Emerging Adults in America
Coming of Age in the 21st Century

Edited by Jeffrey Jensen Arnett and Jennifer Lynn Tanner
Emerging Structures of Adult Thought

Gisela Labouvie-Vief

Several writers of the past century called attention to the fact that contemporary life has transformed the entry into adulthood. In *Culture and Commitment*, for example, Margaret Mead (1970) argued that if once lives had been firmly grounded in secure roles, such roles were beginning to break down; as a result, individuals had begun to experience a dislocation from a self whose life course was prefigured by his or her predecessors in a predictable generational sequence. Modern times, she suggested instead, were witnessing the emergence of a postfigurative self that could no longer rely on such clear plans. Indeed, the very notions of commitment and identity, according to Mead, sprang up because of this move toward a postfigurative society.

The uprooting of individuals from a sense of secure grounding in an intergenerational flow has become even more pronounced as the worldwide pluralism in political ideologies, religions, and ethnicities has become a source of global concern. The need to deal with such a complex world demands complex cognitive skills, as individuals need to reconstruct their intuitive sense of what is firm and secure at a much more abstract level (Kegan, 1982). Even though most adolescents and youth who enter this transition appear to be developmentally prepared to acquire such abstract skills, they are highly dependent on the availability of contexts that nurture those skills.

This chapter, as a consequence, deals with emergence in two senses. The first is that the social and intellectual transformations of the past century created the need to address new forms of thinking and being. Until the turn of the 20th century, thinking had been described in terms of certainty, stable outcomes, and rational processes; in the 20th century interest arose in processes of thinking that deal with the uncertain and changing nature of knowledge, the acknowledgment of diversity, and the importance of nonrational (e.g., automatic and affective) processes in decision making. In cognitive–developmental psychology, too, this search emerged as the attempt to question available notions of growth from childhood to adolescence, especially as embodied in the

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theory of Jean Piaget. Around the year of 1980, a flurry of writings appeared suggesting that beginning in later adolescence or perhaps even following adolescence, many individuals experience a disequilibration of their thinking that can lead to a significant expansion of thinking, indeed a new level or stage, or even series of stages.

The second sense of emergence deals more specifically with the life stage discussed in this volume—the question of how these emerging structures of thought map into the period of emerging adulthood. I present data to show that indeed, the capacity for new and complex forms of thinking emerges after adolescence and matures rapidly during emerging adulthood. But even so, I suggest that this period appears to present a kind of critical stage in which these thought structures get launched but are not necessarily brought to fruition.

In this chapter, I present theory and research on the emergence of these more complex adult thought structures as individuals enter adulthood. In the first section of the chapter I locate the origin of these proposals in movements in contemporary thinking about development. In the second section, I summarize some of the major proposals concerning the emergence of adult thought structures and present data to suggest that they begin to appear at the entry into emerging adulthood. These data also suggest that because many individuals at this developmental stage are in transition, the support of appropriate contexts (such as those related to education and work) is of great importance. This role of contexts, both inner and outer, in emerging thought structures is the topic of the third section, in which I discuss the variability of thinking in the period of emerging adulthood.

The Emergence of Relativism

The topic of emerging adult thought structures—and the possibility of a new stage they imply—moved on the stage of developmental theory some 40 years ago with the work of Lawrence Kohlberg (e.g., 1969, 1973). Inspired by Piaget's (Inhelder & Piaget, 1958) theory of the development of thought structures, Kohlberg (1969) began in the 1960s to outline a general cognitive–developmental framework proposing that cognitive growth reorganized individuals' understanding of self and reality as reflected in such domains as morality, authority, laws, rights, and norms. Following Piaget's conviction that the development of structures of thinking reorganizes children's understanding of concepts of physical laws, moral issues, and emotions, Kohlberg laid out a broad cognitive–developmental theory proposing general levels (or stages) of complexity that undergird individuals' understanding of social reality at different points of development. Like Piaget, Kohlberg assumed that underlying the understanding of these diverse domains was a naive epistemology (see also Broughton, 1980), an evolving awareness of how humans can know and judge important issues of life.

In 1969, in an article with Kramer (Kohlberg & Kramer, 1969), Kohlberg reported on a follow-up of his original standardization sample into early adulthood and noted that many individuals who in their late adolescence had appeared to have acquired a principled and universal sense of morality appeared
to have regressed some years later, after entering college. Many of these youth had begun to show signs of relativism and questioning the firm values they had previously held. Kohlberg and Kramer did not, at first, conclude that this increase in relativistic thinking signaled the entry into a new stage of thinking about moral issues. Instead, they proposed that it reflected a retrogression.

This regressive interpretation came at a time when traditional concepts of rationality were being thoroughly revised. In science and philosophy, the notion that universal truths could be arrived at by rational analysis from axiomatic ground principles was being overturned. Instead, context, interpretation, perspective, and change all were being acknowledged as part and parcel of truth claims (e.g., Baynes, Bohman, & McCarthy, 1987; DeLong, 1970; Wittgenstein, 1953). For some writers, this led to the rejection of the very concept of rationality and to the belief in the radical relativity of all knowledge. But others (see Habermas, 1984) suggested that the notion of rationality was not so much outdated; rather, it was being transformed from something that could be concretely grasped by the individual mind to something that emerges out of the confrontation and coordination of multiple perspectives. Thus laws and truths were more like complex systems that change, like coming-into-being of forms that are the subject of evolution.

In developmental psychology, too, contextualism rose as an important theoretical stance as the roles of context (Labouvie-Vief & Chandler, 1978; Riegel, 1976) and cohort (Schaie & Labouvie-Vief, 1974) were being proposed as important factors in development. Following this emerging zeitgeist of contextualism and postmodernism, Kohlberg (1973) and Turiel (1974) eventually proposed that these college students had not really regressed. Rather, they had begun to question earlier views that were quite absolutist. Turiel suggested that this phase of relativism represented an opening up of an earlier view of morality that, even though it claimed universal validity, was too much rooted in conventional social practices. Thus what at first had seemed a kind of regressive movement, he proposed, might actually reflect a disequilibration of a closed form of thinking—a disequilibration that eventually could lead to further structural advances in adult thinking.

Almost simultaneously with Kohlberg's grappling with issues of relativity, William Perry (1968) had begun to study relativism in Harvard students as they progressed through the college years. Perry suggested that when they entered college, these individuals held a particular view of the nature of knowledge that fit quite well with the traditional concept of rationality. They believed that they were in college to learn what was right or true. This notion led them to polarize the world into right and wrong, a dualism that was extended not only to matters intellectual but also to those who held the views—especially professors and other authorities.

