Integrating Normative and Psychological Knowledge: What Should We Be Thinking About?*1

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Introduction

Human beings live in an incredibly complex social environment. Understanding the cognitive abilities that produce and sustain this environment is among the central goals of psychological research. Given the scope of the phenomena involved it is inevitable that research has become organized into subfields that explore different aspects of social cognition. As necessary as such a division of research labor might be, it is also necessary to keep in mind the bigger questions and think about how the pieces of the social cognition puzzle might fit together. The papers in this volume take on two major pieces, what I will call psychological and normative knowledge. Like any truly challenging puzzle, it is clear that the pieces must go together somehow, but figuring out the productive points of contact is not at all obvious. The papers in the current volume address two aspects of the integration of psychological and normative knowledge. Some explore people’s intuitions about causal connections, others address conceptual linkages. Although these are two distinct types

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of research questions, perhaps typically associated with Psychology and Philosophy, respectively, I'll argue that they are intimately linked. Specifically, conceptual questions about normative ascriptions turn on intuitions about psychological causes of behavior.

The psychological piece of the social cognition puzzle concerns people's commonsense conceptions of the mind and intentional agency (Flavell, 1999; Wellman, 1992). This research explores the ways people use mental state concepts (such as belief, desire, and intention) to predict and explain human behavior. Normative knowledge has been addressed primarily by researchers interested in moral psychology (Damon, 1996; Kohlberg, 1981; Turiel, 1998). This research explores the ways people use normative concepts (such as obligation, right, and rule) to evaluate and interpret human behavior. The psychological concepts are deployed to answer causal questions. What led a person to produce the behavior? Under various conditions, what behavior is expected? Normative concepts are deployed to answer evaluative or conceptual questions. Does this action count as morally right or wrong? Under what conditions does someone deserve punishment or blame? These are the standard or canonical questions, at least as addressed in the research literatures. What makes psychological and normative knowledge so ripe for integration, though, is that both kinds are useful for both questions. Causal explanations of behavior often involve rules, obligations, and norms. Evaluations of behavior often depend on beliefs, desires, and intentions. Especially important is the question of whether these are really two separate domains of knowledge. Specifically, do normative judgments somehow depend on psychological knowledge? I believe the answer is “yes,” both causally and conceptually.

Norms as causes of behavior: Wanting to follow the rules

Without question, norms are important to causal predictions and explanations of behavior. In watching a game of baseball we would typically cite the rules of the game to account for behavior on the field. Why did the batter run to first-base rather than third after hitting the ball? Because that's the rule. A common interpretation is that this explanation is a short-hand for a psychological process: It implies that the bat-
ter knows the rule and intends to follow it (though see Ryle, 1949). Wellman and Miller (this volume) describe just this kind of role for norms in psychological explanation. Norms are an influence, a source of mental states. The existence of a norm provides a reason for behavior (Searle, 2001). Rules are causally important as a source of intentions: Norms have causal effects via mental representations. In this way, norms are like facts: indirect causes of behavior. To say the batter ran to first because the ball landed within the foul line, is also shorthand for a complete explanation involving the implicit premise that the batter represents that fact about the world.

The remarkable thing is that young children have very different intuitions about the ways facts can influence behavior than do older children and adults. Before age four or so, children the world over (see Wellman & Miller this volume) seem to feel that it is the actual physical reality that determines a person’s behavior, rather than beliefs about that reality (Wimmer & Perner, 1983). This is the false-belief error. Young children think a person will look in the actual location of a hidden object, rather in the location indicated by the available information. The strong interpretation of this result is that physical facts are understood to cause behavior directly, without mediation of mental states. In the same way a germ can give you a cold whether or not you are aware of its presence, a chocolate bar can lead you to look in the cabinet, whether or not you are aware of its presence (Kalish, 1997).

