means of deciding whether a particular use of power is ethical is to refer to a value system that prioritizes whose needs should be met or what kinds of needs are most important. Another form of power ethics concerns what kinds of parties are entitled to exercise what kinds of power and on whose behalf. For example, domestic and international political debates have concerned whether women or governments are obliged to care for others or should be free from such encumbrances. Some such prescriptions are relational. For example, some ethics proscribe that more powerful people should not use their power against the less powerful (e.g., “No bullying!”) or are obliged to use power to benefit less powerful people (e.g., charity). Some ethical systems mandate the exercise of particular kinds of power (e.g., capitalism prioritizes exchange of material resources), and others prohibit the exercise of particular kinds of power (e.g., pacifism prohibits using violence) or concern what forms of power are acceptably traded for other forms (e.g., is a cash gift an appropriate way to get one’s child admitted to a hospital or school?). A fourth form of power ethics concerns the purpose of using power. Different ideologies emphasize that power should be used to bring about good, to maximize economic output, to maintain social harmony, or for personal gain. Power Basis Theory easily allows for these varieties of cultural or more formal ethical systems.

### *Forms of Power and Sites of Conflict*

Power Basis Theory predicts that conflicts will arise among individuals and between groups and societies regarding the types of power that are concomitant to basic needs. One kind of evidence that the basic forms of power are sites of conflict is in the use of violence over each form of power. A huge number of wars could be said to concern who is the *legitimate* ruler (e.g., the war of the Roses, Pope Julius’s wars against French and Venetian independence) or which groups have legitimate political control over an area (e.g., the Northern Irish conflict, most civil wars, wars of national liberation, ethnic conflicts). Another large set of conflicts have engaged the force of law, extralegal uses of force, or military action over *resource control*, including imperial wars, piracy, protection or control of trade routes, material and intellectual property rights, patents, and so forth. Force is also used to control or to suppress *knowledge*, as in Galileo’s house arrest by the pope, the Soviet Gulag, the Chinese Cultural Revolution, and the mass murder of educated people by Pol Pot. Access to *pleasure-giving substances* has also provoked wars and other violent conflicts: U.S. prohibition on alcohol led to gang warfare over control of illicit distribution, and Britain went to war with China several times over forced importation of opium and exportation of tea. The British colonized India to maintain access to tea. Whether the Trojan War over the sexually attractive Helen is apocryphal, a large number of men murder other men around the globe over *sexual jealousy*

(Daly & Wilson, 1988). When individuals, groups, or nations are not satisfied with the current balance of power, or in their desires, they engage in conflict over at least one of the basic forms of power.

### *Strategies and Tactics in Power Struggles*

Our view of power suggests several strategies for maintaining relative power over others. Parties can exercise forms of power against or on behalf of others, can try to prevent other parties from gaining or exercising forms of power, can restrict others' access to power or use of power, can influence other parties to use power to sustain themselves rather than to use it against others, and can try to restrict fungibility of different forms of power for others while maintaining high fungibility for themselves.

The basic forms of power suggest basic tactics that can be used in power struggles. We have no space to exhaustively list them all but provide a few examples of constructive and destructive tactics associated with each form of power, which can be used either by individuals or by collectives such as institutions and societies.

Wholeness-maintaining tactics include provision of medical care, rest, psychological care, and defensive apparatuses (e.g., bulletproof jackets), whereas wholeness-destroying tactics include torture, maiming, spread of disease and addictive substances, and use of weapons. As governmental sovereignty largely concerns monopolizing force, it is no surprise that governments try to control weapons, pleasure-giving drugs, the military, the police, and the justice system and other institutions of force and to credential healers.

Legitimacy can be conferred or removed by stigmatization or awards, through stereotypes and reputation spreading (e.g., gossip, recommendations), and by applying ideologies about who is admirable or despicable. Although legitimacy can be communicated interpersonally, the mass media, charitable organizations, religious institutions, and governments can also confer or deny legitimacy.

Commitments, obligations, and reneging on obligations can be communicated interpersonally through words and deeds, but these are often given meaning through cultural symbols, rituals, role prescriptions, and ideologies. Family members cajole, request, and argue about their commitments, but the law and religious institutions also help to define and enforce obligations through marriage customs and laws, recognition of social contracts, and enforcing or teaching obligatory roles (e.g., parental obligations or duty to country). Individuals can labor or steal to gain material resources, but collectives and governments have a wide variety of devices to control material resources including imposing import and export taxes, engaging in collective bargaining, creating mutual aid societies, building trade routes or relationships, enforcing property laws, and providing or restricting access to water and land.

