❖ III ❖

PERSONALITY AND THE SOCIAL CONTEXTS OF DEVELOPMENT

Language permits abstract thought; it also allows interpersonal communication, a primary medium for the social interaction that lies at the base of personality and social development. Chapters in the last section of *Developmental Science: An Advanced Textbook* examine personality and social development in the context of the various relationships and situations in which developing individuals function and by which they are shaped.

Chapter 9 focuses on temperament, emotions, and self in the individual child as they evolve into personality. As Ross A. Thompson and Rebecca Goodvin show, personality as we understand it in adults integrates over the development of temperament, emotion, and self. The authors set themselves and the reader the goal of understanding what each is, how each develops, and the ways each contributes to the psychological makeup of the individual. Therefore, the self unfolds in close relation to temperament, emotions, and personality in the course of early psychological development.

As Thompson and Goodvin also make clear, however, the self emerges in social contexts. One primary social context for developing individuals is represented by the family. In chapter 10, Michael E. Lamb and Charlie Lewis recount the development of social relationships within the family during the first years of life. They describe normative developmental progressions in the emergence of these relationships as well as the factors that account for individual differences in relationships, creating some that foster healthy adjustment and development and others that subvert developmental processes and lead to the emergence of behavioral pathology.

In chapter 11, Kenneth H. Rubin, Robert Coplan, Xinyin Chen, Allison A. Buskirk, and Julie C. Wojslawowicz shift the developing child's focus to relationships established with children outside the family, notably with peers. As Rubin and his co-authors point out, relationships with peers play a central and formative role in children's development. These authors document that, with increasing age, peers in various kinds of groups account for a growing proportion of children's social experiences, creating an increasingly important context within which children manifest their distinctive personality and social styles and by which these styles are modified and honed. How peer influences are measured, why individual children are so influenced by peers, how children negotiate their relationships with friends, and the consequences of good and poor peer relationships in children's lives are topics of keen interest in contemporary developmental science.

As most children grow, self- and social relationships are increasingly organized within institutional contexts such as the school and community. These social institutions serve as environments in which children are expected to perform and by which their tendencies, preferences, and abilities are shaped. School and community are, therefore, as Jacquelynne S. Eccles and Robert W. Roeser show in chapter 12, pervasive and powerful developmental ecologies for children. Although psychologists have often viewed the family as the primary context within which children are reared, and peers as a close runner-up, the authors of this chapter make clear that children are profoundly influenced by relationships and experiences outside the family in the schools and communities where they are most often found.

As noted in many of the preceding chapters, developmental science is not simply a subdiscipline in which scientists seek basic knowledge of developmental processes. The developing individuals at the focus of developmental research face real problems and challenges, and the results of that research often have implications for the design of intervention programs and for the development of social policy. Currently, an increasing proportion of attention in developmental science is paid to applied as well as basic research issues. In chapter 13, Christina J. Groark and Robert B. McCall illustrate the ways in which developmental thinking and research affect and are affected by practice and social policy. Their chapter is a guide to the student of the discipline who would see her or his work affect the society at large.

❖ **9** ❖

THE INDIVIDUAL CHILD: TEMPERAMENT, EMOTION, SELF, AND PERSONALITY

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INTRODUCTION

This chapter is concerned with the unique qualities that develop to distinguish the individual child from others, the qualities that contribute to the growth of personality. The goal is to understand what the child brings to the social world from the very beginning that marks developing individuality. It is important to note, however, that "the individual child" does not really exist except in the mind of the theorist. From the moment of conception throughout life, a person's growth is constituted by the influences of others, beginning with the quality of prenatal care and continuing in the variety of social influences that guide developing thoughts, emotions, and personality throughout adulthood. But developing people do not come as empty entities to these interactions. They bring with them temperamental predispositions, unfolding emotional capacities, and developing self-awareness that individualize their specific transactions with the social world. In this regard, considering "the individual child" involves asking what developing people bring to their encounters with family members, peers, the school, and community.

Why focus on developing temperament, emotion, and self in the construction of personality? One reason is that these three early emerging attributes establish young children's individuality to others—and to themselves. Temperament helps to organize individual experience; emotions contribute to unique transactions between the child and the social world; and developing self constitutes the prism through which these transactions are internalized into emergent personality. This trio of emerging capacities helps to define individuality from the beginning of life. Another reason is that temperament, emotion, and self each reflect an interaction between emergent intrinsic capacities and the influences of the social world. In this reciprocal dynamic between nature and nurture, personality takes shape, and each developing child becomes a unique actor in a complex social world.

These three facets of developing individuality emerge early yet unfold considerably from infancy through adolescence and beyond. The first, temperament, forms the intrinsic bedrock of personality development through the dispositions by which young infants first exert a unique influence on others around them, and become recognized by others as distinct individuals. The second, emotion, constitutes one of the most important ways in which individuality is developmentally broadened and deepened as emerging capacities for emotional expression, understanding, and regulation contribute to the growth of personality. The third, self-development, **Au: Pls. Check edit.**

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is important for how it organizes emergent personality processes around a changing, yet consistent, core of self-perceived personhood.

The development of temperament is considered first, in the next section. In doing so, we address the defining features that distinguish temperament from moods or emotions, and the core dimensions of temperamental individuality. Then we summarize research findings concerning the consistency of temperament over time and its relation to personality features. This leads to a broader discussion of how temperament develops, and the influence of temperament in the growth of behavior and personality. Emotional development is profiled in the section that follows. Definitional issues are again considered first, and we compare the ways that emotion is defined and studied by structuralist and functionalist emotions theorists. Because emotions are so complex, our discussion then considers the question, "What is emotional development the development of?" In answering this question, the psychobiological foundations of emotion, the growth of emotion perception and understanding, empathy, emotion and the growth of self-understanding, emotional display rules, and emotion regulation are each profiled, along with the growth of emotion in close relationships. The last major section considers the development of self. Not surprisingly, we first consider "What is 'self'?" and the various dimensions of self-awareness and self-understanding that emerge developmentally. We then provide a developmental outline of how the self emerges in infancy, early childhood, middle childhood, adolescence, and adulthood. Finally, in a concluding section, we relate the developmental processes discussed in this chapter to the growth of personality. Throughout this chapter, we consider for each topic the importance of culture, emerging new research questions, and methods of study.

TEMPERAMENT

Beginning shortly after birth, a child's individuality is manifested primarily in temperament. The child's dominant mood, adaptability, activity level, persistence, threshold for distress (or happiness), and other characteristics are important because of the influence they have on others, and because they constitute the foundations of personality growth. Parents and other caregivers devote considerable effort to identifying, accommodating to, and sometimes modifying the temperamental features of young children. Parents also understand that to the extent that we can see in the baby the person-to-be, we see in temperament the personality-to-be. Most parents are fascinated by their child's temperamental individuality because it distinguishes their child in ways that foreshadow, they believe, the growth of personality dispositions. Developmental research into temperament has been motivated by the same interests. What is temperament and its core features? How consistent over time are temperamental characteristics, and do they constitute the basis for personality development? How does temperament influence development—and how does temperament itself develop over time?

Defining Temperament

Temperament concerns the early emerging, stable individuality in a person's behavior, and this is what distinguishes temperamental individuality from more transient moods, emotions, or other influences on the developing child. More specifically, temperament is defined as constitutionally based individual differences in behavioral characteristics that are relatively consistent across situations and over time (Goldsmith et al., 1987; Rothbart & Bates, 1998; Wachs & Kohnstamm, 2001). Encompassed within this definition are several important points.

First, temperamental characteristics are *constitutional* in nature. Temperament is biologically based and derives from the interaction of genetic predispositions, maturation, and

experience. The biological foundations of temperament are multifaceted. Considerable evidence indicates that individual differences in temperamental qualities associated with emotionality, activity, and other characteristics are strongly heritable (Caspi, 1998; Goldsmith, 2002; Plomin, DeFries, Craig, & McGuffin, 2003). Genetic individuality is, in turn, expressed in many physiological systems, including individual differences in the reactivity of subcortical and sympathetic nervous system structures (Kagan, 1998; Kagan, Reznick, & Snidman, 1988), neuroendocrine functioning (Gunnar, 2000; Gunnar & Davis, 2003), cerebral asymmetry (Calkins & Fox, 1994; Calkins, Fox, & Marshall, 1994; Fox, Schmidt, & Henderson, 2000), parasympathetic regulation (Porges, 2003; Porges, Doussard-Roosevelt, & Maiti, 1994), attentional processes in the central nervous system (Rothbart, Derryberry, & Posner, 1994; Rueda, Posner, & Rothbart, 2004; Ruff & Rothbart, 1997), and many other psychobiological processes (see Rothbart & Bates, 1998, and Rothbart et al., 1994, for reviews).

Many of these features of biological individuality emerge very early in life; thus, they influence developing social, emotional, and other dispositional qualities in the child. Although it is common to assume that the biological foundations of temperament account for the stability of temperamental attributes over time, it is important to remember that these biological foundations are also developing systems whose maturation may change the nature or organization of temperament. The early months and years of life witness not only the budding of behavioral individuality, in other words, but also the rapid growth and consolidation of neurological, neuroendocrine, neocortical, and other biological systems on which temperament is based (Rothbart & Bates, 1998; Rothbart et al., 1994). As a consequence, the 3-year-old is biologically much different from the newborn, and these biological differences contribute to somewhat altered temperamental qualities. Emotional reactivity, for example, is manifested within the context of far more organized behavioral capabilities in the older child, and the self-control of a 3-year-old is greater than it is just after birth (but less than it will be at age 6), which further alters emotional reactivity (Cole, Martin, & Dennis, 2005; Eisenberg & Morris, 2002). Furthermore, experiences can also modify biological functioning in ways that influence temperament, such as how the quality of care provided by a depressed or abusive parent can influence the psychobiological responding of offspring (e.g., Ashman & Dawson, 2002), or in the effects of chronic experiences that entail stress or impose taxing physiological demands (Dienstbier, 1989).

A second defining feature is that temperament is expected to be *relatively consistent* over time. That is, individual differences in temperamental characteristics are stable: A child who is dispositionally more bright and cheerful than peers in infancy should, as a preschooler, still be more cheerful than age-mates. We should not expect temperamental characteristics to be rigidly stable in developing persons, but they should show greater consistency than do other behavioral attributes. Studying the consistency of temperament over time poses theoretical as well as methodological challenges, however. Theoretically, in what circumstances are temperamental attributes likely to be stable over time, and when is discontinuity more likely? Are there developmental phases when temperament is more likely to be modifiable, for instance, and does the quality of an individual's transactions with the social environment, such as parent–child relationships, influence the consistency of temperament? We shall consider later in greater detail these theoretical issues.

Methodologically, temperamental characteristics are inferred from behavior, but a person's behavior changes substantially with development. This can make the study of consistency or change in temperament a difficult task. An infant with a high activity level manifests this attribute quite differently from a comparable preschooler or adolescent, for example, and high activity level is also likely to mean different things to other people in that child's world (it may be an amusing characteristic to the parents of an infant, but an irritable attribute to a preschool teacher seeking to manage a group of children). Using developmentally appropriate indicators,

it is tricky to assess the same temperamental characteristic in an individual over time, but the failure to do so can contribute to a misestimation of the consistency of temperament.

