William Perry's intellectual scheme set the stage for future theory building related to the cognitive development of college students.

Perry's Intellectual Scheme

Little can be said about Perry's scheme of intellectual and ethical development that has not been said already; however, any discussion of cognitive development theories of college students must begin with William Perry's work. Among the reasons for including Perry are that three of the works also summarized in this volume (Baxter Magolda, 1992; Belenky, Clinchy, Goldberger, and Tarule, 1986; King and Kitchener, 1994) grew out of the research of Perry and his colleagues. In addition, the theory—and what it has to say about the cognitive development of college students—is still salient for today's practitioners. At a minimum Perry's work has intuitive face validity for practitioners (King, 1978), and it forms a bridge from the child and adolescent studies of Piaget, Vygotsky, and others to a more direct focus on early adulthood, especially the early adulthood of college students.

Two of the most cited and thorough reviews of Perry's theory and research are King's chapter (1978) and Perry's own synopsis (1981). Briefer, but more recent, reviews include Chickering and Reisser's summary (1993) in *Education and Identity* and Evans, Forney, and Guido-DiBrito's summary (1998) in *Student Development in College*. The purpose of this chapter is to provide a summary of Perry's work and view it in the context of the late 1990s. Perry was a counselor and professor of education at Harvard, and during the course of about fifteen years in the 1950s and 1960s he worked with more than thirty people in conducting the research that led to the development of this scheme (Perry, 1981). Perry and his colleagues came up with the intellectual and ethical scheme now identified solely with him. One of his motives for studying the cognitive development of college students was his recognition of the increasing relativism in society and diversity on campus,

For ease of communication, throughout this volume we refer to the scheme as Perry's, as has been the tradition.

which had both been accelerating since World War II. Perry felt that there was a need to comprehend how students came to understand the modern world through multiple frames of reference. The diversity Perry identified was geographic diversity—students were arriving at Harvard and Radcliffe from all over the United States and from throughout the world. This kind of diversity is distantly related to today's concerns about such issues as class, race or ethnicity, and sexual orientation.

The population Perry and his colleagues studied consisted of white, overwhelmingly male, upper-class students at Harvard and Radcliffe—the elite of the time. They interviewed students at the end of each academic year during their four years in college. Each interview began with the same question: "What stands out for you from the past year?" They interviewed 31 students from the class of 1958 (27 from Harvard, 4 from Radcliffe), and then 109 students from the classes of 1962 and 1963 (85 from Harvard, 24 from Radcliffe). A total of 464 interviews were conducted from which there were complete four-year sequences for 84 students, of which only 2 were women. Their conclusion was that, although the content of the interviews varied tremendously, the underlying structures of meaning making (that is, the forms students used to make sense of their academic and personal experiences) and the sequence of development were equivalent. Also, they concluded that the differences were not due solely to personality styles but to different aspects of a developmental process.

Perry's work was an outgrowth of theories that preceded his own, especially Piaget's theory. For example, Perry and his colleagues adopted Piaget's terms assimilation and accommodation to describe the processes of development they discovered in the students they interviewed. Perry (1970, p. 204) also pointed out the similarity between the two theories as a "movement away from a naive egocentrism to a differentiated awareness of the environment." Both theories trace a process of new awareness of the self, of environmental influences on the self, and of the complex balance between this emerging awareness of the self and the external influences from the environment. Perry's focus on college students extends our understanding of cognitive development beyond Piaget, whose theory stopped at approximately age fifteen.

Terms and Concepts

In some cases, Perry and his colleagues developed a specific vocabulary to explain what they were finding in their research. Definitions of some of the important terms and concepts that will be elucidated in the course of this chapter are presented here.

Position. Perry's scheme comprises nine positions. He chose to use the term *position* rather than *stage*. *Stage* refers to a relatively stable and enduring form, pattern, or structure of meaning making that pervades a person's experience (Perry, 1970). Perry and his colleagues preferred the term *posi-*

tion because they made no assumptions about the duration of the position. Amid the variety and range of structures a particular student uses to make sense of the various aspects of the world at any particular point in time, position could express a central tendency in students' meaning making. Also, the term implies the "place," or vantage point, from which the student views the world (Perry, 1970).