Taken aback at first by the coexistence of so many truth claims, many of these students soon came to understand that the source of their confusion was their own dualistic view of the nature of knowledge. Thus, the sense that there were safe, objective facts that were somehow outside the realm of human subjectivity began to crumble, giving way to a position of relativism.

Perry noted that relativism not only can move the bottom of certainty out from under youth but also can lead them to a new and transformed model of
rationality, one in which the old notion of objective knowledge is wedded to subjective engagement and commitment (see also Belenky, Clinchy, Goldberger, & Tarule, 1986). The individual now can become a much more active participant in the process of knowledge. There is vastly increased tolerance for diversity, yet the self can be securely anchored in its own viewpoint that is understood to have strong subjective elements. Thus, subjectivity in self and others is understood to be valid and necessary.

The work of Kohlberg and Perry was extremely influential because it set the stage for subsequent inquiries into changes in thinking as individuals move from adolescence into adulthood. Kohlberg's subsequent revision of his coding system (see Colby & Kohlberg, 1987) indeed suggested that the emergence of relativism prefigured the development of more mature adult thinking. Most of the writers thereafter would agree that the relativism emerging sometime in late adolescence prefigured a more complex way of thinking whose significance was extremely broad, stretching from general assumptions about the nature of morality, truth, and reality to understanding of self, others, and emotions.

Despite much criticism, this cognitive-developmental stance has survived and matured as it absorbed the confrontation with contextual diversity. Current adherents of this approach (e.g., Commons, Richards, & Armon, 1984; Dawson, 2002; Dawson, Xie, & Wilson, 2003; Fischer & Yan, 2002; Fischer, Yan, & Stewart, 2003; Karmiloff-Smith, 1998; Labouvie-Vief, 2003; Pascual-Leone, 1984) adopt much more dynamic views of the evolution of cognitive structures in which context and variability play important roles. Even so, the notion that there are structures of thinking that pervade many domains of life has persisted; one could even say it has become reinvigorated. However, as I point out in the following section, most researchers working in the field prefer to talk about levels rather than stages, indicating a current belief that orders of complexity are logically independent from age or the time at which they enter into the individuals' repertoire.

**Levels of Adult Thought**

Since the early work of Kohlberg and Perry, research on cognitive development in emerging adulthood has blossomed and suggested a rather coherent picture. In this section, I outline this research, which indicates that emerging adulthood may be a period that is highly significant for the launching and even solidification of these complex forms of thinking.

**Kohlberg's Stages of Moral Judgment**

It would be impossible to discuss work on the emergence of structures of adult thought without detailing the contribution of Kohlberg. At the core of his theory was an extension of the physicalistic model of reality of Piaget's theory—of the child as scientist. Kohlberg's core assumption was that our social reality as humans is interpersonally constituted. Adopting from James Mark Baldwin (1906) and George Herbert Mead (1934) the assumption that the self develops
Table 3.1. Adult Stages of Moral Judgment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Social perspective</th>
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<tbody>
<tr>
<td>Conventional</td>
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<tr>
<td>3 (Interpersonal expectations &amp; conformity)</td>
<td>Perspective of the individual in relation with other individuals; Aware of shared feelings, agreements, and expectations that take primacy over individual interests; Relates points of view through the concrete Golden Rule, “putting yourself in the other guy’s shoes;” Does not consider generalized system perspective.</td>
</tr>
<tr>
<td>4 (Social system &amp; conscience)</td>
<td>Differentiates societal point of view from interpersonal agreement or motives; Takes the point of view of the system that defines roles and rules; Considers individual relations in terms of place in the system.</td>
</tr>
<tr>
<td>Postconventional</td>
<td></td>
</tr>
<tr>
<td>5 (Social contract &amp; individual rights)</td>
<td>Prior-to-society perspective; Perspective of values and rights prior to social attachments and contracts; Integrates perspectives by formal mechanisms of agreement, contract, objective impartiality, and due process; Considers moral and legal points of view; recognizes that they sometimes conflict and finds it difficult to integrate them.</td>
</tr>
<tr>
<td>6 (Universal ethical principles)</td>
<td>Perspective of moral point of view from which social arrangements derive; Perspective is that of an individual recognizing the nature of morality or the fact persons are ends in themselves and must be treated as such.</td>
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in a shared matrix with other selves. Kohlberg (see also Selman, 1980) posited a series of general stages outlining how individuals deal with successively more complex ways of understanding reciprocity and equality. Kohlberg was less concerned with subject-object relations than with between-subject relations, or intersubjectivity. In a sense, one could say that he laid out a series of increasingly complex forms of intersubjectivity that can guide individuals’ thinking and behavior.

At Kohlberg’s preconventional level, the rules that organize human understanding are related to individuals’ immediate experience vis-à-vis others—such as parents—who are seen as powerful and whom individuals’ aim to please. The ability to relate to more abstract norms and rules emerges at the conventional and postconventional levels, which are displayed in Table 3.1. At the conventional level, individuals begin to understand that a more abstract shared reality of common rules and norms superordinates the concrete preconventional reality. This is first evident at Stage 3 as a sense that group expectations take precedence over individual feelings. At Stage 4, a more complex societal perspective emerges in which a more generalized social-systems perspective of formalized laws takes precedence even over the rules of one’s immediate group. At Level 3, the postconventional level, this social-systems perspective becomes widened further into a perspective that involves change and
diversity. Postconventional thinking at first appears to be initiated by a sense of doubt about whether the laws and truths one has come to accept are, indeed, unalterable, and the suspicion that context and history matter. Such transi-
tional doubt further leads individuals to wonder if such change and diversity 
can be orderly and principled. This doubt matures into the conviction, at 
Stage 5, that change can come about in an ordered way if individuals integrate 
their varying perspectives by formal mechanisms of agreement, contract, objective impartiality, and due process. In this way, it is possible to critique the validity of laws in terms of the degree to which they preserve and protect 
fundamental rights and values; thus the sense of right and wrong is more 
procedural. At Stage 6, finally, individuals adopt a more universalizing perspective affirming the equality and dignity of human beings. Thus social agreements 
are valid to the extent that they honor such general principles.

Colby, Kohlberg, Gibbs, and Lieberman (1983) studied these adult stages 
of moral reasoning in a sample of 84 boys ages 10, 13, and 16 years and followed longitudinally for 20 years. Between the ages of about 18 and 28, there was a noted decline in the proportion of Stage 3 responses and a corresponding in-
crease in Stage 4 responses, indicating a social-systems perspective. Stage 4 
thinking was virtually absent before late adolescence; in fact, only one individ-
ual younger than 18 displayed it. Stage 4 responses then rose systematically 
throughout adulthood, reaching about 60% at the oldest age level, 36. The transition to Stage 5 occurred even later, about the mid-20s; but Stage 5 re-
ponses never rose above 10%. Overall, the pattern looks quite similar for high socioeconomic status (SES) and low SES individuals, although that of the high SES individuals looks somewhat more favorable.