The false-belief error is not limited to physical reality, but holds for normative properties of the environment as well. Young children predict that people will follow rules they are ignorant of (Flavell, Flavell, Green, & Moses, 1990; Kalish, 1998; Kalish, Weissman, & Bernstein, 2000). For example, in recently completed studies (Kalish & Cornelius, 2005) we presented children with a “changed rule” problem akin the changed location false-belief task: A student is absent from school on a day when a conventional rule is changed (e.g., about where to hang coats). Just like the physical case, younger children often predict that the ignorant student will follow the new, not the old, rule. Again, the strong interpretation is that such results show young children think that normative facts (rules, obligations) can have a direct impact on behavior, unmediated by mental states. This strong interpretation is not the one most favor, but it is important to at least recognize it as a possibility.
For example, young children are often said to believe in immanent justice (Jose, 1990); the world works to automatically give people their just deserts. Such a view would suggest that young children may have very different intuitions about the causal powers of norms than do adults (at least adults in Western cultures, though see Raman & Winer, 2004).

A more conservative interpretation of the false-belief results is that young children have different intuitions about the origins of those occurent beliefs, desires, and intentions that produce behavior. Children agree that people’s actions (hanging coats, looking for chocolate) are caused by their mental states, but disagree about which mental states people have. Specifically, young children see thoughts as stemming from influences external to the mind, and downplay internal processes. Most discussion have focused on ideas about the origins of belief: The child’s intuition is that beliefs are generated directly and unerringly from the facts (Chandler & Lalonde, 1996; Wellman, 1992). I would argue that much the same intuitions hold for the sources of motivation (Kalish, 2002; Kalish & Shiverick, 2004). Specifically, young children tend to see people as motivated by norms; people want to do what they are supposed to.

As Wellman & Miller point out, American adults often explain behavior as motivated by intrinsic traits or preferences. There is a long tradition of research arguing that trait attributions only become a significant part behavioral explanations beginning in middle-childhood (around age eight; see Ruble & Dweck, 1995 for review). In the literature young children are often described as making external attributions. This does not, necessarily, mean that they see behavior as non-psychological (the strong interpretation above). Rather, we should understand this external orientation as a set of intuitions about where psychological motives (e.g., desires) come from. Norms are one of the primary external sources of motivation. Especially in the absence of countervailing internal motives, young children may tend to expect people’s behavior to follow from rules and obligations. For example, preschool-aged children tend to ignore information about a person’s preferences (likes and dislikes) and focus on information about norms when predicting future behavior (Kalish & Shiverick, 2004). When norms and preferences conflict, preschool-aged children are likely to predict that following the rule rather than the preference is what a person would want to do, and what would make the
person happy. Unlike older (American) children who tend to discount their judgment that a character wants to do something if there is a rule mandating the action, young children augment: A person wants something more if that is what he is supposed to do (Costanzo, Grumet, & Brehm, 1974; Iyengar & Lepper, 1999). Just as young children generally expect people to believe what is true, they may expect people to desire what is right.

Older children and adults in US samples often express the sentiment that norms and preferences conflict; rules go against what you really want (Kalish & Shiverick, 2004). Wellman and Miller present cross-cultural data suggesting that this is not a universal developmental trajectory. Many adults believe that what someone wants to do, and what the person is obligated to do, generally coincide. Indeed, we should not overstate the discounting of normative motives in American common-sense. There are plenty of situations in which people are expected to do what they are supposed to; that is why citing roles, norms, and obligations is an effective strategy. Why did the batter run for first? Why did the waitress bring the food and the customer pay? Why did the motorist stop at the light? In these cases the assumption is that the people were motivated to follow the operative norms. But did the actors want to perform those norm-consistent actions?

Wellman and Miller offer the example of the woman who stays home to care for her ailing husband. While adults in India agree that the woman has both a duty to stay home and wants to stay home, American adults are less comfortable agreeing that the woman wants to do something motivated by her duty. At the same time, all presumably agree her actions are voluntary, products of her beliefs, desires, and intentions. American adult common sense so privileges internal sources that it is difficult to credit a desire with an external origin. However, I expect most Americans would accept that the woman wants to do her duty and, if her duty is to stay home, admit that, to some degree she wants to stay home. This emphasis on internal, individual personality-based influences (e.g., traits, preferences) is why I think it is preferable to use the quasi-scientific term “motive” to describe the pro-attitudes that contribute to intention and action. The English terms “want,” and “desire” have the general meaning of “motivators of intention,” and the more
specific senses of “internally originating” motivators. This is why English speakers are often in the awkward position of asserting that an action may be voluntary and fully intentional, but not desired.