Absolute. Perry used the term *Absolute* (uppercase *A*) synonymously with Truth—in the sense of unchanging, universal, timeless facts and knowledge. The Truth was possessed by Authorities.

Authorities. *Authorities* (uppercase *A*) were the possessors of the right answers in the Absolute; *authorities* (lowercase *a*) existed in the relativistic world and derived their authority from many sources, such as power, expertise, training, wisdom, experience, and position.

Adherence and Opposition. In several of the early positions of the scheme, Perry and his colleagues noticed that students differed in their perceived relationship with Authorities. Those identified as *adherents* tended to identify and align with Authorities through a dualistic structure of the world: Authorities were part of "we" (Authority-we-right). Those identified as being in *opposition* set themselves apart from Authorities: Authorities were part of "they," and they were wrong (Authority-they-wrong; we-right). These different relationships with and to Authority had an influence on the form of students' intellectual development.

Alternatives to Growth. In his original work, Perry (1970) identified at least three alternatives to forward progress through the positions of his scheme: *temporizing*, *retreat*, and *escape*. Knefelkamp (1999) identified at least one more: *functional regression*.

Temporizing occurred when a student delayed in one position for a period of time, hesitating to take the next step. The individual usually was aware of the position ahead but was unwilling to proceed.

Retreat described a movement back to the relative safety and security of dualism—a world where right and wrong were clear and ambiguity did not exist. This occurred often in reaction to the complicated nature of pluralism.

Escape described the act students engaged in when they avoided moving beyond the position of relativism to the responsibility of making commitments in a relativistic world. Students who took the escape route realized that it was easier to remain in a relativistic stance than to face the difficulty of making commitments and personal choices.

Functional regression described a process where students who were undertaking new learning in a new environment "functionally" regressed to previous positions until they felt comfortable in the new environment. That is, the regression was developmentally appropriate; to progress developmentally, the students needed to move back to previous sense making in order to get their bearings.

Perry's Nine Positions of Cognitive Development

Perry's scheme has been divided and sorted in a variety of ways. In various explications, it has been broken down into nine, four, three, or two parts. As already indicated, his theory lists nine separate positions. However, they often are clustered into groups for easier digestion and initial understanding. Several authors (such as Brand, 1988; King, 1978; and Kloss, 1994) suggest that the dominant pattern is four major groups within the nine positions: dualism (positions 1 and 2), multiplicity (positions 3 and 4a), relativism (positions 4b, 5, and 6), and commitment in relativism (positions 7, 8, and 9). Perry (1970) himself initially clustered them into three groups. He described positions 1, 2, and 3 as the transition from a right-wrong outlook to the recognition of relativism; positions 4, 5, and 6 as the development of this relativistic outlook; and positions 7, 8, and 9 as the development of commitments in a relativistic world. However, the scheme also can be seen as having two major orientations: pre-position 5 (knowledge and values are objective, certain, and universal); position 5 and post-position 5 (knowledge and values are relative, contingent, and contextual). Position 5 is where the most significant revolution in sense making occurs for the individual (Perry, 1970). It is this dichotomy that led to King's criticism (1978) of Perry's theory, in which King contends that the first five positions described epistemological and intellectual development and that the last four described moral, ethical, and identity development. This chapter focuses on the first five positions of Perry's scheme and the transitions between them. (The last four positions of Perry's scheme were lightly drawn and in the intervening years have not been filled in. Instead, ethical and moral development has arisen as a separate area of focus and research.) Providing information on the transitions between positions allows for clearer application of the theory in practice (Perry, 1981). To further enhance clarity, Knefelkamp's labels (1999), which she indicated she and Perry developed to clarify confusion about the original labels, are given in parentheses, either following the subheading of the section where the label is discussed (for positions 1-5) or within the text of that section (for positions 6-9). For example, Knefelkamp's label for basic dualism is strict dualism.

