Developing conceptions of authority and contract across the lifespan:
Two perspectives*

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Abstract

Kohlberg's moral stage scale is but one of a number of "Piagetian" developmental scales proposed during the latter part of this century. Kohlberg claimed that his moral stages fulfilled the criteria for "hard" Piagetian stages—invariant sequence, qualitative change, and structured wholeness. He also argued that his scoring system measures a dimension of thought with a unique structure. To explore these contentions, we compare the concepts that define Kohlbergian stages with those associated with orders of hierarchical complexity as determined with the Hierarchical Complexity Scoring System, a generalized content-independent stage-scoring system. We conclude that the sequence of conceptual development specified by Kohlberg generally matches the sequence identified with the Hierarchical Complexity Scoring System, and that contract and authority concepts identified with a methodology that employs the Hierarchical Complexity Scoring System match the concepts that define theoretically analogous Kohlbergian stages above Kohlberg's stage 2. However, we argue that Kohlberg's stages 1 and 2 do not accurately describe the development of moral concepts in young children.

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This paper has three aims: (1) to explore the relationship between the conceptual content of moral judgment performances and their order of hierarchical complexity (complexity order) along two thematic strands—authority and contract (promise); (2) to compare the conceptions of authority and contract associated with each complexity order with the moral concepts that define theoretically and empirically analogous Kohlbergian moral stages; and (3) to discuss the implications of the findings for developmental theory and research.

Developmental stages, also referred to here as orders of hierarchical complexity, are conceived of as a series of hierarchical integrations of knowledge structures. Most developmental stage theories employ the notion of hierarchical complexity. In the Piagetian model, for example, each successive hierarchical integration produces novel understandings by employing the operations of the previous order as conceptual elements in its new constructions. This notion is central to several other developmental theories as well, including those of Werner (1948), Case (1985), and Fischer (1980), and underlies a number of developmental scales, such as the levels and tiers of Fischer's (1980) skill theory and the complexity orders of Commons' Model of Hierarchical Complexity (Commons, Trudeau, Stein, Richards, & Krause, 1998).

The notion of developmental stages leads to certain empirical expectations. First of all, developmental stages are built one upon the other in the sense that the construction of a subsequent stage requires the elements and operations of the previous stage. Consequently, each is logically more difficult than its predecessor. This means that development should proceed from one stage to the next in an invariant sequence with no skipping. There is a large body of longitudinal evidence supporting sequentiality in the acquisition of stages of development (Armon & Dawson, 1997; Case, Okamoto, Henderson, & McKeough, 1993; Colby, Kohlberg, Gibbs, & Lieberman, 1983; Dawson, Commons, & Wilson, in review; Fischer & Bullough, 1981; Müller, Sokol, & Overton, 1999; Snarey, Reimer, & Kohlberg, 1985; Walker, 1982).

However, evidence of sequentiality does not provide adequate support for the existence of developmental stages. Each stage in a hierarchical complexity sequence is generally defined by a set of internally consistent formal properties. In Piaget's model, these are said to constitute a *structure d'ensemble*, or structure of the whole. In more recent formulations of developmental stages, the processes and elements of a given stage are more often spoken of as the processes and elements of a dynamic, complex system, and stage
change is thought of as the transformation of a system of this kind into another that is more hierarchically complex (Fischer & Bidell, 1998; Stevens, 2000; van Geert, 2000). Both Piaget's and dynamic systems theories of stage lead to the notion that, at least under some conditions, development from one stage to another should appear discontinuous, with plateaus during periods of consolidation, and spurts during periods of reorganization. Fischer and Rose (1999), based on a number of developmental studies, propose one model of development as a sequence of overlapping waves, with relatively long periods of consolidation (plateaus) during which performance within a domain tends to be largely homogeneous (is predominantly at a single complexity order), and shorter transitional periods (spurts) characterized by vacillation between the modal complexity order and its successor. If stages are manifest in performance, valid developmental measurement should make it possible to observe spurts and plateaus in development. Several researchers have provided evidence of spurts, drops, or shifts during developmental transitions in childhood and adolescence (Andrich & Styles, 1994; Case, 1992; Fischer & Rose, 1994; Fischer & Silvern, 1985; Thomas, 1993; van der Maas & Molenaar, 1992; van Geert, 1998; Walker, Gustafson, & Hennig, 2001). New evidence for these developmental patterns in adulthood is discussed further below.

The notion of cognitive development as a series of hierarchical integrations is useful in psychological assessment and research only insofar as instruments can be designed that measure stages with reasonable consistency, reliability, and freedom from bias. This has proven to be a difficult task, especially outside the logico-mathematical domain. Most of the stage-scoring systems developed to assess social, personal, or moral reasoning (Armon, 1984; Colby & Kohlberg, 1987a; Fowler, 1991) are vulnerable to accusations of cultural bias, because scoring with them involves matching arguments with exemplars selected from the performances of small samples of predominantly white, middle class respondents. In fact, their stages are often defined in terms of the concepts generated by these respondents. Moreover, there are no agreed upon criteria for assessing how well these scoring systems function as measures of developmental stage; their developers do not always agree about what kind of behaviors are evidence of the attainment of any given stage; and it is not clear how the developmental levels in one system are related to the levels in the other systems. This paper directly addresses the latter issue by asking whether a domain-based scoring system which employs a concept-matching strategy (Colby & Kohlberg, 1987b) assesses the same dimension of performance as a generalized scoring system—the Hierarchical Complexity Scoring System (Commons, Danaher, Miller, & Dawson, 2000; Dawson, 2003; Dawson, Commons, Wilson, & Xie, 1999), that is not dependent upon concept-matching.

Kohlberg's Standard Issue Scoring System (Colby & Kohlberg, 1987b) is one of the best known stage-scoring systems. Kohlberg and his colleagues...
employed what they called a "bootstrapping" process to define moral judgment stages and construct a scoring manual. They started with a theoretical sequence strongly influenced by Piaget's (1965) idea that moral thinking moves from heteronomy to autonomy and from concrete to abstract, and refined their understanding of moral stages as they gathered successive rounds of longitudinal data from a group of New England school boys, the youngest of whom were 10 years old at the onset of the study. The Standard Issue Scoring System itself was constructed by analyzing seven sets of interviews from Kohlberg's original longitudinal study. Each of these sets of interviews included assessments from all six of the test times, which were separated by four-year intervals. Each performance was assigned a global stage score "based on intensive discussion and analysis" (Colby & Kohlberg, 1987a, p. 40) employing criteria from an earlier version of the scoring system. Then, individual responses to each dilemma provided the basis for examples in the scoring manual.

The Standard Issue Moral Judgment Interview is made up of three "forms," each of which is composed of three hypothetical moral dilemmas and from 9 to 12 standard questions per dilemma. Each question is designed to probe respondents' reasoning on one or more of six moral issues—life, law, conscience, punishment, contract, and authority. To assess moral development with the Standard Issue Scoring System, the researcher administers a set of moral judgment interviews, transcribes the responses, identifies each moral argument addressing one of the six moral themes (life, law, conscience, punishment, authority, and contract), then employs the scoring manual to match each identified argument with a similar argument (criterion judgment, or CJ) in the manual.

The conceptions of contract and authority in this paper, as well as examples provided throughout the paper, are drawn from responses to the "Joe" interview, part of Form A of the Standard Issue Scoring System. In this dilemma, Joe, a 14-year-old boy, wants to go to camp. His father promises him he can go if he saves the money for himself. So, Joe works hard at his paper route and saves up enough to go to camp. However, just before camp begins, his father changes his mind, and decides he wants Joe's money to go on a fishing trip. Naturally, Joe does not want to give up going to camp, so he thinks he might not give his father the money. Follow-up questions probe for respondents' understanding of the dilemma and their reasoning about promises, ownership, and familial obligations. For example, respondents are asked if it is important for a father to keep a promise to his son, and the response is probed to reveal the reasoning behind it.

Kohlberg's moral stages describe three periods of development in the moral domain: preconventional, conventional, and postconventional. Each of these three periods is subdivided into two stages so that Kohlberg's model comprises six stages of moral development. The first five of these are described briefly in Table 1 and elaborated in Results. Stage 6 is not discussed
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<td>First order principles (principles governing systems)</td>
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<td>Definitional: identifies one aspect of a principle coordinating systems of abstractions</td>
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<td>People seen as complex systems of qualities that vary with circumstances. Actions justified in terms of impact on system and status within system.</td>
<td>Systematic</td>
<td>Third-order abstractions (properties of abstract systems)</td>
<td>Verbal contract, moral commitment, development, social structure, foundation</td>
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<td>Following through with his commitment and actually experiencing camp combine to promote Joe's growth and development, not just physically but psychologically, emotionally, and spiritually. (Multiple facets of Joe's personal development are promoted when he both keeps his commitment and accomplishes his goal.) Joe has a right to go to camp because his father said he could go if he saved up the money, and Joe lived up to his commitment. (Joe's fulfillment of his father's conditions determines whether Joe has a right or does not have a right to go to camp.)</td>
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<td>Linear: Coordinates one aspect of two abstractions</td>
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**Table 1**

Descriptions of moral stages and orders of hierarchical complexity.
Stage 2/3  People understood in terms of a few inner states that are closely tied to behavior. Actions are justified in terms of the psychological response they evoke, e.g. guilt.

Abstract  First-order abstractions (qualities abstracted from representations)  Fairness, friendship, guilt, kindness, reputation, respect, proof, sympathy  Definitional: identifies one aspect of a single abstraction.

Stage 2  People classified into groups according to actions they perform. Actions justified in terms of one's personal interests.

Concrete  Third-order representational sets (properties of representational systems)  Turn against, blame, believe, to trust, being fair  Multivariate: coordinates multiple aspects of two or more representations

Stage 1  People conceived of as particular persons who do particular things. Actions justified in terms of avoiding punishment, or obtaining rewards.

Primary  Second-order representational sets (representations coordinating or modifying representations)  Better, favorite, being mean, changing your mind, sharing, lying, telling the truth  Linear: Coordinates one aspect of two representations

Pre-operational  First-order representational sets (classes of states, things, people)  Boys, camping, paper route, girls, fathers, puppies, school, teachers, toys  Definitional: identifies one aspect of a single representation

If Joe's Dad says Joe can go to camp, then says he can't go to camp, that's not fair because Joe worked hard and then his Dad changed his mind. (Two conflicting representations of Dad's authority are evaluated in terms of his changed mind and Joe's hard work.) If you do not do what your father tells you to do, he will get really mad at you and you might get time-out. (Doing what your father says and not doing what your father says are coordinated by his anticipated reaction and its consequences.)

You want a good reputation so you keep promises. (Keeping promises is one way of maintaining your reputation.)

Camping is fun. (Having fun is one aspect of camping.)
here because Standard Issue scoring criteria for this stage were not developed, and it was, therefore, not identified in the performances in our sample.

Specific challenges to the developmental sequence described by Kohlberg are of four kinds. First, there are those who claim that Kohlberg’s moral perspective is too narrow. Among critics in this school are those who suggest that Kohlberg’s stage definitions do not encompass a broad enough range of conceptual content. For example, Okonkwo (1997), in her recent study of Nigerian students’ moral reasoning, noted that Kohlberg’s scoring manual lacks scoring criteria for advanced forms of Nigerian moral concepts related to parental obedience, family interdependence, and the transcendental authority of a divine being. Similarly, Kohlberg’s higher stages have been challenged because they are defined in terms of a Kantian or Rawlsian philosophical perspective, one that is not represented in all cultures (Snarey, 1985). Others argue that Kohlberg’s moral stages inadequately represent the moral domain (Gilligan, 1982; Puka, 1994; Turiel, 1983).

The second type of challenge to Kohlberg’s moral development sequence addresses specific deficiencies in the characterization of particular stages. Of the greatest salience to the present project is the argument that young children’s moral reasoning is not entirely based on physicalistic or instrumental concerns, as depicted at the preconventional level in Kohlberg’s scheme (Damon, 1984; Turiel, 1983). For example, Keller, Eckensberger, and von Rosen (1989) examined 31 stage 2 performances (as scored with Kohlberg’s system) of Icelandic and German children. They found that 50% of the scoreable justifications in children’s performances were not represented in the Standard Issue Scoring System, and that many of these dealt with normative and interpersonal relationship concerns. The authors conclude that a more complete account of moral development at the preconventional level must take these non-instrumental concerns into account.

The third type of challenge to Kohlberg’s moral development sequence addresses the basis on which some of its stages are specified. The failure of the Standard Issue Scoring System to adequately assess the lower stages has been addressed by several researchers. For example, Kuhn (1976a), Damon (1977), and others argue that the dilemmas developed for adolescents and adults are inappropriate for assessing the moral judgment of children. And as noted above, moral stages 1 and 2 both fail to account for a wide range of moral concepts expressed by young children and generally underestimate their ability to take the perspective of others. It is likely that these problems stem, at least partially, from the limitations of Kohlberg’s construction sample. Not only was the sample small, but the youngest respondents were 10 years of age at the first test time. By 10 years of age, most Western children are capable of performing at the first level of what Fischer (1980) calls the abstract tier, which is analogous to early formal operations in Piaget’s stage sequence. Yet, according to Colby and Kohlberg (1987a), moral stage 2 is theoretically analogous to Piaget’s concrete operations.
Fischer and Bullock (1981), Roberts (1981), and Wohlwill (1973) all argue that it is not possible to accurately define lower stage conceptions on the basis of performances from higher stage respondents. Given the ages of his youngest respondents, this is precisely what Kohlberg and his colleagues attempted to do.

