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BECOMING STATUS CONSCIOUS
Children's Appreciation of Social Reality

Charles Kalish

This paper explores the cognitive developments underlying conventionalized social phenomena such as language and ownership. What do children make of the claims that, 'This is mine' or 'That is called "water"?' Understanding these features of social reality involves appreciating status as a system of normative prescriptions. Research on children's theories of intentional agency suggests important constraints on the development of status systems. Key insights are that prescriptions affect behavior only via representations, and that the norms involved in prescriptions are distinct from statements of preferences. When do children appreciate the normative structure of social facts, and what kinds of experiences might advance their understanding?

Introduction

Human beings are born into a social world. This is obvious in the sense that a child's world contains other people. Only slightly less obvious is the fact that many of the physical objects a child interacts with are human-constructed artifacts. Obvious perhaps only upon reflection, is that most of the naturally occurring things in a child's environment have social significance, for example names and owners. What is not obvious at all is when and how children come to appreciate any of this. Do children inhabit a social *cognitive* world? Clearly there are many senses in which children may have social cognitions. A major focus of recent research in cognitive development has been when and how children come to see people as intentional agents (see Flavell 1999; Wellman 2002, for reviews). **Q1** In this paper I will focus on a different sense of social cognition. When and how do children come to understand what Searle (1995) characterizes as 'social reality?' One strand of social cognitive development can be said to focus on the child as a budding Psychologist, interested in mental states. In this paper I will consider what is involved in treating the child as a budding Sociologist, interested in status and norms. The general conclusion is that these two perspectives are inextricably linked. The body of the paper will involve considering what is involved in understanding social reality, how children might come to this understanding, and what significance social reality has for children. The answers to these questions turn on conceptions of normative prescriptions and deontic properties. Thus children's understanding of social reality is intimately related to the development of moral agency.

Traditional accounts of cognitive development have held that children move from concrete to more abstract thinking. Very young children cognize the world in terms of

readily apparent perceptual attributes. In the social realm this means that people are thought about in terms of behaviors and appearances (Livesly and Bromley 1973). More recent theories, however, suggest that young children, and even infants, appreciate abstract, invisible, theoretical properties (Keil et al. 1998; Spelke 1995). Young children are not behaviorists. From the child's perspective the world contains not just behaviors and appearances, but goals, beliefs, and emotions as well. The same findings hold in the non-social realm as well. Infants see the world as containing objects (Spelke 1995; Xu, Carey, and Welch 1999). By preschool-age, individuals are recognized as instances of general types characterized by properties such as underlying essences (Gelman 2003). Children have a richer ontology and much younger than we had previously thought (Mandler 2004). A very general characterization of preschool-aged children's thinking is that they appreciate the distinction between appearance and reality (Flavell, Flavell, and Green 1987). There is the phenomenal world of experience and then there is the conceptual world that organizes and explains that appearance.

Adults' commonsense ontology includes entities that are socially constructed, those Searle characterizes as 'institutional.' Institutional facts or entities are observer-relative. Something is money, or a marriage, or a mayor because of the way people treat it. Institutional facts contrast with brute facts. Brute facts are those features of reality that would exist even if we did not recognize them. The abstract entities described above are all brute facts; goals, objects, and essences are things we discover in the world. In contrast, money, marriages, and mayors are things we invent. Searle (1995) provides a detailed analysis of the basis of institutional facts. The central idea is the assignment of status. Status is the abstract property of 'counting as' something. Thus certain disks of metal may count as money; they have the status of being money. Adults have the ability to attend to institutional facts as well as to brute facts. When interacting with some metal disks it is not just their brute properties that affect behavior (e.g., weight, color) but their status as well. In addition to the examples given, other institutional facts include: linguistic meaning (e.g., that 'dog' means dog), social norms and laws (e.g., that the speed limit is 55), and ownership (e.g., that some object is mine). Each of these examples involves a status, that something counts as something.

Psychological states are to some degree constitutive of institutional facts. Exactly what kinds of beliefs people must hold in order to establish institutional facts is a complex question (see Searle 1995). In this paper I want to focus not on how institutional facts come to be, but rather on how people come to appreciate that status, and make a distinction between brute and institutional facts. It seems that most adults appreciate that the value of a coin is a different kind of fact than its weight or atomic structure. What does that understanding consist of and how is it acquired?

By the time they are toddlers, children think about money, meaning, norms, roles, and ownership. But how do they think about such things? What does 'mine' mean to a five-year-old (versus a 15-month-old, versus a 15-year-old)? There must be some developmental change in conceptions of institutional facts. It seems unlikely that very young children appreciate the socially constructed nature of institutions. Indeed, a considerable body of research in epistemological development suggest that not until late adolescence, if then, do people come to appreciate that truth may be subjective or conventional (Chandler and Lalonde 1996; Kuhn, Cheney, and Weinstock 2000). At the same time, it seems unlikely that infants are able to cognize or respond to status. Babies would seem to live in a world of brute facts, albeit potentially abstract ones.[1] One way to approach the developmental

question is to consider whether there are any intermediate states; what could come between a total insensitivity to institutional facts and a full awareness of the subjective, conventional nature of social reality?