Third, temperament *interacts with the environment* as an influence on development. Although it is common to think of temperament as having a direct and specific influence on developing capacities like attachment, sociability, and adjustment, it is more often true that its influence is mediated by environmental characteristics, such as the demands and stresses of the child's home, the sensitivity and adaptability of social partners, and the manner in which temperament guides the child's choices of activities in the environment and interpretations of those experiences. Temperament also interacts with the environment because of how temperament is construed in light of cultural values and beliefs (Bornstein, 1995). This is true even for children with "difficult" temperaments, because the consequences of temperamental difficulty are mediated by the ways in which temperament can be expressed in social contexts (in constructive or inappropriate ways), the reactions of other people, and the values of the culture concerning normative behavior. Differences in how children's characteristics are conceptualized arise from cultural variation in how particular temperamental characteristics are valued (Cole & Dennis, 1998; Harwood, Miller, & Irizarry, 1995). Shy and inhibited behavior is viewed much differently and is associated with different parenting practices, in North American and Chinese families, for example, with inhibition associated with warm, accepting parenting in China but with punitiveness in Canada (Chen, Hastings, Rubin, Chen, Cen, & Stewart, 1998). Likewise, Japanese mothers are reported to value levels of proximity-seeking and fussiness in their infants that U.S. mothers find problematic or indicative of developmental problems. The fact that temperament interacts with environmental influences should not be surprising because development is complex and rarely guided by one or a few primary influences. Any temperamental attribute can yield diverse developmental trajectories depending on the context in which temperament is perceived and interpreted.

Dimensions of Temperament

Another way of answering the question "What is temperament?" is to identify the primary dimensions of temperament. In what ways is temperamental individuality typically expressed? Temperament theorists vary somewhat in their answers to this question (Goldsmith et al., 1987; Rothbart & Bates, 1998). To Thomas, Chess, and their colleagues—who emphasized that temperament defines the stylistic component (the "how") of behavior rather than the content (the "what") of behavior—temperament is expressed in characteristics like the *rhythmicity* of biological functions, *approach* to or *withdrawal* from new stimuli, *adaptability, distractability, activity level, quality of mood, persistence* or *attention span, intensity of reaction,* and *sensory threshold of responsiveness* (Chess & Thomas, 1986; Thomas & Chess, 1977; Thomas, Chess, & Birch, 1968). To Rothbart and Derryberry (1981; Rothbart, Derryberry & Posner, 1994), temperamental individuality includes *activity level, soothability, duration of orienting, smiling and laughter* (positive reactivity), *fear,* and *distress to limitations* (frustration). Buss and Plomin (1984) portray temperament in terms of variability in three dimensions: *activity level, emotionality,* and *sociability*.

There are some common themes in these alternative conceptualizations of temperament. Each regards activity level as a distinctive temperamental quality, primarily owing to its salience and its broad influence on behavior. In addition, variations in positive and negative emotionality figure prominently in each formulation. Indeed, Goldsmith and Campos (1982) define temperament as individual differences in the expression of the primary emotions, such as happiness, sadness, distress, fear, and anger. It is interesting that emotionality is such an important part of how temperament is conceptualized because this reflects the centrality of emotion to the behavioral variability that we can observe in young infants (whose proneness to distress,

soothability, and smiling and laughter are extremely important to caregivers), and its significance as a developmental precursor to later personality features like extroversion, agreeableness, neuroticism, conscientiousness, shyness, and aggressiveness. Indeed, the emotional features of early temperament make it easy to see the conceptual overlap between infancy and childhood temperaments and the structure of adult personality (Caspi, 1998; Halverson, Kohnstamm, & Martin, 1994), and this adds credence to the view that temperament constitutes an important foundation for personality development.

Moreover, emotional dispositions are central to the conceptualization of temperamental "*difficulty*." The concept of difficult temperament implies that particular constellations or profiles of temperamental attributes may be "greater than the sum of their parts" because they have a more significant impact on social relationships and behavioral adjustment than do individual dimensions taken alone. Temperamental difficulty is a profile that includes predominantly negative mood, frequent and intense negative emotional behavior, irregularity, poor adaptability, and demandingness (Bates, 1980, 1987, 1989; Chess & Thomas, 1986; Rothbart & Bates, 1998; Thomas et al., 1968). Consistent with these characteristics, several researchers have found that infants with a difficult temperamental profile are more likely than others later in development to exhibit externalizing difficulties (such as aggression and conduct problems) and internalizing difficulties (such as anxiety; Bates, Bayles, Bennett, Ridge, & Brown, 1991; Keily, Bates, Dodge, & Pettit, 2001; see Rothbart & Bates, 1998). This may occur because difficult temperament renders a child more vulnerable to later behavior problems, but it may also occur because temperamental difficulty influences the social relationships that also shape personality growth and the emergence of externalizing and internalizing difficulties. These processes require further study. Adding complexity to the study of temperamental difficulty is that "difficulty" sometimes is in the eye of the beholder and is differentially perceived in light of cultural values. In studies relying on parent-report measures of temperament, therefore, parental reactions are crucial both to perceptions of difficult temperament and to the behavior problems that may arise later. Even so, it appears that this profile of temperamental difficulty renders some young children more susceptible to later problems than others with easier temperamental profiles.

Another way of understanding temperamental profiles is to conceptualize temperament as revealing fundamental variability in *reactivity* and *self-regulation* (Rothbart, Ellis, & Posner, 2004; Rothbart & Bates, 1998). Reactive features of temperament reflect how easily a person becomes aroused to respond to events, and can be observed in the rate of onset, speed of escalation, persistence, and intensity of emotional reactions, as well as in variability in activity level, attention span, and sensory threshold. Self-regulatory features of temperament are revealed in how reactivity is modulated, and can be observed in approach and withdrawal tendencies, inhibition of responding (as in soothability), emotion regulation, and adaptability. One advantage of this conceptualization of temperament is that it mirrors the dynamic interaction between excitatory and inhibitory nervous system processes; thus, it better enables researchers to map the psychobiological components of temperamental individuality (Rothbart & Bates, 1998; Rothbart et al., 1994, 2004). It also enables theorists to see the range of temperamental attributes in terms of two broad aspects of behavioral responding that characterize people throughout life, because individual differences in reactivity and self-regulation remain important throughout the life course.

Temperament can be measured in various ways, but each approach has interpretive problems as well as advantages (Bates, 1987; Rothbart & Goldsmith, 1985). Parents are likely to have considerable insight into the temperamental attributes of offspring because of their long-term knowledge of the child's behavior in many different circumstances, and parent-report temperament questionnaires are inexpensive and convenient to use. But parents may be biased informants in various ways: Their relationships with offspring, their personality characteristics,

and their efforts to present their children (and themselves) in a positive light can each skew temperament reports. There is currently vigorous debate concerning the suitability of using parent-report temperament questionnaires and the extent to which these measures can be made more valid (compare Kagan, 1998, with Rothbart & Bates, 1998).

Laboratory and naturalistic observations of temperament-related behavior in children have their own strengths and weaknesses. Direct observations by unacquainted observers are more objective, and laboratory studies enable researchers to control more precisely the conditions in which children are studied. But observational approaches are expensive and time consuming, are limited (by practical and ethical considerations) in the range of circumstances in which children are studied, and cannot easily enable repeated assessments in different situations of the same temperamental attributes (comparable to how parent-report measures index temperamental variability in a range of situations). The result may be a comparably distorted or incomplete portrayal of temperament. Consequently, some researchers recommend a multimethod strategy in which parent-report and observational assessments of temperament are used convergently, and in which the unique and shared variance of each measure can be studied (see Asendorpf, 1990, Bornstein, Gaughran, & Segui, 1991, and Kochanska, 1995, for illustrations of such a strategy).

Consistency of Temperamental Qualities, and Prediction to Later Behavior

Is it true that we see in temperament the foundations of later personality? Or are temperamental attributes observed early in life rather pliable and changing over time? Embedded within these superficially straightforward questions are more difficult queries (see Bornstein, 1998, for a thoughtful discussion of different meanings of stability and continuity in behavior). Can the same temperamental attribute be measured at different ages using age-appropriate measures? If so, is there a strong association among comparable measures of temperament at each age (i.e., does a child rank similarly among peers on the same temperamental quality at different ages)? Does temperament at an earlier age predict other relevant later behavior, such as personality attributes, in the same person? If so, does the strength of prediction depend on the age at which temperament is initially assessed?

The answers to these questions depend, not surprisingly, on the specific temperament dimensions of interest, along with other developmental considerations (see Caspi, 1998, Rothbart & Bates, 1998, and Shiner & Caspi, 2003, for important reviews of this research in which the following account is based). Several general conclusions seem warranted.

First, measures of temperament obtained neonatally or in the initial months of life are only weakly or inconsistently associated with later assessments of the same temperament dimensions. This is true, for example, of distress proneness, activity level, and attention. The instability of individual differences in these dimensions of temperament should not be surprising in view of how significantly the infant is changing during the first year as psychobiological systems progressively mature (Rothbart et al., 1994). The generalized distress response of the newborn gradually becomes more differentiated to distinguish anger-frustration and fear, for example, as the infant's appraisal capacities and neurophysiological systems mature (Buss & Goldsmith, 1998). Later in the first year, inhibition begins to appear (illustrated in the wariness that 9-month-olds often show to a stranger) that further alters the child's negative reactivity, and which may also affect activity level (Thompson & Limber, 1990). At the same time, neocortical maturation underlies changes in attentional processes that result in greater voluntary control over visual attention and changes in temperamental qualities like attention span (Rothbart, Ellis, & Posner, 2004). Taken together, the rapid pace of developmental change in the first year means that the biological systems that express temperament are themselves changing,

and this likely contributes to the instability of individual differences in temperament during this period. A temperamental characteristic like attention span is a psychobiologically more mature behavior in a 3-year-old than in a 6-month-old, and these developing neurobiological, perceptual, and cognitive systems associated with temperament likely reorganize developing individuality.

Second, greater short-term stability in certain temperament dimensions begins to be observed after the first year, and sometimes earlier. Characteristics like behavioral inhibition, positive emotionality, attention span and persistence, and even activity level show moderate stability in repeated assessments over periods of several months or sometimes years when they are carefully measured in age-appropriate ways (or based on parent reports using developmentally appropriate questions). Moreover, these early assessments of temperament sometimes predict later personality characteristics. Kagan, Reznick, and Gibbons (1989), for example, found that toddlers who were specially selected at 14 and 20 months of age because of their inhibited behavior in a series of laboratory tasks were found to be more cautious and fearful in a laboratory assessment at age 4. Calkins et al. (1996) also noted that inhibited behavior in childhood was predicted by temperamental characteristics even earlier in infancy. Kochanska and Knaack (2003) recently found continuity in children's inhibited behavior from 22 through 45 months, and that this early pattern of inhibition predicted self-regulated behaviors later in childhood. However, associations between temperament assessments over time are weaker or inconsistent in many other studies, suggesting that aspects of developing individuality remain fairly pliable during this period. In many respects, developing individuality has not yet become consolidated.