During conflict, theft of knowledge that produces resources (e.g., identity theft), pillaging, and destroying cropland are tactics aimed at increasing one's own resource control at the expense of others'. Knowledge is communicated in numerous obvious ways. Control of knowledge power can come by restricting access to education or information, lying, withholding information, developing new

knowledge, or disseminating successful practices. Throughout history, an important social control device has been to prohibit literacy and education to slaves and women. During several cultural conflicts, dominators have all but destroyed the cultural knowledge of the conquered. For example, Canadians suppressed most of the rituals of the Kwakiutl, and Christians burned all the books of the Islamic library in Granada when they extirpated Muslims in 1492.

Sexual attractiveness can be enhanced with numerous beauty devices and practices, but sexual behavior can be at least partly controlled interpersonally and through social customs (e.g., killing adulteresses, sex segregation) and the law. To restrict self-transcendence and the reproduction of one's generation, groups and individuals have desecrated or hidden graves, destroyed monuments, repressed religious practices, forced sterilizations, and separated families. However, it is far harder to restrict self-transcendence than any other form of power because of the variety of means by which it can be achieved.

## NEW RESEARCH ON POWER BASIS THEORY

The breadth of Power Basis Theory is reflected in the variety of research it is beginning to generate. This section shows how Power Basis Theory can be used to examine cultural ethics, power dynamics in an experimental game, the contents of group stereotypes, and person perception.

### *Ethical Cultural Teachings About Wants and the Use of Power*

As unfettered desires and destructive power can seriously damage societies, we expect cultures to develop ways to try to curb insatiable power appetites and to sanction using power in ways that damage the community or relationships. For this reason, we expect cultural ethical and moral precepts to invoke elements of Power Basis Theory. Ethical teachings could focus on desires and motivations, on when power should be used selfishly or altruistically, and on what forms of power should be fungible with other forms of power. We illustrate this prediction by using three predominant ethical bases of culture: Buddhism, Confucianism, and the Abrahamic family of religions. Table 10.3 lists a number of moral precepts from, respectively, the five precepts from the Buddhist Sila, or ways that laypeople are to live; the six virtues promoted in Confucianism; and the Ten Commandments, which are said to be God's instructions or law for people given to Moses about 4,000 years ago. These precepts do not represent each belief system completely, but these teachings about "right living" are foundational for each ethical or moral system and also have been foundational for many of the world's modern civilizations. This brief study will show that each ethical or moral body of teachings does address central elements of our theory, including all the power bases we have discussed, their corresponding motivations and desires, or whether power is used on one's own behalf or on behalf of others.

**Buddhism.** Prince Siddhartha Gautama, the Buddha, who lived about 500 BCE, renounced the luxuries of his own social position to seek and teach the right way to live. He taught that everyone suffers in life and that the cause of suffering