To consider intermediate states it is useful to distinguish status from institutional fact. There may be different ways of achieving a status. In particular, things may have (or people believe them to have) natural status. Status may be conventional: assigned or stipulated as in Searle's discussion of institutional facts. In other cases, though, status seems to be non-arbitrary: something we discover (and could be wrong about) rather than invent. In the literature on moral development, for example, objective validity is just what distinguishes concepts of morals from social conventional rules (Turiel 1983). Some ways of assigning moral facts just seem incorrect. That stealing or murder count as morally wrong is not observer-dependent. Such acts would be wrong even if we did not recognize the fact.[2] Descriptively it may be appropriate to characterize morals as involving natural status.

Status may be understood as a discovery rather than an invention, but there is still a critical sense in which status is observer-dependent, unlike straightforward brute facts. The consequences of having a particular status are observer-relative. It is only because people recognize and respond to it that status can have any causal implications. Status is a kind of normative or deontic property. Some thing's status entails how it should be treated. To say 'X counts as Y' describes (and may stipulate) the proper attitude and behavior with respect to X. Searle (2001) argues that status assignments have normative force; indeed statuses and institutional facts have only normative force. There is nothing in the analysis of institutional facts, though, that suggest only institutional facts have normative properties.

The developmental question of social reality can now be broken into two parts; understanding of status and normative properties, and understanding of convention and institutional facts. A straightforward developmental hypothesis is that infants understand neither status nor convention, children first acquire the notion of status and then, somewhat later, appreciate that status may be conventional rather than always natural. I will discuss evidence suggesting this picture is roughly correct. A central question, then, is what is a concept of status that does not include a conventional basis? A major focus of this paper will be describing such a concept and distinguishing this notion of status from other related ideas. The development of concepts of convention is a complex question, the subject of considerable debate. In contrast, the development of status and normative concepts, independent of convention, has not received much attention. In the section that follows I will discuss these two issues and consider their relation. In a second section I will discuss several contexts or content areas in which children are encountering ideas of status and convention. Finally, I'll return to the question of how young children may come to understand social reality.

Status: Understanding Deontic Relations

The critical characteristic of status is that implications of status are prescriptive, and only prescriptive. There are no necessary physical or psychological properties of status, only deontic properties. Consider a prince and pauper switched at birth. The child growing up as a pauper has a status; he is really the prince (at least under some natural conception of the assignment of royal status). Yet because neither he nor anyone else knows that fact, his status can have no physical or causal effects. Other features associated with prince-hood (e.g., hemophilia) may have observer-independent consequences, but those are not part

of status. Of course the recognition of status may lead to objective outcomes; when the prince's status is revealed things will change. Status has consequences only as a reason for action or judgment, its effects are in our minds. The limitation to observer-dependent consequences may or may not be true of all normative and deontic properties (see below). I want to characterize status, though, just as a fact whose consequences depend solely on prescriptive force rather than on brute facts. To accord the prince his status is to obey because he is the prince, not to because one is physically compelled to conform, or even because one fears the physical consequences of doing otherwise. Status implications are distinct from physically-causal properties and from preference/utitlity-based decisions.

If the significance of status is prescriptive, then only individuals who can respond to and understand prescriptions can be said to understand status. Some appreciation of intentional agency is required. Objects can have status, but only intentional agents can realize that. More specifically, an understanding that intentional action depends on representation rather than objective reality is also critical. It is beliefs or representations of status that affect behavior, not the objective fact of having it. The effects of having status are observer-dependent. Understanding intentional agency and observer-dependent properties is a complex cognitive achievement. What do we know about the development of these abilities?

Developing Understanding of Representation and Mind-dependent Properties

A very active research program in cognitive development explores just how children come to understand intentional agency. The basic finding is that infants seem to interpret people as goal-directed, as acting to achieve certain states of the world (Woodward, Sommerville, and Guajardo 2001). At least by 18 months, children also appreciate that **Q3** there may be individual differences in goals: I might like broccoli better than crackers, you might have the reverse preference (Repacholi and Gopnik 1997). At the same time these infants distinguish a person's goal from their actual (e.g., unsuccessful) behavior (Meltzoff 1995). A somewhat later achievement, typically located around four years of age (Wellman, Cross, and Watson 2001), is the appreciation of subjectivity in beliefs. Before this age, children expect that a person will act based on the way the world really is, rather than on the way he or she believes it to be. Put another way, they expect a person's beliefs to be true. The general consensus is that young preschool-aged children tend to see facts as having more direct consequences than do older children. Adults and older children appreciate that the truth of a proposition is a kind of status and can only affect someone who recognizes it. For younger children, truth is an objective quality rather than a status applied to representations of the world.