Third, there is increasing evidence for longer term associations between temperament and later behavior after the second year of life (Lemery, Goldsmith, Klinnert, & Mrazek, 1999). Sometimes these long-term associations are quite impressive. In a large sample of over 800 children in New Zealand studied every 2 years from early childhood to young adulthood, Caspi and his colleagues (2003) have found significant associations between temperamental qualities at age 3 and personality traits at ages 21 and 26 (Newman, Caspi, Silva, & Moffitt, 1997; see also Caspi, Henry, McGee, Moffitt, & Silva, 1995; Caspi & Silva, 1995). Young children who were temperamentally "undercontrolled" (impulsive, irritable, and distractable) were more likely to show externalizing behavioral problems in adolescence and lower levels of adjustment and greater interpersonal conflict in early adulthood. By contrast, young children who were temperamentally inhibited were, as young adults, more likely to be rated as cautious and restrained but showed adequate adjustment. These impressive consistencies in individual characteristics indicate that childhood temperament can have long-term correlates in later personality growth. Not all studies show such strong continuities, however, and such findings are not apparent for all children (see, e.g., Pfeifer, Goldsmith, Davidson, & Rickman, 2002). Considerably more research is required to discover why these continuities between temperament and later personality exist for some children, but not for others. Some theoretical proposals are presented in the next section.

Why does temperament have greater predictive power after infancy? One reason is that some of the psychobiological foundations of temperament are becoming consolidated (although many continue to mature throughout childhood) and are having enduring influences on personality development. Once many of the core neurobehavioral bases of temperament have become organized during the first year, in other words, temperamental individuality becomes expressed more consistently. Another reason is that other concurrent developmental processes help to consolidate temperamental individuality after infancy. As we shall see, the preschooler is an increasingly self-aware, intentional child who is developing a more complex self-image and whose choices of friends, activities, and settings are guided, in part, by an emerging sense of self. That sense of self is likely in turn to be grounded in temperamental individuality. For

instance, young children who begin to perceive themselves, in relation to others, as more shy will choose friends with similar characteristics, participate in certain activities (like dyadic play) in which they feel comfortable in preference to other activities requiring leadership or public performance, and become increasingly perceived by others in ways that are consistent with their self-perception as shy or inhibited. Because this sense of self is influenced by temperamental characteristics, it may contribute to the integration of temperamental characteristics with the development of personality and the consolidation of behavioral individuality in the years to come. Finally, the perceptions of others are also an important contributor to the consolidation of temperamental individuality. By the time a young child reaches the toddler and preschool years, caregivers, child-care teachers, peers, siblings, and others have likely developed stable perceptions of what the child is like that influence how they respond to her or him. In doing so, they help to reinforce and consolidate the behavioral characteristics they perceive.

Taken together, temperament research shows that the stability of temperament, and its prediction to later behavioral attributes, is contingent. Some researchers believe that temperament is more likely to be stable within, but not between, major periods of developmental change and reorganization, such as the transition from infancy to early childhood (Goldsmith et al., 1987). Others argue that temperament will become increasingly stable, and predictive, with increasing age because of the ways that developing self-understanding, social awareness, intentionality, social comparison, and other changes make children increasingly aware of their individual characteristics and capable of acting on this realization (Caspi, 1998; Shiner & Caspi, 2003). These two views are not, of course, inconsistent explanations of why very early temperament may not be highly predictive of later individuality. Despite this, theorists concur, temperament becomes a foundation for personality as temperamental attributes become developmentally consolidated and incorporated into a stable personality structure.

Temperament and Development

Temperamental dispositions do not always foreshadow later personality. Sometimes change rather than continuity over time is more apparent. Understanding why this is so requires appreciating the dynamic interaction of temperamental characteristics with other developmental influences in personality growth, particularly from the social environment, and how this interaction shapes behavioral individuality. Temperament researchers have several ways of portraying this developmentally interactive process.

First, a child's temperamental profile may mesh well, or poorly, with the requirements and opportunities of the child's social setting. Consequently, the influence of temperament on personality or adjustment depends on the "goodness of fit" between temperament and environmental demands. Chess and Thomas (1986; Thomas & Chess, 1977) originated this concept in describing the developmental outcomes of difficult temperament. As they argued, temperamental difficulty need not contribute to later behavior problems if the social and physical environment is accommodated to the child's needs and characteristics. When parents are tolerant and understanding, for example, and opportunities for constructively channeling temperamental qualities are provided (e.g., frequent flexible self-chosen options rather than no choices in activities), difficult temperament can lead to more positive, adaptive personality attributes. By contrast, even children who are temperamentally easy will likely develop behavioral problems if they live in settings where demands are excessive and developmentally inappropriate and partners are cold and insensitive. The same process of environmental "match" or "mismatch" applies to other temperamental attributes, such as activity level, negative or positive emotionality, or attention span. In each case, the accommodation of the environment to the child's unique characteristics foreshadows better adjustment than the failure of social partners to recognize

and adapt to the child's temperamentally based needs. This is one of the reasons why sensitive, responsive parenting is such an important predictor of positive personality outcomes in children and a buffer of the negative effects of early poor adjustment (Belsky, 1999; Teti & Candelaria, 2002; Thompson, 1998a).

It is important to remember, however, that a child's environment changes significantly over time in ways that can also influence temperament–environment goodness-of-fit. As children mature, for example, parents, teachers, and other adults increasingly expect more competent, self-controlled behavior; children enter into settings (like preschool and school) that require compliance, initiative, and cooperation; and children increasingly participate with adults in circumstances (like church, concerts, and other events) in which they must understand and enact socially appropriate behavior. Environmental expectations thus become less flexible and less amenable to some children's temperamental profiles over time, consistently with the normative expectations of the culture (Bornstein, 1995). These changes in social expectations may also include divergent expectations for gender-appropriate conduct, such that boys and girls find environmental demands differentially amenable to their behavioral styles. As a consequence, a particular temperamental profile may fit well with environmental demands and opportunities at one age (e.g., low persistence or attention span in infancy), but provide a poor fit later (e.g., the same characteristics during the school years). In this way, the temperament–environment match is a developmentally dynamic one, and this is likely to influence the consistency of temperamental attributes over time and their relations to later personality.

Second, a child's temperamental profile may influence how the child interacts with people and settings. This can occur in several ways (Plomin, DeFries, & Loehlin, 1977; Scarr & McCartney, 1983; Shiner & Caspi, 2003). For one, a child's behavioral style may *evoke* certain reactions from others, such as how a child with a temperamentally sunny disposition naturally elicits smiles and interest from peers and adults. These positive social reactions are likely, in turn, to influence the child's development and the growth of personality attributes (such as sociability) much differently from the reactions evoked by a child with a more negative temperamental profile. For another, a child's behavioral style may guide that person's *preferences* for partners, settings, and activities. For example, someone with a high activity level is more likely to participate in sports with other active people than a person with a low activity level, for whom more sedentary activities and partners are more comfortable. These choices also influence development because they channel the range of opportunities and challenges children are likely to encounter to those that accord with their dispositional characteristics. Furthermore, a child's behavioral style may influence how children *alter* their social environments. For example, a child with a difficult temperamental profile may have a more profound influence on other people than a child with a more inhibited or adaptable style.

Over time, of course, children and youth become progressively more capable of choosing their partners and settings to accord with their personal preferences. By the time of adulthood they can often create lifestyles that are consistent with their personality styles in the choices they have made of marital partner, occupation, residence, hobbies, and other activities. This is one reason, therefore, that temperamental and personality dispositions tend to become more consolidated over time: People increasingly choose partners and create lifestyles with characteristics that are compatible with their own. However, many people are incapable of exercising this kind of choice, especially when they encounter unexpected misfortune or have limited resources or options (such as in poverty) with which to exercise choice. In these circumstances, especially when the environmental demands are out of sync with temperamental attributes, we might expect poorer adjustment (and less stability in personality attributes) because of the difficulties presented by an unaccommodating and unexpectedly changing environment.

Third, a child's temperamental profile may influence how that person perceives, experiences, interprets, and thinks about life events (Rothbart & Bates, 1998; Shiner & Caspi, 2003;

Wachs & Gandour, 1983). This can begin quite early. A 1-year-old with a positive, outgoing disposition is likely to regard the approach of an unfamiliar but friendly adult much differently from a temperamentally inhibited infant, and will feel greater interest and curiosity (rather than fear) when encountering a new setting (such as a peer's playroom). The children's different responses in these and similar circumstances may have broader consequences for the growth of social skills, the emergence of peer relationships, and intellectual development. Temperament may also be an important influence on how a child interprets and responds to the parent. Kochanska (1993, 1995) found, for example, in two research studies that conscience development occurred differently for young children who differed in temperamental fearfulness. Conscience developed best for temperamentally fearful children when their mothers used gentle, nonassertive discipline practices in a manner that avoided overstressing their offspring. By contrast, conscience development for temperamentally nonfearful children was best predicted by a secure attachment to the mother and the positive, shared partnership it helped to create between them. Discipline practices were less influential, even those in which mothers were fairly assertive. For both types of children, their temperamental qualities caused young children to perceive and respond to their mothers' discipline practices in different ways. It is also possible that temperament influences thinking and information processing more broadly, especially in light of the importance of emotion and attentional persistence to an individual's capacities to concentrate, remember, and reason competently at all ages (Campos, Barrett, Lamb, Goldsmith, & Stenberg, 1983).

Temperament is likely to interact with environmental influences in other ways. Temperamental qualities may enhance a person's vulnerability to intrinsic or extrinsic stressors and, in doing so, contribute to the development of maladjustment or dysfunction. Alternatively, temperamental attributes may provide buffers against the stressors that occur by strengthening resiliency, such as that provided by positive mood, adaptability, and greater self-regulation (Rothbart & Bates, 1998). In each of these profiles of temperament–environment interaction, it is clear that the developmental trajectories yielded by a particular temperamental profile depend not only on temperamental attributes but also on the nature of environmental demands and opportunities. In a sense, these formulations converge on the conclusion that temperament causes people to experience the world in distinct ways (Wachs, 1992).

Conclusion and Future Directions

Contemporary research on temperament offers conclusions that differ markedly from traditional portrayals. By contrast with traditional formulations that temperament emerges early, is highly consistent across situations and over time because of its psychobiological origins, and is directly tied to the growth of personality, current research underscores that temperament is a biologically based but developmentally evolving feature of behavior. For this reason, temperamental attributes become increasingly more consistent over time as temperamental individuality is enveloped into the network of self-perceptions, behavioral preferences, and social experiences that together shape developing personality. Moreover, contemporary research shows that, although temperament may have direct effects on behavior and development, temperament more commonly interacts with environmental influences to shape development in remarkably complex ways.

These conclusions remind us of the complexity of human development and of the multifaceted ways that temperament influences emergent individuality. They also help to explain why we commonly consider infant or child temperament, but rarely conceive of adult temperament. By adulthood, personality has fully developed to include many features of self-understanding, social dispositions, behavioral style, attributional processes, and other facets that incorporate, elaborate, and extend initial temperamental dispositions.