Overall, then, Kohlberg's data suggested that the period of emerging adult-
hood constitutes a critical phase for the beginning of individuals' ability to think beyond a purely interpersonal-conventional perspective and to embrace a conventional abstract systems perspective. A similar picture has also emerged in a recent reanalysis of several Kohlbergian studies (Dawson, 2002), although this reanalysis also suggested that during emerging adulthood, most individu-
als may just begin to elaborate such a perspective, as many of them score in the transitional level.

I think it is difficult to overestimate Kohlberg's view of the prior-to-society perspective for the emergence of adult thought, from both a philosophical and 
a psychological point of view. To a radical postmodern relativism that maintains 
that different abstract perspectives are incommensurable, it proposes that they 
can be intercoordinated and related at a more complex level that involves nego-
tiation and communication. This view underlies an ideal vision of political 
process but also of scientific inquiry; it is a perspective that allows a vision of 
ordered change rather than one directed by mere convention or social power. 
On a more concrete level, it can permit individuals to resolve the conflict or 
even clash between the role expectations (e.g., ones related to one's religion, 
political conviction, or gender roles) of the group in which one is embedded 
and those that are formalized in more legal systems. Perry's work had ended 
on a note of a relativism that left room for a more complex view of objectivity. 
But Kohlberg affirmed that relativism does not necessarily suspend rational 
discourse nor justify a more abstract form of individualism. As is true of the
work of Habermas, Kohlberg suggested that individuals continue to search for new levels of intersubjectivity that interrelate and coordinate perspectives.

Most subsequent writers were profoundly influenced by both Kohlberg and Perry, but most agreed with Kohlberg that relativism does not form the most mature form of knowledge. Broughton's (e.g., 1980) work, for example, suggested that relativism is superseded by a new form of objectivity in which the self cocreates knowledge through an active, dialectical, social process. This theme became the topic of a number of theoretical and empirical investigations that addressed how individuals began to interrelate subjective and objective aspects of knowledge. Basseches (1984a, 1984b), Kramer (1983), Labouvie-Vief (1984, 1994), and Sinnott (1984, 1989) all suggested that the discovery of seemingly incompatible and contradictory systems of knowledge confronted young adults with issues of interpretation and perspective; and all agreed that young adults eventually resolve these contradictions as they integrate them into an "overriding more inclusive whole made up of two or more formally consistent systems" (Kramer, 1983, p. 93).

Levels of Thinking in Emerging Adults

That the period of emerging adulthood marks the beginning of a more complex way of thinking—one that is better able to deal with contradiction, diversity, and the individual's own role in the process of knowledge—has been confirmed by a number of authors who have charted individuals' emerging ability to differentiate and reintegrate such dualities as objective and subjective, information and interpretation, individual and generalized perspectives, and so forth (Basseches, 1984a; Blanchard-Fields, 1986; Kramer, 1983; D. Kuhn, Pennington, & Leadbeater, 1983; Labouvie-Vief, 1980, 1994; Sinnott, 1989). The various proposals for such thought structures have covered a variety of different domains, but the most general theory is probably that developed by Michael Commons (Commons et al., 1984) and Kurt Fischer (Fischer, 1980; Fischer et al., 2008). Both theories describe successive levels as increasingly complex intercoordination of representations and skills that in many ways extend the analyses of formal thinking Piaget had offered. Fischer, in particular, has worked on applying such general levels of abstractions to a variety of domains, from reflective thinking to emotions and interpersonal representations. This work has most recently resulted in a general system for analyzing the developmental complexity of representations as they may occur in many domains of thinking.

One example of how this theory is used is its application to a study of critical thinking by Kitchener and King (King & Kitchener, 1994; Kitchener & King, 1981). These authors worked with individuals ranging in age from 16 to 34. The research participants were given problems that required making judgments about controversial issues. One problem, for example, asked that they take a stand on the controversy of religious versus scientific accounts of evolution: Did they believe the creationist teaching that God had created all life in a single instant, or did they believe the scientific account of gradual biological evolution?
Table 3.2. King and Kitchener (1994): Reflective Judgment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Example</th>
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<tr>
<td>1</td>
<td>Knowing is limited to single concrete observations: what a person observes is true.</td>
<td>“I know what I have seen.”</td>
</tr>
<tr>
<td>2</td>
<td>Two categories for knowing: right answers and wrong answers. Good authorities have knowledge; bad authorities lack knowledge.</td>
<td>“If it is on the news, it has to be true.”</td>
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<tr>
<td>3</td>
<td>In some areas, knowledge is certain and authorities have that knowledge. In other areas, knowledge is temporarily uncertain. Only personal beliefs can be known.</td>
<td>“When there is evidence that people can give to convince everybody one way or another, then it will be knowledge; until then, it’s just a guess.”</td>
</tr>
<tr>
<td>4</td>
<td>Concept that knowledge is unknown in several specific cases leads to the abstract generalization that knowledge is uncertain.</td>
<td>“I’d be more inclined to believe evolution if they had proof. It’s just like the pyramids: I don’t think we’ll ever know. Who are you going to ask? No one was there.”</td>
</tr>
<tr>
<td>5</td>
<td>Knowledge is uncertain and must be understood within a context; thus justification is content specific.</td>
<td>“People think differently and so they attack the problem differently. Other theories could be as true as my own, but based on different evidence.”</td>
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<tr>
<td>6</td>
<td>Knowledge is uncertain but constructed by comparing evidence and opinion on different sides of an issue or across contexts.</td>
<td>“It’s very difficult in this life to be sure. There are degrees of sureness. You come to a point at which you are sure enough for a personal stance on the issue.”</td>
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<tr>
<td>7</td>
<td>Knowledge is the outcome of a process of reasonable inquiry. This view is equivalent to a general principle that is consistent across domains.</td>
<td>“One can judge an argument by how well thought-out the positions are, what kinds of reasoning and evidence are used to support it, and how consistent the way one argues on this topic is as compared with other topics.”</td>
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</table>

Note. Data from King and Kitchener (1994).