Position 1: Basic Dualism (Strict Dualism). For those who view their experience from this position, the world is divided into absolutes (right and wrong, good and bad). Everything is known. Authorities possess the Absolute Truth; they know the right answers and identify what is good (Perry, 1970). The world of Authority is free from conflict, and a student's job is to listen to the Authorities in order to receive the right answers—the Truth. All problems are solvable by obeying and conforming to what is right and what Authorities want.

Perry and his colleagues did not find any students who by the end of their first year in college had basic dualism as a dominant orientation (Perry, 1970). However, the expectation associated with dualism (the existence of right answers for all questions and problems) persists as an important

assumption underlying the first four positions of the scheme. It is only in position 5 that the discovery of a simple right answer becomes recognized as the exception rather than as the rule.

Transition to Position 2. Development is prompted by the recognition of the existence of different opinions and the recognition that some Authorities disagree on what is right and good (Perry, 1981). In Perry's original work (1970), he noted that students were confronted with pluralism and diversity of opinions most powerfully in the residence halls and that the first challenge to basic dualism often came from peers.

Position 2: Multiplicity Prelegitimate (Strict Dualism). Multiplicity refers to the pluralism of answers, opinions, ideas, and points of view related to problems and issues. The notion of multiplicity being "prelegitimate" means that students recognize but stand in opposition to pluralism, complexity, diversity, abstractness, and interpretation. In this position the student remains loyal to Authority, still seeking truth from professionals, such as a professor or advisor, or from books written by "experts." Perry (1970) noted that students at this position also express fear, stress, and sadness when they realize that the way they have known (that is, the world as absolutely known and knowable) is at times no longer in evidence. Because multiplicity is not perceived as legitimate, students must make sense of its existence. They will, for example, allow a difference of opinion but recognize it as only temporary or decide that questions without clear-cut answers are used by Authorities for the purpose of making students think more. Students at this position will also differentiate between good Authorities ("My professor wrote the book on this subject.") and bad Authorities ("She's only a teacher's assistant. What would she know?").

Transition to Position 3. Progression toward the outlook that pluralism may be a legitimate notion is prompted when students experience good Authorities admitting that even they do not have all the answers yet (Perry, 1981). Students struggling with this transition may divide subjects into the definite (most often math and science) and the vague (such as social sciences and humanities) (Perry, 1981).

Position 3: Multiplicity Legitimate but Subordinate (Early Multiplicity). Students who view the world from this position accept as legitimate the idea that there is room for human uncertainty but that this uncertainty does not affect the nature of Truth itself because the uncertainty is temporary (Perry, 1970). The limit of uncertainty that students can tolerate has expanded, but uncertainty is still agitating. Eventually, the one right and universal answer will be found. However, where there is no agreement as to the right and good answer, there is then no wrong answer. Instead, in areas of uncertainty everyone is viewed as having a right to a personal opinion. Rightness, therefore, vanishes as a standard of evaluation. For example, students who see the world from this position begin to question systems of grading or modes of evaluation (in and out of the classroom). If there are no agreed-on answers, nothing is left for a basis of the

judgment of schoolwork but style and good expression. Students set out on a quest to discover what the Authorities (that is, professors) want and then try to give it to them (Perry, 1970).

Transition to Position 4. Students recognize that uncertainty is not isolated but widespread and that the chance of quick answers coming soon is slim. Uncertainty is now unavoidable, and the strong identification of Authorities with Absolute truth is further loosened (Perry, 1981).

Position 4: Late Multiplicity. In Perry's original work (1970), position 4 represented the modal starting point of freshmen at the end of their first year. In the earlier positions of the scheme, Perry (1970) described how students varied in how they experienced and worked through their development. However, in position 4 the differences were so dichotomized that Perry and his colleagues identified two different paths students took. Basically, students split into two groups in position 4, only to be reunited in position 5. In 1981, Perry noted that some students may actually proceed from 4a to 4b before moving on to position 5. Perry and his colleagues also found that the path students took seemed to be dictated by their relationship and identification with Authority—that is, the balance between a student's tendency toward Opposition on the one hand and Adherence on the other.