Just as temperament theory has become more nuanced and sophisticated, so also has temperament research. Contemporary researchers use carefully constructed parent-report questionnaires in combination with thoughtfully designed laboratory assessments to explore the developmental influences shaping a child's behavioral style, and the influence of that style on later development. Consistent with its biological origins, temperament researchers are also applying behavioral genetics research designs to understanding the genetic and environmental influences shaping temperamental individuality, using identical and fraternal twins as research samples (see Goldsmith, Lemery, Buss, & Campos, 1999, for an example). The emerging field of molecular genetics will also provide further insights into the hereditary origins of temperament in the near future as scientists begin to associate specific gene loci with psychological characteristics. Current researchers are also devoting considerable attention to the interactive and mediated influences of temperamental processes on development (see Park, Belsky, Putnam, & Crnic, 1997, for an illustration). For example, work by Shaw and his colleagues explores how early temperamental vulnerability interacts with harsh parenting in the development of conduct disorders in young children (see Owens & Shaw, 2003; Shaw, Miles, Ingoldsby, & Nagin, 2003). This highlights one of the important applications of temperamental theory and research to the field of developmental psychopathology as researchers are better understanding how temperamental individuality confers unique vulnerabilities, and strengths, for children in their encounters with supportive or stressful social environments. In all, this means that one can no longer append a parent-report temperament measure into a research design and, by doing so, create a temperament study. Instead, contemporary developmental research on temperament is examining theoretically sophisticated questions based on temperament theory using multiple methods that are well suited to the developmental samples and questions under study.

EMOTION

Emotions also shape our experience of the world, and they exercise a pervasive influence throughout the life span. By contrast with temperamental variability, however, the effects of emotional reactions can be either enduring or brief, transcontextual or situationally specific. Moreover, emotional experience changes considerably with development and includes a rich variety of basic and complex feelings that far surpass the range of temperamental variability in mood. Emotions are also complexly tied to other developmental processes. Emotional development is associated with psychobiological maturation, self-understanding and the understanding of others, the child's growing capacities to appraise people and environments, social interaction and self-control, and the awareness of social rules and social conventions.

We take for granted that emotions are part of everyday life. But consider how much emotional experience changes over the life course. It is easy to see in infancy the extremes of emotional arousal, from raucous crying to exuberant delight, that are unregulated by the child and uncontrollable except through the sensitive intervention of caregivers. In infants the raw, basic experience of emotion is readily apparent, but the infant is also sensitive to the emotions of others and strives to comprehend their meaning. For the preschooler, basic emotions have become supplemented by self-conscious emotions, like pride, guilt, shame, and embarrassment, that reflect evaluations of the self. Emotional experiences are also thought about, discussed with parents and peers, and frequently enacted in sociodramatic play. The preschooler is more self-aware emotionally and has begun to understand the causes and consequences of emotional experiences and the influence of emotions on social interaction.

By middle childhood, children have become more reflective and strategic in their emotional lives. Emotions can be more effectively managed through cognitive means (such as using distracting thoughts) as well as behavioral strategies, and emotions are often intentionally

hidden through display rules that dissemble genuine feelings. But children of this age are also capable of genuine empathy and greater emotional understanding than ever before. In adolescence, it appears as if the emotional swings of infancy have reappeared, but the emoter is now a psychologically more complex individual who reflects on the unique origins of personal emotional experience, is acutely sensitive to the psychological bases of emotion in others (especially peers), and can feel strongly in response to symbolic (e.g., music, narrative) as well as direct elicitors of emotion.

Does emotional development continue into adulthood? Yes, but the character of its development changes. Rather than witnessing the unfolding of new, psychologically complex emotional experiences, adults often seek to create personal lifestyles that are emotionally satisfying, predictable, and manageable through their choices of occupation, partners, and other activities. In other words, adults strive to construct their lives to incorporate emotional experiences that are personally desirable, and this may include career choices that promise the satisfactions and challenges of productive labor, personal choices such as the pleasures (and turmoil) of childrearing, and leisure choices that offer the excitement of musical, artistic, athletic, or other creative pursuits. Of course, not all succeed in doing so. Adults also become skillful at managing the expression of their personal feelings to accord with their social circumstances and their personal goals. Although new capacities for emotion may emerge (e.g., poignancy), the theme of emotional development in adulthood is the adaptive integration of emotional experience into satisfying daily life and successful relationships with others. This is one reason why adults seem emotionally more stable and predictable—and, sometimes, less animated—than children or adolescents.

This developmental survey not only underscores the changing tapestry of emotional experience but also highlights the relation between emotional development and the growth of personality. At each stage of life, new capacities for emotional experience, expression, and understanding contribute to personality development as they help to organize and express developing individuality. In this respect, emotional growth is an important part of the growth of personality from infancy through later life. Furthermore, in tracing the influence of emotion in development, it is increasingly clear that emotional development is shaped by cultural beliefs about emotion. From parents' reactions to their infants' emotional displays to everyday views of what constitutes mature emotionality in adulthood, cultural values influence the salience of particular emotions, the significance accorded emotional life, and the specific ways that emotion influences personality development.

Defining Emotion

But what is emotion? The question almost begs an answer because of the ubiquity of emotion in everyday experience. Each person is intimately acquainted with the visceral reactions (rapid heartrate and sweaty palms), subjective experience (inability to concentrate and infusion or depletion of energy), cognitive appraisals (of threat, the unexpected or goal achievement), facial expressions, and other familiar constituents of emotions that we linguistically demarcate as fear, anger, joy, distress, guilt, or other feelings.

To some emotion theorists, the constellation of these physiological, subjective, appraisal, and expressive components defines emotion (Izard, 1991; Izard & Ackerman, 2000; Lewis & Michalson, 1983). This *structuralist* perspective accords with our common-sense view that emotional experience is readily distinguished into different emotional states, each with unique patterns of subjective feeling, cognitive appraisal, physiological arousal, and facial expression. Most emotion theorists believe that for basic emotions like anger, fear, surprise, sadness, joy, and disgust, these constellations of emotion attributes are deeply rooted in human evolution because of their relevance to survival and reproductive success. An emotion like fear, for

example, rapidly mobilizes the body's resources to flee from an unexpected and potentially dangerous event, whereas an emotion like anger has different visceral, subjective, and expressive components that involve readiness for fight rather than flight. In each case, the constellation of emotion components renders humans better capable of surviving and reproducing in their natural environments. Structuralist emotion theorists believe, that, despite this long biological heritage, emotions develop early in life because of changes with age in children's capabilities for appraising circumstances in emotionally relevant ways and responding appropriately to emotion elicitors.

Other emotion theorists disagree that emotional life is so discretely packaged. They argue that basic emotions are not as differentiated, either physiologically or expressively, as structuralist theorists believe (Camras, 2000; Ortony & Turner, 1990). They note that everyday emotional experience consists not of a succession of discrete emotions, but rather of subtly nuanced blends of a broad variety of emotional states that range in dynamic and temporal quality owing, in part, to emotion regulatory processes, and these features of emotional experience are not well represented in most structuralist accounts (Thompson, 1990). Furthermore, some cultural theorists point out that the manner in which we commonly conceptualize discrete emotions reflects the linguistic distinctions of English-speaking people. By contrast, people from different cultural and linguistic systems have equally rich emotional lives that are conceptualized much differently, with potentially different "basic emotions" (Lutz, 1988).

As an alternative to structuralist theories, therefore, some emotion theorists have adopted a functionalist approach (Barrett & Campos, 1987; Frijda, 1986; Saarni, Mumme, & Campos, 1998) that emphasizes the role of emotion in everyday experience, as reflected in the following definition: "(e)motion is thus the person's attempt or readiness to establish, maintain, or change the relation between the person and the environment on matters of significance to that person" (Saarni et al., p. 238). By defining emotion in very broad terms of person–environment transactions that matter to the person, emotion is associated with goal attainment, social relationships, situational appraisals, action tendencies, self-understanding, self-regulation, and a variety of other developmentally changing processes. The range of emotion is not confined to a specific set of categories defined by their subjective, physiological, and expressive attributes (although functionalist theorists talk of "emotion families" that share common characteristics), but is considerably broader because of how emotion is conceptualized in different social and cultural groups based on the nature of specific person–environment transactions. The definition of emotion is thus more open-ended in functionalist accounts. To be sure, the openness in how emotion is regarded from a functionalist perspective introduces considerably greater ambiguity into theory and research on emotional growth (e.g., are hunger, effort, arrogance, or indifference also emotions?), and it is unclear what (if any) features distinguish emotion from other motivational states or from personality processes.

The two alternative ways of conceptualizing emotion proposed by structuralist and functionalist theorists of emotion also have methodological implications. Consistent with the view that discrete emotions are associated with distinctive facial expressions, many developmental researchers have been inspired by structuralist accounts to measure facial expressions in their studies of emotional growth, often using highly detailed, anatomically based measurement systems suited to infants and young children (see Oster & Rosenstein, 1996). Facial expressions (and, to a lesser extent, other behavioral expressions) of emotion provide a window into underlying subjectivity, according to the structuralist view, because of how the expressive, subjective, cognitive, and physiological sides of emotional experience are tightly interconnected. But the organization of facial expressions and their association with specific emotions may not be a biological given but rather a developmental process, as noted by Camras (2000). That is, the meaning of a facial expression as an indicator of emotion may not be innate, but the result of the gradual developing refinement of facial activity because of neocortical maturation,

socialization influences, self-organization, and other developmental processes. One research group found, for example, significant differences in the facial expressions of Chinese, Japanese, and European American infants in response to standardized emotion-eliciting circumstances, noting that variations in facial expressions were not necessarily associated with different emotional experiences and may have derived from socialization experiences distinct to each culture (Camras et al., 1998). From this perspective, therefore, functionalist emotions theorists argue that it is unwise to rely exclusively on any behavioral index of emotion.

Moreover, even in adults an expression like a smile can serve many masters: It can reflect happiness, contempt, embarrassment, an effort to distract, or a display meant to dissemble a different true underlying feeling. Consequently, contemporary study of emotional development is increasingly multimethod, integrating various behavioral measures of emotion (including facial expression, vocal behavior, and specific actions interpreted within the context in which they occur) into an organizational interpretation of emotional responses to the interaction between a person and the environment. In this regard, a smile observed in the context of gaze-aversion, withdrawal, and an effusive compliment might be interpreted as part of the emotion family of embarrassment; but a smile observed in the context of eye contact, outstretched arms, the exclamation "I did it!" and a completed task might be regarded as part of the pride family.

What Is Emotional Development the Development Of?

We can easily observe the changes that occur in emotion with increasing age. But what accounts for growth in emotionality? Emotional development incorporates many features of psychological growth, making this topic an especially integrative field of study (Denham, 1998; Oatley & Jenkins, 1996). These include the psychobiological foundations of emotion, developing capacities for perceiving emotion in others, emotional understanding, the development of empathy, the growth of self-understanding, mastery of emotional display rules, and developing capacities for emotion regulation.