Kitchener and King scored individuals' justification of knowledge claims into seven stages (Table 3.2). The first of those are prereflective, as individuals do not recognize a need to justify knowledge claims. They assume that truth is simply what one observes or believes in, and no justification is necessary; in a somewhat more complex fashion, individuals juxtapose right views with wrong ones, and right or wrong is adjudicated by authority. For example, at Stages 3 and 4, individuals master a single first-order abstraction, such as *truth*, but cannot clearly understand (even though they may have intuitive
hunches) that truth can be affected by one's perspective, nor are they able to elaborate how. In contrast, at Stage 5 they begin to display a second-order abstract perspective that compares arguments and viewpoints and relates them to their contexts. Stages 6 and 7 bring the individual beyond a simple contextualist–relativist perspective as they begin to search for a principle that can examine and perhaps compare and even unify different perspectives. The third-order abstractions of Stage 6 bring the realization that comparison is possible, but only the fourth-order abstractions of Stage 7 permit the individual to reconcile notions of relativity with systematic standards of how evidence can be compared. Rather than being identified with concrete positions, notions of truth come to be based on procedural criteria such as the adequacy of methods of inquiry. Here, then, individuals realize that truth does not so much have to do with objective facts but rather with an attitude of critical thinking, careful evaluation, and openness to falsification and change—the complex intersubjective perspective Kohlberg outlined for Stage 5 thinking.

Kitchener and King's work has been widely replicated, and the authors (King & Kitchener, 1994) report the results of reflective judgment scores on more than 1,300 individuals. Data indicate that scores increase as individuals progress through the educational system; they approach Stage 4 relativism at the end of high school and the beginning of the college years and increase through the college years, graduate school, and postgraduate training. Even so, the very highest levels are relatively rare even among individuals with the most advanced education.

How general are patterns of intellectual evolution such as those outlined by Kohlberg in the moral domain and by Kitchener and King in the domain of reflective thinking? In a series of recent papers, Dawson (2002; Dawson et al., 2003) used the Commons–Fischer general scheme of levels of abstraction to develop a general, content-independent scoring method in which the complexity of individuals' verbal statements is coded. Applying her analysis to several studies of Kohlberg's moral levels coding, for example, she finds a correlation of .92 between this latent complexity dimension and moral stages. Relationships to age and education show the usual patterns: Age shows a monotonically increasing quadratic relation to complexity scores, whereas education and level are correlated in a linear fashion with a correlation of .80. I discuss the possible implication of this strong relationship to education in the third section of this chapter.

Self and Emotions

Epistemological assumptions about the nature of truth are not the only kinds of cognitions that mark the entry into adulthood. Rather, the assumptions inherent in them about the nature of right and wrong are carried into daily experiences of individuals and expand their emotions and their sense of self and reality. These expansions are important in how individuals deal with the polarizations that often occur when thinking about self and others in such arenas as roles and responsibilities and ways of interacting with others (Kegan, 1982). They are also important in the religious arena (Fowler, 1981) in which
the evolution of more complex forms of thinking affords individuals the understanding that diversity in belief does not contradict the notion of abiding faith and religious commitment. Such social–cognitive forms of cognition form an important component of the general cognitive changes outlined so far.

How individuals' thinking about self and emotions develops is the topic of an ongoing longitudinal–sequential study of individuals from 10 years to over 80 years of age (Labouvie-Vief, Chiodo, Goguen, Diehl, & Orwoll, 1995; Labouvie-Vief & Medler, 2002). This study involved the follow-up of an original sample of 400 community-living individuals randomly selected from three suburban communities of a Midwestern metropolitan area on the basis of 1990 Census information. Along with completing an extensive battery of cognitive and socioemotional measures, individuals wrote a brief narrative describing the self—likes and dislikes as well as thoughts. These narratives were transcribed and coded into four levels of adult emotional and self-development (see Table 3.3).

At Level 1, individuals describe the self in terms of the values of the immediate social group, such as their relationships and the immediate social network. They emphasize features of the self and others that make for immediate group acceptance. (e.g., “I am outgoing and friendly”). At Level 2, one finds self-descriptions that reflect a more individualized, differentiated, and inner sense of self. For example, the self is described in terms of fairly self-directed values and goals, often related to achievement and institutionalized social roles. However, the individual accepts these roles rather than reflects on them (e.g., “I am family oriented and active in my community”). In contrast, individuals of Level 3 have a more contextual view of the self. Their descriptions often are critical of conventions as institutional goals are reexamined and placed in historical perspective, including reflections of how they have shaped the self. One now finds more dynamic self-descriptions that emphasize the role of historical and psychological factors, with many references to processes and contrasts over time (e.g., “I am relearning who I am”). Finally, at Level 4 these descriptions are even more multifaceted as individuals describe themselves in the most complex way in terms of underlying, unconscious motivations and reciprocal interactions. The view of self is truly dynamic as individuals realize that activities and goals are subject to continual revision as one gains knowledge of self and others. Overall, the sense of self conveyed is one of process, becoming, and emergence. Thus identity is viewed as transforming over time as a result of an inner psychological reorganization.

Our results show, as one might expect, that most of the adolescents' responses, about 90%, are coded below Level 2. In contrast, for 20- to 29-year-olds the percentage of these lower level responses drops by about 50%; instead, they show an increase of about 40% of responses that are Level 2 or higher. This level stays virtually unchanged for the 30- to 45-year-olds but is highest for those aged 46 to 59. Even so, my analyses in the next section suggest that emerging adults find it difficult to integrate their complex thinking, and that integration is not achieved until later in adulthood. In turn, the age groups over 60 show a dramatic increase in lower level responses.