The fourth type of challenge to Kohlberg's moral development sequence questions Kohlberg's and Armon's (1984) contention that his stages meet all of the requirements for Piagetian developmental stages, including invariant sequence and "structured wholeness." There is a large body of longitudinal evidence supporting invariant sequence in the acquisition of Kohlberg's stages of moral development (Armon & Dawson, 1997; Colby et al., 1983; Snarey, 1983; Walker, 1982). However, structured wholeness, evidence of which would be finding that individuals tend to reason predominantly at a single stage, has received more equivocal support (Campbell & Bickhard, 1986; Commons & Grotzer, 1990). Moderate evidence of structured wholeness was found in a scaling study of 996 Kohlbergian interviews, but only from stages 3 to 5 (Dawson, 2002b).

An alternative approach to investigating the development of reasoning is to apply a generalized method of assessment, independent of specific content, to determine the stage of performances. Several attempts of this kind have been made. Indeed, Piaget defined each of his stages in generalized terms. Conservation, for example, is a general feature of concrete operations and can be observed on a wide range of tasks. Case (Case, Griffin, McKeough, & Okamoto, 1992), Fischer (Fischer & Bidell, 1998), and their colleagues have employed general stage definitions extensively to scale performances across domains, but neither has published a generalized scoring system. Based on Commons' Model of Hierarchical Complexity (Commons et al., 1998), the Hierarchical Complexity Scoring System (Commons et al., 2000; Dawson, 2003; Dawson et al., 1999) is therefore unique, in that it lays out explicit general criteria for determining developmental stage of performance in any domain of knowledge. The Model of Hierarchical Complexity specifies 15 orders of hierarchical complexity (complexity orders). The sequence is: (0) computory, (1) sensory and motor, (2) circular sensory-motor, (3) sensory-motor, (4) nominal, (5) sentential, (6) preoperational, (7) primary, (8) concrete, (9) abstract, (10) formal, (11) systematic, (12) metasystematic, (13) paradigmatic, and (14) cross-paradigmatic. The stages in this model are closely related to the tiers and levels of Fischer's (1980) skill

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1 "Structured wholeness" can be observed in developmental spurts and plateaus. Developmental plateaus, or periods of consolidation at a stage, are identifiable in cross-sectional samples when a large proportion of performances are predominantly at a single stage. This kind of within-person consistency in stage of reasoning has been viewed as evidence of structured wholeness.
theory, in fact, the definitions for complexity orders and skill levels are virtually identical from complexity orders 0–12.

The Model of Hierarchical Complexity is a model of the hierarchical complexity of tasks. In this model, an action is considered to be at a given stage when it successfully completes a task of a specified order of hierarchical complexity. We agree with Brainerd (1993), that what Piaget thought of as "cognitive" structures are best viewed as formalizations of task structures. Hierarchical complexity refers to the number of non-repeating recursions that coordinating actions must perform on a set of primary elements. Actions at the higher order of hierarchical complexity are: (a) defined in terms of the actions at the next lower order; (b) organize and transform the lower order actions; and (c) produce organizations of lower order actions that are new and not arbitrary and cannot be accomplished by the lower order actions alone.

In text performances, hierarchical complexity is reflected in two aspects of performance, hierarchical order of abstraction and the logical organization of arguments. While the Model of Hierarchical Complexity does not itself predict that increases in hierarchical complexity will take the form of increasing hierarchical order of abstraction, in scoring text performances order of abstraction must be taken into account. This is because new concepts are formed at each complexity order as the operations of the previous complexity order are "summarized" into single constructs (Fischer, 1980). Burtis (1982) and Halford (1999) suggest that this summarizing or "chunking" makes more complex thought possible by reducing the number of elements that must be simultaneously coordinated, freeing up processing space and making it possible to produce an argument or conceptualization at a higher complexity order. For example, the concept of honor, which appears for the first time at the formal complexity order, "summarizes" an argument coordinating concepts of reputation, trustworthiness, and kindness constructed at the abstract complexity order. Similarly, the concept of personal integrity, which appears for the first time at the systematic complexity order, summarizes an argument coordinating concepts of honor, personal responsibility, and personal values constructed at the formal complexity order. The hierarchical order of abstraction and logical structure of 7 complexity orders are briefly described in Table 1.

Scoring with the Hierarchical Complexity Scoring System is different from scoring with content-dependent systems like Kohlberg's. Most notably, it does not involve matching performances to examples in a scoring manual. Instead, the rater determines the complexity order of a performance by looking for the highest hierarchical order of abstraction evident in its elements and then examining the logical structures coordinating these elements. (See Appendix A for an example of Hierarchical Complexity Scoring.) Consequently, unlike the Standard Issue Scoring System and similar content-dependent systems, which can only be employed reliably when
concepts in a given performance can be matched to those in a manual, the Hierarchical Complexity Scoring System can theoretically be employed to score any kind of performance in any domain, employing identical criteria across domains, and has been applied in both logico-mathematical and social/moral knowledge domains (Commons, Goodheart, & Bresette, 1995; Commons & Hallinan, 1990; Dawson, 1998; Sau-Ching Lam, 1995). Moreover, when scoring texts with the Hierarchical Complexity Scoring System, particular conceptual content is attended to only to the extent that it reveals the hierarchical order of abstraction of a performance, thereby allowing stage assignment and conceptual analyses to be conducted separately. This attempt to tease apart particular conceptual content and developmental stage makes it possible to ask questions about the relationship between meaning and development that cannot legitimately be addressed when we employ content dependent scoring systems. For example, by employing the Hierarchical Complexity Scoring System—along with an independently conducted content analysis—to score moral judgment interviews, we can directly address the question of whether, at a given stage, girls refer more to “care” and boys refer more to “justice” in their moral justifications (Gilligan, 1982). In other words, we can distinguish between hierarchical developmental and other influences on performance.

A developmental scoring system like the Hierarchical Complexity Scoring System, which employs scoring criteria that are independent of particular content, confers at least two other advantages, particularly in socio-moral domains of knowledge, where problems are ill-structured and often have no “correct” answers. First, unlike domain-based stage scoring systems, the Hierarchical Complexity Scoring System incorporates no normative statements about the conceptual content of performances. The claim that one stage is “higher” than another simply means that it is more hierarchically complex. Second, the time and expense of producing a different scoring system for every domain of knowledge are not necessary, and the need for raters to go through arduous learning processes for different systems is eliminated.

Dawson and her colleagues (Dawson et al., in review) employed Rasch scaling to investigate patterns of performance in a cross-sectional life-span sample of 602 moral judgment performances scored with the Hierarchical Complexity Scoring System. They found six complexity orders—primary, concrete, abstract, formal, systematic, and metasystematic—represented in performance between the ages of 5 and 86. The ages at which primary to formal complexity orders first predominate are 5, 7, 10, and 14 years. The systematic and metasystematic complexity orders do not become the plurality until 22 years of age with 3 years of college, and 26 years of age with 3 years of post-graduate work. These age-ranges are very similar to those reported by Fischer and his colleagues (Fischer & Bidell, 1998) for the acquisition of analogous skill levels (Table 2).
Dawson (2001b) also finds that the sequence of acquisition of the complexity orders appears to be invariant and wave-like, with evidence of spurts and plateaus at every stage transition measured, including the transitions to the two highest complexity orders, which were identified almost exclusively in adulthood. Evidence of these spurts and plateaus is illustrated in Fig. 1. This figure shows the relationship between expected complexity order score (O or o = preoperational, P or p = primary, C or c = concrete, A or a = abstract, F or f = formal, S or s = systematic, and M or m = metasystematic) and the person stage estimates (reported in logits\(^2\)) produced from a Rasch analysis of 747 moral judgment interviews scored with the Hierarchical Complexity Scoring System. The single capital letters at the left of the figure indicate the ranges within which consolidated performances are expected. For example, persons in the 3–8 logit range are expected to perform consistently at the formal complexity order. The capital letters followed by lower case letters and lower case letters followed by capitals at the left of the figure indicate ranges within which performances are expected to be predominantly at the complexity order represented by the capital letter. So, for example, individuals whose performance estimates are in the 11–12 logit range are expected to perform predominantly at the systematic complexity order, with some protocols at the formal complexity order. (Transitional periods are represented in the figure with shading.) For a given complexity order, the logit ranges for expected transitional performances are invariably short-
er than the logit ranges for expected consolidated performances, indicating that transitions are less stable than periods of consolidation. Thus, plateaus are apparent at the primary, concrete, abstract, formal, and systematic complexity orders. These results indicate, as Dawson and her colleagues argue, that once the structures of a new complexity order become available they are rapidly generalized, and once they have been generalized, thinking is likely to remain consolidated at the new complexity order for a long period of time relative to the time spent in the preceding transition. The overall pattern is strikingly similar to a conceptualization of development as a sequence of overlapping waves (inset in Fig. 1). Through a series of additional analyses, the authors also demonstrate that patterns of performance in their sample are highly consistent from complexity order to complexity order. They argue that if any complexity order in the Model of Hierarchical Complexity were incorrectly specified, or if complexity orders were left out, much less systematic patterns of performance would be expected.

The considerable differences between the Hierarchical Complexity Scoring System and the Standard Issue Scoring System raise the question of whether the Hierarchical Complexity Scoring System and Standard Issue Scoring System measure the same dimension of performance. Are the same moral concepts associated with analogous moral stages and complexity orders? Kohlberg would not have expected this to be the case. Kohlberg, along with other proponents of domain theory (Cosmides & Tooby, 1994;
Demetriou & Efklides, 1994) argues that development in different knowledge domains involves fundamentally different processes. For Kohlberg and his colleagues, the moral domain constitutes a unique structure (Colby & Kohlberg, 1987a; Kohlberg & Candee, 1984). They argue that perspective-taking development, which is necessary for moral reasoning, involves capacities in addition to basic cognitive capacities. Cognitive development regards the objective environment, while perspective-taking involves comprehension of how people think and act toward one another. Moral development demands a further step, knowledge of how people should think and act toward one another. For example, Piaget’s stage of consolidated formal operations (systematic complexity order) enables individuals to understand and manipulate systems of variables. This ability provides a foundation for attaining a level of role-taking where an individual can understand herself and others in terms of each person’s place in the system. Based on this knowledge an individual can then make prescriptions of fairness or justice. Considering these dependencies, Kohlberg may have concluded that a generalized scoring system would confound logico-mathematical and moral development. One consequence of confounding logico-mathematical and moral thought might be that the moral content associated with complexity orders would not be the same as the moral content defining Kohlbergian moral stages.

Four earlier reports address the question of whether complexity orders, as identified with the Hierarchical Complexity Scoring System, represent the same latent dimension of performance assessed with the Standard Issue Scoring System. In the first of these, a think-aloud procedure was employed to examine the scoring behavior of five raters trained in the Hierarchical Complexity Scoring System was compared with the scoring behavior of three raters trained in Kohlberg’s Standard Issue Scoring System (Dawson, 2001a). All raters scored the same 43 texts. A mean score for each text was calculated for each group of raters, resulting in two scores for each text, one based on the ratings of HCSS raters and one based on the ratings of Standard Issue Scoring System raters. Despite the fact that the raters trained in the Standard Issue Scoring System justified their stage assignments on the basis of particular moral conceptions and interpersonal perspectives, while HCSS raters justified their complexity order assignments in terms of hierarchical order of abstraction and logical structure, these mean scores were within one complexity order of one another 95% of the time ($r = .94$).

In a second study, theHierarchical Complexity Scoring System, Good Life Scoring System, and Standard Issue Scoring System were employed to score three different interviews administered to 209 5- to 86-year-olds. Correlations of .90 and .92 were found between the results obtained with the Hierarchical Complexity Scoring System and the Standard Issue and Good Life Scoring Systems (Dawson, 2002a). Dawson argues that these correlations, combined with patterns in the acquisition of analogous Good Life
Stages, Moral Stages, and complexity orders provide evidence that the three scoring systems predominantly assess the same latent dimension: hierarchical complexity.

In a third study, Dawson, Xie, and Wilson (2003) conducted a multidimensional partial credit Rasch analysis to examine the relationship between scores obtained with the Standard Issue Scoring System and scores obtained with the Hierarchical Complexity Scoring System on 378 moral judgment interviews from respondents aged 5 to 85. They found a correlation of .92 between scores awarded with the two scoring systems, suggesting that to a large extent these two systems assess the same dimension of performance, though the Hierarchical Complexity Scoring System appeared to be somewhat 'easier' than the Standard Issue Scoring System, particularly at the lower complexity orders. The Hierarchical Complexity Scoring System also produced more stage-like patterns of performance, including evidence of spurts and plateaus, than the Standard Issue Scoring System.

Finally, Dawson (in press) conducted two detailed examinations of the relationship between moral stages and complexity orders. In the first of these, she employed the Hierarchical Complexity Scoring System to score the 219 criterion judgments (scoring criteria) from Form A (Heinz and Joe) of the Standard Issue Scoring System. She concluded that the primary, concrete, abstract, formal, systematic, and metasystematic complexity orders correspond predominantly to moral stages 1, 2, 2/3, 3, 4, and 5. Criterion judgments for stages 2/3 to 5 correspond well with analogous complexity orders. However, criterion judgments for Kohlbergian stages do not correspond well to complexity orders below the abstract complexity order, where 23% of stage 1 criterion judgments were scored as concrete instead of primary, and 24% of stage 2 criterion judgments were scored as abstract instead of concrete. Moreover, some of Kohlberg's Stage 1 criterion judgments were scored as preoperational, a complexity order that has no clear parallel in Kohlberg's hierarchy, though other researchers have commented on the acquisition of social and moral concepts in pre-school children (Fischer, Hand, Watson, van Parys, & Tucker, 1984; Killen, 1991).