It is too strong to conclude that children younger than four or five do not understand subjective bases for action. They appreciate subjective desires, often appreciate the consequences of ignorance (lack of belief as opposed to mistaken belief, see Wellman 1992), and recognize that pretense involves subjective representations (though see Lillard 1996). A more apt characterization might be that young children do not consistently distinguish between subjective and objective influences on thought and behavior (Kuhn 2000; Kalish and Pritchard forthcoming). In the theory of mind literature this distinction is often described in terms of a representational understanding. Young children know

there are conditions of the world that can affect people, and affect different people differently. They also know that people have psychological states that can affect their behavior (e.g., dreams, desires). In representational mental states (e.g., belief) those two sources of influence come together. Beliefs are mental states that represent the world as being in a certain factual state. Objective reality can influence people two ways, directly and via representations. When faced with this conjunction, young children seem to ignore the subjective, representational route. It is interesting that they are able to appreciate subjective influences in the absence of competing objective influences (see Gopnik 1993).   **Q4**

Children's difficulty understanding observer-dependent effects also appears in their reasoning about prescriptions. Three-year-olds do not appreciate that people may have erroneous beliefs about morals and values (Flavell et al. 1990). Kalish (1998a) found that five-year-old children, but not younger, reliably distinguished between prescriptive and descriptive 'laws' (e.g., 'Kids can't wear shoes in the bathtub' and 'Kids can't jump up and fly', respectively). The older children appreciated that conformity to prescriptions was mediated by intentional processes: An ignorant motivated actor might violate a prescriptive rule, but knowledge and intentions have no effect on conformity to descriptive laws. Younger children saw intentions as inconsequential for conformity in both cases. Other research confirms that young children have difficulty appreciating the consequences of a change in rules. Three-year-olds frequently assert that an authorized change in a rule (e.g., about rules of a game) will affect behavior even in the absence of communication (Kalish, Weissman, and Bernstein 2000). The expectation is that people conform to rules they do not know about.   **Q5**

The implications of status are even more limited than discussed above. Both causes and consequences are observer-relative. In this way status prescriptions are different from warnings or precautions. Unless someone is aware of a warning it can have no effect on their behavior. The same is true of status. However, a warning may involve a natural consequence: Ignoring the warning not to touch a hot stove results in a burned hand whether or not anyone recognizes the violation. The effects are independent of the actor's or anyone else's construal of the situation. This is not true of status. Failing to act according to some status does not have natural consequences.[3] Taking an object that is not yours, for example, has no direct consequences, only observer-relative ones. It is only because an observer responds to the status involved that the lack of ownership can have effects (e.g., conviction for theft). When do children appreciate this feature of status: observer-dependent consequence?

The traditional view is that young children believe in a just world. The consequences of rule or status violations are seen as natural occurrences. One classic example is the belief in immanent justice causes of illness (Jose 1990). Preschool-aged children are said to believe that illness is a natural consequence of misbehavior, of violation of social rules. You get sick if you don't follow the rule about washing your hands before eating, and you get sick if you don't follow the rule about not stealing. The implication is that young children view statements about stealing as precautions, with no appreciation of the observer-relative nature of the consequences (as would be necessary for interpreting statements as prescriptive). Someone who knows the rule will avoid the behavior because the outcomes are bad (see Kohlberg 1981). Recent research has tended to discount claims of immanent justice reasoning in children (Springer and Belk 1994) and suggests that children can distinguish psychological and biological reactions to transgressions and danger (Kalish 1997). At the same time, many adults believe in a just world, that people get what they

deserve (Furnham 2003). It would be inappropriate to suggest that belief in natural consequences of moral transgressions is somehow childish or immature, such beliefs are a feature of many religious traditions (e.g., karma). What remains an open developmental question is when children come to appreciate that at least some status consequences are non-natural, observer-dependent. The sources of such insight are unclear. Parents, for example, may not be eager to teach their children that good and bad deeds are only contingently rewarded.

The suggestion is that many things adults treat as statuses are not recognized as such by children. For young children, facts such as the permissibility of an action, or the truth of a proposition, may have direct consequences not limited by mental processes. The fact that something is forbidden can affect your behavior in the same way as the fact that something is heavy; you may be ignorant of the fact, but you can learn and respond to it through direct interaction without someone having to tell you. The exact characterization of children's difficulties remains a matter of debate (see Wellman, Cross, and Watson 2001, and replies).   **Q6** There is a general consensus, though, that young children have difficulty separating objective and subjective influences on behavior (Kuhn 2000). Appreciation of status requires just this separation. For the young preschooler, status is a kind of abstract brute property of the world. These children cannot appreciate the observer-relative character of status.

Preference-based versus Normative Reasons

The strategy has been to try to characterize status by saying what it is not; it does not have consequences beyond prescriptions, and the prescriptions are not warnings about natural consequences. A further negative constraint is that status consequences are not desire-dependent (Searle 2001). So far my characterization of status does not distinguish between 'it's mine' meaning (a) 'you should not take it' and (b) 'I don't want you to take it.'[4] The former is truly prescriptive, while the latter merely describes an observer-relative fact. 'I don't want you to take it' could be seen as a warning about an observer-dependent consequence. The reason to heed the warning is that one prefers the outcome. As Searle notes, prescriptions have force independently of preferences about the outcomes, they have normative, not desire-dependent force. How does this distinction come to be made? Searle develops an account of collective intentions and imposition of conditions of satisfaction to distinguish (a) from the description of preference or utility in (b). However, that account only works if status is understood as an institutional fact, constructed by collective intentions. The collective intention sense of desire-independent reasons does not apply to morals or natural status. Still, Searle's emphasis on the distinction between desires and status is suggestive about how children come to view status as a particular kind of natural property.