These results reflect that individuals of the emerging adulthood period begin to profoundly restructure their sense of self. As Jung proposed (see
<table>
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<tr>
<th>Level</th>
<th>Description</th>
<th>Example</th>
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<tbody>
<tr>
<td>0</td>
<td>The language used is simple and concrete. Characteristics and physical traits are seen as global. Events are detailed in simple seriation. Action-oriented behaviors describe activities. No references to goals or psychological processes occur.</td>
<td>I am an engineer. I am physically robust, strong, (6 ft, 280 lbs). I am tall. I am nice. I am pretty. I have two sisters.</td>
</tr>
<tr>
<td>1</td>
<td>Simple evaluations are made that reflect the values of the immediate social group. Traits described are nondifferentiated. Individuals are described in terms of relationships (simple descriptors) and social networks. Emphasis is on features of the self or others that make for ingroup acceptance.</td>
<td>I like to fool around and make my friends laugh. I am outgoing and friendly. I love my family. I am fun to be with. I have lots of friends. I am involved in many clubs at school.</td>
</tr>
<tr>
<td>2</td>
<td>Interpersonal descriptors indicate a clearer sense of the individual within the social group. Traits at this level indicate a more self-directed and goal-directed individual whose evaluations are guided by achievement-oriented and conventional goals, values, and roles. Achievement of these goals and values is a frequent theme.</td>
<td>I am family-oriented and active in my community. I am effective as a mother. I am empathic and a committed friend. I have not been successful in my life. I work hard to support my children and really love them. I have tried, with some success, to develop the patience of my father and devotion of my mother.</td>
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<th>Level</th>
<th>Description</th>
<th>Example</th>
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<tr>
<td>3 (contextual-</td>
<td>Descriptions are critical of convention, involve an awareness of how traits change, and give a</td>
<td>I am a singer, an actress, and a writer and want to use these talents more creatively than I do now.</td>
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<tr>
<td>intersystemic)</td>
<td>sense of individuals with their own value system. Institutional goals are reexamined and put into</td>
<td>I get along well with all people but need to develop more insight as to what motivates other people.</td>
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<tr>
<td></td>
<td>historical or psychological perspective. Descriptions involve references to processes and</td>
<td>I am relearning who I am.</td>
</tr>
<tr>
<td></td>
<td>contrasts over time.</td>
<td>I am adding new dimensions to my life in as many ways as possible.</td>
</tr>
<tr>
<td>4 (dynamic-</td>
<td>Roles and traits are described at a complex psychological level and reflect awareness of</td>
<td>I struggle with the concept of who I am and have been identified as all-giving mother, self-sufficient, religious, and I think, feeling the need to be a more individualized woman with specific needs and desires.</td>
</tr>
<tr>
<td>intersubjective)</td>
<td>underlying, often unconscious motivation and reciprocal interaction. Activities and goals are</td>
<td>I work for profit rather than for satisfaction, partly because of my (guilty) need to continue to support my family.</td>
</tr>
<tr>
<td></td>
<td>seen as subject to continual revision as one gains knowledge of oneself and others. Reference is</td>
<td>At this point in my life and my parents’ lives, they are becoming dependent, and I find myself reliving the tensions of struggling to remain my adult self but getting pulled back to my younger self as I have spent more time with them.</td>
</tr>
<tr>
<td></td>
<td>to multiple dimensions of life history and an emphasis on process, becoming, and emergence.</td>
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Whitmont, 1969), early adulthood is a period in which the role of institutions in development is powerful in shaping the sense of self, and my findings do suggest that this process begins approximately at the transition from adolescence to emerging adulthood and demonstrates the most dramatic growth during that period.

In sum, there is ample evidence that the period of emerging adulthood, from about the age of 18 to around 30, is a significant time for the development of mature thought structures. These thought structures appear to permeate many dimensions of individuals’ lives. They permit them to project self into the future and into complex roles and communal activities and to participate creatively in many activities of adult life. At the same time, research indicates that this period appears to mark the emergence of these structures rather than their culmination, and that only a portion of individuals may come to master them.

One aspect of this emergence of adult thought is potentially troubling, however: Again and again, studies demonstrate that whether or not individuals begin to evolve more mature forms of thinking in emerging adulthood is strongly dependent on education. One might conclude from this strong linkage that these forms represent somewhat esoteric ways of thinking that do not necessarily illuminate a general developmental process. Instead, I suggest that the diversity of forms of thinking that is evident in emerging adulthood—and indeed at any stage of development—can be more profitably viewed if they are placed in a broader social context and their role in adult life is examined, more generally. That is, what are the conditions that foster or hinder their growth, and what are their relations to adjusting to the demands of adulthood?

Variations in Cognitive Growth

The preceding review suggests that during the period of emerging adulthood, thinking begins to change in profound ways. In general, the capacity emerges to think beyond the conventional and accustomed and to develop more system-oriented views about reality. Although research has not addressed the specific time at which these higher order forms of thinking emerge, they do appear to mark the end of adolescence and transition into emerging adulthood. At the same time, it is evident that mature adult structures of thought begin to emerge only after late adolescence, and neither the emergence nor the continued development of mature thought are givens. Rather, they appear to constitute a potentiality that needs to meet certain conditions if it is to be realized. Many individuals may continue to function in ways that are very concrete and conventional.

This period of emerging adulthood might be thought of, then, in Eriksonian terms as a crisis. The ideal outcome of that crisis is the ability to contribute to society in a principled manner—in a way that reflects not only the internalization of cultural values and roles but also a capacity to reflect on them and a creative ability to work with them and transform them. Yet this outcome remains just that—an ideal—and the lives of many individuals may require that they function in ways that are more concrete and conventional. In some
cases, such conventionality may be a result of temperament or endowment, but in others, it may mirror the structure of the embedding environment. What, then, are factors that promote or discourage complex, mature thought?

Dynamics of Cognition

One major reason that individuals may not evidence high-level thinking is that cognitive structures appear to be responsive to a set of dynamic circumstances. The conventional view of the development of thought structures held that they emerged quite inevitably in a step-like sequence of stages, at least in a good-enough environment. Each stage was assumed to form a structure d'ensemble pervading many or even most domains of life. Many current views of cognitive growth have abandoned this view in favor of one more compatible with modern dynamic-systems thinking (e.g., Dawson, 2002; Fischer, 1980; Karmiloff-Smith, 1998; Labouvie-Vief & Márquez Gonzalez, 2004). One core feature of more dynamic views is that they tend to replace the notion of age- or life-period-correlated stages with that of levels. Levels are a more abstract ordering principle that may or may not be highly correlated with age, and may or may not form a domain-general sequence of development. Thus, although the general structure of levels can be applied to many domains, individuals' behavioral repertoire across different domains can consist of many different levels simultaneously. Such a structure is called “a web” by Fischer (e.g., Fischer et al., 2003). In a web, there may be many developmental strands (or domains), each of a different level of complexity, depending on the specific contexts and activities. In addition to such across-strand variability will be within-strand variability depending on whether certain supporting conditions are available. Thus even within a domain, performance can vary along several levels, forming a range of levels or developmental range.

According to this dynamic view of levels, it is not necessarily problematic that levels of cognitive-emotional development are somewhat idealized and reached by only relatively few individuals. In fact, it is possible to see the use of idealized levels not so much as a prescription for what one would expect most individuals to accomplish, but rather as a diagnostic tool that can be used to determine their current performance and the pattern of causes associated with it. In that sense, the use of cognitive levels could be said to be more akin to the use of an idealized standard of perfect health. Such a standard does not demand that most individuals possess perfect health; rather, it serves to diagnose why individuals differ from this idealized standard, each in their own unique way. Indeed, without such a standard, it would not be possible to determine deviations from it, nor prescribe possible courses of actions that might bring individuals closer to it. In that way, I suggest that instead of expecting high levels of thinking to be achieved by all individuals under all circumstances, those of us in the field should focus on systematically examining how and why individuals differ in the level of their cognitive functioning (see Labouvie-Vief, 1994).

In the context of adult cognitive levels, Kitchener, Lynch, Fischer, and Wood (1993) applied this notion to the reflective judgment task in individuals
aged 14 to 28 when performance was assessed under different conditions. One was the usual condition in which individuals performed under standard instructions, without any special support. In contrast, a second condition was one of high support—individuals read a prototypical statement of each level and then responded to a series of questions about each level. These questions highlighted basic concepts, and individuals' attention was directed to the critical aspects of those. Finally, respondents summarized the prototypic statements in their own words, and scores for these summaries were derived.