In a second analysis presented in the same paper, Dawson examines the relationship between scores awarded with the Hierarchical Complexity Scoring System and the Standard Issue Scoring System in a sample of 637 moral judgment interviews scored with both systems. She finds strong correspondences between scores awarded by the two systems at analogous stages from the formal to metasystematic complexity orders. In this range, the two systems agree within 1/2 of a complexity order 84–89% of the time. At the concrete and abstract complexity orders, agreement rates are considerably lower, with agreement within 1/2 of a complexity order only 50–61% of the time. Dawson argues that Kohlberg's stages are misspecified below moral stage 3 (the formal complexity order). She provides three sources of
evidence. First, she notes that several researchers have reported problems with the definition of Kohlberg's lower stages (Damon, 1977; Keller et al., 1989; Kuhn, 1976b). Second, Rasch scaling of the Standard Issue Scoring System results consistently reveals more 'noise' at the lower stages than at the higher stages (Dawson, 2002b; Dawson et al., 2003). And finally, individuals with mean scores at moral stages 1 and 2 tend to receive a statistically significantly wider range of scores (mean range = 1 stage) than those with mean scores at moral stages 3, 4, or 5 (mean range = .60 –.85 stage), suggesting that reasoning is either (a) less cohesive at the lower stages than at the higher stages or (b) that scoring criteria are not as well specified at stages 1 and 2 as they are at stages 3–5. The misspecification of Kohlberg's lower stages is probably due to the fact that his lower stage scoring criteria were based on performances that were too developmentally advanced to provide accurate data on lower-stage behavior. Kohlberg's youngest respondents were 10 years old, the modal age for the emergence of abstractions (Fischer & Bidell, 1998).

A note on the assignment of the abstract complexity order to moral stage transition 2/3. Commons and his colleagues (Commons & Grotzer, 1990) place the abstract complexity order at moral stage 3. Dawson disagrees concurring with Watson (1984) and Lamborn, Fischer, and Pipp (1994), that reciprocal role relations like the golden rule role-taking described at moral stage 3 require abstract mappings (formal complexity order). The relations described at moral stage transition 2/3 focus on single abstractions like the importance of having the approval of one's father or the right to one's own property, but they do not coordinate these to provide a solution to the conflict between Joe and his father.

Each of these four studies contributes to a growing body of evidence that hierarchical complexity is at the root of many developmental sequences, in other words, that it is the predominant latent dimension of performance we measure with developmental assessment systems. However, all of these studies have focused on comparisons of stage assignment. We have not, until now, compared the conceptions associated with complexity orders with those that define Kohlbergian stages. Dawson (1998) describes a method for conducting such a comparison. She employed the Hierarchical Complexity Scoring System to examine the development of conceptions of good education, tracing conceptions of learning, education as play, education as socialization and education as preparation across five complexity orders in a sample of 153 5- to 82-year-olds. To do this she first scored the performances with the Hierarchical Complexity Scoring System and then submitted them to a detailed content analysis. Finally, she brought the content analysis and complexity order analysis together to examine the relationship between complexity orders and the kinds of conceptions expressed by her respondents. Below, we employ the same method to examine developing conceptions of authority and contract. We then compare the concepts asso-
associated with each complexity order with those that characterize analogous Kohlbergian stages.

Method

We collected 713 Joe interviews (Form A, Standard Issue Scoring System) from seven Kohlbergian studies conducted between 1955 and 2000 (Armon & Dawson, 1997; Berkowitz, Guerra, & Nucci, 1991; Colby & Kohlberg, 1987a; Dawson, 2001b; Ullian, 1977; Walker, 1989; Walker et al., 2001). The sample is distributed as follows: Armon, 71; Berkowitz, 247; Colby and Kohlberg, 165; Walker, 102; Walker, 38; Dawson, 67; Ullian, 23. The age-range of the largely Caucasian and working- to upper-middle class American and Canadian respondents was from 4 to 86 years. All interviews were recorded, transcribed, and scored for Kohlbergian moral stage according to guidelines in the Standard Issue Scoring System.

Hierarchical Complexity scoring was conducted by the first author as described in Dawson (2003). The text segments (protocols) scored by the Hierarchical Complexity rater were responses to up to nine standard probe questions posed by interviewers administering the Joe dilemma from the Standard Issue Scoring System. As explained above, Hierarchical Complexity scoring involves identifying both the highest hierarchical order of abstraction and most complex form of logic in text performances. A protocol is considered to be at a given complexity order if its elements embody the hierarchical order of abstraction and most complex form of logic in text performances. A protocol is considered to be at a given complexity order if its elements embody the hierarchical order of abstraction and most complex form of logic in text performances. A protocol is considered to be at a given complexity order if its elements embody the hierarchical order of abstraction of that complexity order, and the complexity of its logical structure meets the formal requirements of that complexity order. For example, a child might say, “It is worse for a father to break a promise (than a son) because he is older and knows not to lie.” The order of abstraction here is second order representations as embodied in concepts represented by the words promise and lie. The logical structure is a concrete system—if father is both older and knows not to lie, it is worse for him to break a promise than a son who is younger and may not know not to lie.

In these data, seven complexity orders were identified: preoperational (O), primary (P), concrete (C), abstract (A), formal (F), systematic (S), and metasystematic (M). One complexity order score was awarded to each protocol. Ideally, a protocol should represent a complete argument on a given topic. Fragmentary arguments are usually treated as unscorable.

Promise and lie are second order representations because their underlying concepts constitute arguments about relations between first order representations. For example, for a child to construct the notion of a lie as an intentional untruth, the child has to coordinate conceptions of true vs. not true and intention. Notions of truth and intention (on purpose) appear for the first time at the preoperational complexity order.
<table>
<thead>
<tr>
<th>SISS stage</th>
<th>Complexity order</th>
<th>SISS concepts of authority</th>
<th>Authority concepts associated with 7 complexity orders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 5</strong></td>
<td>Metasystematic</td>
<td>Focus on social contract or utility, individual rights, and universal ethical principles. Exercise of authority is in the service of raising children to be principled/autonomous adults. Authority recognizes that all persons are human beings deserving respect, all persons have rights. All parties must agree to authority relationship.</td>
<td>Authority is based on parent's moral obligation to protect and promote the social, moral, emotional, and intellectual development of a child as a human being equal to other human beings. To represent society. To support the development of principled, autonomous, fully realized adults. Obedience protects child from physical or psychological harm; promotes the development of the child; results from child's love of parent; or is a conscious choice of child. Authority is never absolute; all human beings are entitled to respect and have certain rights: you cannot enhance autonomy while taking it away.</td>
</tr>
<tr>
<td><strong>Stage 4</strong></td>
<td>Systematic</td>
<td>Focus on family unity, strength, harmony, traditions, and the common good; parents' legitimate needs; parent's legitimate authority; the social role of the family; the moral training or social development of children; the maturity of the child; and the relationship between parents' authority and their responsibilities. The direction a parent must give a child to fulfill the obligations of parenthood, after taking into account the abilities or maturity of the child. To prepare children to participate in society or fulfill adult obligations. A child should show respect for the values of the parent/family; child is too immature to decide for himself; disobedience could damage the parent/child relationship. Authority should not be arbitrary; should not intimidate; should not be inflexible; and should not exploit. Inappropriate exercise of authority could damage parent/child relationship.</td>
<td></td>
</tr>
<tr>
<td>Stage 3</td>
<td>Formal</td>
<td>Focus on conventional father/son roles and parental influence. A good son should respect, obey, or honor his father; the father is head of the household; the father’s example will have an effect on son’s character or personality.</td>
<td>The exercise of power, resulting from one’s role or wisdom, to promote the short- or long-term well-being of children.</td>
</tr>
<tr>
<td>Stage 2/3</td>
<td>Abstract</td>
<td>Focus on what is necessary to teach children to be good people who behave well and who know right from wrong.</td>
<td>The power to get children to do the right things.</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Concrete</td>
<td>Focus on immediate bad (or good) consequences, role-taking, and having a right.</td>
<td>The power of adults, who know more, to tell children, who know less, what to do.</td>
</tr>
<tr>
<td>Stage 1</td>
<td>Primary</td>
<td>Limited to a focus on obedience and avoiding punishment. Grownups should be obeyed because they are bigger, older, the boss, will punish you.</td>
<td>The power of the big over the little.</td>
</tr>
</tbody>
</table>
Table 3 (continued)

<table>
<thead>
<tr>
<th>SISS stage</th>
<th>Complexity order</th>
<th>SISS concepts of authority</th>
<th>Authority concepts associated with 7 complexity orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoperational</td>
<td>Undefined</td>
<td>The power of a grown-up to make a child do something (implicit).</td>
<td>Child has to do what grownup says.</td>
</tr>
</tbody>
</table>

*Note: The table continues from the previous page.*
<table>
<thead>
<tr>
<th>SISS stage</th>
<th>Complexity order</th>
<th>SISS conceptions of contract</th>
<th>Contract concepts associated with 7 complexity orders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Definition</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Metasystematic</td>
<td>Focus on human rights. Keeping promises affirms the worth or dignity of the other person; shows that the rights of other individuals are the same as one's own; promises, or the trust generated in keeping promises, form the basis of human relations.</td>
<td>Promises are mutual obligations set up by persons acting as autonomous agents; are uniquely human.</td>
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<td></td>
<td>Purpose</td>
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<td></td>
<td>Are the basis for the mutual trust that makes human society possible.</td>
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<td></td>
<td>Why keep it?</td>
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<tr>
<td></td>
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<td></td>
<td>Without the expectation that promises will be kept, contracts honored, society could not exist.</td>
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<td></td>
<td></td>
<td>Limits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>One should only break a promise to serve a higher ideal.</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Systematic</td>
<td>Focus on responsibilities, character standards, and practices that are morally obligatory or support the functioning of relationships or society. A contract should be honored to preserve one's character; contracts preserve order in society; keeping promises fosters integrity; promises are contractual obligations.</td>
<td>Promises have the purpose of maintaining relationships by building trust; make it possible for people to live together.</td>
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<td></td>
<td>Why keep it?</td>
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<td></td>
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<td></td>
<td>Promises should be kept because the actions of others are influenced by a promise; to preserve your own or others' perceptions of your integrity.</td>
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<td></td>
<td></td>
<td></td>
<td>Limits</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Some promises will be broken because of changes in circumstances. However, because of the nature of a promise, it is not okay to break one with no explanation.</td>
</tr>
<tr>
<td>SISS stage</td>
<td>Complexity order</td>
<td>SISS conceptions of contract</td>
<td>Contract concepts associated with 7 complexity orders</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Definition</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Formal</td>
<td>Focus on norms or shared expectations about roles of parent and child. One should keep promise to leave a good impression; to show sensitivity; to protect trust and faith in relationships; because it makes you feel good about yourself.</td>
<td>Agreements that have a sacred quality/should not be made lightly.</td>
</tr>
<tr>
<td>Stage 2/3</td>
<td>Abstract</td>
<td>Focus on keeping promises to keep friends, preserve trust, keep your reputation, or so you won’t feel guilty.</td>
<td>Keeping a promise means keeping “your word.” A promise is a promise.</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Concrete</td>
<td>Focus is on one's personal benefit. You keep your promise to get something for yourself or to avoid angering others.</td>
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<td></td>
<td>Promises are bargains. Secrets are a kind of promise-keeping.</td>
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<td></td>
<td></td>
<td>A promise is a means to grant an individual's desires.</td>
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<tr>
<td></td>
<td></td>
<td>Keeping promises is a way to keep friends, or is &quot;fair&quot; or &quot;right.&quot;</td>
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<tr>
<td></td>
<td></td>
<td>People can break promises if they change their minds.</td>
<td></td>
</tr>
<tr>
<td>Stage 1</td>
<td>Primary</td>
<td>Breaking a promise is the same as lying, which is wrong because it is, or because punishment is its inevitable consequence.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>A promise is something you should keep. Breaking a promise is equivalent to lying. Beginning notion that a promise is a deal.</td>
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<td>A promise will let you do something you want to do or have something you want to have.</td>
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<td></td>
<td>You can get into trouble if you break a promise; someone will be sad or feel bad if you break one; it is &quot;nice&quot; to keep promises. You keep promises so people won't fight/get mad.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Adults can break promises because they are bigger or because they can change their minds.</td>
<td></td>
</tr>
<tr>
<td>Preoperational</td>
<td>Undefined</td>
<td>A promise is a good thing (implicit)</td>
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<tr>
<td></td>
<td></td>
<td>You should keep promises (prompted)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>You have to keep promises.</td>
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</table>
because they tend to be down-scored. However, because this practice results in loss of data we chose to score fragmentary protocols if adjacent protocols in a given interview provided enough information to aid in their interpretation. This approach meant that the rater had access to the entire interview when scoring, an accepted practice in this type of research (Armon, 1984; Colby & Kohlberg, 1987a).

For each case, a mean score was calculated from the protocol scores to provide a global complexity order. These complexity orders ranged from the early transition to the primary complexity order (mostly preoperational reasoning with a little primary reasoning) to the metasystematic complexity order.

Inter-rater agreement

Correlations among scores of four independent raters on a subset of 112 randomly selected cases ranged from .95 to .98. Agreement rates ranged from 80 to 97% within half a complexity order and from 98 to 100% within a full complexity order. This equals or exceeds inter-rater agreements commonly reported in this field (Armon, 1984; Colby & Kohlberg, 1987a).

Content analysis

For the authority and contract concept analyses, we chose to analyze only those cases with over 85% of their protocols at a single complexity order. These consolidated cases were selected because we are more confident that they, as opposed to performances scored as transitional, represent the content associated with each complexity order. There are 28 primary, 22 concrete, 39 abstract, 166 formal, 103 systematic, and 16 metasystematic consolidated performances in the sample. We then selected 15 Joe interviews, at random, from the consolidated performances within each complexity order, for a total of 90 interviews. We are fairly confident that the selected cases represent the range of authority and contract concepts associated with each complexity order; by the time 5–10 interviews from each complexity order were coded for their conceptual content, new conceptual material was increasingly rare.