There are two points to note about the role of normative knowledge in causal explanations of behavior. The first is that citing norms as causes is ubiquitous, and perhaps especially central in young children’s explanations. This is generally true despite significant cross-cultural differences in the frequency and contexts in which people expect conformity to norms. The second point is that norm-based explanations implicate psychological processes. At least as far as we know, everyone who uses norm-explanations recognizes the norms as having causal effects via intentional processes. This second point is, I believe, the more surprising and arguable one.

At least from introspection, we do not always think about mental states when providing normative explanations. It seems we can say or judge that the batter ran to first because, “that is the rule” without making inferences about just what is going on inside the actor’s mind (Ryle, 1949). Of course, introspection is not a reliable guide here. Part of the idea of intuitive theories, or domain-specific cognitive modules, is that they operate outside conscious awareness. We may decide someone is following a rule only after (covertly) analyzing the person’s intentional states. But are the intentional state inferences necessary? Can we identify or explain using norms only after reasoning about psychological states and causes? This question raises a set of conceptual issues about the bases for ascriptions of mental or normative states. Are the two kinds of judgments at least potentially independent or do normative evaluations depend on psychological?

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2 As opposed to external or “imposed” sources of motives (such as norms). It is interesting to ask about the cross-linguistic evidence in this regard (following Knobe & Bura, this volume). Anecdotally, the Chinese (Mandarin) word for “want”, “yao,” comfortably accommodates external motivation. Thus someone might say, “I want [yao] to go to work tomorrow.” and mean, “I have to go to work tomorrow, though I would love to stay out drinking.”
Normative evaluations: The blame game

The discussion of the woman caring for her ailing husband raised a conceptual question. Perhaps Indians and Americans have different criteria for the concept of “want.” The two groups may have the same causal intuitions. All agree the woman has two motives, a preference not to do the difficult labor, and a sense of duty to provide care. The one motive is judged to outweigh the other, and she forms an intention to provide care. They disagree about how to describe the situation: Does this count as “wanting to” or not? A similar question is addressed by the three papers concerned with acting intentionally (Knobe & Burra; Malle; Nadelhoffer, this volume). There is no question in these discussions about people’s causal intuitions. The goal is not to explore subjects’ understanding of what the hunters, executives, and servants wanted, believed, and intended, where those mental states came from, or what the (causal) consequences might be. Rather, the question is how people describe or evaluate those causal sequences. Do they count as acting intentionally or not?

At issue is the central moral question of how we assign blame; who deserves to be punished? It is generally understood that causal intuitions inform the evaluative. Our judgments of blame depend (at least in part) on judgments about the psychological causal process involved. The surprising empirical finding is that a judgment that was thought to be a purely causal ascription, did the person act intentionally, turns out to involve evaluation. The causal structure of an action does not determine whether it counts as acting intentionally. A moral evaluation is also required; actions with evaluatively bad outcomes are seen as acting intentionally, when the same causal sequence with a positive or neutral outcome is not acting intentionally. Thus our judgments of moral dessert cannot depend on our judgments of whether someone acted intentionally. This is an important finding about the nature of blame ascription, but what are the further implications?

The studies described by Knobe & Burra, Malle, and Nadelhoffer are taken to demonstrate that the same mental process may be described as acting intentionally or not depending on our evaluation of the outcome. It is not clear, though, that the same causal process is involved in the negative, positive, and neutral stories. In Knobe’s (Knobe, 2003)
negative outcome scenario the executive considers and rejects a reason not to implement the program. In the positive outcome the executive recognizes an additional reason to go ahead with the program. Those are two different decision processes. To truly equate the positive and negative scenarios, the decision makers would have to have the same beliefs about the possible outcomes of their actions.\(^3\) The current findings seem to indicate that we take actors’ beliefs about the positive or negative value of their actions into account when ascribing acting intentionally.