The results of this study showed that under the high-support condition, individuals achieved significantly higher scores than they did under the standard condition. For example, stage 6 responses appeared to spurt at about the age of 20, when about 50% of responses were scored at this level; another spurt at about age 25 raised the percentage to nearly 100. As Fischer et al. (2003) noted, data such as these suggest that one's functional level may lag considerably under one's optimal level—in fact, a level may not become functional until the next higher level emerges under optimal (high support) conditions. Thus, support and scaffolding are inherent conditions for the development of reflective thinking—and higher order reflective thinking clearly appears in the period of emerging adulthood.

Findings such as these are important in interpreting the relation of higher level thinking to education. I have noted throughout that levels of complexity of thinking are strongly correlated with education: Colby et al. (1983) reported a correlation of .54 between moral reasoning and education, but Dawson (2002) reported one as high as .80. Such high correlations with education and a developmental outcome are often considered problematic because they may indicate dependence on verbal output that should be parcelled out. In contrast, I suggest that education reflects a critical theoretical variable from both a cultural psychology and a neurobiological perspective on development because education is the very process or means by which culture imparts knowledge to the younger generations. The development of younger generations is embedded into a system of knowledge provided by current and prior generations of mature adults. Thus education forms the very mechanism by which individuals are initiated into the storehouse of cultural knowledge. Just as research suggests a period of emerging structures of mature thought at the transition into adulthood, so it also suggests that the middle-aged generation manages this storehouse; they are the carriers of the most complex thought structures integrating high-level knowledge.

The presence of mature adults, then, provides knowledge in highly organized, well-structured form, an essential ingredient of effective education. Even though Piaget described the individual as a discoverer of knowledge, many of the skills he described—such as knowing the laws of balances, pendulums, and hydraulic presses—would hardly emerge on the same time frame unless the laws underlying them were already part of a culture in which competent adults can aid adolescents in breaking down the critical parameters of such problems. In fact, the typical Piagetian experiment often amounts to a teaching situation in which the youngster's attention is directed to a few well-isolated critical variables. It would be impossible to acquire these laws—which, after all, may have required the lives of generation of scientists of the past to
formalize—on their own. Rather, much as Gould (1977) has suggested that biological development in many ways incorporates the results of the evolution of prior generations, so individual psychological development is nested in a process of cultural evolution of which the middle-aged generation represents the culmination. Younger generations are not just knowledge builders but also are novices mentored by more skilled knowers. Thus, their continued development depends on the presence of an informational differential or gradient provided by more mature generations.

The dependence of knowledge acquisition on the guidance of more mature adults has been well noted by child developmentalists (e.g., Rogoff, 1990; Vygotsky, 1978) who have examined processes of knowledge transmission of adults to children. This dependence very much continues into adulthood, yet only a few researchers on youth and adulthood have examined this continuing dependence. One of the theorists who commented on it was Jung (see Whitmont, 1969), who saw the period of emerging adulthood (indeed the whole beginning of the life span) as a process of becoming entrenched in society’s institutions. On a more positive note, Caspi and Roberts (2001) recently noted that as young adults begin to make commitments to and invest in those institutions, they also evidence a profile of improved and more stable adjustment; Helson (1999), in her longitudinal study of Mills College women, also noted that between college age and early adulthood, the women increased in norm-orientation, which suggests greater institutional and role commitment.

Nobody recognized the necessary alliance between individuals entering adulthood and mature adults who master the tasks of adulthood better than did Erikson, who suggested that the entry into adulthood depended on the presence of knowledgeable and generative adults. Erikson’s point is especially important as many of the tasks of adulthood are no longer so well-structured but move into arenas in which knowledge must be applied in ill-defined situations, or even created anew as one goes along. Such ill-structured problems place increasingly high demands on personal and emotional factors as individuals tolerate ambiguity inherent in a knowledge process that is open-ended and uncertain.

To be sure, not all institutions have the primary goal of fostering such a pattern of principled autonomy; in fact, as Kohn and Schooler (1978) showed, institutions can invest in creating conformity and dependency for a group of adults, such as those of low socioeconomic status, who will work in highly structured institutional settings. In such settings, autonomy and critical thinking can be considered a liability rather than an asset. As a consequence, questions of continued cognitive growth throughout the period of emerging adulthood and thereafter are inextricably intertwined with aspects of social stratification and the degree to which it affects participation in higher education (Schooler, 1987).

**Affective Complexity**

The importance of adults who manage knowledge systems also highlights the emotional dimensions of knowledge. Even complex institutionalized knowledge
systems, as T. S. Kuhn (1970) pointed out, serve not only informational and scientific functions but also social-regulatory and emotional functions; they define networks of power and authority that affirm congruent claims and suppress ones that challenge them. Thus individuals sometimes experience a conflict between their need to feel socially affirmed and appropriate and potentially important insights they may develop.

Erikson (1984) described how such conflicts ideally are held at bay because of a common generational bond young and mature adults share. He suggested that young adults need mature adults to help them maintain a sense of coherence as they mirror their growing competencies and to affirm for them an ideology worth investing in. However, middle adults, in taking on roles of authority—parent, teacher, religious, or political leader—need to feel affirmed by youth that they are, in the eyes of youth, numinous models who transmit ideals and values. Yet this generational linkage, like that between parent and children, has its dark side and can breed what he termed totalism and authoritism, in which a complex world picture yields to the need to be accepted by a charismatic leader. How individuals understand emotional processes is likely to affect the degree to which they are vulnerable to such social influences.

In recent work by my colleagues and me (Labouvie-Vief, 2003; Labouvie-Vief & Márquez Gonzalez, 2004; Labouvie-Vief & Medler, 2002), we have begun to explore how individuals are able to dynamically coordinate the demands of conceptual complexity and social acceptance. It has been a strength of cognitive-developmental theories (e.g., Kohlberg, 1969; Piaget, 1980) that they proposed a transformative view of emotions, somewhat in contradiction to prevalent theories that emphasize primary emotions (e.g., Ekman, 1984; Izard, 1997). According to this transformative view of emotions, emerging cognitive capacities transform the very functioning of emotions, even causing at times the emergence of new emotions that appear to be linked to higher levels of complexity. An example is the emergence of self-conscious emotions such as shame or pride that already presume a capacity to represent others’ evaluation of one’s own behavior (Lewis, 2000; Schore, 1994). Even so, this reflective emotion processing system is but one route to emotional processing—one that LeDoux (1996) called the high or cortical road. In contrast, many situations require emotions to be processed through a low or limbic road that secures successful emotion regulation in emergency situations that do not permit resource-rich reflective processes. Thus high levels of emotion understanding and regulation remain quite vulnerable to the potentially disruptive effects of emotions.