Concept coding

The first step in the content analysis was to identify and code the individual assertions made by respondents in their moral arguments. An assertion was defined as any single justification given for a judgment. For example, saying that Joe should disobey his father is a judgment, while saying Joe should do so because he earned the money is a justification. The coding method was designed to preserve subtle nuances of meaning. A new code
was assigned each time a new meaning was expressed. This approach resulted in 275 initial coding categories on the authority theme and 599 initial coding categories on the contract theme. Through careful analysis we were able to collapse many of these categories, ending up with 73 categories for authority and 78 for contract. We then sorted these concept categories by the complexity orders at which they first appeared. A more detailed explanation of the coding process can be found in Dawson (1998).

The following descriptions of reasoning at each complexity order are based on our analysis of the authority and contract concepts that appear for the first time at each complexity order. For each complexity order, we first provide the Kohlbergian stage definition as it applies to the authority and contract issues at the analogous Kohlbergian stage as determined in Dawson (in press). We then describe the conceptualizations of authority and contract associated with each complexity order along four dimensions: (1) their definitions; (2) their purposes; (3) reasons for responding to authority or adhering to contracts; and (4) their limits. At each complexity order, the new conceptions relating to these four dimensions are contrasted with the conceptions of the preceding complexity order. Finally, we compare the conceptualizations that define the Kohlbergian stage with the descriptions of reasoning at the analogous complexity order. We also include, in the heading for each section, the earliest age at which each complexity order first predominates as reported in Dawson et al. (in review). Tables 3 and 4 provide summaries of the relationship between Kohlbergian stage definitions and conceptions of authority and contract identified at analogous complexity orders. Appendix B contains several exemplars for each complexity order.4

Results

Preoperational (age 3)

The Standard Issue Scoring System does not provide scoring criteria for a stage analogous to the preoperational complexity order, and we identified no consolidated preoperational performances in our sample. However, an analysis of the protocols scored as preoperational provides some basis for an understanding of reasoning at this order.

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4 Each exemplar is linked to the main text with a code. The first letter in the code represents the complexity order of the performance (O = preoperational, P = primary, C = concrete, A = abstract, F = formal, S = systematic, and M = metasystematic. The second letter in the code represents the conceptual strand addressed by the exemplar (A for authority and C for contract). Thus, for example, AA-1 refers to exemplar 1 on the authority theme, at the abstract complexity order.
Preoperational authority

Authority at the preoperational complexity order is simply the implicit idea that a grown-up can make a child do something. There is no real conception of the purpose of authority: the child just has to do what the adult says. Either no reason for responding to authority is given—one “just does”—or one responds to avoid immediate negative consequences (OA-1, 2). Asked whether Joe’s father has the right to make Joe give him the money he earned for camp, the preoperational child focuses alternatively on the father’s and Joe’s desire for the money, without any coordination of perspectives (OA-3). At the preoperational complexity order, there appear to be no limits to authority.

Preoperational contract

At the preoperational complexity order, the concept of a promise is primitive or absent. It is not clear from the performances in our sample whether preoperational performers have a concept of promise or any notion of the purpose of promises, but they appear to be familiar with the word, and generally affirm that keeping promises is a good idea. If they give a reason for not breaking a promise it generally involves anticipation of immediate negative consequences (OC-1, 2). As might be expected, no understanding that promises might have limits is expressed at this complexity order.

On the surface, the conceptions of authority and contract evident at the preoperational complexity order fit the definitions of Kohlbergian moral stage 1, defined in terms of obedience and avoiding punishment. However, we find three important differences between Kohlberg’s moral stage 1 and the conceptions present in preoperational performances. First, though children at this complexity order do not appear to be able to conceive of disobedience, some of them seem to understand that punishment does not always follow disobedience, as it does at Kohlberg’s stage 1. Instead, they say it “might” follow. Second, though preoperational performers do say parents can tell them what to do because they are bigger, they do not refer to parents’ being older or being the boss. These justifications occur at the primary complexity order. Third, at Kohlberg’s stage 1, children equate lying to breaking promises, while preoperational performances do not indicate any understanding of a relationship between lies and promises. Overall, the differences present between the primary complexity order and Kohlberg’s stage 1 outweigh the similarities.

Primary (age 5)

Primary authority

The closest match in the Standard Issue Scoring System to the primary complexity order is Kohlberg’s stage 1—heteronomous morality. At Kohlberg’s stage 1, as reported above, conceptions of authority are limited to a
focus on obedience and avoiding punishment. Disobedience is unthinkable and punishment is unavoidable. The reasons for obeying Joe’s father are physicalistic: (1) because the parent is bigger, older, or the boss; or (2) because Joe will be spanked or beaten up if he refuses.

At the primary complexity order, authority is the power of the big over the little (PA-1). For the first time, authority has a clear purpose: to make children do what adults want them to do or to make children be “good” (PA-2). While only immediate physicalistic consequences are given as reasons for obeying authority at the preoperational order, at the primary complexity order several possible reasons are given for complying with authority. First, the child may anticipate getting into trouble, being punished, or losing a privilege (PA-3). Second, the child may advocate complying with authority because the authority is nice, does nice things, or has a need (PA-4, 5). Finally, authority is no longer viewed as absolute. One can disobey an authority if the authority is mean, or if the authority’s demand will deprive you of something you want or something that is yours (PA-6).

Children’s conceptions of authority at the primary complexity order include—but are not limited to—Kohlberg’s themes of obedience and punishment. In Kohlberg’s system, it is not until stage 2 that children give reasons other than avoiding punishment for adhering to (or disobeying) authority. However, primary performers often give justifications related to “niceness” and “meanness” and even refer to Joe’s and his father’s wants and needs. Clearly, primary rationales for keeping promises include relationship concerns not included in the specifications of moral stage 1. Finally, authority is not absolute at the primary complexity order, as it is at Kohlberg’s stage 1.

**Primary contract**

Conceptions of contract at Kohlberg’s moral stage 1 are absolute and physicalistic. Breaking a promise is the same as lying, which is wrong because “it is,” or is wrong because punishment is an inevitable consequence.

At the preoperational complexity order, promises were understood only to the extent that they were seen as good things. In contrast, at the primary complexity order, a promise is understood to be something you should keep. Breaking a promise is equivalent to lying (PC-1). There is a beginning idea that promises are equivalent to “deals,” an early form of contracts (PC-2). The purpose of a promise is to let you do something you want to do or have something you want to have. A promise should be kept because some particular person will be sad or feel bad if it is broken (PC-3). Alternatively, a promise should be kept because you will get into trouble if you break it (PC-4). It is also a good idea to keep promises because it is “nice” to do so (PC-5). Children performing at the primary complexity order do not
always regard promises as absolute. Adults can break promises because they are bigger or grown up, or just because they change their minds (PC-6, 7).

Conceptualizations at the primary complexity order and moral stage 1 are similar in several ways. Primary performers clearly view breaking promises as the same as lying, and for the most part, absolute and physicalistic reasons are given for keeping promises. However, we found the primary child's concepts of promise to be broader than those described at Kohlberg's stage 1. While fear of punishment is the primary reason given for keeping promises at moral stage 1, children at the primary order are also likely to consider the feelings of the person promised, or claim that keeping promises is "nice"—considerations that do not appear in the Standard Issue Scoring System until moral stages 2 and 3. We also found evidence that children's thinking about promises at this complexity order is not entirely absolutistic. Promises can be broken by adults, who have the authority to do whatever they want to do.

Concrete (age 7)

Concrete authority

The concrete complexity order is theoretically analogous to Kohlberg's stage 2—individualism, instrumental purpose, and exchange. At this stage in Kohlberg's system, children's concepts of authority focus on immediate bad (or good) consequences, role-taking (as instrumental reciprocity), and having a right. The reasons for obeying (or disobeying) Joe's father are because his father (1) will punish him; (2) will pay him back later, like him better, or be nicer to him; (3) has been nice to him, given up things for him, or done a lot of things for him; or (4) has no right to take Joe's money.

At the concrete complexity order, authority is no longer simply the power of the big over the little as it was at the primary complexity order. Instead, to the concrete performer, authority is the power of adults—who know more—to tell children—who know less—what to do. Its purpose is to get children to do what they are "supposed" to do so they can learn. Concrete complexity order reasons for complying with authority are no longer exclusively tied to immediate consequences. Concrete performers argue that an authority should be obeyed because the authority knows more things, knows the truth, or knows right from wrong (CA-1, 2, 3). The primary complexity order idea that it is okay to disobey authority if the authority is mean, is differentiated by concrete performers into the notions that it is okay to disobey an authority if what he or she tells you to do is wrong or unfair (CA-4, 5).

Kohlberg has characterized stage 2 thinking as concerned with instrumental freedoms, interests, and exchanges. While we do find evidence of instrumentalism in performances at the concrete complexity order, we also find evidence that concrete performers are beginning to understand that
parental authority serves a purpose—to help children learn. Children performing at the concrete complexity order also have an implicit early understanding of rights and obligations in the parent-child relationship. Though they do not, as in Kohlberg's characterization of Stage 2, refer to rights or obligations directly (this occurs at the abstract complexity order), they do appeal to fairness. In our sample, they rarely think Joe should give his money to his father. Most (75% of 22) argue that either that the father should not break his promise, or that Joe earned the money, it belongs to Joe, and Joe should keep it.

**Concrete contract**

At Kohlberg's moral stage 2, reasons for keeping a promise appeal to concrete freedoms and instrumental interests. Promises are maintained for one's personal benefit, though the value of a promise to both parties (in terms of concrete benefits) is understood. Promises should be kept because (1) the other person will keep a promise to you or give you something in return; (2) you may need that person to do something for you someday; or (3) if you break a promise others may bother you or get mad at you.

The primary complexity order concept of breaking a promise being synonymous to lying is sometimes found in concrete performances (CC-1). However, at the concrete complexity order, most children begin to think of promises as "bargains," and sometimes refer to keeping secrets as a kind of promise-keeping (CC-2, 3). The purpose of a promise begins to emerge at this complexity order. A promise is a means to grant an individual's desires (CC-4, 5). Keeping a promise is also a means of keeping friends (CC-6) and the choice to keep a promise can be based on what is "fair," or "right" (CC-7). Adults should not break promises because they should have learned that breaking promises is wrong (CC-8). While primary performers observed that adults could get away with breaking promises because of their authority or because they changed their minds, concrete children appear to understand that anyone can change his or her mind. However, they are no more able than primary performers to explain why this is so (CC-9).

As at Kohlberg's stage 2, concrete performers assert that promises should be maintained because they benefit the self or allow one to avoid unpleasant consequences. However, this central concept of self-advantage, developed at Kohlberg's stage 2, does not dominate concrete complexity order conceptions of contract. Some concrete performers understand that breaking and keeping promises can affect friendships, though these effects are couched in concrete terms, e.g., friends will not play with you anymore if you break a promise. Many concrete performers justify keeping promises by referring to early concepts of rightness and fairness. Notions of rightness and fairness are not components of Kohlberg's lower stages. As early as the primary complexity order, we find the moral stage 2 notion that one keeps promises
in the expectation that the person who was promised will respond by being “nice.” The moral stage 2 notion that keeping one’s promise will cause others to keep their promises, or do something nice for you someday, is not found until the abstract complexity order.

Abstract (typical age, 10)

Abstract authority

The abstract complexity order is theoretically analogous to Kohlberg’s transition 2/3. At this transitional stage in Kohlberg’s system, concepts of authority focus on caring for and taking the perspective of others. Joe should obey his father because (1) Joe and his father should stick together, help each other out, or do things together; or (2) Joe should think about how much his father has done for him, or that his father brought him into the world. The Standard Issue Scoring System provides no transition 2/3 reasons for disobeying an authority—possibly because, as a transition, 2/3 is not exhaustively defined.

Performances at the abstract complexity order reflect the increasing interpersonal understanding of Kohlberg’s transition 2/3. At the concrete complexity order, the authority of a parent is to tell children what to do so the children can learn. At the abstract complexity order this conception is generalized and extended. Here, the authority of a parent is to do what is necessary to teach children to be good people who behave well and who know right from wrong. The purpose of authority is to teach children to do the right things (AA-1). One should obey the authority of a parent not only because an adult knows more than a child, as at the concrete complexity order, but because it’s the parent’s job to teach the child right from wrong, or because children are too young to make some kinds of decisions for themselves (AA-2, 3). One might also obey a parent to be kind to someone who has “done a lot for you” (AA-4). At the concrete complexity order, children claim it is okay to disobey an authority if what the authority demands is wrong. At the abstract complexity order, wrongdoing by an authority includes violating a child’s “rights” (AA-5). The scope of parental authority is limited by considerations of the child’s need for some freedom to make his own decisions (AA-6). What is right in some interactions between parents and children is governed by symmetrical rather than authority relations (AA-7).

Authority concepts constructed at the abstract complexity order are similar to those that characterize Kohlberg’s definition of transition 2/3. There are only two differences of note. First, explicit references to children’s “rights” appear at Kohlberg’s stage 2, but as previously noted we find the first evidence of these references at the abstract complexity order. Second, we find the conceptual content of the abstract complexity order richer and more varied than indicated in the CI’s for Kohlberg’s 2/3 transition.
In particular, abstract performers provide several reasons for disobeying authority, while Standard Issue Scoring System 2/3 criteria provide none.

Abstract contract

At Kohlberg's 2/3 transition, promises should be kept (1) because you want to keep your friends, so people will trust you, or because you do not want a bad reputation; (2) the person promised has his hopes up or will feel let down if the promise is broken; (3) if you keep your promise the other person may help you out; or (4) if you do not keep your promise your conscience will bother you.