TABLE 10.3 Examples of Common Ethical Precepts and Their Relation to Power Bases

Precept	Relation to Power Bases and Motivations or Desires
Precept 1. To refrain from taking life.	Admonition against violating wholeness.
Precept 2. To refrain from taking that which is not given.	Admonition against controlling others' resources.
Precept 3. To refrain from sensual misconduct (abstinence from immoral sexual behavior)	Prohibition against misuse of sexuality and extravagance.
Precept 4. To refrain from lying.	Prohibition against creating false knowledge.
Precept 5. To refrain from intoxicants that lead to loss of mindfulness (refrain from using drugs or alcohol).	Admonishment to maintain a state in which knowledge can be used and not confused.
Virtue: Xiao or Hsaio (Filial piety)	Obligation of children to parents (and parents to children).
Virtue: Xin (Integrity, Honesty, Trustworthiness).	Admonition to create knowledge and not create misinformation.
Virtue: Li (Propriety). Use patience and courtesy, follow rituals, act properly.	These practices demonstrate a person's legitimacy and trustworthiness.
Virtue: Yi (Righteousness). Privilege action that is right and moral.	This virtue emphasizes being trustworthy and altruistic in use of power.
Virtue: Ren (Benevolence). In deciding on actions, choose what is best for all involved rather than only what is best for oneself. Employ compassion, empathy, and understanding.	This virtue emphasizes considering the other's view and being trustworthy in relation to power.
Virtue: Chung (Loyalty). Offer help whenever possible to one's family, community, and nation.	Use one's power to help and protect oneself and others.
Confucian virtue: Shu (Forgiveness). Consider that people are all enmeshed in relation to one another before determining one's actions.	This virtue admonishes people to consider how their own power behavior affects others.
Commandment 1. You shall have no other God before me.	Admonishment to obligation.
Commandment 2. You shall create no graven images.	Admonishment to obligation.
Commandment 3. You shall not swear falsely.	Prohibition against deception (false knowledge) by using God's name to speak of trivial points such as swearing in frustration.
Commandment 4. Honor your father and mother.	Admonishment to obligation.
Commandment 5. You shall not kill.	Prohibits violating wholeness.
Commandment 6. Do not commit adultery.	Prohibits using sexuality without obligation.
Commandment 7. Do not steal or kidnap.	Prohibits taking resources and restricting others' freedom.
Commandment 8. Do not bear false witness against your neighbors.	Prohibits using false knowledge to delegitimize others.
Commandment 9. Do not covet your neighbor's wife or lust after women.	Admonition against male lust for women (sexuality).

TABLE 10.3 Examples of Common Ethical Precepts and Their Relation to Power Bases (Continued)

Precept	Relation to Power Bases and Motivations or Desires
Commandment 10. Do not covet your neighbor's house or goods.	Admonition against greed (desire for material resources).

*Note:* The precepts are from the Buddhist Sila for laypeople, actions deliberately taken as the right way to live. The six Confucian virtues are the most important general aspects of self-criticism and striving in Confucianism. The commandments are from the Ten Commandments, common to Judaism, Islam, and Christianity. The wording here reflects a variety of interpretations among different sects.

is desire. Many of Buddha's teachings concern how to rid oneself of various desires so that one can become happy, including curbing what our theory calls power motives (e.g., greed for resources, lust for sex, envy of other's resources, deception and self-deception rather than knowledge). In other words, Buddhism prescribes happiness not by fulfilling desires suggested by need-based motivations but rather by *freeing oneself of such desires*. Several of the admonitions to the 10 perfections or virtues within Buddhism appear to be ways to prevent antisocial uses of power. For example, *generosity* should curb control of resources, as should *renunciation*; *truthfulness* should curb deception; and *sympathetic joy* should curb envy of other's resources. The general admonition of *loving kindness toward others* pertains to using any form of power in a constructive trustworthy manner. On the whole, Buddhist ethics center on relinquishing power for oneself but using some forms of power to benefit others. The five lay precepts in Table 10.3 address forms of power relating to the needs for resource control (not taking, living with what the ecology provides), wholeness (no use of violence and mood-altering drugs), reproduction and obligation (chaste sexuality), and knowledge (truth telling).

*Confucianism.* The Chinese sage Confucius promoted an ethical prescription of social behavior beginning about 500 BCE, which was further developed by Mencius. Confucianism has formed the basis of cultures and governmental systems throughout East Asia. Confucianism emphasizes humanism in thought and practice in its central concept of *Jen*, the expression of one's humanity in conscientiousness and altruism (Chan, 1963). Confucianism promotes harmonious social relations through individual development and cultivation (Chan, 1963; Hall & Ames, 1987), as shown in its veneration of scholars (*Ru*), who are accorded more respect than religious bodies or political authorities.

Confucianism's focus on social harmony seems to be antithetical to extreme power imbalances and especially to power abuse, as exemplified in the central edict "What you do not wish for yourself, do not do to others" (Chan, 1963). But Confucianism emphasizes not equality per se but that all persons in superior positions (e.g., parents, bosses, teachers) should be beneficent and caring toward their juniors (e.g., children, employees, and students) and that juniors owe service and reverence for their seniors (Hall & Ames, 1987). According to Confucianism, the higher in power a ruler is, the more he is obligated to those under his rule and the more exemplary he must be in order to become a man of *Jen* (Chan, 1963). In our

view, Confucianism emphasizes obligation within unequal power relations, especially that those with more power should use that power to benefit others rather than themselves.