One way of posing the problem is to ask when children distinguish subjective desires from objective norms—what one wants to do from what one should do, what one prefers from what is right. It seems plausible that the child's earliest conceptions might not distinguish these different 'pro-attitudes'. This is not just a claim that the child does not distinguish what he or she wants from what is right, fair, or deserved. Other people's desires are similarly conflated. Thus if someone wants something it should happen. If something should be the case, people desire it. This kind of moral innocence can accommodate disappointment; the world is not always fair, people do not always get what they want. Diversity in desire of the 'I like crackers, you like broccoli' sort described above (Repacholi and Gopnik 1997) is also comprehensible. It might be right and fair that you get one thing

and I get another. Where such a conflated concept founders is on conflicting desires. Some evidence for this hypothesis comes from findings that young preschool-aged children have difficulty understanding that another may have desires that actually conflict with their own (Moore et al. 1995). These children often predict that characters with non-normative desires will be sad when they achieve their aims (Rieffe et al. 2001; Yuill et al. 1996). The idea is that an actor could not really want to be naughty. Similarly, young children tend to assume norms and desires will be consistent. They reinterpret stories involving conflict (a person wants X, but the rule is not-X) to make what someone wants and what they should do the same (Kalish and Shiverick 2004).

Gopnik and Meltzoff (1997) point out that around 18 months children become very interested in conflicts of perspective. What we often describe as 'the terrible twos' involves exploring, and provoking, clashes of preferences. What could a very young child make of a situation in which two people want different, mutually incompatible outcomes? It would seem that one of the disputants must not be serious, they are only pretending to want different things. This would account for the gleeful manner in which toddlers push their parents' limits. In much the same way, a child who lacks an understanding of false belief must interpret a person's obvious instance on a contrary-to-fact proposition as pretense or silliness (Schult and Wellman 1997). Indeed at about the same age as the onset of the **Q7** terrible twos, children engage in joint pretense around counter-to-fact propositions. It is highly amusing for a two-year-old to watch her father pretend to use a shoe as a telephone (see Tomasello and Rachovinc 2004) and likely just as amusing if he genuinely makes the **Q8** mistake. The less charitable interpretation of conflicts is that one of the parties is being unfair or, which is the same thing on this view, irrational. The experience of unfairness may be especially galling if one cannot fathom the motive for the violation.

The result of learning about conflicts of valuation may be characterized as acquiring a representational understanding of desire. The achievement lies not in understanding that people may 'aim' for different effects in the world, but that people can be motivated by different conceptions of what is good or right. Similarly with belief, it is one thing to understand that people may have different epistemic relations to things in the world, and another to understand that they may act on different conceptions of what is true. Before they understand false belief, children realize that people may pretend and may lack beliefs about facts (be ignorant or neutral). People may have different motives and thoughts because they experience different external conditions, but anyone in the same conditions would have the same experiences (see Chandler and Lalonde 1996; Kalish 2000 for discussion). **Q9**

A traditional claim in the literature on moral development is that young children think that something is right or good because it leads to good outcomes (Kohlberg 1981). The hypothesis developed above, that initially children do not distinguish what people want from what is right, is not exactly the same claim. The first view is that children distinguish what they prefer from what they should do, but use the former to decide the latter: implying the two judgments are distinct. It is recognizing the subjectivity of desires that raises the question of how to judge which motives are the right ones. Kohlberg's theory of moral development has received major empirical challenges (see below). The general sentiment is that children's reasoning is more sophisticated than he described. In another sense, however, Kohlberg, and others working in moral development, may over-estimate children's conceptual understanding. It remains an open empirical question just when children appreciate what moral/normative evaluations are, that is, distinct from judgments of preference or physical consequence.

Research by Turiel and colleagues (Turiel 1983) suggests that from a very early age   **Q10**
children recognize different standards for evaluation, for judgments of rightness. In some
cases evaluation is seen to be objective; stealing is wrong whether we recognize it or
not. In other cases what makes something right is a matter of social convention; eating
with your fingers is only wrong because we've agreed it is. In still other cases, what is
right is seen as a matter of personal preference; what color I 'should' like best is my own
decision (Nucci and Weber 1995). At least the basic differentiations between these   **Q11**
domains of social judgment seem evident by three or four years of age. Interestingly,
there seems to be a lag in children's appreciation of the subjectivity of truth. Not until
around age seven do children unambiguously show an appreciation of conventional
truth. These children realize that an authorized decision can establish a genuine fact
such as the name of a doll or its ownership (Kalish, Weissman, and Bernstein 2000).
Before this age, children have not clearly distinguished such decisions from pretending.