At the abstract complexity order, promises are finally clearly differentiated from truths and lies. Keeping a promise means keeping your word. “A promise is a promise” (AC-1). At the concrete complexity order, a promise is viewed as a means to grant an individual’s desires. At the abstract order, the purpose of a promise more clearly involves the expectations set up by an agreement between two persons. Here, the purpose of a promise is to assure another person that you will definitely do what you have agreed to do. Consequently, you should keep promises because others are depending on you to keep them (AC-2). Concrete performers argue that keeping your promises will make your friends happy or make people like you. Abstract performers generalize these observations, claiming that keeping promises is important to friendship and trust (AC-3, 4). Keeping promises may also cause others to keep their promises to you (AC-5). At the abstract complexity order children argue for the first time that breaking a promise can make the promise-breaker feel bad or guilty (AC-6). For the first time at this complexity order, children also make the argument that parental behavior can influence their children’s behavior. If parents break promises, their kids may do the same thing (AC-7). Promises are not entirely absolute at the abstract complexity order, despite the often-repeated assertion that “a promise is a promise.” Whether or not you should keep a promise can depend upon the chance of future contact with the person who was promised (AC-8).

Aside from the fact that we do not find a notion of personal reputation at the abstract complexity order, conceptions of promise identified in abstract performances are very similar to those at Kohlberg's 2/3 transition. The only other difference of note arises over the idea that broken promises can make people “feel bad.” We first identified this notion at the primary complexity order. However, “feelings” are more differentiated and constructions more generalized at the abstract complexity order. For example, rather than saying that breaking a promise will make a particular person sad, abstract performers say that people, in general, will be disappointed by broken promises. Interestingly, this concept, along with other consequences of broken promises like feelings of guilt and loss of trust and friendship, leads most abstract performers to the radical position that promises should never be broken.
Formal (age 14)

Formal authority

The formal complexity order is theoretically analogous to Kohlberg's stage 3—mutual interpersonal expectations, relationships, and interpersonal conformity. At this stage in Kohlberg's system, concepts of authority focus on caring for others, fulfilling expectations, and golden rule role-taking. Joe should obey his father because (1) his father has Joe's best interests at heart, is doing his best, or showing his love; (2) Joe should make the sacrifice, set a good example, or teach his father a lesson; or (3) Joe should show appreciation for what his father has done for him.

At the abstract complexity order, the authority of a parent is to teach children to be good people who behave well and who know right from wrong. This notion is generalized and extended at the formal complexity order, where parental authority is the exercise of the power resulting from one's role or wisdom to promote the short- or long-term well-being of one's children. The purpose of authority is to guide, teach, support, or give direction to the child so he or she can grow up to be a good parent, be successful, or have a good life (FA-1). At the abstract complexity order respondents argue that children should obey their parents because it is the parents' job to teach their children right from wrong. At the formal complexity order, respondents take this idea a step further, explicitly referring to childrearing in their discussions of parental authority. They argue that one should obey a parent because the parent is (supposed to be) wiser than the child, and the parent's role is to guide, teach, raise, or direct the child (FA-2, 3). At the abstract complexity order, children argue that parental authority should be obeyed because children are not old enough to make their own decisions. At the formal complexity order, parental authority is also limited by a child's age, but an additional reason for this limitation is that parent will not be able to exercise control over the child indefinitely (FA-4). For the first time at the formal complexity order, individuals argue that parents should sometimes refrain from exercising authority because a child can benefit by learning from his or her own mistakes (FA-5).

At the abstract complexity order, arguments against obeying authority focus on rules of fair play in symmetrical relations and children's rights and freedoms. At the formal complexity order, authority is conceptualized in terms of the child-rearing role of parents. Here, authority is exercised wrongly if it does not promote the welfare of the child, is too restrictive, results from questionable motives, or deprives the child of important experiences (FA-6).

The concepts of authority identified at the formal complexity order, like those that define Kohlbergian stage 3, focus on golden-rule role-taking, maintaining relationships, and fulfilling roles. Though we find conceptual content that is not represented in the Standard Issue Scoring System man-
ual, such as the notion that a child should be allowed to learn from his or her own mistakes, this content is structurally consistent with Kohlberg’s characterization of stage 3.

**Formal contract**

The conceptions of contract that define Kohlbergian stage 3 focus on shared expectations about the respective roles of parent and child as well as norms for good conduct. Relationships are valued for their own sake. One should keep promises (1) to leave a good impression with others, (2) to show sensitivity for others’ feelings, (3) to protect trust and faith in relationships, and (4) because keeping promises makes one feel good about one’s self.

At the formal complexity order, as at the abstract complexity order, promises have a sacred quality. Individuals performing at this complexity order frequently emphasize the importance of not making promises lightly (FC-1). At the formal complexity order, as at the abstract complexity order, the purpose of a promise is to assure another person you can be counted on to do what you have agreed to do. But, at the formal complexity order, the abstract notion that breaking a promise can damage a relationship forms the basis for the notion that keeping promises builds trust, which is required for relationships (FC-2, 3). Promises should be kept because you would want others to do the same for you. This is golden-rule role-taking, and differs from the abstract complexity order argument that you should keep a promise because the other person might do the same for you someday (FC-4).

Going beyond the abstract complexity order notions that people will not trust or cannot depend on you if you break your promises, formal performers assert the more generalized idea that promises should be kept because breaking promises can cause others to lose respect for you or ruin your reputation (FC-5, 6). Breaking promises not only reduces trust and damages relationships as at the abstract complexity order, it can also cause psychological harm (FC-7). While at the abstract complexity order, individuals argue that if parents break promises they are teaching their children to break promises, formal performers make the more generalized argument that keeping promises is part of a parent’s child-rearing role, which is to raise his or her child to function in the world (FC-8, 9). As at the abstract complexity order, promises, despite their almost universally sacred quality, are not entirely absolute at the formal complexity order. Whether or not one should keep a promise can depend upon the importance of the promise (FC-10).

Conceptions of promise identified at the formal complexity order are very similar to those at Kohlberg’s stage 3, with one exception. The notion of personal reputation from Kohlberg’s transition 2/3 (abstract complexity order) is found for the first time at the formal complexity order.
Systematic (age 22+)

Systematic authority

The systematic complexity order is theoretically analogous to Kohlberg's stage 4—social system and conscience. Reasons for submitting to (or refusing to submit to) authority appeal to responsibilities, character standards, and practices that are morally obligatory or support the functioning of society. At this stage in Kohlberg's system, concepts of authority focus on family harmony or welfare, the integrity with which parents exercise their authority, and children's legal status. Joe should obey his father if (1) his father needs the money to promote the family's welfare, or (2) his father needs the money for something else that is vital. Joe's father should not demand the money; because doing so will (3) contribute to the breakdown of the family law or moral code, or (4) cause family disharmony, animosity, or irresponsibility.

At the formal complexity order, parental authority is the exercise of the power resulting from one's role or wisdom to promote the short- or long-term well being of one's children. Concepts of parental authority focus, for the first time, on parental responsibility rather than parental power. The notion of parental responsibility is taken a step further at the systematic complexity order, where all parental authority is viewed in terms of the responsibility to promote both children's and the family's long-term best interests. In fact, while most systematic performers assert that Joe should refuse to give his money to his father (84% of 103), many of them also argue that Joe should give up the money if doing so will fulfill a legitimate family need (SA-1). Many individuals at this complexity order who think Joe should give his father the money also invoke issues related to family welfare (SA-2). Others consider Joe's legal status (SA-3). In contrast to earlier complexity orders, individuals performing at the systematic complexity order advocate that parents' fulfill the obligations of parenthood with less force or didactic instruction and more modeling or subtle guidance (SA-4, 5).

At the formal complexity order, the purpose of parental authority is to help children grow up to be good parents, be successful, or have good lives. At the systematic complexity order, the idea that parental guidance promotes the long-term well-being of children is complemented by the notion that raising good children will also benefit society in general. Here, the purpose of parental authority is to promote the development of children into psychologically healthy, moral adults who can participate effectively in society (SA-6, 7). At the formal complexity order, respondents argue that parents should be obeyed because they are wiser than children are and the role of parents is to guide, teach, raise, or direct the child. Systematic performers no longer assert that the main source of parental authority is parental wisdom. At the systematic complexity order, the source of parental authority is parental responsibility, which places automatic limits on author-
ity (SA-8). As at the formal complexity order, individuals performing at the systematic complexity order assert that children should show respect for the rules and teachings of their parents. However, this respect is no longer unilateral. Parents are expected to respect their children as persons, and children have a responsibility to question parental demands (SA-9, 10). Individuals performing at the formal complexity order argue that parental authority is limited by the fact that parents have less control over their children as they get older. However, it is not until the systematic complexity order that the developmental needs of children constrain parents' authority (SA-11, 12).

Concepts of authority at the systematic complexity order include a focus on family harmony or welfare, parental integrity, and children's legal status, just as they do at Kohlberg's stage 4. However, at the systematic complexity order, we find that the major conceptual advances on the authority strand are (1) the definition of legitimate parental authority in terms of parental responsibility and (2) the notion that this authority needs to be adjusted to the developmental status of the child. We think these findings are consistent with Kohlberg's characterization of stage 4 in that they view the child as a developing system and the parent-child relationship as a system—in the same way that considering the family welfare involves thinking of the family as a system, and considering a child's legal status involves taking account of his or her position in the social system. Note, however, that the child system and the family system are not yet coordinated. Respondents performing at the systematic complexity order focus on one or the other (or one and then the other).

Systematic contract

At stage 4 in Kohlberg's system, reasons for keeping a promise appeal to responsibilities, character standards, and practices that are morally obligatory or support the functioning of relationships or society. A contract should be honored because (1) keeping promises is a direct reflection of one's character; (2) contracts preserve order in society; (3) keeping promises fosters the growth of integrity; and (4) promises are contractual obligations.

At the formal complexity order, promises are viewed as a special case of giving one's word. At the systematic complexity order, promises become synonymous with contracts, commitments, and agreements, all of which set up binding rules of behavior for the individuals involved in making them (SC-1, 2). The formal complexity order notion that promises build trust, which is essential for maintaining friendships, forms the basis for the systematic complexity order argument that promises have the purpose of maintaining relationships by building trust (SC-3). At the systematic complexity order, the larger social value of promises is recognized for the first time (SC-4, 5).

At the formal complexity order, respondents argue that promises should be kept because you would want others to keep their promises to you.
Systematic performers agree, but add that one must keep one's promises to uphold personal values (SC-6). One should also keep promises because the actions of others are influenced by one's commitment (SC-7). Respondents performing at the formal complexity order argue that promises should be kept because breaking promises can cause others to lose respect for you or ruin your reputation. Systematic performers often shift the perspective from what others will think to what one personally thinks about one's own behavior. People should keep their promises in order to uphold their own integrity—to be "true" to themselves (SC-8, 9). Formal performers understand that breaking promises can cause psychological harm. Systematic performers add the notion that psychological harm—especially harm done to a child—can have lasting developmental effects (SC-10). At the formal complexity order, the sacred quality of promises makes it difficult for respondents to come up with conditions that justify the breaking of a promise, though they do understand that some promises can be more important than others. Most individuals performing at the systematic complexity order recognize that some promises may be broken because of changes in circumstances. However, because of the importance of a promise, explanation is required before one is broken (SC-11).

As at Kohlberg's stage 4, conceptions of contract at the systematic complexity order clearly focus on moral obligations, character standards, and practices that support the functioning of relationships and society. We find no differences between conceptions of contract at Kohlbergian stage 4 and those identified at the systematic complexity order.

Metasystematic (age 26+)

Metasystematic authority

The metasystematic complexity order is theoretically analogous to Kohlberg's stage 5—social contract or utility and individual rights. At this stage, the emphasis is on following self-chosen ethical principles, which are universal principles of justice—the equality of human rights and respect for the dignity of human beings as individual persons. Authority relations are evaluated in terms of these principles. Stage 5 reasons for disobeying Joe's father generally affirm human rights constructed on the basis of a generalized respect for persons. The claims of all conflicting parties are considered in attempting a just solution to a moral dilemma. In exercising authority a parent should consider: (1) the full development of his child as a moral agent or as an independent or autonomous individual; (2) other persons, as human beings, are deserving of respect or are entitled to certain rights; (3) persons should recognize and have respect for one another's rights; or (4) legitimate parental authority should be acceptable to both parties or based on just or moral behavior.

At the systematic complexity order, parental authority is viewed in terms of the responsibility to promote children's and the family's long-term best
interests. The purpose of parental authority is to promote the development of children into psychologically healthy, ethical adults who can participate effectively in society. At the metasystematic complexity order, parental responsibility continues to be central to parental authority. Here, authority is based on the parent's ability to protect and promote the social, moral, emotional, and intellectual development of the child as a person, with the aim of promoting his or her development into an autonomous human being who can participate fully in society. It is a moral authority, grounded in a universal respect for human life (MA-1, 2). Respondents performing at the systematic complexity order argue that as children develop and demonstrate increasing responsibility, parental authority should gradually be relaxed. Metasystematic performers argue more directly that legitimate parental authority takes into account the developmental level of the child. Unlike systematic performers, they make this claim on the basis of the child's fundamental right, as a human being, to have the opportunity to develop into an autonomous adult (MA-3).

At the systematic complexity order, most respondents think Joe should refuse to give his money to his father. Those who think Joe should obey his father invoked concerns about family welfare or Joe's legal status. All 16 metasystematic performers assert that Joe should refuse to give his money to his father as long as the repercussions will not be devastating to Joe. The only other conditions under which obedience is an option are if it results from the child's love of the parent or is a conscious choice of the child (MA-4).

At the systematic complexity order, the source of parental authority is parental responsibility, which places automatic limits on authority. One consequence of these limits is that parents have an obligation to recognize and respect their children's rights. At the metasystematic complexity order, this notion of respect is generalized into the principle that all human beings are entitled to respect and therefore to certain fundamental rights. This principle guides thinking about the limits of parental authority (MA-5, 6).

Prominent in metasystematic performances, as at Kohlbergian stage 5, is the emphasis on the equality of human rights and respect for the dignity of human beings as individual persons. We found no major differences between the conceptions that characterize Kohlberg's stage 5 and the metasystematic complexity order.