Independent of the empirical results, it seems quite plausible that descriptions of behavior and action might involve non-psychological criteria. Ascriptions of knowledge clearly have this feature: Whether a mental state counts as “knowing” does not just depend on the psychological processes that gave rise to the state. The discussion of acting intentionally is very reminiscent of issues in the attribution of cause. We do not normally say the presence of oxygen caused the fire, even though oxygen plays a causal role in the fire (Hilton & Slugoski, 1986). Whether or not oxygen is designated as “the cause” depends on our explanatory goals and principles of communication (e.g., relevance, informativeness). This dependency does not seem to have any implications for the connections between our theories of combustion and our theories of mind. Similarly, communicative goals might determine whether an action was “intentional enough” to count as acting intentionally. So what should we make of the dependence of acting intentionally judgments on normative evaluations?\(^2\)

One reaction would seem to be that our judgments of psychological causation are shot through with normative criteria. Ascriptions of mental states involve evaluative judgments. This is part of the message, at least with regards to judgments of acting intentionally (see Nadelhoffer, this volume). However, there is also the implication that normative judgments may be independent of psychological ones. We do not first use

\(^3\) It may be that the same outcome effect would occur after equating for actors’ intentions. For example: A government official implements a policy with the anticipated side effect of increasing income inequality, which the official thinks is a good thing (to the victor the spoils). Would participants who value income equality say the official acted intentionally to increase inequality, but participants with the opposite values come to the opposite conclusion?
psychological/causal criteria to decide someone acted intentionally and then draw normative conclusions. Rather, normative evaluation of the act occurs prior to, or at least independent of, application of causal (non-evaluative) psychological knowledge. Knobe and Burra (this volume) discuss the possibility of a distinct module for normative (moral) evaluation. The moral module would identify actions as blameworthy and intentional without involvement of psychological or mental state inferences. Although not the direct focus of the papers in this volume, the possible independence of moral/normative knowledge and psychological knowledge (e.g., theory of mind) is a fascinating and important question.

Research on the relations between moral and psychological judgments has often focused on assignment of blame and punishment. Although this is clearly a central moral question, I am not sure it is the best focus for basic explorations of the relations between the two domains of knowledge. Assignments of blame and punishment are complex; there are different kinds of blame and punishment, and very different motives for selecting responses to transgression (e.g., retribution, remediation, justice). This may be true of all normative evaluations, but let me suggest a potentially simpler, more basic judgment. Before we can blame someone we have to identify a norm violation. The core of normative evaluation is not whether some action deserves blame, punishment, or praise, but rather whether the action was consistent with norms, rules, or obligations. Is the action something that ought to have happened or not: Was it right or wrong? After identifying a violation we can go on to judge whether punishment is deserved.

There are many ways to characterize the basic normative concepts. I will focus on obligations (e.g., rather than duties or rights). Obligation is at least a representative normative concept. A moral or normative judgment faculty will identify what someone ought, ought not, and may (not ought not) do. Normative knowledge would also identify violations of obligations and then assess consequences. The assessment of blame may implicate other forms of knowledge (e.g., psychological reasoning about intention), but what about the prior judgments of obligation and violation detection?

Identification of obligations and violations are at least potentially independent of psychological judgments. Violation is a kind of logical inference. Many obligations are understood as conditionals: If some
condition applies then some action is obligated/allowed. Identifying violation involves recognizing which states of affair are consistent and inconsistent with the conditional. For example, given the rule, “If one rides a bicycle then a helmet must be worn,” only bicycle riding without a helmet counts as a violation. Young children appreciate this logic (Harris & Nunez, 1996). A person riding a bicycle without a helmet is violating the obligation. Not wearing a helmet without riding, and wearing a helmet without riding are not. Whether a person deserves punishment for violation is another matter. It may be only intentional violations that warrant blame, but recognizing the violation need not involve intentional ascription. Mental operations involved in the logic of conditional obligation, identifying cheating and conformity, could be independent of motive and psychological judgment (Cosmides, Tooby, & Gazzaniga, 2004). But what distinguishes normative conditionals from others? Put slightly differently, a cognitive ability to identify states of affairs consistent and inconsistent with conditionals is not in itself a normative faculty.