Although the road of reflection, then, increases the adaptive repertoire of individuals, it does not guarantee good adaptation. Indeed, a large body of research indicates that measures of conceptual complexity are quite independent of measures of emotional adjustment. That is, high levels of conceptual complexity can also serve maladaptive functions such as distortion of reality in defensive maneuvers. For this reason, in my own work I have emphasized that successful adaptation requires individuals to coordinate a concern with complexity and high-level reflective control with the ability to maintain sufficiently positive levels of positive affect and to ward off extreme levels of negative affect. In recent work, I referred to these different strategies as differentiation and optimization.
To describe such a dynamic between differentiation and optimization, my collaborators and I (Labouvie-Vief, 2003; Labouvie-Vief & Márquez Gonzalez, 2004) expanded Piaget's concept of an interplay between two core strategies of processing information (assimilation and accommodation) through a generalization of the Yerkes–Dodson law (Metcalfe & Mischel, 1999). This law postulates a compensatory and curvilinear relationship between an individual's level of emotional activation or arousal and the degree to which complex, integrated behavior is possible. Slight elevations of activation foster integrated, well-ordered thinking and behavior. However, when activation rises to extremely high levels, it tends to disrupt or degrade integration. At high levels of activation, automated nonconscious thoughts and behaviors, which are less easily disrupted by high arousal or activation, take over in an effort to maintain affect in a sufficiently positive range.

For an example of such degradation, think about common reactions to a frightening event, such as the terrorist attacks on September 11, 2001. The reactions to these attacks involved not only an increase in patriotic feelings and an emphasis on family values but also increases in racial and ethnic stereotyping. This example shows that the degradation of complex thinking due to high emotional activation does not necessarily result in complete fragmentation but can be relatively coherent or graceful. First, behavior becomes more automatic and schematized (Metcalfe & Mischel, 1999). Second, the ability to coordinate positive and negative aspects about self and others is disrupted, which leads to a positivity bias in which attention is diverted from negative information about the self. In contrast, negative affect and information often are projected on others, resulting in increased black-and-white thinking, stereotyping, and polarization among in-groups and out-groups (e.g., Paulhus & Lim, 1994). In a sense, trading off differentiation and complexity in favor of optimizing positive emotions makes good sense in situations that pose a threat to the well-being and survival of the self. Such situations stimulate emergency responses in which resources are focused on the self-protective task of restoring equilibrium and securing survival (Bodenhausen, 1992). However, as Erikson (1984) has discussed, this self-protective response also has a dark side—the exclusion of others from the circle of humanity in which one includes oneself.

The principle of dynamic integration usually works flexibly in response to situational demands, creating a dynamic cognitive–affective system that adjusts its level to the flow of circumstances. However, such flexibility can be relatively permanently altered by two sets of circumstances. First, normal developmental changes in cognitive resources can alter vulnerability to degradation. As these resources grow, individuals are better able to maintain integrated behavior even when levels of activation are high. In contrast, as long as these cognitive resources remain relatively low, individuals are more strongly affected by overactivation (Labouvie-Vief & Márquez Gonzalez, 2004; Metcalfe & Mischel, 1999). Second, if development does not proceed in a context of relatively low and well-regulated arousal or activation, individuals are likely to develop poor strategies of affect regulation; these strategies, in turn, should render the individuals particularly vulnerable to the degrading affects of overactivation.
To examine differing strategies of how individuals regulate their emotions, my colleagues and I defined different ways in which individuals can deviate from well-regulated, integrated functioning (Labouvie-Vief & Márquez Gonzalez, 2004; Labouvie-Vief & Medler, 2002). Following Werner (1957), we identified an integrated style that permits individuals to do so with relative ease. But we also defined two major deviations from an integrated style. One was a self-protective style in which individuals trade off complexity for positive affect by simplifying their representation of affect, focusing positive affect on the self and the immediate social network but negative affect on the out-group. We contrasted this with a complex style in which individuals traded off positive affect and social relations for conceptual complexity and individuation—hence, while attempting to maintain a complex and objective view, they experience lowered levels of positive affect and higher levels of negative affect and depression. Finally, we identified a dysregulated regulation style that showed aspects of both.

Self-protective individuals aim to maximize positive and minimize negative emotion but do so by engaging in thinking of low complexity. These individuals are high in self-acceptance but low in self-doubt and value the importance of social network, self-control, and social conformance; they place relatively low emphasis on personal growth and score low in empathy. In contrast, complex individuals, although high in cognitive-affective complexity, also score higher on negative affect and depression. They value intellectuality, openness, and independence and score high in empathy. Thus whereas one group values smooth adaptation to the social world (Erikson's world of pseudospeciation), the other group values growth and independence from normative values.

Each confers different sets of not only vulnerabilities but also strengths. The strength of the self-protective style is to foster a sense of group cohesion and to act quickly in emergency situations; its weakness is a tendency toward black-and-white thinking. The core strength of the complex style is its ability to maintain a differentiated and objective view of reality; its intellectuality, independence, and openness to psychological depth often have been associated with high levels of creativity, but also with a number of psychological vulnerabilities such as increased neuroticism and depression (Helson, 1999). These diverging affective patterns appear to indicate different identity styles, each reflecting characteristic variations in how individuals integrate the need for hedonic balance with that for complexity, openness, and objectivity (see Helson & Srivastava, 2001).

Table 3.4 presents the data from our research, classifying individuals from seven separate age intervals according to integrated, self-protective, complex, and dysregulated styles. The distribution by age shows a pattern highly consistent with what one would expect from other developmental findings (for review, see Harter, 1999). Our data indicate that preadolescents fall primarily into the self-protective group: They tend to give simple descriptions biased toward positivity; those not fitting this pattern are classified as dysregulated. For adolescents, the percentage of self-protective individuals declines considerably, but that of dysregulated individuals increases; this pattern suggests that individuals now begin to process more negative affect but do not yet have complex...
Table 3.4. Distribution of Regulation Styles (% Within Age Category)