**Metasystematic contract**

At Kohlberg's stage 5, reasons for upholding contracts affirm human rights constructed on the basis of a generalized respect for persons. It is important to keep a promise because (1) doing so affirms the worth or dignity of the other person; (2) shows that the rights of other individuals are the same as one's own; or (3) promises (or the trust generated by keeping promises) form the basis of human relations.
Respondents performing at the systematic complexity order see promises as synonymous with contracts, commitments, and agreements, all of which set up binding rules of behavior involved individuals. They recognize that promises are important to human relations. At the metasystematic complexity order, promises are mutual obligations set up by persons acting as autonomous agents. Promises form the basis of human relations (MC-1). Moreover, the ability to make contracts is viewed as uniquely human (MC-2). Human society could not exist without the expectation that promises will be kept, and contracts honored (MC-3, 4). At the systematic complexity order it is sometimes permissible to break promises, but only if one is prepared to explain why the promise is being broken or to renegotiate the agreement. While metasystematic performers would agree with this, they would also employ a strict criterion as the basis for deciding when it is permissible to break a promise. Breaking a promise must serve a higher ideal (MC-5).

Metasystematic concepts of contract, like those that define Kohlbergian stage 5, affirm human rights and dignity and are clearly constructed on the basis of a generalized respect for persons. We find no differences between the concepts found at the metasystematic complexity order and Kohlberg's stage 5 definitions.

Discussion

We conclude that the sequence of conceptual development specified in the Standard Issue Scoring System generally matches the sequence identified with the Hierarchical Complexity Scoring System. Moreover, contract and authority concepts from the abstract complexity order to the metasystematic complexity order generally match the concepts that define theoretically analogous Kohlbergian stages. However, we find three important differences between conceptions of authority and contract at analogous Hierarchical Complexity and Kohlbergian stages.

First, we find evidence of probabilistic thinking as early as the preoperational stage, while Kohlberg characterized the reasoning at his lower stages as absolutistic. Even children performing at the preoperational complexity order say they “might” get a spanking if they disobey a parent. Second, reasoning at the primary and concrete complexity orders was not confined to individualistic and instrumental concerns. Third, some concepts that define Kohlbergian stages in this range are found at earlier stages in performances scored with the Hierarchical Complexity Scoring System, while a few are not found until later. In other words, though the overall sequence of concept development is the same, stage assignment of some of these concepts differs.

These differences raise the question, “Which sequence is more reliable at the lower levels?” There is good reason to favor the stage assignments obtained through our hierarchical complexity analysis over Kohlberg's stage
assignments at lower stages. First, other researchers have found evidence of non-instrumental and probabilistic (Keller et al., 1989; O'Neill & Atance, 2000) reasoning in the developmental range in which we find them. Second, as suggested elsewhere (Dawson, in press; Keller et al., 1989) moral stages 1 and 2 are poorly defined. The bootstrapping method employed to construct criterion judgments for the Standard Issue Scoring System relied upon identifying exemplary performances for each stage. However, the youngest children in Kohlberg's sample were 10 years of age. Because the performances of most of these children are represented in our sample, we were able to determine that their modal complexity order is abstract (moral stage 2/3). There are no primary or preoperational and few concrete performances in this group. Given that Kohlberg had no preoperational or primary and few concrete performers in his sample, it is reasonable to conclude that his early stage-scoring criteria (and to some extent, his stages) are misspecified as a consequence of being constructed, at least in part, on the basis of performances that are too developmentally advanced. A third reason for preferring Hierarchical Complexity scoring over Standard Issue scoring is that the former produces results that are more consistent with stage theory, including evidence of both invariant sequence and developmental spurts and plateaus, even at the lower stages (Dawson et al., in review).

A second question raised by the differences between Kohlbergian moral stages and the conceptual content of performances as assessed with the Hierarchical Complexity Scoring System is whether these differences constitute evidence that the Standard Issue Scoring System and Hierarchical Complexity Scoring System assess different dimensions of performance. Given the high correlation between scores obtained with the two scoring systems (Dawson, 2002; Dawson et al., 2003), the definitional correspondence between complexity orders and moral stages (Dawson, in press), the empirical correspondence between scores awarded with the Standard Issue Scoring System and the Hierarchical Complexity Scoring System (Dawson, in press), and the fact that the conceptual content of analogous Kohlbergian stages and complexity orders range from very similar to identical, we conclude that the Hierarchical Complexity Scoring System and Standard Issue Scoring System tap the same underlying dimension of performance: hierarchical complexity.

This finding has important implications for developmental theory. First of all, it provides additional support for general stages of development based on the notion of hierarchical complexity. Case (Case et al., 1996), Fischer (Fischer & Bidell, 1998) and their colleagues have long argued that development involves general processes as well as processes tied to particular domains and contexts. These general processes involve increases in the hierarchical complexity of thought, and permit the specification of general scoring criteria.

The second implication for developmental theory is methodological. If we accept that one component of development is a general process of increasing hierarchical complexity, it makes enormous sense to assess this
dimension of development with a generalized scoring system designed specifically to assess this single dimension of performance. By doing so, we can theoretically control for developmental stage when analyzing similarities and differences in the specific conceptual content of performances across gender, domains, culture, and context. This type of approach has been employed by Case (Case et al., 1993), Fischer (Fischer & Silvern, 1985), and their colleagues. Unfortunately, many comparisons of reasoning across groups ignore the hierarchical complexity dimension, use age as a proxy for development, or simply assume that domain-based scoring systems function without bias across groups, cultures, and contexts (Adler, 1989). In such research, stage-developmental and other effects can easily be conflated.

A generalized domain-independent method of stage assessment makes it possible to meaningfully incorporate the hierarchical complexity dimension in cross-cultural, cross-domain, and cross-context research. For example, Hierarchical Complexity scoring would make it possible to compare same-stage pedagogical conceptions of students in different countries or to meaningfully compare the same-stage moral concepts of teenaged girls and boys.

This project provides compelling evidence that a generalized developmental assessment system can be fruitfully employed to trace conceptual development. Employing a methodology suggested by Overton (1998), we have used the Hierarchical Complexity Scoring System to tease apart structure and content in order to better understand their interrelationship. In doing so, we have shown that form can tell us a great deal about content. In this case, separate analyses of hierarchical complexity and conceptual content allowed us to provide a detailed description of conceptual development on two moral themes—without the necessity of collecting several rounds of longitudinal data. Methods that help us to understand how meanings unfold in development are important. They are important to education, for example, because they allow us to determine what comes next in the development of knowledge and what is required to get there. However, the benefits of understanding the course of conceptual development are not limited to educational applications. Kuhn (2000), for example, has argued that an understanding of conceptual development—the development of meaning—is critical to memory research, which has failed in the past to distinguish among qualitatively different forms of knowledge. Moreover, as we have argued, meaningful cross-cultural, cross-context, and cross-gender comparisons of conceptual understandings virtually require an account of hierarchical complexity.

Appendix A. Scoring with the HCSS

To score for stage with the HCSS, one must first identify a scorable statement. A scorable statement is defined as a segment of text that contains a complete argument or justification.
Here, for example, is an extract from an interview about the respondent's conception of an ideal education:

A. The ideal education would be to have a school system, okay, first of all, that you have teachers that are aware of human needs, and have a balanced perspective. Because nowadays we have one type of school where all they care about are the emotional needs and social interaction, but they have no intellectual growth for the kids. And you have the others that will make them into little computers. So what you have to do is realize that both of those have some equal weight in maximizing potential in human beings. I think where our problem lies, in devising the system, is that we're in the age of specialization, which I'm completely appalled by. Because I feel it makes all these lopsided people in society. So that we have to start reeducating the educators about the uniqueness of the human being and his potentiality and the fragility of it. That he has—not only is he an animal, emotional but he is also an intellectual, he has intellectual potential. And these things are intertwined so he can seek his happiness. So we have to have educators that are more interdisciplinary, that are more aware of all the different repercussions, the factors that influence the human being.

The general argument stated here is that a good education promotes both the emotional and the intellectual development of students, and that good schools systems and teachers should promote this development. Several justifications (or arguments) are offered:

1. Teachers would be aware of human needs.
2. Teachers would have a balanced perspective.
3. Teachers would not emphasize emotional needs over intellectual needs.
4. Teachers do not emphasize intellectual needs over emotional needs.
5. Intellectual and emotional growth have equal weight in maximizing potential.
6. It appalls me that people are so specialized.
7. Specialization makes lopsided people.
8. Educators should be reeducated about the uniqueness of human beings.
9. Educators should be reeducated about the potentiality of human beings.
10. Educators should be reeducated about the fragility of human beings.
11. Human beings have an animal part.
12. Human beings have an emotional part.
13. Human beings have an intellectual part.
14. The emotional and intellectual parts are intertwined.
15. Ability to seek happiness results from [appropriate?] intertwining of parts of self.
16. Educators should be more interdisciplinary.
17. Educators should be more aware of the different repercussions.
18. Educators should be more aware of the factors that influence the human being.

Each of these justifications is minimally a formal proposition, in that each coordinates a pair of abstract or formal concepts. For example, in k, the formal concept, specialization, is coordinated with the abstract concept of lopsided people. Specialization is considered to be a formal concept because even the most rudimentary understanding of this concept involves the abstraction of an abstraction. The first level of abstraction is the idea of specializing in a particular area. The second is the idea of specialization without reference to any particular area, specialization in general. The concept of lopsided people is considered to be at least abstract, because it refers to a generalized, abstract category, lopsided, of another such category, people. The concept, lopsided people could also be considered a formal category, depending upon the intended meaning of lopsided. However, in the present case, it is not necessary to explore the meaning of this term more fully because there are several examples of formal concepts in the text, more than enough to conclude that this participant is, minimally, performing at the formal stage.
In addition to formal propositions, several systematic propositions are present in the text sample. Some of these are concepts such as factors that influence the human being. This is a system because one can infer from the types of factors listed in the text as a whole that these factors are, at the least, a coordinated set of formal concepts such as potentiality, fragility, and uniqueness of human beings, and their intellectual and emotional needs. Other systems present in the text are constructions containing several concepts that are related to one another through causal or other logical links. The following four systems are formed in this way:

System A = proposition \((f_1 + f_2)\) where proposition \((g_1 + g_2)\) because proposition \(h\).
System B = proposition \(j\) because proposition \(k\), proposition \((11 + 12 + 13)\)
System C = proposition \((m_1, m_2 = m_3)\) where proposition \(n\)
System D = proposition \(p\), proposition \((q_1 + q_2 + q_3)\)

The final system, D, is actually a metasystem, because it coordinates System A with Systems B and C. Educators, in a good education, must balance the intellectual and emotional needs of students, and, in order to do this, they must understand their students' potentiality, fragility, and uniqueness. In other words, they must coordinate these two knowledge systems. In making his case, this participant has demonstrated his ability to think metasystematically by advocating that educators should reason metasystematically. Based on this analysis, the stage score for this performance is stage 5, or metasystematic.

Appendix B. Examples of reasoning on authority and contract themes at each complexity order

Preoperational

**Authority**

OA-1  [Why can your Dad tell you what to do?]
I do not know. My Dad says I have to listen and not hit my brother. I used to hit him (1396).

OA-2  [WHY DO YOU DO WHAT YOUR DAD TELLS YOU?]
Maybe he will spank me (1367).

OA-3  [Do you think his father has the right to make Joe give him the money?]
Yes
[Why?]
He really wants it for fishing.
[Should Joe give him the money for fishing or keep it for his camp?]
Keep it for his camping.
[Tell me why.]
He really wants to go to camp (1346).

**Contract**

OC-1  [Is it good to keep promises?]
Yes
[Why?]
If they do not they can get mad (1361).

OC-2  [Why should people keep promises?]
So they are not going to fight.
[Why would keeping a promise stop a fight?]
Because if you do not make a promise that means that somebody might get mad (1409).
Primary Authority

PA-1  
[Do fathers have the right to tell you what to do?]  
Yes  
[Why?]  
Because they are grown-ups.  
[Why because they are grown-ups can they tell you what to do?]  
Because they are bigger than the little kids.  
[Why is that important?]  
Because the other one is a grown-up and the other one is not (1351).  

PA-2  
[Do fathers have the right to tell you what to do?]  
Yes  
[Why can they tell you what to do?]  
So you can be a good boy or a good girl (1383).  

PA-3  
[Why should Joe give him the money?]  
Because if he does not listen... his dad will get mad at him... he will get in trouble (1362).  

PA-4  
[DO FATHERS HAVE THE RIGHT TO TELL YOU WHAT TO DO?]  
Yes  
[WHY DO YOU LISTEN TO YOUR DAD?]  
Sometimes I do not listen to him and sometimes I do. A lot of times I do.  
[WHY?]  
Because he gives me—he is nice to me. And guess what he does when we go to Safeway? He gives us soda (1403).  

PA-5  
[Do you think his father has the right to make Joe give him the money?] Yes.  
[Why?] His daddy needs some money (1361).  

PA-6  
[DO YOU THINK JOE’S FATHER HAS THE RIGHT TO MAKE JOE GIVE HIM THE MONEY?]  
No.  
[WHY NOT?]  
Because he does not want the boy to have a lot of fun and the boy wants to have a lot of fun (1339).  

Contract

PC-1  
[WHY SHOULD WE KEEP PROMISES? WHY IS IT GOOD TO KEEP A PROMISE?]  
Because if he promised, then he has to promise it or he lies and it is bad to lie (1339).  

PC-2  
[The father promised Joe he could go to camp if he earned the money. Does that make any difference in whether Joe should give his father the money?]  
The dad promised and he is going to another thing. [Joe] should keep the money... because it is not good to break a deal (1400).  

PC-3  
[WHAT HAPPENS IF YOU BREAK A PROMISE?]  
Joe could feel bad (1375).  

PC-4  
[IN GENERAL, WHY SHOULD PEOPLE KEEP PROMISES?]  
If your dad breaks a promise then they might be arrested (1357).  

PC-5  
[In general, why should people keep promises?]  
Because it is nice to keep promises (1368).  