Searle's point is that social reality has a normative basis. Understanding features of
social reality such as ownership and language is much like understanding morals and
social rules. I have tried to characterize the emergence of such understanding. I suggest
three conceptual distinctions. The first is Searle's notion of institutional fact which involves
assignment of status via some process of collective intentionality. We decide that 'X counts
as Y.' However, not all status is assigned this way. People also recognize natural status. This
suggests people conceive of status beyond institutional facts (e.g., recognize ownership as
a status without seeing it as a product of collective intentionality). I characterized status as
implying normative prescriptions; when I recognize some thing's status I recognize how
I am supposed to treat it. Thus concepts of status involve concepts of prescription,
action, and reasons. Beyond the level of understanding of intentional action involved in
prescriptions and reasons, status also involves concepts of normativity. Status is a special
kind of reason. The prescriptions involved in status are not warnings or suggestions
about effective action, they are desire-independent (Searle 2001). Status specifies what is
right and wrong, not what is good and bad. The ontogenetic origins of normativity are
complex and poorly understood. I suggest there is at least as much reason to believe
that normative concepts are primitive as there is to take any other pro-attitude (e.g.,
desire) as the basic element of children's understanding. One hypothesis is that young chil-
dren do not distinguish subjective desires from objective judgments of rightness, in much
the same way as they have difficulty distinguishing subjective beliefs from objective judg-
ments of truth. In the following sections I discuss the kinds of evidence that might bear on
this hypothesis. The next section discussed several research literatures exploring children's
acquisition of status-based concepts (e.g., language, ownership). The final section proposes
some additional sources of data: As discussed above, children's experiences and under-
standing of conflict may be particularly critical in developing appreciations of status.

Content

In this section I briefly review the literature on children's developing competence
with some important elements of institutional social reality. Among the status systems
that children interact with from a very early age are language, function, ownership, and
social roles. This is not a set of phenomena that is usually thought of as involving
common developmental or cognitive processes. However, all are systems of normative pre-
scriptions. From an adult perspective, each involves assignment of status. Thus the same

conceptual distinctions are relevant to each area. In particular, we can ask when children come to recognize that language, function, ownership, and social roles all involve prescriptions rather than, or in addition to, descriptive and instrumental knowledge. A second set of questions concern the assignment of status; are these features of social reality seen as natural discoveries or as invented convention? Although there are a common set of issues, it is an open question whether children's participation in, and understanding of, these social institutions develops in synchrony. The purpose of reviewing the empirical work below is to illustrate the common themes across the different social institutions, and to indicate where additional research is needed to address questions about common developmental processes.

Language: Meaning and Validity

At least some appreciation of status seems necessary for the acquisition of language. Language is a status-based system (Searle 1969). One perennial question in language acquisition is when children understand words as having meanings, as referring. As discussed above, there are two aspects to understanding language as status: normativity and observer-dependence. Taking the latter first, when do children realize that words have effects via intentional causal chains? Recent research suggests that infants understand labeling as an intentional act. Words are not just sounds associated with objects, but are demonstrations of intentions toward objects (Baldwin 1993). Tomasello (1999) locates the emergence of 'true' language around 12 months when children engage in triadic interactions. At this age infants recognize that one person may direct another's attention to an object. Infants realize that words can function as tools to direct and convey intentions. A further feature of language is that it is a normative system; a word is not just a means for directing attention, there is also a correct or incorrect way of using a word. Brandom (2000) argues that linguistic meaning involves specific inferential commitments and entitlements. For children to use and appreciate language they must appreciate this normative structure (Bransen 2002). At least by 18 months of age children will correct a speaker who mislabels an object (Pea 1982). By age three children appreciate that there is some standard or correct label for an object (or referent for a word). Thus, children will disregard information about usage from an ignorant speaker (Sabbagh, Wdowiak, and Ottaway 2003). While words have standard meanings, there is considerable leeway in usage (e.g., metaphor, see Barsalou 1993). Other aspects of language, especially syntax, involve stronger **Q12** normative constraints. By the early school years, children are beginning to make grammaticality judgments distinct from judgments of truth (e.g., 'Tommy is more old than Sarah' may be correct but 'said wrong'). Interestingly, bilingual children seem more explicitly aware of syntactic rules than their monolingual peers (Bialystock 1986). Related to cross-language differences, a third feature of language as an institutional system is that it is conventional. Piaget argued that before age seven, young children were 'nominal realists,' believing that labels were objective features of objects akin to size or color. Before age seven, children do deny that words can change meanings or that different words could be used to refer to already named objects (Homer et al. 2001). However, when engaged in a task even preschoolers can follow and apply non-standard names (e.g., call a horse a 'giraffe' when prompted; Rosenblum and Pinker 1983). It is not clear from such demonstrations, though whether children think the word comes to change meaning in such tasks (see Kalish, Weissman, and Bernstein 2000).

Categorization: Sameness as Status

Related to language and word meanings, categorization can also be understood as status-based. Young children understand many categories as natural kinds (Gelman 2003; Kalish 2002; Keil 1989); category identity is understood as a brute fact about the dis- **Q13**, **Q14** tribution of properties, both apparent and abstract. At the same time, there is evidence that young children appreciate a more relativistic sense of categorization. Category identity may be an assigned status; a stipulation of how an object should be treated or considered. Preschool-aged children accept that the ways people categorize may be goal-specific; someone interested in color will construct different categories than someone interested in texture (Viola and Kalish 2003). Categorization is not just observer-dependent, but is **Q15** also conventionalized. Some categories are culturally specific and could be legitimately altered (Kalish 1998b). By four years of age, children accept that while it is correct for us to categorize cereal with eggs and toast (as breakfast foods), in other places it may be correct to categorize cereal with dinner foods. Critically, children acknowledge that there are ways things should be grouped and ways they should not be. Most categorization tasks depend on participants believing there are right and wrong answers (see Kalish 2002 for discussion). To categorize is not just to make a judgment about likely properties, but to make a judgment about how something should be treated.