A violation is a normative matter when obligations are involved. How do people identify obligations? Here again, psychological knowledge is not obviously required. For example, what one ought to do can be independent of anyone’s mental states. Turiel and his colleagues (Turiel, 1983, 1994) have demonstrated this intuition in quite young children. By age four or five children state that a person ought not to violate a moral obligation even if that person (and everyone else in the community) doesn’t recognize the obligation (Smetana, 1981). People may not know that they should not steal, but they still have the obligation not to. Conventional obligations (e.g., school rules) are more complex. These rules only exist because people created them (they are observer-relative, even if not explicitly stipulated, see Searle, 1995). Still, one’s conventional obligations are social facts, not mental states. Recall the example of the student who was absent when the school rule about hanging coats was changed. The student should follow the new rule (even if he cannot be blamed for failing to do so). Our research shows that four year olds appreciate something of the objective nature of conventional obligations (Kalish & Cornelius, 2005). There are many kinds

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4 There are interesting developmental differences. Younger children reliably identify
of norms, and they have different relations to intentions and mental states. At least in some cases, judgments of what someone ought to do need not depend on judgments about the person's psychological states.

So far discussion has centered on how people decide which obligations apply, and how violations might be identified. Left unaddressed is the central question of just what obligations are; what are we ascribing to a person when we judge that she has an obligation? In answering this question it's more difficult to maintain the independence of normative and psychological knowledge. Fundamentally, obligations (and other norms) are reasons. To have an obligation to do X is to have a reason to do X [see Kalish, 2005]; (see Searle, 2001). As discussed in the previous section, obligations have their causal force as influences on intentional psychological processes (Kalish, 1998, 2000). The claim here is that this causal role is central to the characterization of what an obligation is. If something is not understood to be a reason, then it is not an obligation. The concept of a reason is a prerequisite for concepts of obligations and other norms. Reasons are part of psychological knowledge. Thus a psychological understanding of the production of action is inseparable from normative knowledge.

This is not to deny that norms have an objective (or at least intersubjective) existence. There can be reasons for a person to perform an action that the person is unaware of. For example, in the changed-location false belief task, the presence of chocolate in the cupboard gives the person a reason to look there, even though the actor believes the chocolate to be elsewhere. Some may prefer to restrict reasons to those that actually affect an actor. In this case, norms and physical facts could be characterized as "potential" reasons. The main point is that physical facts can be characterized and understood apart from their status as reasons. One does not have to know anything about mental states to know what it means that the chocolate is in the cupboard. Norms, however, cannot be understood except as reasons for actions. Besides having a reason to do X, what does it mean that a person ought to do X?

obligations with the desires of an authority figure. School-aged children and adults appreciate that just because a teacher wants something does not mean students are obligated to provide it (even if the behavior is within the teacher's authority).
In his discussion of free will, Nichols (this volume, Nichols, 2004) addresses the link between obligations and reasons. He notes the Kantian dictum that, “ought implies can.” and suggests that children’s notions of free will may derive from their understanding of obligation. The point is that being obligated to do something means you can voluntarily form an intention about it. This is stronger than the claim that being obligated means you have a reason, or some (potential) influence on your intention. A voluntary decision maker is a sub-type of a reason-based decision maker.

As I understand it, Nichols is proposing a developmental sequence. The child first learns about obligations: what she should and should not do. The child appreciates that “ought” implies “can” (control), and thus recognizes that she and others to whom obligations apply have voluntary agency. This same sequence could apply to learning about reasons. First note people’s obligations, then realize that obligations imply reasons, thus conclude people act based on reasons. Under this model, the obligation judgment is prior and the psychological intuitions follow: Intuitive psychology derives from intuitive morality. This may be correct for intuitions about free-will, but I believe it is backwards for intuitions about reason-based (intentional) action. The child first appreciates that people act for reasons, and then appreciates norms as a special kind of reason.

A problem with the obligation-first hypothesis is the acquisition story. How would a child ever know he had encountered an obligation without first appreciating he had encountered a reason for action? One source of information about obligations is language. Children receive explicit instruction about what they and others may, must, can, cannot, have to, and are not allowed to do. However, the input, the modal system, is massively and productively ambiguous. The terms that indicate normative relations (e.g., obligation, permission) can also indicate other kinds of relations. This is true even of deontic uses, and even of the (putatively) core term “ought.” Thus, “Your skin ought not to be that shade of green.” neither implies you have voluntary control over your health.