PC-6  
[The father promised Joe he could go to camp if he earned the money. Is that important?]  
Yes
[Does that make any difference in whether Joe should give him the money?]
Yes

[What is the difference?]
It does not matter what his father says. If his father says give him the money then just give him the money. No matter what he says just do it.
[Why should he just do it?]
Because he is bigger than him. He is just a kid and his father gets to do whatever he wants because he is grown (1380). PC-7

[Can his father tell Joe to give him the money?]
Yes
[Why?]
He changed his mind (1385).

Concrete

Authority

CA-1
[Do fathers have the right to tell you what to do?]
Yes
[Why?]
Grown ups know what is good and bad (1344).

CA-2
[What is it about dads that makes it right to do what they say?]
Because they are grown-ups and they know what to do-like if a kid breaks a promise (1404).

CA-3
[Do fathers have the right to tell you what to do?]
Yes but only when they are young.
[But only when the children are young?]
Yes
[Why only when they are young?]
Because then they can learn how to be more polite when they grow-up or more nice (1358).

CA-4
Do fathers have the right to tell you what to do?
Yes but not all the time. Like stealing a chain from the store.
[Why can they tell you what to do sometimes?]
Because they might be telling you right. And what I mean by right like he is telling you the truth what will happen and what will not happen (1364).

CA-5
[Should Joe give the money to his father or should he tell his father he cannot have the money?]
I think he should tell his father that "you said that I could go to camp with the money and you can save up for your terrific fishing trip by yourself like I did for camp."
[And it would be okay to say that?]
Yes. I think so, because that is what is fair... (1389).

Contract

CC-1
[WHICH IS WORSE TO DO? A SON TO BREAK A PROMISE TO HIS FATHER OR A FATHER TO BREAK A PROMISE TO HIS SON?]
A father to break a promise to his son.
[WHY?]
Because his father lied to him (1343).

CC-2
[The father promised Joe he could go to camp if he earned the money. Does that make a difference in whether he should give it to his father?]
Yes. [Why?]
Because well actually this is another thing where we get into the shaking or not. [What if they did shake hands?] Then Joe should be able to go to camp definitely.
[And if they did not shake hands? What if he just said it out loud?] Then I would not know (1407).

CC-3  [In general, why should people keep promises?] Because it is good.
[Why is it good?]
Like if someone told you a secret and they did not want anyone else to hear it you should keep it as a promise (1376).

CC-4  [IN GENERAL, WHY SHOULD PEOPLE KEEP PROMISES?]
Because then people will be a lot happier.
[WHY WILL PEOPLE BE A LOT HAPPIER?]
Because then they get what they want and they would not want anything else because they wanted that thing (1388).

CC-5  [NOW IN GENERAL, WHY SHOULD A PROMISE BE KEPT?]
So people could have more fun, and other people could do what they want, if their father or someone says (0757).

CC-6  [So, why is it important to keep a promise...?]
Well if you want to keep your friends, you keep your promise or they won't like you and they'll just go away and play with someone else (1433).

CC-7  [WHY IS IT IMPORTANT TO KEEP A PROMISE?]
Because you have said you would do that and you changed your mind. That is not fair (0858).

CC-8  [WHICH IS WORSE, A FATHER BREAKING A PROMISE TO HIS SON OR A SON BREAKING A PROMISE TO HIS FATHER?]
A father breaking a promise to his son.
[WHY?]
Because he has learned more about breaking promises and how it is wrong... (1340).

CC-9  [IN GENERAL, WHY SHOULD PEOPLE KEEP PROMISES?]
Sometimes you should not.
[... SHOULD PEOPLE KEEP PROMISES IF THEY MAKE THEM?]
Not always (1364).

Abstract

Authority
AA-1  [In general, what kind of control should a father have over his son?] I think he should have pretty good control so that if he does something wrong he should discipline with no trouble.
[That's important?]
Yeah, if it's really bad.
[Why do you think that that's important?]
So that he learns not to do it again (1442).

AA-2  [WHAT SHOULD THE FATHER BE MOST CONCERNED ABOUT IN HIS RELATIONSHIP TO HIS SON?]
Well, that his son should grow up good and have a nice childhood. (0190).

AA-3  [WHY DO YOU THINK A PARENT SHOULD HAVE THAT KIND OF AUTHORITY?]
Because you are not old enough to make those kinds of decisions yet. You are not responsible enough, like you might not come home at all or something (0611).

AA-4  [DOES HIS FATHER HAVE THE RIGHT TO TELL Joe TO GIVE HIM THE MONEY?]
Yes, he has the right. Well, his father does stuff for Joe and Joe should do something for his father (1077).
AA-5

[Should Joe refuse to give his father the money?]
I think he should. He earned the money, it is his money.

[WHAT ABOUT THE FACT THAT IT IS HIS FATHER, WHO IS ORDERING HIM TO GIVE IT TO HIM.]
His father does not have the right to order him around. Joe earned this money and it is his money and he worked hard on his paper route, so he should not give the money to his father that Joe is earning for camp. I think Joe has a right to it (1069).

AA-6

[In general, what kind of authority or control should a father have over his son?]
Medium. [Why?]
So the son can have some say. If his father had total discipline over him he wouldn’t be able to make any decisions (1450).

AA-7

[DO YOU THINK THE FATHER HAS THE RIGHT TO TELL JOE TO GIVE HIM THE MONEY?]
No.
... If the kid asked the father for $40, he wouldn’t have to give it to him, so he doesn’t have to [give his money to his father] (1070).

Contract

AC-1

[IN GENERAL, WHY DO YOU FEEL YOU SHOULD KEEP A PROMISE?]
It is like I gave you my word...
[WHAT DOES THAT MEAN THAT YOU GAVE ME YOUR WORD?] Well, I told you that I would get something for you. [WHY SHOULDN’T YOU BREAK YOUR PROMISE?] It is just like I gave you my word and I just should not break it if I promised. [WHY NOT, WHY SHOULDN’T YOU BREAK A PROMISE?]
A promise is a promise. If you tell a person that you are going to get him something, you should get it... (1067).

AC-2

[Why should a promise be kept, in general?]
Because if people didn’t keep the promise, that wouldn’t be right. [WHY NOT?]
Because they are depending on you, and if you have a promise and you don’t [keep it], maybe they will stop depending on you. And not rely on you...

[Which is worse, a father breaking a promise to a son or a son to father.]
A father breaking a promise to his son, because the son is really depending on him and the son doesn’t know better maybe.

[What do you mean the son is really depending on him?]
Because he loves his father very much and he believes in him (1071).

AC-3

[In general, should people try to keep their promises?]
Yes, I would say so.
[Why is it good to keep your promise?]
When you make another promise, they will believe that what you say will be true. [Why is that important, that people believe what you say is true?]
So that they trust you (0055).

AC-4

[IN GENERAL, WHY SHOULD A PROMISE BE KEPT?]
... If a friend didn’t keep a promise than he would lose his friendship, and you would disown or not associate with your friend anymore, because he wouldn’t be your friend (0083).

AC-5

[IN OTHER WORDS, WHY SHOULD A PROMISE BE KEPT?]
... When you make a promise and you keep it, you kind of feel good. I don’t know. [FEEL GOOD IN WHAT WAYS?]
Well, the person that you make the promise to is happy with you. And... they might do the same thing for you. They will make a promise to you and keep it (0452).
AC-6 [Is it important to keep a promise to someone you don't know well and probably won't see again?]
Yes. It's like inside. You will lie to the person and that will make you feel guilty. The other person might not know that you [broke the promise], but you do it because this person asked you to and that's important (1424).

AC-7 You should never break your promise to someone like your kid. [AND WHY NOT?]
Because that kid might try to be the same as the father, or maybe even worse (0289).

AC-8 [IS IT IMPORTANT TO KEEP A PROMISE TO SOMEONE YOU DON'T KNOW WELL AND PROBABLY WON'T SEE AGAIN?]
Probably not.
[NO? WHY WOULDN'T IT THEN?] Because you will not be seeing the person anymore... (0808).

Formal Authority
FA-1 [WHAT DO YOU THINK IS THE MOST IMPORTANT THING A FATHER SHOULD BE CONCERNED ABOUT IN HIS RELATIONSHIP TO HIS SON?]
I think a father should be concerned that his son does the right thing, that he becomes intelligent and productive... Just guide him the best he can.

[WHY IS IT IMPORTANT THAT A FATHER GUIDE HIS SON?] So that life will be easiest and happiest for the son (0355).

FA-2 [WHY IS IT IMPORTANT THAT HIS FATHER MAKES SURE THAT HIS SON GROWS UP TO BE HONEST AND NOBLE?]
The son's life is in the parent's, or in this case, the father's, hands. As a child, the son has no choice as to what he... turns out to be, and it's the parents'—or the father's—role to steer the child to being a helpful person. If the person isn't raised to be a good person, then their life can be completely ruined simply because of the father's decisions (0305).

FA-3 [IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER OVER HIS SON?]
The father instructs the son on what to do in life. He is his guidance, and shows what, by just his own morals... and usually gives them to his son. That is his role as a father (0804).

FA-4 [IN GENERAL WHAT SHOULD BE THE AUTHORITY OF A FATHER OVER HIS SON?]
Well, I guess basically whatever he does until a certain age because a father cannot control a son forever (0836).

FA-5 [IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER OVER HIS SON?]
... He has the authority to tell the son what to do, but sometimes it is not... right, and the son should be allowed to make his own mistakes; you learn from your own mistakes... (0804).

FA-6 [WHY WOULD IT BE RIGHT FOR JOE TO REFUSE TO GIVE HIS FATHER HIS MONEY?]
Because the father didn't deserve it... The father isn't being all that kind. He is taking something away from his son. A son is supposed to do what his father tells him, but he cannot go beyond what he thinks is right (0804).

Contract
FC-1 [In general, why should a promise be kept?]
Don't make a promise if you can't keep it. You can always have it on loose terms. Why even make a promise? You could say it's a possibility. It's a little more sacred to have a promise (1332).

**FC-2**

[IN GENERAL WHY SHOULD A PROMISE BE KEPT?]

A promise should be kept because it is based on trust. And you have to trust other people, and if somebody breaks a promise then you have lost trust in them (0836).

**FC-3**

[Why should a promise be kept?]

Because... especially when you are talking about a kid and a parent, that's how you build trust (0493).

**FC-4**

[IS IT IMPORTANT TO KEEP A PROMISE TO SOMEONE YOU DON'T KNOW WELL AND PROBABLY WON'T SEE AGAIN?]

... I think... you wouldn't want another stranger to break a promise to you, so you should not break a promise to them (0804).

**FC-5**

[WHY IS IT IMPORTANT TO KEEP PROMISES?]

... A person will not depend on you or count on your word anymore if a promise is broken so easily. They lose respect for you (0064).

**FC-6**

[IS IT IMPORTANT TO KEEP A PROMISE TO SOMEONE THAT YOU DON'T KNOW VERY WELL AND PROBABLY WON'T SEE AGAIN?]

Yes

[WHY IS THAT?]

Because word travels. Word travels.

[AND WHAT DOES THAT MEAN, WHAT DOES THAT HAVE TO DO WITH IT?]

Well, reputation... It's something that's going to follow you throughout your life (0272).

**FC-7**

[THE FATHER PROMISED JOE HE COULD GO TO CAMP IF HE EARNED THE MONEY. IS THE FACT THAT THE FATHER PROMISED IMPORTANT IN THIS SITUATION?]

Oh, of course. That's the most important thing. [WHY IS THAT THE MOST IMPORTANT THING?]

If you break a promise—that's really important between a father and son—if that's broken, it's really hard for a child to handle (0982).

**FC-8**

[WHICH IS WORSE, A FATHER BREAKING A PROMISE TO A SON OR A SON BREAKING A PROMISE TO HIS FATHER? WHY?]

A father breaking his promise to his son, because the son looks up to his father. A father has to teach him ways, so when he goes out in life, he can transfer those ways to his children (1200).

**FC-9**

[OKAY, ALL RIGHT. THE FATHER PROMISED JOE THAT HE COULD GO TO CAMP IF HE EARNED THE MONEY. IS THE FACT THAT THE FATHER PROMISED IMPORTANT?]

Oh, yes.

[OKAY, AND WHY IS THAT IMPORTANT?]  
I think it's really important, because I think by doing that he sets a bad example for his son. Because you want your kids to follow through on something they promise. And if you don't set a good example on that, how are they going to know to do that? (0257).

**FC-10**

[IS IT IMPORTANT TO KEEP A PROMISE TO SOMEBODY YOU DO NOT KNOW WELL AND PROBABLY WILL NOT SEE AGAIN?]

Well, yes, I think so. If it is something quite important like giving a message to their parents or something like that... a stranger... yes I think it is important. I think it depends on the actual importance of it (0836).
[SA-1]

[OKAY. SHOULD JOE REFUSE TO GIVE HIS FATHER THE MONEY?]

Yes, why not? [OKAY. WHY SHOULD HE?]

...I think it's also important what his dad wants it for. You know I think that...if there was something in the family that needed tending to, that's different than having your parent's pull something on you like this... (0574).

[SA-2]

[SHOULD JOE REFUSE TO GIVE HIS FATHER THE MONEY?]

...The boy should not refuse to give his father the money. But, certainly his father has got no right to the money.

[WHY SHOULDN'T JOE REFUSE?]

The father is responsible for the son, if nothing else—Lord knows parents can make it pretty difficult on kids. There may have been some pretty miserable times, and I think—if nothing else but to keep harmony in the home—it makes a big difference in a child's attitude and outlook, and if there's no harmony in the home, it can really mess up an individual. I think, if nothing else, the son should give the father the money just to keep harmony in the home (1196).

[SA-3]

[SHOULD JOE REFUSE TO GIVE HIS FATHER THE MONEY?]

Legally or morally or what? I guess I would have to say that no, Joe should not refuse to give his father the money.

