

25th Anniversary Series: Looking Forward
Forum

Perceiving and pursuing legitimate power

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How do people perceive and pursue legitimate power? For the social sciences, this question is venerable. Yet, for cognitive science, it offers fresh and generative opportunities to explore how adults evaluate legitimacy, how children learn to do so, and what difference legitimate power makes for people's thoughts, feelings, and actions.

Social life is full of relationships defined by hierarchical roles and responsibilities: parent–child, teacher–student, employer–employee, governor–governed. Within these relationships, people have unequal power and asymmetric obligations. Yet, in some cases, these inequalities are seen as legitimate and just even by those who are disadvantaged by them. Here I argue that in the next 25 years, we should develop the cognitive science of the perception, and pursuit, of legitimate power.

Legitimate power is defined by other people's perception that they ought to obey or comply with it [1]. Thus, legitimate power is one means to get other people to behave in desired ways, that is, to exert social control [2]. People comply with the decisions and instructions of a person they perceive to hold legitimate power, voluntarily, against their narrow self-interest and even in private [1]. By contrast, the main alternative means of social control are rewards for compliance and punishments for defiance, which require intensive monitoring and substantial expenditure. For those who have or want power, legitimacy is thus highly valuable.

Systematic studies of social groups and social structures, for example, in political science, sociology, and anthropology, have always emphasized power, [3,4]. Power and status in society arise in broader contexts of privilege and oppression, which must not be ignored in a psychology of power. By contrast, questions about the cognition of legitimacy have been relatively neglected. One reason is that power is inherently a feature of interpersonal interactions, whereas cognitive science investigates intrapersonal processes. Indeed, some have theorized that the species of power are emergent phenomena of interpersonal dynamics that literally cannot be investigated in individuals [2]. I disagree. Legitimacy of power is a subjective perception, created, sustained, changed, and destroyed in the minds of individuals. Understanding legitimacy requires a model of abstract recursive cognitive processes that are characteristically human. There are so many questions here, to which cognitive science could offer distinctive answers.

When, why, and how do the less-empowered accord legitimacy to those with power? The psychology of legitimacy has been best characterized with respect to institutional roles in criminal justice, like police and judges [1]. In that context, the perception of legitimacy depends on three component appraisals: that power was acquired by an appropriate process and is being exercised impartially and benevolently. Similarly, governments are perceived as legitimate when they appear to use their power to reinforce a social and moral order (benevolence) and not to extract exploitative benefits for themselves and their allies (impartiality [4]). Cognitive scientists could generalize and formalize these descriptions and study their neural implementation. Are the three components of legitimacy for institutional power also computed for interpersonal power, for example, within marriages [5]? If so, how? When one person perceives another as exercising legitimate

power, how is this representation different from calculating that compliance offers greater long-term expected benefits than defiance?

A complementary question is, when and how do the less-empowered stop seeing power as legitimate? Legitimacy may be continuously under (even unacknowledged) negotiation [5]. A robust hierarchical relationship can induce strong moral motivations and constraints: people will die out of obligation to their king. Yet hierarchies weaken and collapse: previously loyal subjects may dispute the legitimacy of the king, or of any king. Cognitive scientists could model the joint inference of legitimacy and rightness: when people confidently perceive power as legitimate, then they (ought to) accept its rulings even against their own judgment, but when a ruling contradicts their convictions too much, people lose confidence in its legitimacy.

How do those who desire legitimacy pursue it, or those who have it act to sustain it? The goal of legitimacy requires pursuing a perception in other minds. Cognitive scientists could formalize the pursuit of legitimacy as recursive reasoning: for example, people with power may choose actions that they expect will support rational inference of their own impartiality and benevolence in their target audience [6].

How is the cognitive evaluation of legitimacy acquired in human childhood? The components of legitimacy all emerge early. Very young children differentiate hierarchies characterized by dominance and coerced compliance versus by prestige and voluntary deference [7,8], evaluate the social and institutional arrangements that create power [9], and are sensitive to others' impartiality and benevolent intentions [10]. Yet, each of these components is abstract and must be defined in social context. For example, children must have the cognitive capacity and flexibility to learn that power can be legitimately

acquired by only one of democratic election, direct descent, or divine decree. Children must also learn whether specific acts of power, like physical punishment, are legitimate [11]. What, if any, are the constraints or cross-cultural commonalities that guide children's learning about legitimacy?

What difference does legitimate power make to people's thoughts and feelings? I am particularly interested in the way that legitimate power creates asymmetric feelings of obligation, in the context of divisions of labor and of giving and returning favors and gifts. For example, in equal-status relationships, obligations are typically determined by reciprocity. If one friend has offered a gift or a favor, then the other friend will typically return a gift or a favor of approximately similar value. Yet in hierarchical relationships, each party is typically obligated to make contributions that are different in kind. David Graeber made the intriguing suggestion that obligations in hierarchical relationships are not computed by reciprocity, but by precedent: if the boss gave the employees new year's gifts last year, she will be expected to give gifts again this year [12]. Ethnographers and missionaries (indignantly) repeatedly recorded cases when recipients of generosity or support responded not with reciprocity, but with expectations of further generosity and support. Do individuals intuitively switch between expecting reciprocity from equals and expecting to follow precedents in a hierarchy?

Distinctive moral dilemmas arise when a person feels torn between hierarchical obligations and other moral concerns. Relationships between parents and children seem particularly fertile ground for these dilemmas. For example, parents may struggle over whether to use their physical advantage to teach their child not to use physical force to get their way. Conversely, adult

children of aging parents may agonize over whether to protect their parent's health and finances by diminishing the parent's authority. Do these moral dilemmas call on the same cognitive and neural resources as the more familiar dilemmas in cognitive science, that ask people whether to sacrifice the few for the benefit of the many?

Cognitive science can offer a distinctive lens on these questions, by focusing on the proximal processes in the mind of an individual during learning and inference. In this way, cognitive science contrasts with traditions that focus on collective, historically contingent, and institutional structures of power, or the ultimate causes of the evolution of hierarchy. Cognitive neuroscience (i.e., functional neuroimaging of human brains) can reveal the similarity, and relative timing, of different cognitive processes. For example, do people react to gaining and losing legitimacy as quickly and obligatorily as they do to gaining and losing money? Computational models can test proposals about the representations and computations, by recapitulating human judgments [13]. Could computational models of natural language learn to recognize or even generate texts that will be not just believed but voluntarily obeyed [3]?

The process of inferring another person's intentions (i.e., Theory of Mind) in particular is a well-developed area of cognitive science, with substantial theoretical and empirical depth. Could existing computational models of Theory of Mind [13] be extended to inferences about legitimacy? Does distinguishing legitimate from coercive power call on the well-known neural system in right temporo-parietal junction, like distinguishing an intentional from an accidental harm [14]? Which aspects of cognition about legitimate power can be understood in terms of Theory of Mind and which cannot?

In the next 25 years, addressing these questions should be a trend in cognitive science.

Acknowledgments

Thank you to Emily Falk, Dae Houlihan, Talia Konkle, Marika Landau-Wells, Setayesh Radkani, Shoshanna Saxe, Laura Schulz, Justin Steil, and Ashley Thomas for feedback on earlier versions of this manuscript. I was influenced and informed by many more papers and books than I was able to cite. I was supported by the Patrick J McGovern foundation and the Guggenheim foundation.

Declaration of interests

No interests are declared.

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<https://doi.org/10.1016/j.tics.2022.08.008>

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