Psychobiological foundations.   In light of the preceding discussion of the psychobiological foundations of temperament, it is unsurprising that emotional development is also based on neurophysiological, neuroendocrine, and other biological processes that change rapidly in infancy and childhood (LeDoux, 2000; Panksepp, 1998). As a biologically ancient feature of human functioning, emotion is rooted in primitive regions of the brain such as the hypothalamus and the limbic system (especially the amygdala, often regarded as the "emotion center" of the subcortex; see Johnson, this volume). But because it is involved in the most complex aspects of human behavior, emotion is also guided by some of the most sophisticated regions of the cerebral cortex, especially the evolutionarily newer frontal cortex. Moreover, emotional reactions are also influenced by hormones and neurotransmitters regulated by a variety of brain areas. This makes an apparently simple emotional reaction a surprisingly complex psychobiological event, and there are significant developmental changes in these processes that affect emotional behavior. For example, the unpredictable swings of arousal of the neonate become progressively more modulated and controllable in infancy as maturational advances occur in adrenocortical activation and in parasympathetic regulation (Gunnar & Davis, 2003; Porges, Doussard-Roosevelt, & Maiti, 1994). With later developing functional connections between subcortical and frontal systems regulating emotion, furthermore, enhanced capacities for emotion regulation emerge in the toddler and childhood years (Thompson, 1994).

Emotion perception.   Another important facet of emotional development is the capacity to accurately perceive emotion in others. This is an early emerging phenomenon: Even 5-month-olds can discriminate and categorize facial expressions of smiling (Bornstein & Arterberry,

2003). By the end of the first year and early in the second, infants have become capable of discerning the emotional meaning underlying many adult facial and vocal expressions and of incorporating this meaning into their interpretation of the adult's behavior in a phenomenon called "social referencing" (Saarni et al., 1998). When an infant encounters an unfamiliar person or object, for instance, the sight of the adult's reassuring smile or terrified look (especially if it is accompanied by appropriate vocalizations and other behavior) influences the child's tendency to approach or withdraw. The baby appropriately "reads" the meaning of the adult's emotional expression and its relevance to the unfamiliar event (Mumme, Fernald, & Herrera, 1996). In later months, this basic capacity for accurate perception of emotional signals is supplemented by a more acute awareness of the meaning of the emotional signal. By the end of the second year, for example, toddlers seem to be more consciously aware of the subjectivity of emotional experience: Another person can feel differently than oneself (Repacholi & Gopnik, 1997). As a consequence, parents begin to witness their toddlers intervening into the emotions of others by comforting a distressed peer or teasing a sibling (Harris, 1989).

Emotional understanding. With further conceptual growth, understandings of emotion become incorporated into young children's broader knowledge about the psychological states of others (Bartsch & Wellman, 1995; Thompson & Lagattuta, in press; Wellman, 2002). Consistent with the expansion of their naive "theory of mind," for example, 2- to 3-year-olds understand that emotion is associated with the fulfillment of desires, and 4- to 5-year-olds appreciate the more complex linkages among emotion and thoughts, beliefs, and expectations (Harris, Johnson, Hutton, Andrews, & Cooke, 1989; Wellman & Banerjee, 1991; Wellman & Woolley, 1990). This broadening psychological understanding richly expands children's conceptualization of emotion because it enables young children to appreciate how emotion is linked to the satisfaction or frustration of desires (which vary in different people) and to beliefs (which may be incorrect, such as the child who mistakenly thinks that her lunch bag contains a delectable dessert when in fact her father forgot to include it).

In middle childhood, children begin to conceive of emotional processes, such as how emotional intensity gradually dissipates over time (Harris, Guz, Lipian, & Man-Shu, 1985), how specific emotions are related to antecedent causes (Thompson, 1989), and how personal background, experiences, and personality can yield unique emotional reactions (Gnepp & Chilamkurti, 1988). Somewhat later, by about age 9 or 10, children begin to understand how multiple emotions can be simultaneously evoked by the same event, such as feeling happy and scared when performing before a group (Donaldson & Westerman, 1986; Harter & Whitesell, 1989). Later, adolescents better appreciate the complex psychological causes of emotion in relational experience, self-reflection, and existential concerns (Harter, 1999; Harter & Monsour, 1992). It is easy to see how these advances in emotional understanding are relevant to children's growing self-awareness and to the growth of personality because of how they offer insight into experiences of ambivalence, emotional self-control (and lacking emotional control), relationships, and psychological conflict.

The development of emotion understanding also reflects the influences of cultural beliefs about emotion. Because of how emotions are perceived and interpreted to young children by parents and others, children from different cultures derive different understandings of the antecedent causes of emotion and the appropriate emotions to experience and express in different social situations. Cole and her colleagues, for example, have identified cultural differences in children's understanding of appropriate emotional responses to difficult interpersonal situations, such as whether negative emotions should be revealed and whether shame or anger is an acceptable response, consistent with broader differences in interpersonal beliefs between individualist and collectivist cultures (Cole, Bruschi, & Tamang, 2002; Cole & Tamang, 1998). Emotion understanding is thus shaped by both the local (e.g., familial) and the broader (e.g., cultural) contexts in which children live.

By what processes do children acquire this expanding understanding of emotion? Along with the influences of developing intellectual capacities and social experience (especially with peers), researchers note that everyday conversations between young children and their parents provide potent opportunities to learn about emotion (Lagattuta & Wellman, 2002; Thompson, Laible, & Ontai, 2003). This is especially so in cultures that accord significance to discussing emotional experiences. As children begin to share their experiences and observations with caregivers in simple accounts (beginning almost from the time they can talk), parents elaborate, inquire, interpret, and otherwise clarify the child's accounts in ways that contribute to the growth of emotional understanding (Dunn, 1994; Dunn, Brown, Slomkowski, Tesla, & Youngblade, 1991; Denham, 1998; Denham, Zoller, & Couchoud, 1994; Ontai & Thompson, 2002). Thus, when a young preschooler observes his older sister arriving home from school in tears, his inquiry about why this was so can provide a conversational forum for learning about emotion and its causes. In doing so, of course, adults not only clarify but also socialize emotional knowledge, conveying expectations about appropriate emotional behavior and the causes and consequences of emotional displays (Thompson, 1998a; Thompson et al., 2003).

In this way, norms and expectations concerning emotion are explicitly communicated to children through conversation. However, the messages that children receive about the causes of emotion, the consequences of emotional displays, and the value of particular emotions depend on both the cultural context and the personal characteristics of the child. For example, Fivush's (1994, 1998) research indicates that lessons about emotion differ based on the gender of the child. With girls, parents discuss more sadness than anger, attribute emotions to social–relational causes (e.g., sadness is caused when someone else is hurt), and resolve negative emotions through reassurance and reconciliation. Parents conversing with boys discuss anger more often than sadness, attribute emotions to autonomous causes (e.g., sadness is caused by losing a toy), and are less likely to discuss resolution of negative emotions (Fivush, 1994, 1998). Cultural differences also exist in emotion-related beliefs and also in parents' inclusion of emotion in conversation, which alters the opportunities for children to learn about emotion in this manner. Mullen and Yi (1995), for example, found that in conversation about past events with their 3-year-old children, U.S. mothers referred to their child's and others' thoughts and feelings nearly two times as often as did Korean mothers.

Empathy and emotional contagion.   The growth of emotion perception and emotional understanding together also enhance the child's vicarious sensitivity to the emotions of others. Young infants often respond resonantly to the emotions they perceive in others (fussing when they hear another person crying), for instance, but these early episodes of emotional contagion are not truly empathic because the baby has no real comprehension of the circumstances provoking another's feelings (Thompson, 1998b; Zahn-Waxler, 2000). But with the rapid growth in emotional understanding that occurs in early childhood, young children can respond with genuine empathy (as well as a variety of other emotional reactions) to another's anguish. In everyday circumstances as well as in experimental contexts, for example, toddlers are observed to react with concerned attention to the sight and sound of the mother's distress (Zahn-Waxler, 2000; Zahn-Waxler & Radke-Yarrow, 1990), and empathic responses increase in sophistication and scope in the years that follow. Early empathic responding is sometimes (although not consistently) accompanied by prosocial initiatives, such as efforts to comfort the distressed person, but with increasing age empathy becomes somewhat more reliably associated with helping behavior as well as with other prosocial initiatives, although empathy remains motivationally complex (Eisenberg & Fabes, 1998; Thompson, 1998b). Taken together, the growth of empathy reflects children's developing affective as well as cognitive awareness of the emotional experiences of others, and the changing role of interpersonal emotion in social relationships.

Emotion and the growth of self-understanding.   Emotional growth is also closely tied to the development of self-understanding, which we consider in greater detail in the section that follows. A major advance in emotional growth occurs during the late second and third years of life, when young children become more physically and psychologically self-aware (reflected in verbal self-references and efforts to "do it myself") and, at the same time, show emerging reactions of pride, guilt, shame, embarrassment, and other self-conscious emotions (Barrett, 1998; Lewis, 2000). Thus, the simple joy of success becomes accompanied by looking and smiling to an adult and calling attention to the feat (pride), and in response to conspicuous attention toddlers increasingly respond with smiling, gaze aversion, and self-touching (embarrassment). These responses reflect new emotional capacities built on new forms of self-awareness.

The emergence of self-conscious evaluative emotions like pride and shame during the third year depends not only on the growth of self-awareness, however, but also on young children's appreciation of standards of conduct and the ability to apply those standards to an evaluation of their own behavior (Lewis, 2000; Thompson, Meyer, & McGinley, in press). Feelings of pride derive from the realization of an accomplishment that is personally meaningful, and likewise guilt is elicited when one violates a significant standard of conduct. The capacities to understand behavioral standards and apply them personally are slowly developing, and young children initially rely on parental evaluations as the basis for their feelings of pride, guilt, or shame in their behavior (Stipek, 1995). Indeed, it is common to find young preschoolers checking back regularly with the parent as they work on a challenging task or are engaged in misbehavior, and the adult's subsequent emotional response—combined with verbal comments underscoring the evaluative standard ("You worked hard at that puzzle!")—significantly shape the child's own.

In this regard, therefore, the development of self-conscious emotions like pride, shame, and guilt has a complex connection to the growth of self-understanding (Barrett, 1995). Although these emotional capacities depend on a young child's self-awareness, the circumstances in which they are elicited provide important cues to the child concerning self-worth and its association with the child's fidelity to specific standards of achievement or morality. Furthermore, the importance of these evaluative standards to the child, and the feelings associated with compliance or misbehavior, are also tied to the warmth and security of the parent-child relationship (Dunn, 1987; Thompson, 1998a). These themes are considered in greater detail below.