[WHY NOT?]

...First of all, Joe's a minor and therefore, legally, everything that Joe owns is actually his father's (0385).

[SA-4]

[IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER OVER HIS SON?]

The authority should be the actual modeling, the examples, the way of life that a father has or a mother has towards her children. That, in itself, will create authority. It's not a forceful authority, but it's respecting the child, at the same time practicing what you preach. I think that in itself is authority, so a child will look up to you, not with fear but with admiration, love, and respect. That's hard. That's really hard (0432).

[SA-5]

[IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER OVER HIS SON?]

...Well, in general the authority is...modeling. What I think is the right way to handle things or to think about things or believe, I do, and that is the model that I offer, and it is an offering and not autocratic control, or arbitrary (0644).

[SA-6]

[IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER OVER HIS SON OR A PARENT OVER A CHILD?]

[To guide children] to build their own character, self-esteem, and self-worth (0511).

[SA-7]

[WHAT DO YOU THINK IS THE MOST IMPORTANT THING A FATHER SHOULD BE CONCERNED ABOUT IN HIS RELATIONSHIP TO HIS SON?]

Well, basically [parenting is] a responsibility. You are bringing up a child: why did you bring him into this world in the first place if you are not going to be teaching him good things? To me, those are the good things: to be a better person, to improve the world by improving yourself, being a trustworthy human being, being a conscious person, being aware of other people and of yourself, and becoming an independent human being. All those things are what I think are the good things that parents should teach children (0432).

[SA-8]

[WHY IS IT BAD THAT THE FATHER IS ASKING FOR THE MONEY FOR SELFISH REASONS?]
Well, if Joe knows that he wants the money so he can go fishing, that's sending him the wrong message. It's saying that people in power are the ones that control what goes on, and if you don't have power you have no control over your life, and I don't believe that's true. At least it shouldn't be true. 

[WHAT'S WRONG WITH SENDING HIM THOSE SORT OF MESSAGES?]
Well, he's a parent and as a parent, you are not just an adult or one person interacting with another person, your job as a parent is to raise your child to the best of your ability (0354).

SA-9
[WHAT DO YOU THINK IS THE MOST IMPORTANT THING A SON SHOULD BE CONCERNED ABOUT IN HIS RELATIONSHIP TO HIS FATHER?]
That he obeys the rules and tries as hard as he can to abide by the moral teachings that he gets. He has an obligation to ask about things that don't make sense and he doesn't understand so that: (1) he can get an explanation; and (2) there can be a dialogue about things instead of a one-way street (0047).

SA-10
[IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER OVER HIS SON?]
Authority. Well, you have to be strong for your children and you have to influence them, but you don't want to be overbearing or overwhelming. You don't want to take liberties with your authority. You do have authority, but you don't want to... make that person subservient to you, because they are a person. Just because they are your son or daughter doesn't mean that they don't have the same rights as anybody else (0439).

SA-11
[DOES IT COME ALL AT ONE AGE? ARE YOU AUTHORITARIAN AND THEN YOU LET GO?]
No. You adjust to how well they handle. It is a gradual thing. They are given more and more leeway, more and more flexibility, more and more responsibility to make their own decisions, handle their own money, come in when they are supposed to, do their homework, do their chores, whatever. And when they do those well, then they are given more responsibility. If they don't, then the authority swings back to the right (0040).

SA-12
[IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER OVER HIS SON?]
At what stage of life?
[IT DOESN'T SAY, I GUESS IN GENERAL.]
Okay. I'll talk about it all the way through. You are making sure that the things that a young person needs in life are provided, and then as life goes on and as the son develops, you become a role model, you give guidance. The relationship would obviously change as you progress through life and then ultimately it's going to be an adult to adult relationship. It's a changing thing. The relationship is changing all the way through life (1024).

Contract
SC-1
[IN GENERAL, WHY SHOULD A PROMISE BE KEPT?]
... Promises set up rules of behavior, and if you do not have order and do not have people knowing how they are going to behave... it becomes a jungle (0846).

SC-2
[SO, WHY IS THE IDEA OF A PROMISE THE MOST IMPORTANT THING?]
Again, it's the trust in a friendship relationship, the respect and sensitivity for
other people's needs and desires that are being violated in this case. That's all inherent in a promise. If I promise you something, it's because I see the need, I see the desire, I see the respect, the sensitivity and all. It all comes into play and that's all been violated in this case when the father changes the terms of the agreement... (0085).

SC-3 [BUT WHY IN GENERAL SHOULD A PROMISE BE KEPT?]
I think in terms of establishing any kind of meaningful family relationships, relationships that are going to last and stand the stresses and strains of the family, that when you give your word you should be bound to keep it (1254).

SC-4 [WHAT DO YOU MEAN, THAT'S HOW WE FUNCTION?]
For instance, in the case of a citizen, where you have a government giving you laws and things, those are contracts that they agreed to look at... as long as you abide by the law, they will do so. It is the trust that you have in them and they have in you, that you will be a good citizen and they will protect you from infringement of your rights that makes it possible for people to live with each other. The trust that people have with government, with each other—that makes it possible for you to live in society (0838).

SC-5 [BUT IN GENERAL, WHY SHOULD A PROMISE BE KEPT?]
It's a contract written up between two people. [WHY IS THAT IMPORTANT?]
I keep getting stuck on the fact that people depend on what you say you are or are not going to do. And that again will affect other people. You are part of a whole scheme of things. You are not the only one, the most important link in this chain... Whatever you say or do is going to affect other people one way or another, and you have to be very careful about what promises you make, what promises you break (0085).

SC-6 [WHY IS IT IMPORTANT FOR PEOPLE TO KEEP PROMISES?]
Well, you want promises kept to you. If you expect people to trust you, if you expect people to respect your integrity, if you expect people to believe you, then you must do what you say you are going to do. If you don't, you need to sit down and communicate with them and explain what happened (0584).

SC-7 [IS IT IMPORTANT TO KEEP A PROMISE TO SOMEONE YOU DON'T KNOW WELL AND PROBABLY WON'T SEE AGAIN?]
Yes, it's just as important as somebody you are very close to... [WHY IS THAT?]
Again, they are going to be making decisions based on what you say. Their actions are going to depend on what you say you are going to do. (0085).

SC-8 [DO YOU THINK IT WOULD BE IMPORTANT TO KEEP A PROMISE TO SOMEONE THAT YOU DON'T KNOW WELL AND MAY NOT EVER SEE AGAIN?]
I think it is. Because you have got to be true to yourself first. [AND AGAIN, WHY IS IT IMPORTANT FOR A PERSON TO BE TRUE TO HIMSELF?]
Because of... your own integrity (0354).

SC-9 [IS IT IMPORTANT TO KEEP A PROMISE TO SOMEONE YOU DO NOT KNOW?]
Sure. [WHY?]
It is my promise... It does not have anything to do with the other person in that sense. It is whether I respect my own promises enough to keep them myself... It is a part of my sense of responsibility for my behavior in the world (0644).

SC-10 [OKAY, SO WHY IN GENERAL, OUTSIDE OF THIS SITUATION SHOULD A PROMISE BE KEPT?]
It depends on the kind of promise that it is. If it's a goal that a child has—or
an adult for that matter—has set for him or herself, it's important that once a
person reaches a goal, that they are able to fulfill it for themselves. If someone
else is in the picture and takes that goal away, it gives a person a feeling of
hopelessness and helplessness, like they have no power and control over their
own lives. Like someone else is controlling them. And it's devastating (0506).

SC-11

[WHY IS IT IMPORTANT FOR PEOPLE TO KEEP PROMISES?]
Well, you want promises kept to you. If you expect people to trust you, if
you expect people to respect your integrity, if you expect people to believe
you, then you must do what you say you are going to do. If you don't, you
need to sit down and communicate with them and explain what happened
(0584).

Metasystematic

Authority

MA-1

[IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER
OVER HIS SON?]  
Yes, I don't much like that term. I think of a relationship of a father to his son as
more of a stewardship relationship. While the young person is not able to make
decisions... the father has to act in their interest. There is always a danger that
you might act in your own interest... when acting as steward for the child. But by
the time the boy is 14 years old you have to think that to a substantial degree he
should be able to act for himself... I would say in this situation the father
shouldn't be playing an authority game with the son. He... should be helping
Joe to come to a good judgement... It should be as [though Joe and his father
are] two persons who are each interested in [Joe], not one who has authority and
one who doesn't (1022).

MA-2

[IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER
OVER HIS SON?]  
Well, in my experience I feel that I do not so much have authority over my son
as that I have a responsibility to help him. Authority is, I think, a word that we
use kind of ambiguously. On the one hand, it has root is in authorship. In
other words, a father-author is in a sense partly a creator of his son which does
not necessarily mean that he has some right to dominate him but to help in
that creation. And so, properly speaking, if you were being a proper creative
author, your authority is to help that person optimize their own development.
(0827).

MA-3

[IN GENERAL, WHAT SHOULD BE THE AUTHORITY OF A FATHER
OVER HIS SON?]  
The level or degree of authority is commensurate with the development of the
child, so that if the child is 2 weeks old, the father would have tremendous
authority, and that as the child develops his or her own way of thinking and
looking at the world... the issue of authority would become very slim quite early
on...

[WHY IS IT THAT YOU WANT TO HAVE DECREASING AMOUNTS?]
What authority means is taking away the autonomy of someone else and
replacing it with your own. So, it would be inconsistent to attempt to enhance the
autonomy of another person while taking it away (0070).

MA-4

[SO, SHOULD JOE REFUSE TO GIVE HIS FATHER THE MONEY?]  
I would say yes, he should. The claims are those of obedience to one's father
on the one hand—that is sort of his moral drama—versus a pledge which his
father made on the other. I suppose that the father could always force the
situation, but I think in refusing to give his father the money, Joe would be
standing up for what his father should be doing, and trying to bring to his
father's attention the importance of that thing... There is another side to this
which transcends the moral situation—the kid, Joe, could always forgive his
father the pledge in love. In a sense, if that were to happen, that would be fine...
as long as the father knew that was what was happening, and that the kid just
was not buckling under for the sake of obedience (0844).

MA-5

[SHOULD JOE REFUSE TO GIVE HIS FATHER THE MONEY?]

... What we are trying to do is seek a sense of fair play. And, in the relationship
between the father and son and their conflicting needs, and which one has
priority, and what judgments will be most detrimental to the personalities of the
people involved. So we are looking for who would be damaged the most
monetarily and psychologically and have his growth inhibited, and maybe his
psychological makeup stunted by this dilemma. Being an adult automatically
places you with certain responsibilities within your family, and other adults too,
that I don't think that your needs or your need of gratifications, whatever
they are, can be used to physically and psychologically harm other human beings,
regardless of age or regardless of social structure (0007).

MA-6

[IS IT IMPORTANT FOR THE FATHER TO RESPECT THE SON'S
PROPERTY?]

Oh yes, very definitely... If you hold certain things very closely to yourself,
then you should also respect another person's possessions. Why is that
important?... I think that really probably is an extension of respecting the
person. Don't ask me how I got from personal possessions to the individual,
but I think... we should respect other people. That is a very positive force,
or should be a very positive force in dealing with people, respect for
people... Maybe it gets back to my basic feeling about life. Life is good...
my feeling is that you have to respect other people, people are life, are part
of life, very obviously an important part of life (1249).

Contract

MC-1

Contracts and promises are abstract, or often abstract and sometimes concrete
articulations of a unique human quality, which is mutual trust. And all of our
moral principles, as well as most of our societal conventions, are based on this
conception of mutual trust, much more than we realize, to the point of which
we could barely move anywhere if we didn't have this often abstract and
intuitive sense that there's mutual trust—even between you and another driver
on the street, or your neighbors, or going further, your representatives in a
political sense, and so on (0070).

MC-2

[OKAY, THE FACT THAT IF A PROMISE IS NOT KEPT, THEN THE
NEXT TIME IT MIGHT NOT BE TAKEN SERIOUSLY, WHY IS THAT
IMPORTANT?]

I think it is basic to the family or to society that if you do not follow through with
your promises or your stated intentions, then you are in violation of one of the
things that separates us from the animals, in that we can make decisions and
abide by them and other people can count on certain things to be done or certain
precepts be followed through (0855).

MC-3

[WHY DO YOU THINK, IN GENERAL, A PROMISE SHOULD BE KEPT?]

In general? [YES, WHY SHOULD THE PROMISE BE KEPT?]

Because promises and social contracts are generally made in good faith on
the part of both parties with a sense of fair play and justice... By breaking
or undermining such commitments, you destroy the social network... that we
live in (0007).
[OKAY. IN GENERAL, WHY SHOULD A PROMISE BE KEPT?]

If your word is going to be taken back—this happens not just within your household, but within the community in general—it leads to a breakdown in cohesiveness in society, a breakdown of order. Particularly in this case... The parent is not only biologically related to the child, but is really kind of a stand-in for society, educator of the child for most of that child's early life... In a way, it prepares the child for how society is going to act towards the child, so the child seeing the parent use language credibly is going to expect society to act the same way. Upon that expectation, the welfare of all depends, because if that isn't generally the case, we have a society of chaos.

[DO YOU THINK IT'S IMPORTANT TO KEEP A PROMISE TO SOMEONE YOU DON'T KNOW WELL AND PROBABLY WON'T SEE AGAIN?]

Sure. [WHY?]

Well, a promise is... a social contract... We came to establish a group of principles, philosophical concepts that we live by... So, when we enter into a contract it has nothing to do with how close the party is to us... Even if somebody calls you over the phone and you made a commitment, you are bound by philosophical principles which you live by, sense of fair play, of making the commitment, and following through... The only time that you would break this social contract is when you have... to seek justice. [For example] all people in a society agree that you are not going to steal property... but when that agreement is no longer just, then we have to do something about it. In other words, there's a higher order than the actual social contract, but the social contract is important.

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