Position 4a: Multiplicity Correlate (Oppositional Alternative). Perry's description (1981, p. 84) of students' mind-set in position 4a was as follows: "These students create the double dualism of a world in which the Authority's right-wrong world is one element and personalistic diversity [multiplicity] is the other. The students have thus succeeded in preserving a dualistic structure for their worlds and at the same time have carved out for themselves a domain promising absolute freedom. In saying in this domain, 'Everyone has a right to [their] own opinion,' students are also saying, 'Where Authorities do not know the Answer, any opinion is as good as any other.'"

Perry's double dualism involved seeing all issues in the world falling into two categories. For many issues and questions, Authorities had the right answers. In this category the student viewed the world dualistically. Regarding issues and questions for which there were no clear-cut answers, the student felt that everyone had a right to a personal opinion. As long as ambiguity remains, people have a right to their own opinion, and no one has the right to call anyone wrong. In this position students claim multiplicity as a domain of their own, equal in legitimacy—a correlate—to Authority's domain (that is, where Truth is known) (Perry, 1970). Perry (1981) argued that multiplicity should not be dismissed as mere license to discount others who disagree with one's opinions. Instead, he pointed out, the egalitarian spirit (the belief that all opinions have equal worth and validity) "expresses a respect for others through a respect for their views" (p. 85).

Transition to Position 4b. In arguing with Authorities (such as teachers), students can become trapped by their own argumentativeness. "Unable

to leave well enough alone, [students] demand that Authority justify itself by reasons and . . . by evidence" in order to prove this or that opinion any more worthwhile than their own (Perry, 1970, p. 99). Unwittingly, students then are caught in the necessity of justifying their opinions and judgments as well, which is a hallmark of relativistic sense making. "The establishment of a domain separate and equal to that of Authority, in which the self takes a stand in chaos, will provide (once contextual thought is discovered to provide some order) a platform from which Authority may be viewed with entirely new eyes. . . . The bridge to the new world is the distinction between an opinion and a supported opinion" (Perry, 1970, pp. 99–100).

Position 4b: Relativism Subordinate (Adherence Alternative). Someone viewing the world from a multiplistic position recognizes diversity, ambiguity, and differences of opinion. A view of the world from a relativistic position does as well, but this position goes beyond multiplicity in that issues of context and rules of evidence are incorporated in order to allow for analysis, comparison, and evaluation of opinions, points of view, and interpretations (Perry, 1970). Knowledge is viewed as contingent and contextual; ideas are better or worse rather than right or wrong. Students who make sense of the world from position 4b recognize these aspects of relativism but still see relativism as subordinate to the overall multiplistic nature of the world.

Perry and his colleagues determined that the majority of college students they studied followed this path through position 4. The shift in this position is from "what they want" (position 3) to "the way they want us to think." For example, in certain courses instructors are not expecting a right answer but are looking for students to provide supporting evidence and arguments for their answers. The paradox that Perry (1970) discovered was that these students were trying to learn to think independently and critically out of a desire to conform to the expectations of Authorities. In this position "reasoning' provides the lever that will move knowledge from the dualistic realm to the qualitative. . . . The requirement that an answer or opinion be reasonable raises the possibility that some questions may have some legitimate answers" and that some answers will be more legitimate than others (Perry, 1970, p. 102).

Transition to Position 5. As students become more aware of the wide influence of context and rules of evidence, they move from seeing relativistic thought as a special case to recognizing that relativistic thinking will be required more frequently and will work more frequently both in coursework and outside of academics.

Position 5: Relativism (Contextual Relativism, Relational Knowing). As Perry (1970, p. 109) observed, "Up to this point students have been able to assimilate [new ways of thinking] to the fundamentally dualistic structure with which they began." Accommodation has resulted either in a double dualism (position 4a) or the adding of a subcategory of "critical thinking" (position 4b) (Perry, 1970). Movement to position 5, however,

involves adopting a way of understanding, analyzing, and evaluating that requires a radical reperception of all knowledge and values as contextual and relativistic. The actions required of position 5 thinking also encourage the development and practice of metacognition—the capacity to think about and examine one's own thinking. Perry (1981) noted that ten years after he first articulated his scheme of development, the modal position for students at the end of their first year at Harvard and Radcliffe had moved from position 4 to position 5.