Confucianism explicitly prescribes that social influence should be performed through virtuous example and rules of propriety, or *li*, rather than by law, punishment, or force. Thus, its precepts are ideals, not laws. The six Confucian virtues listed in Table 10.3 emphasize that people should consider the intertwined nature of human relations in using power. These virtues emphasize the need to be trustworthy in using any form of power, for example, by considering what impact power use has on others, that others cannot be influenced without affecting the self, and that selfishness in general is to be eschewed in favor of maintaining good relationships. Many more particular Confucian teachings admonish against particular desires (e.g., greed, lust) and motivated temptations (e.g., lying) that do address each basic form of power.

*Abrahamic Religions.* Despite differences among sects, Judaism, Christianity, and Islam share the belief that humans were created by one God, which makes all humans kin and implies that God should be loved, respected, and worshiped above all. In these religions, then, all obligation is owed to the most powerful being. This ideal relation between humans and God, and with which humans are understood to struggle, is sometimes upheld as a model of an asymmetric obligatory power relationship between parents and children, rulers and subjects, and husbands and wives. All three religions also recognize the equality of each person, a stumbling block for abuse of power, and a human obligation to discern right from wrong.

Jewish tradition includes an extensive exploration of the ethical meaning of the hundreds of Jewish laws and how they prescribe that people live. Judaism prioritizes the eternal covenant between people and God and the dignity and well-being of individuals (e.g., Sacks, 2000). For example, it is acceptable not to fast for health reasons. Jewish practices also nurture the community, for example, in prioritizing family life and in welcoming the stranger. Likewise, Jewish principles such as honesty, peace, justice, and charity reveal ethics encouraging constructive power and prohibiting destructive power.

In Catholicism, the teachings of St. John Cassian (1999) and Pope Gregory, popularized in frescos and the Dante's *Inferno*, admonish against giving in to desires. The Eight Temptations, which in Catholic doctrine become Deadly Sins or Cardinal Vices when given in to, can be said to be unfettered desires for forms of power we have addressed (despair for wholeness, greed, gluttony, sloth, envy for resources, lust for reproduction, infidelity for asymmetric obligations, pride for legitimacy, ire for violence), whereas the corresponding Catholic virtues, like Buddhism, admonish people to renounce such desires (e.g., chastity) or, like Confucianism, to use power on behalf of others (e.g., charity). The gospel of Matthew promises heaven to those who provide for the needs, including food, clothing, comfort, and companionship, of the "least" among them.

Like Judaism, Islam also has a strong tradition of both legal prohibitions of power abuse and admonitions to virtue and of enacting equality within and strengthening communities. Islam prohibits the use of alcohol, a mood-altering drug, and Sha'ria law prescribes punishments for sins such as stealing and adultery.

Among the five pillars of Islam are charity, which prioritizes others' needs, and fasting, which focuses one on the needs of the poor and helps one learn to curb one's desires.

In addition to several admonitions to obligation in the Ten Commandments, the commandments collectively address every form of power addressed here: violence, sexuality (especially in the absence of obligatory relationship, namely, marriage), control of resources, knowledge, restricting freedom, and legitimacy (see Table 10.3). Ritual practices within each religion (e.g., circumcision, baptism, the hajj) may be seen as affirming one's legitimate identity as a member of the religion.

*Summary.* This sampling of three very rich ethical or moral traditions demonstrates that they all presume that people have fairly chronic desires and power motives that may disrupt social relationships and should be governed either by self-striving and ethical guidance or by law and custom, or both. All the moral or ethical traditions considered here have ways of addressing both the higher level aspects of our theory, such as power fungibility, interdependence, trust, and power balance, and the lower level motivations, desires, and prescriptions concerning particular needs and their corresponding types of power. Differences in how ethical principles are communicated, particularly in whether they admonish people to take particular actions or strive for particular virtues or prohibit particular actions and condemn desires, and whether these are considered "law," demonstrate that there are many ways that ethical systems can promote more prosocial and less selfish uses of power. All three traditions use stories or parables as well as abstract statements, symbols, and rituals as reminders of the ethics they proscribe. The fact that all three culturally independent systems speak against the use of particular forms of power to damage other people and selfishness demonstrates that the needs, motivations, and desires in our theory are common social-psychological problems that societies and people must address.