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5 Here again is an important cross-linguistic question. At least other European languages share this property of English (Bascelli & Barbieri, 2002) (Day, 1996).
nor a reason for avoiding green skin. There are also epistemic uses of the same modals even further removed from intentions and reasons. To say, “That tree ought to have held your weight.” is not to describe an obligation of the tree. Nichols might be right that an understanding of obligation leads to appreciation of volition, but a child cannot rely on the input to identify which things are voluntary, are reasons, or are obligations. Rather, children must use their understanding of psychological causation to disambiguate the information they receive, to pick out the normative relations from others (Kalish, 1998, 2000, 2005).

Valence judgments are a second source of information about norms and obligations. States of affair can be evaluated as good or bad, positive or negative. Several researchers have noted that there may be a fundamental emotional component to normative/moral judgments (Haidt, 2001; Nichols, 2002). At least potentially, evaluative judgments can be independent of psychological knowledge. Complex mind-reading abilities are not (always) required to decide that something is good or bad. Still, like linguistic input, positive/negative evaluations are not unambiguously normative. There are many kinds of good and bad outcomes; skinned knees, tornadoes, Brussels sprouts for dinner, and losses of favorite toys might all be bad things. Not all involve moral or normative violations. Similarly, violations can have a positive outcome. Depending on one’s team loyalties, spectator interference could have a positive impact on the outcome of a baseball game. It is still a normative violation (see Searle, 2001).

On the one hand the priority of valence is a theory about the causal history of normative judgments. Initially, outcomes are appreciated as good or bad, only later (ontogenetically, phylogenetically, or in the time-course of cognitive processing) are such sentiments transformed into normative evaluations. This causal theory raises the question of just what is involved in such a transformation. My argument is that understanding of intentional action, reason-based behavior, is a necessary component of deriving normative judgments from positive and negative valence.

\[6\] Nichols, at least, is not arguing that emotional reactions distinguish norms from other reasons. Rather, his hypothesis is that emotions distinguish moral norms from non-moral norms.
This is both a conceptual claim, about what it means for a judgment to be normative, and an empirical claim about the kinds of distinction people make among events.

**Summary**

The papers in this volume address two related questions about normative reasoning. One question concerns the components of normative evaluation. Some of the cognitive processes of normative evaluation may be independent of psychological knowledge; which obligations apply, whether an action is consistent with or violates obligations, and even, perhaps, whether punishment or praise are deserved, may not always involve reasoning about people’s mental states. The other perspective on normative reasoning is that it is an aspect of psychological explanation. The causal consequences of norms are mind-dependent; they are parts of psychological causal chains. Explaining a behavior in terms of norms (“He did it because that’s the rule.”) at least implicitly invokes a psychological process. The main point of this commentary is that the causal structure of norms is part of the conceptual question. To evaluate a behavior or outcome in terms of norms is to frame the problem in terms of reasons and intentional action. In part this is a definitional claim: Someone who says (or thinks), “He did it because that’s the rule,” but does not know anything about reasons or psychological processes is not really citing an obligation. Exactly what psychological concepts are required is an interesting and open question (see Nichols, this volume).

Psychologists are often somewhat dismissive of conceptual questions, regarding them as policy decisions about what counts rather than as empirical questions to drive research. In closing I would like to, briefly, offer a somewhat different perspective. Our cognitive system provides us the ability to respond to various features of our environment, including abstract, conceptual features (Fodor, 1995; Margolis, 1998; Millikan, 1998). Norms are one class of those features, and humans are able to respond to them. The basic psychological question is how we do this. What are those cognitive abilities that allow us to identify and keep track of norms, and distinguish norms from other features of the environment (Kalish, 2005; Kalish et al., 2000)?
In its interactions with the world an organism can potentially encounter any number of features including, for example, outcomes (potential consequences of various actions), intentions (its own and others’ goals and preferences), and norms (obligations and permissions). The organism will be sensitive to some of these features and not others. Sensitivity, in part, means being able to make differentiated responses. Adult humans are differentially responsive to norms; we can keep track of and respond to norms distinct from other properties such as outcomes and intentions. Newborn human infants almost certainly do not show the same kind of sensitivity. They cannot respond to norms differently than to some other properties of the environment. The most interesting and important ability is the discrimination between good and right. Babies are clearly sensitive to properties of valence: Some things are positive, some negative. But how does a finer-grained distinction emerge: When do some things become not just good, but right, and others not just bad but wrong?