In the movement to position 5, relativistic thinking becomes normalized and habitual; it is first conscious, then automatic (Perry, 1970). Complexity is expected, and the simplicity of dualism is consigned to the subordinate status of a special case. The notion of Authority becomes authority, that is, authority loses its status as not being open to challenge. Instead, authority's assertions are now open to analysis, evaluation, and the requirements of contextualized evidence. Students recognize the existence of multiple (and often conflicting) authorities. Authorities are recognized as groping in a relativistic world along with the students, though they may be more advanced in their experience and in their expertise in groping (Perry, 1970).

Perry (1970) pointed out that this revolution in the way of making sense of the world is both the most violent accommodation of structure and the most quiet. Whereas students were conscious of and remembered the assimilations they had made within and between other positions, they often did not remember their accommodation to position 5 sense making. Students commonly found themselves in a relativistic world without an explicit memory of how they arrived. The salient qualities of this position are a breakdown of the old structure and identity, balanced by a realization of growth and competence in a relativistic world; a changed relationship to authority; a new capacity for detachment; and an awareness of a path toward a new identity through personal commitment (Perry, 1970). To observe both an act and its context one must have an alternate context in which to stand. Relativism provides the ground for detachment and objectivity. In their records (Perry, 1970) no student who had once accepted a relativistic epistemology showed evidence of a generalized regression to absolutism.

Positions 6–9: Commitment in Relativism. Perry (1970) argued that in relativism one is threatened with unbearable disorientation and that students had three alternatives: to go limp, become an active opportunist, or transcend the disorientation through commitment. In position 6 (commitment foreseen) students see that commitments will need to be made in order to establish their bearings in a relativistic world. At this point students feel the beginnings of a desire to define their personal choices, believing that to remain undefined or uncommitted would be irresponsible. Yet those in position 6 still are unable to make a decision, establish a commitment, or narrow their range of possibilities. Positions 7–9 (initial commitment, orientation in implications in commitment, and developing commitments) attempt to chart

the diffusion of commitments throughout one's life. As indicated earlier, these positions were not developed adequately in the initial publication of the scheme; in fact, the last three were collapsed into one chapter in the original work (Perry, 1970). In a subsequent explication of the theory (Perry, 1981), positions 7–9 (evolving commitments) consumed less than two pages of a forty-page chapter.

There is at least one major concern with the latter part of Perry's scheme. Although one cannot deny that making commitments is an important aspect of adult life, making commitments and enacting values are part of one's entire life. Establishing priorities and making choices are aspects of the entire life span. The structure of Perry's scheme implies that commitments are made only when one reaches the level of contextual sense making—that where intellectual development ends, ethical development begins (King, 1978). Researchers and theorists who followed Perry do not incorporate this element into their schemes of intellectual development. Likewise, Fowler's theory of faith development (1981), which is based on Perry's work, recognizes the role of values throughout the course of development.

Saliency and Use of Perry's Theory Today

Perry's scheme still has saliency today because the basic underlying structure—movement from a right-wrong mentality, to one in which multiple viewpoints are experienced as valid, and finally to one in which evaluations of evidence are made in a relativistic world—remains viable. Kurfiss (1975, 1977) validated the sequence and cohesiveness of Perry's positions using a sample of sophomores and juniors at a large state university. Although both King and Kitchener's research (1994) and Baxter Magolda's (1992) research differ, and at points diverge, from Perry's in important ways (see Chapters Three and Four), they also bear out Perry's pattern of development.

Other issues need to be considered when interpreting Perry's research for use today. These issues include comparing the sociohistorical context of the time Perry conducted his research with today's context and understanding the changes in college students during the past forty years.