Artifact: Proper Functions and Status

The role of status has been particularly central to discussion of children's conceptions of artifact categories. The basic finding is that young children categorize human-made objects (e.g., tools) based on function (rather than on direct perceptual grounds such as shape; Kemler Nelson et al. 2000). For Searle (1995), functions are observer-relative ascriptions. One question is whether children's concepts of artifacts are based on functional ascriptions or on functional affordances. A functional affordance is an observer-independent disposition to support a function. Because chairs afford sitting we can successfully use them for that function. Are the functional properties central to children's artifact categories ascriptions or affordances? For preschool-aged children, an object may lose its physical affordances but still retain its function: A broken chair is still 'for sitting on' (and still a chair; see Kemler Nelson, Holt, and Egan 2004). Adult intuitions are that the creators' intentions determine function. Thus the true or proper function of something is observer-relative. If I make something intending it to be sat on, that is its proper function and that makes it a chair. Someone may use the object to hold books, but that is not what it is for; it does not become a bookshelf. Proper function is a kind of status. Some research suggests that young children do not distinguish proper function from other uses of an object (German and Johnson 2002). If I use a chair to hold books, the object is for holding books, not sitting on. An alternative interpretation is that children have different intuitions about the assignment of proper function. They may not privilege creator's intent over user's intent, for example. Consistent with this interpretation is the finding that young children are promiscuous in assigning proper functions (Kelemen 1999). They judge that naturally occurring objects, trees and animals, are 'for' certain things: not just that they can be used for things, but they have proper functions. To my knowledge research has not asked the critical question of whether it is wrong or mistaken to use things for other purposes. Is there a normative element to children's function judgments?

Social Status: Roles and Identity

If status is central to artifact identity, it is only slightly less central to human identity. Many social categories are status-based. Such categories are typically characterized as roles. To have a role just is to have particular rights and responsibilities. Of course, people have lots of interesting and salient properties, only some of which involve status. A mother is a female parent, someone who loves and nurtures, as well as someone who has the legal status of guardian (see Lakoff 1987). Which, if any, of those characterizations are most significant for young children? The traditional view is that physical and behavioral attributes constitute identity initially; mothers are people who look and act certain ways. One consequence of this view is that identity is fluid. For preschoolers a boy who wears a dress becomes a girl (Bem 1989). More recent research suggests that even preschool-aged children appreciate that surface appearances and identity may both depend on underlying (quasi-biological) essences (Hirschfeld 1996). Beginning around age seven, children start to describe and think of others in terms of stable personality characteristics, traits, such as shyness or generosity (Ruble and Dweck 1995), though they may understand psychological attributes somewhat earlier (Heyman and Gelman 1999). Traits and essences, along with appearances and behaviors are brute facts about a person. Brute facts do not constitute all social identities. One becomes a doctor or a citizen by being treated as such, in these cases under formal conditions. The status entails rights and obligations. From a very young age, children organize their social knowledge in scripts: expectations about normative patterns of interactions in different settings (e.g., restaurants, doctors' offices; Nelson 1978). When categorizing individuals into known or novel social kinds, children preferentially attend to normative features, what a person is allowed or obligated to do (C. Kalish et al., in preparation). Similarly, when predicting an individual's behavior preschoolers focus on norms, what a person should do, while older children often focus on psychological motives, what a person wants (Kalish and Shiverick 2004).

Social identity as a status distinct from actual behaviors is evident in children's stereotypes. Children's gender concepts involve not just what boys and girls typically do, but what they should do (Blakemore 2003). One reason it is so difficult to change gender stereotypes is that presenting children with examples of counter-stereotypic behavior may leave normative judgments unchanged (see Bigler 1999). Some boys may play with dolls, and some girls play football, but that does not mean such behaviors are appropriate. In the case of social categories, the normative implications of status seem primary. It is less clear whether or when children see social status as observer-relative (e.g., would someone ignorant of status obey a police officer?) and conventional (e.g., the content and assignment of gender roles).

Ownership as Status: Property Rights

Finally, one of the most salient status features of young children's experience is ownership. Children very early on develop personal attachments to specific objects. Psychoanalysts have emphasized the role of 'transitional objects' in developing a sense of self distinct from others in infancy (Rodman 2003). Researchers also characterize infants as becoming attached to objects in ways akin to their dependence on caregivers for support and comfort (Gulerce 1991). In addition to a brute fact sense of liking or emotional attachment **Q16** to objects, children also express entitlement; not just that something is part of or related to

me, but that something is 'mine' (and critically, 'not yours'). Property disputes are among the earliest, most frequent, and most intense conflicts among children (Vandell and Bailey 1992). These conflicts go beyond battles over physical control. At least by age two, children recognize ownership as something beyond immediate physical possession. Ownership is an abstract status of entitlement, not a quality of physical control. Thus a toddler will argue that some object is rightfully his because, 'I had it first' or 'Mom gave it to me.' These arguments are not just made, but are typically successful, trumping mere possession (Ross 1996). The issue is complicated in that entitlement to use an object is distinct from ownership. Parents often intervene to make their children share; teaching that you are not always entitled to use your own toys (Ross et al. 1990). Such experiences would seem to convey that ownership is not a function of brute properties. However, research has not explored whether children realize that ownership cannot (always) be inferred from physical properties of an object and can only have consequences as a reason.