Understanding and use of display rules.   Emotions are intrinsically social, and one aspect of emotional development is understanding and applying social rules for the display of emotion in social settings. A person is supposed to show delight when opening a gift, even if it is undesirable (especially in the presence of the gift-giver), and one is not supposed to laugh at a defeated opponent or at someone who takes an unexpected spill on a slippery sidewalk. People use emotional "display rules" to mask the expression of true feelings with a more appropriate emotional expression in order to protect self-esteem, avoid hurting others' feelings, and preserve relationships. Young children clearly do not share this awareness, which is why they commonly reject undesirable gifts and act in other socially "inappropriate" ways. Although they begin to manage their emotional expressions to protect the feelings of others as young as age 4 (Banerjee, 1997a; Cole, 1986), it is not until they reach middle childhood that they can conceptualize the meaning of emotional display rules and their purposes (Jones, Abbey, & Cumberland, 1998; Saarni, 1999). Their grasp of the meaning, application, and importance of display rules for emotional behavior increases significantly in the years that follow. As it does so, children make a remarkable discovery: Emotional appearance is not necessarily emotional reality. What others show is not necessarily what they feel. People may deliberately seek to deceive concerning their true feelings. And most important, one can disguise one's own true feelings and thus retain the privacy of emotional experience.

As a social phenomenon, display rules are susceptible to the same cultural and contextual variability of other features of emotional development. Thus, cultural values differ significantly concerning the importance of dissembling one's emotions to others. Cole's work in Nepal suggests that there are important conventions, different from those of the United States, for displaying both positive and negative emotions, and these are recognized by children as young as age 6 (Cole et al., 2002; Cole & Tamang, 1998). Even within Western cultures the display rules conveyed to boys and girls differ. It is more appropriate for girls than for boys, for example, to display feelings of sadness or fear (Fivush, 1994).

Emotion regulation.   Emotion regulation concerns the management of emotional experience. In contrast to display rules, which regulate emotional expressions, strategies of emotion regulation influence emotion itself (Cole et al., 2004; Eisenberg & Morris 2002; Thompson, 1990, 1994). There are many reasons for doing so. People seek to regulate their emotions to feel better under stress (managing negative emotions and increasing feelings of happiness or well-being), think better (managing any kind of strong emotion), act courageously (curtailing feelings of fear or anxiety), enhance motivation (sometimes by accentuating guilt), elicit support (focusing on personal distress or anxiety), affirm relationships (enhancing sympathetic or empathetic feelings for another), and for other reasons. Understanding emotion regulation thus requires appreciating the diverse personal goals underlying regulatory efforts. Sometimes these goals are self-evident: Children and adults manage emotions when striving to cope with difficult circumstances. But these goals are also shaped by the social context: Competent emotion regulation may be best observed, for example, when a young child loudly protests a bully's provocations when adults are nearby, but quietly tolerates this abuse when adults are absent (Thompson, 1994). In this regard, processes of emotion regulation—like the use of display rules—are social, and it is unsurprising that skills in emotion regulation are related to social competence in children (e.g., Gilliom, Shaw, Beck, Schonberg, & Lukon, 2002).

Emotion regulation is social also because the earliest forms of emotion regulation are the efforts of caregivers to manage the emotions of their young offspring. Parents do so by directly intervening to soothe or pacify the child, and also in other ways, such as by regulating the emotional demands of familiar settings like home and child care (often in accord with their perceptions of the child's temperamental strengths and vulnerabilities), altering the child's construal of emotionally arousing experiences (acting enthusiastically while going on a ferris wheel or taking a trip to the dentist), and coaching children on expectations or strategies for emotional management (Garner & Spears, 2000; Spinrad, Stifter, Donelan-McCall, & Turner, 2004). With growing maturity, however, emotions become internally managed in increasingly sophisticated ways (Thompson, 1990, 1994). Whereas the newborn infant may cry uncontrollably, the toddler can seek assistance from others; the preschooler can talk about her feelings and their causes; the school-age child can redirect attention, reconceptualize the situation, and use other deliberate cognitive strategies to manage feelings; the adolescent can use personally effective means of regulating emotion (such as playing meaningful music or talking to a close friend); and the adult can alter schedule, responsibilities, and (sometimes) relationships to change emotional demands. The growth of these intrinsic capacities for emotion regulation is thus built on advances in emotional understanding (discussed earlier) and self-understanding (discussed later) that enable developing persons to better understand the personal causes and consequences of emotional arousal and devise increasingly sophisticated and effective means of managing emotion.

Emotion and Relationships

Contemporary research on emotional development shows that emotions are not just internal experiences with outward expression; they are deeply influenced by the social contexts in which

they occur. As functionalist emotion theorists note, the person–environment transactions of significance to an individual are usually social, and relationships influence not only emotion elicitation but also the enlistment of display rules and strategies for managing emotional experience and its expression. The social context is also crucial to the growth of emotion perception and emotional understanding by which children develop an appreciation of the meaning of emotion to themselves and others, and emotional development is further enlivened by the vicarious experiences of empathy and emotional contagion. A child's skills in emotion perception, understanding, and self-regulation are, in turn, significant influences on a child's social acceptance and social competence (Denham et al., 2003; Rubin, Coplan, Nelson, Cheah, & Legace-Seguin, 1999; Saarni, 1999). It is, in short, impossible to conceptualize emotional development except with reference to the social conditions that add meaning to emotional behavior throughout life.

The most important feature of the social context is, of course, the close relationships on which people depend for support. This is especially true during the early years of life, when a child's attachment to caregivers provides an emotional context of security and reassurance, or insecurity and uncertainty, that colors self-perception and understanding of others (Thompson, 1998a). Close relationships influence emotional development because they shape many of the conditions in which young children experience, understand, and interpret emotion in the context of everyday social interaction, shared conversations, coping support, instruction and modeling, and a variety of other influences on emotional development. Even more fundamentally, parent–child relationships color emotional development through children's developing expectations of support and sensitivity (or lack of it), the construals of emotionally relevant situations that are shaped by the adult's attributional style, and the emotional demands of these relationships on the developing person (Cassidy, 1994; Gunnar & Davis, 2003).

Unfortunately, these relational influences are sometimes most clearly apparent in disturbed parent-child relationships when the consequences of emotional turmoil in the home for early emotional development are evident (Thompson & Calkins, 1996; Thompson, Flood, & Goodvin, in press; Thompson, Flood, & Lundquist, 1995). Young offspring of parents with affective disorders like depression are at heightened risk of problems with emotion and emotional regulation, for example, because of the caregiver's limited accessibility as a source of emotional support, and the adult's parenting practices that enhance the child's feelings of responsibility and helplessness (Goodman & Gotlib, 1999). As a result, the offspring of a depressed caregiver become overinvolved in the parent's affective problems, unduly obligated to buttress the parent's emotional state, and feeling inappropriately guilty when their efforts inevitably fail. Children from homes characterized by marital conflict show a heightened sensitivity to distress and anger that is manifested in excessive guilt and diminished coping capacities when adults argue between themselves (Cummings & Davies, 1994; Davies & Cummings, 1994). From the preschool years onward, these children also become overinvolved in their parents' emotional conflicts and have difficulty managing the strong emotions it arouses in them. Maltreating mothers are less aware of their children's feelings and less competent at helping their children cope with emotionally arousing situations, which contributes to the emotional difficulties of their offspring (Shipman & Zeman, 2001). These studies underscore how much the sensitivity and support provided by close relationships is required for children to develop in an emotionally healthy manner. Unfortunately, they also illustrate how emotional processes in the home can contribute to the intergenerational transmission of emotional problems from parent to offspring.

Conclusion and Future Directions

Understanding how significantly social relationships influence emotional experience not only underscores the complexity of emotion and its development but also constitutes an important

direction for future research. Contrary to the view that emotion is the outward expression of an internal subjectivity, recent research highlights that the elicitors of emotion, the meaning of emotional arousal, and the understanding of emotional experience and its expression are each deeply social processes (Thompson et al., 2003). This research is important also for understanding the role of emotion in personality development. Because the emotions with which infants and young children begin to understand themselves and others and communicate with partners are socially instigated and construed, personality is founded on the shared meanings associated with emotion in a particular culture.

In addition to their origins, the fundamental organization and function of emotions in development is also the topic of considerable research inquiry. Consistent with growing psychological interest in brain development, for example, researchers are exploring the neurobiology of emotional growth in infancy and early childhood and its behavioral correlates (see Fox, Henderson, Rubin, Calkins, & Schmidt, 2001, for an illustration). In doing so, researchers are relying less exclusively on facial expressions as criteria of emotional experience and are instead approaching the study of emotion in a multimethod manner, enlisting measures of behavioral tendencies (e.g., withdrawal, aggression), self-report, psychophysiology (e.g., heart rate and skin conductance), neurobiology (e.g., brain scans), as well as facial expression in developmental research. This makes the convergence and divergence among these alternative markers of emotion in infants and children an especially provocative means of examining the developing coherence of emotion over time. Emotions may not exist as innately packaged constellations of behavior, expression, and experience, in other words, but may become self-organized as the result of maturation and social experience.

Finally, there is also intense interest in the development of emotion understanding, especially in early childhood when conceptions of the psychological world are taking shape (Banerjee, 1997b). Because emotions are such significant and salient indicators of what is going on in another's mind, researchers are discovering that young children's grasp of the causes and outcomes of emotion in others offers a window into broader aspects of their psychological understanding. Developmental researchers are especially interested in how children construct an understanding of emotion from diverse sources, including their personal experiences of emotional arousal, their observations of emotion in others, and opportunities to discuss what they observe with parents (Thompson & Lagattuta, in press). They are also discovering, as earlier noted, that individual differences in emotion knowledge predict social competence even in early childhood. Achieving a better understanding of the associations between the caregiving experiences that contribute to young children's capacities to comprehend emotion and their social responses to the emotions of others (such as peers) thus constitutes one of the more exciting topics in contemporary developmental emotions research.

SELF

As mature people, it is almost impossible to conceive of life without a sense of self. The integrated perception of "me" at the center of all of life experience seems natural and inevitable. But if we stop to consider all that "self" encompasses, it is apparent that this concept is considerably more complex than our intuitive experience suggests, and that the development of self is a multifaceted process that extends throughout life. Moreover, because the sense of self organizes and integrates our experience of who we are in the context of changing life events, it provides an essential foundation to personality development. Studying the growth of self is thus an essential developmental task and (as we shall see) requires methods that are as diverse as are the different facets of "self."

What is "Self?"

At the core of "self" is, of course, the sense of *subjective self-awareness*. This is the perception of self as an actor, perceiver, emoter, thinker, and experiencer in the midst of all of which one is consciously aware. It is the "I-self" that, to William James (1890) and his followers (Harter, 1999), denotes the uniquely personal experience of life, in contrast to the "me-self" that constitutes the various characteristics that can be objectively known about a person by others. Subjective self-awareness develops very early in life and provides a foundation for the growth of self.

But there is more. Self also includes *self-representation*: Who you think you are. This includes physical self-recognition, assigning categorical labels to the self (for gender, racial or ethnic identity, age, and the like), attributing characterological qualities to self (such as shy, friendly, bright, or strong-willed), and understanding how self-relevant processes function (like thinking, feeling, and motivation). These forms of physical and psychological self-definition provide the basis for perceiving similarities and differences between self and other people, applying social schemas (such as gender schemas) to the self, gaining insight into the causes and motives underlying one's behavior, making ingroup–outgroup differentiations, and creating a self-concept. Although self-representation expands and is refined considerably throughout life as self-awareness assumes progressively more complex and differentiated features, this process also begins quite early. Long before the second birthday, for example, toddlers are capable of recognizing their physical mirror image (Lewis & Brooks-Gunn, 1979), have begun to use language for simple self-description (Stern, 1985), and can identify basic emotional states in themselves (Bretherton, Fritz, Zahn-Waxler, & Ridgeway, 1986). By contrast, it is not until later childhood and adolescents that children begin to perceive themselves as members of societal groups and can evaluate ingroup–outgroup distinctions (Killen, Lee-Kim, McGlothlin, & Stangor, 2002).