Sociohistorical Context. In trying to use Perry's work for today's professionals and today's students, one needs to consider the sociohistorical context of the 1950s and early 1960s. The latter years of the 1960s were turbulent and witnessed a dramatic reduction in the respect afforded authorities across the societal spectrum. Influences included the Vietnam War and the antiwar protests it generated; the Civil Rights movement; the assassinations of John F. Kennedy, Martin Luther King Jr., and Robert F. Kennedy; rebellion on campuses; the final dismantling of in loco parentis; and the proliferation of coed residence halls and coed universities. The questioning of religious and political leaders and challenges to social scientific dogma accelerated throughout the 1960s as well. All of this might suggest why more students in the 1960s were arriving at Harvard a full position ahead

of their counterparts from the 1950s (Perry, 1981). Perhaps they were already practiced at questioning authority and had already struggled with making sense of the multiple, conflicting messages coming at them from their parents, the media, religious organizations, and educators.

Changes in College Students. Perry noted in 1981 that the cohort of students he and his colleagues followed in the 1970s had already experienced the radical transformation that occurs as one reaches position 5. However, other researchers during that same time period (such as Blake, 1976; Meyer, 1977) found a much different developmental picture at institutions less elite than Harvard and Radcliffe. Students at other institutions appeared to enter college at positions 2 or 3 and *graduate* at positions 3 to 5. Therefore, some students managed to graduate from college without having made the significant shift to position 5 thinking. This coincides with Pascarella and Terenzini's (1991) finding that from an individual psychosocial perspective (specifically related to issues of self and identity) many students graduate from college developmentally untouched by the experience.

In looking at today's college student one must also recognize just how different the population of students today is from the students of Harvard in the 1950s. First, there is the oft cited issue of the homogeneity of Perry's participants-traditional-aged, male, upper-middle-class, white. Additionally, it can be assumed that these students also were single, attending fulltime, probably working little if at all, without children, and predominantly from two-parent families. Over the past forty years, the college student population has diversified remarkably in terms of gender, race, ethnicity, age, class, ability, and life circumstances. Greater recognition of this diversification has emerged among researchers of college student experience. Perry's work has served as a foundation on which much of this other research on the cognitive development of college students has continued. For example, although Perry's scheme and basic structures have been found to "work" for women, Belenky, Clinchy, Goldberger, and Tarule (1986) found in their research on the cognitive development of a broad range of women (both in and out of college) that Perry's scheme missed some elements of women's development, including such issues as silence, voice, view of self, and relationship to Authority (see Chapter Two). Rodgers (1990) questioned whether these issues of silence, voice, view of self, and relationship to Authority are issues of the epistemological structure of meaning making or, rather, just differences in style.

Finally, attending college in the 1950s was much more an intentional and self-motivated choice than it is today. In his observations about the relationship of motivation to development, Perry (1970) noted that most of his students experienced a quite conscious urge toward maturation. He identified such motivations as sheer curiosity, a striving for competence, an urge to make order out of incongruities, a wish for authenticity in personal relationships, and a wish to develop and affirm an identity. It can be assumed that such motivations exist to at least some degree in college students today

(especially in first-generation and older college students). However, given the fact that attending colleges has become a normative expectation and a societal assumption rather than a self-motivated choice, it can perhaps also be assumed that these internal motivations are less pervasive and weaker than in Perry's group of participants. Perry also noted that many of his students did not experience the environment as imposing on them a "press" to mature and, in fact, some experienced a "press" to remain immature. If a decline in self-motivation among college students in general is a valid assumption, then creating environments that induce maturation or growth becomes that much more important. Kuh, Schuh, and Whitt's study of "involving colleges" (1991) bears this out. Their findings include such concerns as the importance of communicating and upholding high expectations for everyone.

Conclusion

William Perry's scheme of cognitive development, though more than thirty years old, is still being used by practitioners today (such as Gallagher, 1998; Kloss, 1994; and Thoma, 1993) to enhance practice in and out of the classroom. It laid a foundation for new research to extend, challenge, and build onto the scheme. The next three chapters review the work of researchers who did just that.