Property rights seem to be among the earliest emerging norms. Toddlers expect and respond to reciprocity in sharing (Levitt et al. 1985). Preschoolers understand the conditional structure of trades, and can readily recognize violations (Harris, Nuñez, and Brett 2001). Stealing is one of the transgressions that young children treat as universal and un-alterable, as opposed to conventional and contingent (Tisak and Turiel 1984). At the same time, unlike other status assignments, children have direct experience with changes and ambiguity in ownership status. It may be wrong to steal, but it is not always clear who owns what. Ownership can change and be contested, in ways other forms of status such as word meanings are typically not. For these reasons, ownership may be one of the first status functions recognized as such by young children (see below).

This brief review illustrates that questions of observer-relativity, normativity, and conventionality are common to children's developing understanding of social institutions such as language, ownership and roles. At least in the case of language there is some evidence for a developmental ordering: from understanding words as affecting and conveying intentions, to understanding normative constraints on usage, to understanding the conventional basis of language. In other areas the research literature is less complete. Conceptually the different areas are linked, though it is not clear that changes in children's conceptions appear in synchrony. Comparing children's thinking across these different areas is an important research focus. Similarities and differences in rate or order of acquisition will be informative about the sources of change in children's thinking about status and institutional reality.

Achieving Status

One of the characteristic features of human life is that we live in a socially constructed world. A primary question for psychological research concerns the cognitive underpinnings of this feature of human experience. A developmental perspective is especially fruitful because it seems that humans begin life largely insensitive to social reality. In cognitive development we can see the emergence of social understanding. Two lines of research address the emergence of social cognition. One line of work explores children's predictions and explanations of behavior. Research focuses on children's developing understanding of mental states and psychological causation

(Wellman 1992). Michael Tomasello (1999) has argued persuasively that such an under-   **Q17**
standing lies at the core of our abilities to participate in and create culture. At the same
time, research in the field of moral development explores how children come to under-
stand the bases for the rules that govern human interaction. Here the question is how
children come to justify and understand distinctions between right and wrong (Turiel
1983). Appreciation of moral and conventional motives for behavior is both uniquely
human and foundational for social life.

Children's understanding of social institutions falls exactly at the intersection of the
two fields of Theory of Minds and Moral Development. The argument in this paper is
that understanding of social institutions and status depends on the concept of normative
prescription. Social institutions are status systems based on normative prescriptions.
Children's understanding of normativity is a basic question for moral development.
Prescriptions are the way normative considerations actually come to influence behavior.
Prescriptions are a kind of reason, and an element of psychological explanation. Many
reasons are individually based, such as beliefs based on perception or desires based on
internal states. But even, and perhaps especially, for young children norms are major influ-
ences on behavior. Despite the significance for work on Theory of Mind and Moral Devel-
opment, there has been little direct discussion of developing understanding of the ways
norms function as motives for behavior.

In this paper I suggested some stages in the emergence of an understanding of status
and institutional reality. The suggestion is that normative representations are present early
in children's lives. They see the world in terms of right and wrong, or should and should not.
One critical development is the concept of observer dependence; children come to realize
that some features of the world have causal powers only via psychological processes.
Another central concept is the idea of subjectivity of desire. The key insight is that what
people want, and what is right may diverge. In the second section of this paper I described
some of the ways in which these concepts figure in children's developing appreciation of
language, artifacts, social roles, etc. Missing from this account has been a discussion of
mechanism. What is it that leads children to develop a subjective view of social reality?
In closing I would like to offer a few speculations about the sources of development in
this area. The general hypothesis is that interaction with social reality is responsible. The
more specific hypothesis is that developing an appreciation of social reality may depend
on experiences of conflict and control.

One suggestion is that conflict gives rise to appreciations that valuations may be sub-
jective: What someone wants and what is right may diverge. Thus ownership disputes may
be important experiences not just because they convey the content of moral principles
(sharing is good, stealing is bad) but because they illustrate that two people may genuinely
have conflicting judgments of entitlement and fairness. It is significant that ownership dis-
putes typically happen among peers. Adult judgments have a way of cutting off debate.
That a peer is just expressing an opinion is clear, and the conflict is something that has
to be worked out. Adult authority likely confuses the subjective and objective components
of disputes. For example, young children may base their preferences, their liking of some-
thing, on a parent's judgment of appropriateness (Costanzo, Grumet, and Brehm 1974). In
conflicts, adults may not just assert their authority, but also explicitly manipulate a child's
preferences (e.g., convince the child they do not 'really' want something). Peers may be
more direct in pointing out the essential conflict. Finally, a common response to conflict,
the discipline technique of induction, involves directly socializing a child to consider the

other's feelings and desires. Thus conflict provides an occasion for explicit teaching about alternative construals of what is right and fair.