Another feature of self is *autobiographical personal narrative* by which the recollections of specific events in the past are integrated because of their personal meaning and relation to the self (Nelson & Fivush, 2004). Although young children are fairly proficient at recalling general events in the immediate past, it is not until after age 3 that autobiographical memory emerges, and most adults cannot recall events of their lives prior to this age (Pillemer & White, 1989; Welch-Ross, 1995). Autobiographical memory differs from general event recall because of the sense of self that is central to the narrative account, organizing and giving meaning to the events that are remembered. One reason for the relatively late emergence of autobiographical personal narrative, therefore, is that the kind of self-knowledge required to instill past events with personal meaning does not begin to emerge until after the third birthday (Howe & Courage, 1993, 1997; Nelson & Fivush, 2004).

A fourth aspect of self consists of the variety of *self-evaluations* that color self-representations and become integrated into the self-concept and self-image (Cole et al., 2001; Harter, 1999). Self-evaluations often derive from the internalization of others' evaluations, but they also arise from the quality of personal self-regard and developing capacities for self-understanding (Stipek, 1995). A temperamentally shy child living in a society that values assertion and extroversion may increasingly view this characteristic as a liability, for example, as she becomes more aware of the difficulties posed by shyness in socializing with others. These self-evaluations guide how personal characteristics (or the self as a whole) come to be colored as strengths or weaknesses, benefits or liabilities, desirable or undesirable. As we shall see, it is likely that rudimentary ways of perceiving the self as good or bad develop in a nonlinguistic form in the initial two years of life, but these self-evaluations become considerably more multifaceted, incisive, nuanced, and differentiated in the years to come.

Finally, another emergent aspect of self is the *social self*—that is, the self primarily regarded in a social context. Although the sense of self is continuously influenced by social interactions and relationships (especially with parents), it is not until around the second birthday that young children begin to be interested and concerned with how their behavior is perceived by caregivers (Emde & Buchsbaum, 1990; Stipek, 1995). This is the beginning of more complex processes by which the self is oriented to its social context. In the years that follow, for example, social comparison processes will become an important facet of self-evaluation (Frey & Ruble, 1990), children and adolescents will be concerned with managing their self-presentation through self-monitoring strategies (Snyder, 1987), and adolescents will realize that they have "multiple selves" that are suited to the expectations and demands of different social situations—and they will sometimes wonder which is their "true self" (Harter & Monsour, 1992). The social context also shapes the contrast between real and possible selves that represent the distinction between one's actual self and the selves that one could possibly become as either an idealized or dreaded possible reality (Markus & Nurius, 1986). These different facets to the "self" are not independent, of course, and they are mutually influential throughout development. The social self is an important feature of self-evaluative processes, for example, even though many aspects of self-image are also colored by personal (even unconscious) influences. Each is also tied to the quality of self-representations.

The value of conceptually "unpacking" the concept of self in this manner, however, is that it allows insight into two features of the development of self that might otherwise remain unrecognized. First, the growth of self begins surprisingly early but is an extraordinarily complex, and therefore extended, developmental process. Although some sense of self exists from very early in the first year, the sense of self is qualitatively different for infants, young children, adolescents, young adults, and older people because of the changes in self-representation, autobiographical personal narrative, and self-evaluative processes that occur over time.

Second, the developing self is the core of developing individuality and of the growth of personality. The sense of self provides coherence and organization to personal experience through the feeling of subjective self-awareness and the self-representations through which experience is interpreted (Sroufe, 1996; Stern, 1985). It offers the realization of temporal continuity among personal past, present experience, and expectations for the future through autobiographical narrative and a continuing self-concept (Moore & Lemmon, 2001). It provides a means of self-understanding and thus contributes also to understanding other people through the recognition of how one is similar to, as well as different from, others (Harter, 1999). In these ways, the developing self, like temperament and emotional growth, provides an essential scaffold to the developing personality.

These features of the self develop within the context of cultural beliefs about the nature of self. Thus, although children universally distinguish themselves from others and assign categorical labels to who they are, the nature and characteristics of self that children construct and what children value (or devalue) about themselves depend on the culture context in which they live. A well-known dimension by which notions of the self vary interculturally is that of individualism and collectivism (Triandis, 1989) or independence and interdependence (Markus & Kitayama, 1991). In cultures with an interdependent view of self, less importance is placed on differentiating oneself from others, and more emphasis is on connectedness with others; there is less salience of one's own thoughts and feelings and more salience of others' perceived thoughts and feelings; there is less emphasis on a core self that is consistent or stable across time and situation and more emphasis on specific situations and partners defining the self's characteristics. In an interdependent self-system, the role of others is to define the self, rather than to evaluate it (Markus & Kitayama). These cultural views of the self are developed quite early. Mothers from the United States emphasize their preschool offspring's autonomy much more in conversation and social interaction than do Japanese mothers, for example,

although there are also social class differences in maternal behavior within the United States (Dennis, Cole, Zahn-Waxler, & Mizuta, 2002; Wiley, Rose, Burger, & Miller, 1998). These socialization differences are already reflected in the autobiographical narratives of children from independent and interdependent cultures (Han, Leichtman, & Wang, 1998; Wang, 2004). These cultural differences in conceptions of the self are important because Western ideas are not only inherent in how self-development is conceptualized and studied in contemporary psychology but also offer a reminder that the self is socially constructed in somewhat different ways throughout the world.

A Developmental Outline

There is considerable interest in the growth of the self because of the insights it affords into the emergence of personality. Moreover, because the experience of self provides a window into what a person finds rewarding or unpleasant, how he or she is motivated, and how personal experiences are construed, understanding the growth of self offers insights into individual differences in many other developmental processes.

Infancy.   In traditional formulations, the newborn enters the world in a state of psychological disorganization or in a condition of psychological undifferentiation from the caregiver. In either case, the newborn was believed to be poorly prepared for the development of a sense of self. Current views emphasize, by contrast, that young infants have surprising capabilities for assembling, from isolated everyday experiences, the consistent frame of reference that eventually develops into subjective self-awareness (Cicchetti & Beeghly, 1990; Meltzoff, 1990; Stern, 1985). As they are physically handled, move and touch things, and experience assorted visceral sensations, young infants progressively acquire a sense of physical self-awareness related to the functioning of their bodies. As they act on social and nonsocial objects (especially those that respond contingently), the experience of agency contributes to a dawning awareness of volition and its consequences. As they experience varieties of emotion, especially in response to social interaction, the sense of subjectivity is enriched and further consolidated. These experiences contribute to the development of a basic experience of the subjective self within the first 6 to 8 months of life.

After this, the self grows dramatically. By the end of the first year, self-awareness in relation to interpersonal (or intersubjective) events has emerged with the infant's dawning realization that others are also subjective entities who have viewpoints that are different from, and potentially can be shared with, the self (Tomasello & Rakoczy, 2003). Self-awareness is revealed in behavior as diverse as protocommunicative acts (sounds to others that signal intention or desire), efforts to achieve joint attention (when the baby reaches from a high chair to a desired toy, for example, while making urgent sounds and maintaining eye contact with the caregiver), striving to reengage social interaction after a period of inattention, and social referencing (Rochat & Striano, 2002; Stern, 1985; Tomasello & Rakoczy, 2003). In these and other ways, the young infant reveals an implicit awareness that others have subjective states (like attention and emotion) that can be altered by the child's efforts. Well before the second birthday, infants become capable of physical self-recognition when presented with their mirror images (Lewis & Brooks-Gunn, 1979). They touch self referentially when looking at themselves in the mirror.

Late in the second year and early in the third, toddlers show indications of early self-representation in their verbal self-reference, such as using their names or referring to "me" (Bates, 1990; Stern, 1985) and in their use of simple emotion terms to describe their internal experiences (Bretherton et al., 1986). Other indications of emerging self-representation are assertions of competence, such as insisting on "do it myself" (Bullock & Lutkenhaus, 1988; Stipek, Gralinski, & Kopp, 1990), identifying the self by gender and in other ways (Ruble &

Martin, 1998), and the emergence of self-conscious emotions like pride, embarrassment, and guilt (Barrett, 1998; Lewis, 2000). During this time, toddlers are also acquiring a sensitivity to standards and their applications to the self (Kochanska, Casey, & Fukumoto, 1995), showing early signs of conscience (Thompson, Meyer, & McGinley, in press), and are beginning to exercise self-control (Kopp & Wyer, 1994). Young children in the second and third years are, in short, experiencing rapidly expanding self-awareness and self-representation.

The growth of self occurs because of changes within the child, and also because of relational influences. The organization and continuity of early experience provide the basis for emerging self-awareness. This organization derives from how parents structure the baby's experience around routines that are manageable, repetitive and predictable, so that the baby becomes capable of anticipating events that will occur (Stern, 1985). Caregivers also offer social interactive experiences that are emotionally salient and reciprocal, so that the baby's social initiatives and responses have meaningful and contingent consequences (Thompson, 1998a). In providing experiences with these characteristics, sensitive caregivers provide the structure and consistency that enables a sense of self to become organized. Caregivers also provide opportunities in social interaction for infants to learn about the different subjective viewpoints that people possess, and to practice the skills for gaining access to these alternative subjectivities (such as through gestural and vocal communication, social referencing, and in other ways) (Tomasello & Radoczy, 2003). Later, as self-representations begin to take shape, social interactions with caregivers shape the conditions in which toddlers feel proud or shameful, the competencies that they seek to exercise independently or with assistance, and the ways that they begin to identify and represent themselves as well as other people (Stipek, 1995). In this respect, consistent with classic theories of the self (e.g., Mead, 1934), young children begin to regard themselves through the lens of others' regard for them (i.e., the "looking glass self").

Unfortunately, not all caregivers provide a sensitive relational context for the development of positive or healthy self-regard. As self-representations begin to take shape in the second and third years of life, a parent's inappropriate expectations, belittling judgments, or impatience can contribute to negative self-regard, expressed in young children's shame or avoidance, even before a young child has mastered the linguistic capabilities for expressing self-regard (Kelley & Brownell, 2000). Indeed, it is possible that the roots of negative self-representations begin even earlier, in the manner in which infants learn to expect either positive and supportive assistance or more abrupt or negative interactions with their caregivers during everyday episodes of social play, caregiving routines, and the relief of distress. It is for this reason that many developmental researchers regard a secure parent–infant attachment as a crucial foundation for the growth of healthy self-regard because of its influence on the young child's developing self-representations or, in the words of some attachment theorists, internal "working models" of the self (Thompson, 1998a).