### *Experimental Games Examining Relations Among Power Fungibility, Inequality, and Survival*

Power Basis Theory posits that distinct kinds of power may be fungible, depending on how people use power to meet needs or prevent deficits. To examine power dynamics among multiple, different forms of power in multiple-party interactions over time, we invented an experimental game called the In Game (see Pratto, Pearson, Lee, & Saguy, 2008). Sessions of four to six players sit around a table for a study of "how people behave in dynamic situations." We postulated that people could infer what different kinds of power (e.g., resources, force, legitimacy, obligations) are by what they enable one to do (or prevent one from doing). Thus, in the game, different kinds of power were represented not by labels but by different colored tokens and the rules about what players could do or have to do with each color token. Players who had more red tokens (force) than others could take other players' tokens without their consent. Blue tokens, representing legitimacy, could be gained by a majority vote of the players and be taken away by the same procedure. Players who had given yellow tokens (obligations) to other players had to



provide those players with green tokens (resources) regularly. Each player revealed an “event card” on his or her turn, which provided choices or requirements about color tokens (power). For example, event cards gave out resource tokens from the experimenter’s pool of tokens or required players to pay them to the pool. Certain event cards required that players obtain different color tokens (i.e., obligations or force) from other players. Players had to decide how to accomplish these requirements, often trying several negotiations with other players to do so. The game was not competitive in that players could not “win” it, but they could “lose” by having too few resource tokens to “survive” or stay in the game. The only goal we provided was to stay in the game. Both open- and closed-ended tests showed that players could make real-life analogies to the types of power instantiated in the game by colored tokens.

### *Fungibility Creates Inequality, and Inequality Contributes to Stress and Mortality*

In our initial instantiations of the In Game, we wanted to test whether players would use the different forms of power fungibly and whether the possibility of using each type of power to gain other types of power creates inequality. In fact, in both versions of the game we conducted, every player began with the same number of each color of token, and each player was provided with the same constraints and options throughout the game by the event cards. In other words, the game was egalitarian, although this fact was not told to the participants. Players could decide how to make any kind of power fungible. A player could lend force tokens in exchange for resource tokens, could ask for resource tokens from players who owed obligation tokens, could be conferred legitimacy tokens if he or she played in ways that other players approved, could form coalitions to use force tokens to take tokens from other players as ways of acquiring different kinds of power.

If it is the case that people use one kind of power to gain other kinds, then one would expect the amount of each type of power that players accumulated by the end of the game to become positively correlated rather than uncorrelated, even if the amounts distributed at the beginning and throughout the game by the event cards were orthogonal. This indeed occurred, providing evidence that people will make the types of power fungible and, in doing so, create inequality.

We also tested whether inequality contributed to low “survival” (not having enough resources to remain in the game). In both experiments, we found that the more unequal the distribution of power tokens among the players was, the more players were eliminated from the game because of lack of resources, even controlling for the mean number of power tokens in the session (Pratto et al., 2008). In other words, nonsurvival was related not just to the absolute level of power in the session but rather to how unequally power was distributed among players. This result is remarkable for two reasons. First, it was not only inequality in kind of tokens invoking nonsurvival, namely, resources, that was associated with greater rates of players being eliminated. Rather, inequality in *all* kinds of power was



associated with more players being eliminated. Second, it shows that power fungibility can have mortality effects, demonstrating that power is used to meet survival needs. Finally, consistent with our notion that power struggles produce stress, we found that the more total power in a game session, the more inequality there was among players and the more instability (“stress”) in their subjective well-being.

### *Stereotype Contents and Perceptions of Individuals Correspond to Basic Forms of Power*

An important implication of our ecological view of power and its relation to basic needs is that for people to be able to negotiate life, they should be able to perceive not only the amount of power but also the *kinds* of power that other people and groups have or lack. Such perceptions may be crucial in helping people decide how to behave toward others given their own power situation.