<table>
<thead>
<tr>
<th>Age</th>
<th>Integrated</th>
<th>Self-Protective</th>
<th>Complex</th>
<th>Dysregulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preadolescents</td>
<td>0.0</td>
<td>75.0</td>
<td>0.0</td>
<td>25.0</td>
</tr>
<tr>
<td>(11.00–14.99)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescents</td>
<td>0.0</td>
<td>23.1</td>
<td>7.7</td>
<td>69.2</td>
</tr>
<tr>
<td>(15.00–19.99)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emerging adults</td>
<td>8.3</td>
<td>20.8</td>
<td>37.5</td>
<td>33.3</td>
</tr>
<tr>
<td>(20.00–29.99)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Adults</td>
<td>34.2</td>
<td>18.4</td>
<td>26.3</td>
<td>21.1</td>
</tr>
<tr>
<td>(30.00–45.99)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle-aged adults</td>
<td>33.3</td>
<td>21.2</td>
<td>36.4</td>
<td>9.1</td>
</tr>
<tr>
<td>(46.00–59.99)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older adults</td>
<td>33.3</td>
<td>33.3</td>
<td>20.8</td>
<td>12.5</td>
</tr>
<tr>
<td>(60.00–69.99)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elderly adults</td>
<td>33.3</td>
<td>12.5</td>
<td>20.8</td>
<td>33.3</td>
</tr>
<tr>
<td>(70.00–85.99)</td>
<td></td>
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</tbody>
</table>

structures to begin integrating it (see Harter & Monsour, 1992). Thus they are likely to be overwhelmed. In contrast, the emerging adults show a much lower percentage of overwhelmed individuals but a much higher percentage of complex individuals. This finding suggests that complex thinking about affect rises dramatically; yet the high percentage of dysregulated and the low percentage of integrated individuals indicate that emerging adults are unlikely to integrate complexity and thus they continue to show high levels of negative affect and a sense of fragmentation overall. However, the next age period of adults over the age of 30 shows a dramatic rise in integrated individuals, and the pattern of styles remains fairly constant for the remainder of adulthood.

These findings are in line with the frequent report that the period of emerging adulthood may be wrought with complex and difficult emotions and attending high levels of negative affect and depression (see Reinherz, Gianconia, Wasserman, Silverman, & Burton, 1999); thus, even those of high complexity have a difficult time integrating their complex view of the world. Even though this age group shows an improved pattern of affect compared with the adolescents (see also Roberts, Caspi, & Moffit, 2001), this period also is clearly set off from adulthood proper. Indeed, this period has been called the nadir of adulthood from an affective perspective (Mroczek & Kolarz, 1998). In contrast, the patterns for the postemerging adulthood individuals suggest a better ability to live more comfortably with complexity. This trend, which suggests increasing consolidation of more complex cognitive–affective structures, continues at least until midlife. Thus emerging adulthood truly does emerge as a somewhat crucial period of the life span.

I commented in the previous section that complex, critical, and relativizing thinking emerges only in the 20s (approximately), and this fact suggests that emerging adults continue to display emotional problems resulting from polarizing thinking with attendant dependence on norms and social acceptance. A considerable body of research supports this suggestion. For example, in a series
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of studies, Blanchard-Fields and colleagues observed that adolescents made less differentiated or dialectical attributional explanations than did young and middle-aged adults and had more difficulty integrating discrepant information presented by different protagonists (Blanchard-Fields, 1986; Blanchard-Fields, Baldi, & Stein, 1999). Emerging adults have difficulty maintaining balanced cognitive-emotional representations especially if emotions are strongly activated, as when issues of security and survival are activated. Research on terror management theory, thus far performed primarily with college students, supports this prediction (Pyszczynski, Greenberg, & Solomon, 1999). Thus, when death-related fears are aroused, college students are more likely to give harsh evaluations of moral transgressors (Florian & Mikulincer, 1997) while increasing the favorableness of ratings of individuals who praise their own cultural standards (Greenberg et al., 1990; Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994; Pyszczynski et al., 1996). Death-related threat is also likely to increase racist attitudes (Greenberg, Schimel, Martens, Solomon, & Pyszczynski, 2001).

Findings such as those are consistent with my view that emerging adults are still easily swayed by their emotions to distort their thinking in self-serving and self-protective ways. Still, my results suggest that such distortion would be less likely for the subgroup of emerging adults who evidence more complex thinking—the complex and integrated. My own research is suggestive in that regard, as these two groups are high in empathy, flexibility, and autonomy. In a similar fashion, Greenberg and collaborators (Greenberg, Simon, Pyszczynski, Solomon, & Chatel, 1992) showed that priming death-related threat increases the acceptance of dissimilar others by individuals with tolerant values, especially if these values have been recently primed.

What causes individuals to embark on one or the other deviation from a more integrated pathway? Individual differences in temperament (Rothbart, Ahadi, & Evans, 2000), attachment history (Mikulincer & Shaver, 2001), or difficult life situations beyond one’s control (Labouvie-Vief, Zhang, & Jain, 2003) all may be critical factors. Again, little precise information about these factors is available, but research on attachment styles and emotion regulation suggests that securely attached emerging adults (who are also more likely to be integrated and complex) behave quite differently in many tasks of emotion and emotion representation than do insecurely attached ones. For example, they have less well-balanced self-representations, either overvaluing the self while projecting negative attributes on others as in the case of dismissing individuals, or undervaluing the self as in the case of anxious individuals (Mikulincer, 1998; Mikulincer, Florian, & Tolmacz, 1990; Mikulincer, Orbach, & Iavnieli, 1998). Securely attached emerging adults also are less likely to distort their judgment of others in response to mortality salience, judging the transgressions of protagonists as less severe and showing less movement toward adherence to prevalent cultural values under conditions of stress (Florian & Mikulincer, 1998).

These findings suggest that even in emerging adulthood, individual differences are pronounced. They also suggest, however, that the problems of integration suggested by research with college students may be somewhat specific to this age period. In contrast, one would predict that the ability for balanced
presentation increases well into midlife—although it is important to note that better than 50% of individuals tend to respond in ways that are not well integrated. These findings, again, point to the role of middle-aged adults whose levels of integration play a critical role. Does this generation of mentors provide models of openness and disciplined change? Are they able to teach those emerging into adulthood in ways that are generative, or do they do so in ways that serve needs of personal aggrandizement? Questions such as these are important for future investigations.

Conclusion

In sum, this chapter has presented evidence of emerging structures of adult thought that begin to appear after the end of adolescence and show rapid growth during the period of emerging adulthood. These thought structures can be described in terms of abstract levels of complexity, but go beyond high-level formal thinking, per se. A common thread that combines them is the understanding of forms of intersubjectivity that can extend beyond institutional boundaries and reach toward constructive change. The understanding of such complex forms of intersubjectivity forms the basis of many important adult accomplishments, such as the formation of identity, the establishment of personal and institutional bonds, and the extent and style of participation in educational, economic, political, and religious life.

This review also has shown that these forms of thinking remain a potentiality for many, a promise rather than a reality. Embedded as they are in a process of generational transmission, they require the support of the more encompassing knowledge systems administered by mature adults who are the carriers of complex knowledge. In this way, emerging adulthood can be seen as a period critical for the establishment of mature structures of thinking, yet also vulnerable to stabilizing distortive forms of thinking if important familial and cultural supports are not available.

References


Emerging Structures of Adult Thought