The argument, sketched briefly in this paper, is that psychological knowledge is necessary for sensitivity to normative properties. (see Kalish, 2005, also, Hauser, 2000, for comparative argument). Psychological conceptions of the causes of behavior ground the understanding of normativity. Whether or not this particular hypothesis is correct, an important goal of psychological research is to explore cognitive abilities underlying distinctive sensitivity to normative properties. In this research program, the causal and conceptual questions addressed by the contributors to this volume are central. These questions are also ones that should continue to engage the attentions of Psychologists and Philosophers, and provide a productive context for working out the interactions between psychological and moral/normative knowledge.

REFERENCES

Bascelli, E., & Barriero, M. S.
2002 Italian children’s understanding of the epistemic and deontic modal verbs dovere (must) and potere (may). Journal of Child Language, 29, 87-107.

Chandler, M., & Lalonde, C.
1996 Shifting to an interpretive theory of mind: 5- to 7-year-olds’ changing conceptions of mental life. In A. J. Sameroff & M. M. Haith (Eds.), The five to seven year shift: The age of reason and responsibility. (pp. 111-139). Chicago, IL, USA: The University of Chicago Press.
Cosmides, L., Tooby, J., & Gazzaniga, M. S.  
2004 Social exchange: The evolutionary design of a neurocognitive system. In The 

Costanzo, P. R., Grumet, J. F., & Brehm, S. S.  
1974 The effects of choice and source of constraint on children’s attributions of 

Damon, W.  
1996 The lifelong transformation of moral goals through social influence. In P. B. 
Baltes & U. M. Staudinger (Eds.), Interactive minds: Life-span perspectives 
on the social foundation of cognition (pp. 198-220). New York, NY, US: 
Cambridge University Press.  

Flavell, J. H.  
1999 Cognitive development: Children’s knowledge about the mind. Annual Review 
of Psychology, 50, 21-45.  

Flavell, J. H., Flavell, E. R., Green, F. L., & Moses, L. J.  
1990 Young children’s understanding of fact beliefs versus value beliefs. Child develop-
ment, 61, 915-928.  

Fodor, J.  

Haidt, J.  
2001 The emotional dog and its rational tail: A social intuitionist approach to 

Harris, P. L., & Nunez, M.  
1996 Understanding of permission rules by preschool children. Child Development, 
67, 1572-1591.  

Hauser, M. D.  

Hilton, D. J., & Slugoski, B. R.  
1986 Knowledge-based causal attribution: The abnormal conditions focus model. 
Psychological Review, 93, 75-88.  

Ivengar, S. S., & Lepper, M. R.  
1999 Rethinking the value of choice: A cultural perspective on intrinsic motivation. 

Jose, P. E.  
1990 Just-world reasoning in children’s immanent justice judgment. Child Develop-
ment, 61, 1024-1033.  

Kalish, C. W.  
1997 Preschoolers’ understanding of mental and bodily reactions to contamination: 
What you don’t know can hurt you, but cannot sadden you. Developmental 
psychology, 33, 79-91.  

1998 Reasons and causes: Children’s understanding of conformity to social rules 

2000 Children’s thinking about truth: A parallel to social domain judgments? In 
M. Laupa (Ed.), New directions for child and adolescent development: Rights 
and wrongs: How children and young adults evaluate the world, no. 89. 
2005 Becoming status conscious: Children's appreciation of social reality. Philosophical Explorations, 8, 243-263.
Kalish, C. W., & Shiverick, S. M.
2004 Children's reasoning about norms and traits as motives for behavior. Cognitive Development, 19, 401-416.
Kalish, C. W., Weissman, M., & Bernstein, D.
Knobe, J.
Kohlberg, L.
Margolis, E.
Millikan, R. G.
Nichols, S.
Raman, L., & Winer, G. A.
Ruble, D. N., & Dweck, C. S.
Ryle, G.
1949 The concept of mind. London: Hutchinson.
Searle, J. R.
Smetsa, J. G.
Turiel, E.
The development of morality. In W. Damon & N. Eisenberg (Eds.), Handbook of child psychology, 5th ed.: Vol. 3, social, emotional, and personality development (pp. 863-932). New York: Wiley.

Wellman, H. M.

Wellman, H., & Perner, J.