We tested this hypothesis in two ways. First, after playing the In Game, participants read descriptions of fictitious prior players whom we described in terms of two game actions and the number of each color of token they had at the end of the game. This indicated how these fictitious players used each type of power or had it used against them during the game. As expected, those fictitious players who accumulated more rather than fewer red (force) tokens were rated higher on a scale including *forceful*, *strong*, *threatening*, and *destructive*. Those who accumulated advantage in obligatory relations (others’ yellow tokens) to other players were rated lower on a trait scale including *exploited*, *obedient*, and *dutiful* than players who were disadvantaged in obligatory tokens. Players who accumulated more green (resources) tokens than other players were rated higher on *wealthy* and *well-off* and lower on *poor* than players with few resource tokens, and players who accumulated more legitimacy tokens were rated more *respectable* and *admirable* and less *unpopular* than players low in legitimacy tokens. These results indicate that people can observe power in use and make in-kind trait inferences about the user without labels for the kinds of power.

Second, in a separate study from the In Game, we examined whether trait stereotypes of many groups correspond to the type of power such groups wield or lack. Pratto and Lee (2005) showed that groups could be distinguished along trait dimensions that corresponded to the form of power we believed they wield or lack. For example, groups high on violence, such as terrorists, were rated substantially higher on trait scales reflecting forcefulness (e.g., violent, abusive) than groups low on violence, such as nuns. Groups high on resource control, such as politicians, could be distinguished from groups with few resources, such as the working poor, on dimensions reflecting wealth (e.g., frugal, thrifty). Groups high on legitimacy, such as soldiers, were rated higher on dimensions reflecting respectability (e.g., respectable, dishonorable) than other groups, such as welfare recipients. Finally, groups advantaged versus disadvantaged in obligatory relationships (white collar criminals vs. housewives) were rated higher on traits reflecting dominance (e.g., obliging and dependent, both reverse coded).

We also hypothesized that judgments of trust hinge on whether others can be expected to use power to fulfill their own needs. Those judged untrustworthy may be either those who use destructive power against others or those who use constructive power only to benefit themselves. One way we tested these hypotheses was in examining stereotypes of groups that were selected to characterize a particular power-trait dimension. We expected groups that use their power to fulfill others' needs to be rated more trustworthy than groups that use power to create needs or only for their own benefit. Between 47 and 52 undergraduate participants rated one of two sets of 10 groups. We expected some groups within a set to be rated high on a particular power-trait dimension and some to be rated low on that dimension. Our measure of perceived trustworthiness was the mean of ratings of *ethical*, *trustworthy*, *corrupt* (reversed scored), and *devious* (reverse scored;  $\alpha = .84$ ). Our measure of perceived general power was the mean of ratings of *powerful*, *influential*, *unimportant* (reversed scored), and *submissive* (reverse scored;  $\alpha = .72$ ).

Within each kind of need, we compared the groups on trustworthiness, covarying their general power scores, and in each case, substantial and statistically reliable differences were found, even controlling for general power ratings (see Table 10.4). For example, many Americans know that soldiers and gang members use violence but would expect soldiers to defend them and gang members to attack them. Consistent with this reasoning, participants rated gang members as only slightly lower in power than soldiers,  $\eta^2 = .08$ ,  $p = .006$ , but as substantially less trustworthy than soldiers,  $\eta^2 = .85$  (see Table 10.4 for means and effect sizes). Likewise, philanthropists, who provide material resources to

TABLE 10.4 Mean Ratings of Power and Trust for Groups That Can Fulfill or Create Needs and Effect Sizes for Group Comparisons Within Form of Power

Basic Need	Group Fulfilling Need	Group Creating Need Deficit	$\eta^2$ Trust	$\eta^2$ Power
Wholeness	Soldiers	Gang leaders	.85	.08
Mean trust	4.07	1.46		
Mean power	4.22	4.10		
Consume resources	Philanthropists	Welfare cheats	.44	.08
Mean trust	3.64	1.48		
Mean power	3.91	2.51		
Belong to a community	Judges	Pedophiles	.59	.02
Mean trust	3.72	1.17		
Mean power	4.48	2.87		
Care from others	Parents	Spoiled brats	.66	.003
Mean trust	4.18	2.00		
Mean power	4.34	3.20		

Note: Approximately 50 participants rated each group on traits from 1 (*very uncharacteristic*) to 5 (*very characteristic*). Across all groups, including those not shown here, the mean trustworthiness and general power ratings correlated slightly,  $r = .22$ ,  $p < .001$ .

others, were rated not only as more powerful than welfare cheats, who take others' resources,  $p = .007$ , but as substantially more trustworthy,  $p < .001$ . Judges, who help maintain the integrity of a community by isolating those who violate social rules, were not judged more powerful than pedophiles,  $p = .08$ , whose abusive behavior tears at the integrity of communities, but perceived to be substantially more trustworthy than pedophiles,  $p < .001$ . Finally, parents and spoiled brats were not judged to differ in general power,  $p = .14$ , but parents, who fulfill obligations to others, were judged much higher on trustworthiness than spoiled brats, who demand obligations from others,  $p < .001$ . Even when we set a conservative  $p$  value for these four tests together, the expected group differences in trust judgments were all reliable. More important, the effect sizes for group differences in trustworthiness were at least five times the effect sizes for general power.