A second possible influence on developing appreciation of social reality is the experience of control. Children are not fully fledged members of their society. In most cases they are in the position of having to take conventional structures as given, as effectively natural (see Gelman and Kalish 1993). Ownership again provides some unique experience. At least to some limited degree young children can change and establish ownership status: They can give things to people. Giving and receiving may provide clear examples of the observer-relative nature of ownership and give children a sense of participation in the establishment of status. Although young children experience some control over ownership, their autonomy is limited. Hook (1992) notes that young children treat ownership transfers as like borrowing/lending. This may be because parents retain ultimate control over most of a child's possessions, in the same way as workers do not really own the desk or computer they use on their job.

Besides ownership, a second context in which children may experience great autonomy is in the institution of game playing. Piaget noted the deep connections between children's games and their moral development. His classic conclusion was that children viewed the rules of games as objectively determined and immutable (though see Turiel 1983). Regardless of views of their origins, participation in games is manifestly voluntary. Players must agree to participate, and may choose to quit. Games may provide a clear experience of what Searle characterizes as collective intentionality: a goal or attitude that exists only when shared (e.g., 'we are playing tag'). Because there is such a variety of games, rules are often discussed and explicitly taught in a way that other social institutions are not. Compare learning the rules for playing baseball with learning the rules for making a promise. In teaching and playing games children experience participating in an activity constituted by their own and others' intentions. In this regard, Lillard's (1996) work on children's conceptions of pretense is particularly provocative. Lillard argues that preschool-aged children see behaviors rather than intentions as critical for pretense. One may pretend to be a frog by performing the characteristic movements without intending to, and indeed, without knowing anything about frogs. Thus it remains something of an open question when children come to appreciate the observer-dependent, status-based, structure even of play and games.

Most children participate so successfully in the social world that it is easy to overlook the complexity of the cognitive problems they face. Certainly some levels of social engagement are possible with less than complete understanding. However, research consistently shows that characteristics of children's thinking place surprising and significant limitations on their social abilities. This would seem to be especially true with respect to engagement in social institutions. For example, if children are to participate in owning, trading, and using possessions they have to deal with problems such as unauthorized transfer, or mistaken/unclear attributions of ownership. Yet a fairly robust finding is that young children often expect people to abide by social rules, to respond to status properties, they do not know about (Kalish 1998b). More generally **Q18** is the question of whether children know what they are doing when they ascribe ownership, use language, categorize objects, and identify people with social roles. It is the actor's intentions, and their representations of others' intentions, that constitute participation in a social institution. Searle (2001) gives the example that users of money need not understand the institutional status of contract money. Yet some representations of

exchange and value, along with recognition of others' appreciation of these attributes, seems critical to really using money. Is an infant pushing coins around on a table using money? The focus of this paper has been to try to develop a principled way to answer such a question. A critical distinction is whether actors are recognizing and responding to status: Are normative prescriptions guiding their actions?

To return to the original observation that started this essay, children are born into a social world. It is also true that puppies and kittens are born into the same world. What separates human babies is that they become special kinds of agents capable of responding to and representing features of the environment, presumably, unavailable to other animals. In part this involves the distinction, central to moral development, between right and wrong. In part the development of human agency involves appreciation of mental states and intentional action. Together, these conceptual developments underlie the ability of children to act as, and view others as, agents guided by normative prescriptions. It is these kinds of agents that can truly participate in institutions and appreciate those features of the world that are irreducibly social.

NOTES

1. By this I do not mean that infants must have a self-conscious appreciation of objective truth. They may lack any conceptions of bases or origins of facts. To the extent babies, and non-human animals, fail to recognize the role of intentions in the establishment of conventions and status, I will say they live in a world of brute facts. We might alternatively state that such creatures appreciate neither brute nor institutional facts. It seems plausible that the appreciation of one depends, to some degree, on contrast with the other. Rather than characterizing development as the emergence of institutional understanding from brute, the process could be characterized as a differentiation. Both the idea of subjectivity and of objectivity are developmental achievements. I thank Jan Bransen for posing this formulation. The specific point about infants is that they cannot interact with institutional facts as well as not understand the basis. A preschooler can respond to the value of a coin, a baby cannot.

2. Smith (2001) points out a potential problem for this account. What counts as murder or theft may be observer-relative. In this case would a brute fact depend on an institutional one? Shweder (1990) also discusses the question of universal evaluations applied to variable distinctions.

3. Beyond changes in status. One does not need to be caught in order to be a rule violator, to change in status from rule-follower to rule-breaker. The further consequences of rule-violation do, though, require an observer.

4. As opposed to 'I'll keep you from taking it' or 'you will get sick if you take it.' The former is not observer-dependent, and the latter is observer-dependent only in the heeding of the warning, not its consequences.

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Charles Kalish, Department of Educational Psychology, University of Wisconsin-Madison, 1025 West Johnson St., Madison, WI 53706, USA. E-mail:cwkalish@wise.edu

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Q18   Kalish 1998 changed to Kalish 1998b – OK?

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Q20   Kuhn 2000 and Kuhn et al. 2000: same information given for both references – please check

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