Another way that we tested the hypothesis that people would trust those who use power on behalf of others rather than only for their own benefit was done within the context of the In Game, described above. After playing the game, participants judged fictitious prior players who were described in terms of the number of each color of power token they ended the game with and how they described their main goal in the game. We expected those participants with prosocial goals, as indicated by the statement "I tried to help other players as much as I could," to be rated as more trustworthy than those with the selfish goal of "Getting as many tokens as I could." Regardless of whether they were high or low on four types of power, players who had prosocial goals were rated as more trustworthy ( $M = 4.65$  on a 1 to 7 scale) than players with selfish goals ( $M = 3.87$ ),  $\eta^2 = .10$ ,  $p < .001$ . Taken together, our results show that group stereotypes and judgments of individuals fall along trait dimensions that correspond to particular forms of power, as well as to general power and trust. Such perceptions are, we posit, important for navigating life.

## GENERAL DISCUSSION

Power Basis Theory argues that particular forms of power recur in human life because they are the means to meet particular universal and recurrent needs. We identified a small set of distinct needs and kinds of power that are reflected in large literatures in psychology, sociology, anthropology, political science, and human history. Recognizing these needs and types of power allows us to make sense of many conflicts, the ethics of power, and dimensions of social judgment. Moreover, we saw that our theory has specific places for the many ways power has been defined in social theory and social science, including coercion and oppression, transformative power (using power to help others develop), social influence, agency, and liquidity.

Our theory differs from other motivation and power theories. First, we have been very careful not to assume that every motivation reflects a real need. Although this assumption is common in social and clinical psychology, we have conceptually distinguished between needs, that is, requirements for survival, and desires. Failing to make this distinction implies that all motivations and actions they drive are both functional and ethical because their purpose is to

meet basic needs. As we have seen, motivated behavior is not always functional, it does not always meet needs, and cultures and people differ in what motivations and actions they deem ethical. Second, because our theory explicitly states that the local ecology is part of the system for meeting needs, it points attention toward the long-term sustainability of the natural, cultural, and local social environment. Theories that focus on needs and motivations without addressing ecological conditions and behavioral repertoires are too myopic to consider either long-term issues or other means of meeting needs. Third, many psychological theories of motivation and needs consider only *psychological* needs, not the other needs (e.g., resources) essential to the human condition. This makes such theories nearly impossible to relate to politics, economics, international relations, intergroup relations, or culture (except through leadership), which is where many important power dynamics occur. Fourth, by defining power in relation to needs rather than in relation to other parties, we decoupled well-being from power relations. This is important because people's well-being is relative to their own needs rather than relative to others; a person who has been maimed less than another person is not necessarily well. In fact, Power Basis Theory predicts that using other people as the standard for whether one has enough power could cause serious problems for both individuals and collectives. Finally, our theory allows power to take several forms other than influence: We address power as exercised in behavior, as a potential, and as relative both to others and to survival requirements.

This new approach to understanding power suggests new avenues for research. As fungibility of different kinds of power is essential to the stability or volatility of relationships and well-being, learning more about what social conditions make which kinds of power more or less fungible would be useful. In particular, more effective interventions in organizations and governments may depend on constraining fungibility and correcting the timescales of feedback loops. Further research on ethical systems might indicate what forms of ethical systems are effective in curbing power problems such as drastic inequality and corruption. Likewise, learning the conditions in which particular power fungibility is judged ethical could expand our understanding of implicit justice theories. By providing more detailed dimensions of social perception than of power and trust, Power Basis Theory can improve understanding of interpersonal relationships and group stereotypes. Most important, Power Basis Theory allows us to incorporate not only the motives of powerful people but also the needs and motives of less powerful people so that their relationships can be dynamically understood.

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