Early childhood.   These "working models" become further elaborated and consolidated in the relational experiences of early childhood. This occurs because of significant growth in young children's self-representations during the preschool years. During this period, children acquire an expanded appreciation of psychological states in themselves and others, incorporating an increasing understanding of emotions and desires, and later of thoughts, beliefs, and expectations, into their rudimentary "theory of mind" (Bartsch & Wellman, 1995; Wellman, 2002). This not only assists them in comprehending the thoughts and emotions of others but also in understanding themselves and their own feelings and thinking. This is reflected in how they describe themselves. Young children rely primarily on concrete, observable features in their spontaneous self-descriptions (e.g., "I am big, I can run fast, and can count to 100."), but they can also use psychological trait terms ("I am naughty sometimes, but good with adults.") when describing themselves (Eder, 1989, 1990; Harter, 1999). Although young children's use

of trait terms like "good" and "naughty" lacks the rich meaning inherent in how older people use these concepts, these self-descriptions are like personality traits in that they show stability over time and are similar to how others (such as their mothers) describe them (Brown, Mangelsdorf, Ho, & Agathen, 2004; Eder & Mangelsdorf, 1997). Even a preschooler's use of a concrete feature, such as describing herself or himself as a girl or boy, is accompanied by a basic understanding of the psychological attributes and stereotypes associated with being male or female (Ruble & Martin, 1998). Preschoolers are, in short, beginning to acquire increasingly complex and multidimensional self-representations based on how they perceive their physical (including temperamental qualities) and psychological characteristics (Brown et al., 2004; Marsh, Ellis, & Craven, 2002; Measelle, Ablow, Cowan, & Cowan, 1998).

These self-representations are strongly influenced by how children believe they are regarded by others. Indeed, one of the hallmarks of early childhood is preschoolers' growing concern with how they are seen by the significant people in their lives (Barrett, 1995, 1998; Stipek, 1995; Thompson et al., in press). When they are engaged in misbehavior or tackling challenging tasks, for instance, young children are sensitive to the implicit or explicit standards of conduct that are reflected in parental evaluations of their behavior. They often anticipate positive parental responses (and seek to avoid negative reactions) before they occur and incorporate parental standards into their own self-evaluations (Barrett, 1995; Stipek, 1995). Parental values, expectations, and beliefs are transmitted in many other contexts also. As earlier noted, for instance, everyday conversations between young children and their parents are a forum for meaningful lessons about behavioral expectations, emotional reactions, causal attributions, and the self in the context of the shared recall of the day's events. Consider, for example, the following brief conversation between a young child and his mother about an event earlier in the morning (Dunn & Brown, 1991, p. 97):

Child: Eat my Weetabix. Eat my Weetabix. Crying.
Mother: Crying, weren't you? We had quite a battle. "One more mouthful, Michael." And what did you do? You spat it out!
Child: (pretends to cry)

Embedded within this short, shared recollection about eating breakfast are significant messages from the mother about the causal sequence of events, the reason for Michael's distress, and culpability for perceived misbehavior. These messages to the child are also lessons about the self, of course. By the mother's account, Michael's crying resulted from uncooperative behavior (by contrast with good boys, who cooperate), whereas in Michael's initial representation of the morning's confrontation, it probably derived instead from his mother's insistence about eating unpleasant breakfast cereal. In discussing everyday events like these with her child, it is likely that similar lessons about the self are implicitly transmitted by the mother in the manner in which she structures, elaborates, and clarifies the child's simple representation of daily experiences.

Furthermore, many developmental researchers believe that early, shared recountings of daily experiences with an adult also provides the basis for autobiographical personal narrative (Fivush & Haden, 2003; Miller, 1994; Nelson & Fivush, 2004; Welch-Ross, 1995). It is easy to see why. By instilling an interpretive framework organized with reference to the child, caregivers structure the shared recounting of personal experiences in a manner that not only reinstantiates and consolidates recall but also underscores the personal significance of events for the child. This not only makes events more memorable but also helps to integrate them into a network of representations of events that are knit together because of their relevance to self. Indeed, parents' use of rich emotional language for highlighting the personal significance

of events in conversations with their young children is associated with children's early self-concept development (Welch-Ross, Fasig, & Farrar, 1999).

According to these researchers, autobiographical memory does not begin to emerge until after the third birthday because prior to this time, young children have limited self-knowledge, are insufficiently psychologically self-aware to represent events autobiographically, and also have minimal capabilities for conversing meaningfully with parents in this manner (Nelson & Fivush, 2004; Reese, 2002; Welch-Ross, 1995). Further, children's capacity to conceptualize the self as enduring over time may not develop until early in the fourth year (Povinelli & Simon, 1998). Once these abilities develop, shared conversations with caregivers provide an important foundation to the growth of autobiographical memory. This means that children's autobiographical personal narratives—or emergent "working model" of the self—are likely to incorporate the moral values, causal attributions, emotional inferences, and perceptions of the child that caregivers incorporate into their shared recollections of the child's experiences (Thompson, 1998a). A parent who regards the young child as mischievous, rambunctious, cautious, or moody is likely to instill these perceptions into the shared recounting of the day's events, and these characteristics are likely, in turn, to be incorporated into the child's self-representations. At later ages, as children become mnemonically more skilled, they are less reliant on shared conversations with parents to retain autobiographical events, but for younger children the influence of these conversations is powerful. It is unsurprising, therefore, that young children's psychological self-representations are similar to how their mothers regard them (Brown et al., 2004; Eder & Mangelsdorf, 1997).

This means that some young children are vulnerable to incorporating the negative or demeaning judgments of their caregivers, although most preschoolers also maintain optimistically positive self-regard, at least in achievement contexts. Young children perceive themselves as capable in many things, confidently predicting success even when they have failed, and maintaining sunny expectations for the future (Harter & Pike, 1984). One reason is that young children have difficulty distinguishing between their desired and their actual performance and, believing that ability can be changed with increased effort, do not easily recognize the limits in their capabilities (Stipek, 1984). Another reason is that preschoolers do not spontaneously enlist social comparison to evaluate their performance against the behavior of others; instead, they evaluate their skills against what they were capable of accomplishing at an earlier age (Frey & Ruble, 1990). By the standard of temporal comparison, of course, most young children can feel positive and optimistic about their capabilities. However, when social comparison information is made salient to them, even children as young as $4\frac{1}{2}$ may knowingly use this information to evaluate their own competence (Butler, 1998). Despite their sunny self-regard, however, preschoolers remain vulnerable to the negative or demeaning judgments of their caregivers, especially when they are incorporated into conversations about everyday events shared with the child.

Middle childhood. Self-understanding changes considerably in the school years as children develop more differentiated, realistic, and sophisticated forms of self-representation and self-evaluation. One reason this occurs is the growth of spontaneous social comparison enlisted into self-evaluation. In middle childhood, children spontaneously and more thoughtfully compare their capabilities and attributes with those of their peers to determine how well they "measure up" (Frey & Ruble, 1990; Harter, 1999). Because few children excel in all aspects, social comparison fosters a more differentiated awareness of personal strengths and weaknesses—the realization, for example, that someone may be skilled at sports, have difficulty with math, but is average in social popularity (Cole et al., 2001). Social comparison processes are fostered by the intellectual competencies that emerge during this period of life (Case, 1991) and by the social conditions of middle childhood. Schools increasingly use comparative performance-based

evaluations (in contrast with the rewards in preschool for simply trying); and in clubs, athletic groups, and other gatherings children are organized into age-stratified groups that better enable them to compare their capabilities with those of their peers (see Eccles & Roesner, this volume).

Social and temporal comparison processes, together with expanding cognitive capabilities, have several consequences for children's developing self-understanding in middle childhood. First, they contribute to more complex and sophisticated self-evaluations by which, in contrast to the comparatively positive self-regard of preschoolers, older children's self-descriptions include a more balanced assessment of personal strengths and weaknesses. This makes their self-evaluations more realistic and consistent with how others view them (Oosterwegel & Oppenheimer, 1993). In middle childhood, for example, children become increasingly aware that differences in ability are not easily changed and can constrain potential achievement (Dweck, 2002). They are thus better able to use past performance and personal self-awareness as a guide to more accurately predicting how well they will perform.

Second, children regard themselves in an increasingly nuanced multidimensional perspective during the school years. Distinguishing among various domains of competency—such as academic achievement, athletic prowess, peer popularity, physical appearance, behavioral conduct, and, somewhat later, romantic appeal and job competence—children view themselves as having desirable or undesirable qualities (or both) in each of many different domains (Cole et al., 2001; Harter, 1999). This contributes to a much more complex self-concept because children begin experiencing themselves as individuals with distinct profiles of strengths and weaknesses, much as adults do. Children also see themselves in the context of the multiple roles they assume in middle childhood as family member, student, teammate, club member, and other roles, and in relation to the various identities they assume as Black, Jewish, female, middle class, and so forth (Harter).

Third, self-esteem in certain domains begins to decline during the school years because of children's more realistic and self-critical self-assessments and the influence of social comparison. Children's perceptions of their physical and intellectual competence, for example, decline progressively throughout the school years (Eccles, Wigfield, Harold, & Blumenfeld, 1993; Phillips & Zimmerman, 1990; but see Cole et al., 2001, for different conclusions). Furthermore, these declines are for both boys and girls, although depending on the domain, rates of decline vary somewhat by gender (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002). A decline in academic self-esteem is perhaps inevitable in light of the unrealistic optimism of the preschool years, but it helps to explain why individual differences in self-confidence and their motivational implications become so important in middle childhood (Dweck, 2002). By contrast, other facets of self-esteem, such as children's perceptions of their social competence, rise rather than decline throughout middle childhood (Cole et al., 2001). As these diverse changes in self-concept reflect, because of their enhanced psychological insight, older children have a better understanding of personality traits as internal dispositions that are manifested in diverse behavior, and begin to perceive themselves as persons with complex personalities (Harter, 1999).

The emergence of social comparison and other social influences on developing self-understanding reveals also the growth of the social self, as children increasingly perceive themselves in terms of the social context. In middle childhood, therefore, children also become more adept at self-presentation: managing how they appear before others (Snyder, 1987). With respect to emotions, for example, children acquire considerably greater understanding of emotion and apply this insight to developing skills of emotion regulation and in using emotional display rules to dissemble their true feelings in the presence of others (Saarni, 1999; Thompson, 1990). Children know how to act appropriately in different social situations and have the self-control to do so, whether remaining quiet at a concert, looking attentively in

class, or adopting an easy-going demeanor with friends. These and other characteristic behaviors of middle childhood reflect enhanced self-monitoring by which children appraise and alter their self-presentation to create a more positive, favorable impression with significant others (Snyder, 1987). The increasingly self-conscious enactment of socially appropriate behaviors on the stage of public regard reflects the greater insight of older children into their social selves and provides a foundation for further advances in self-understanding of adolescence.

Adolescence and beyond.   The intellectual capacity for abstract thought flourishes during adolescence, and abstract thought enables teenagers to think of themselves and others much differently than before. They can reflect on discrepancies as well as consistencies within their profile of personality characteristics and ponder what these discrepancies mean for the integrity of who they are (Harter, 1999). They can appreciate the different personae they appear to be in different social situations and wonder which (if any) reveals their "true self" (Harter & Monsour, 1992). They can contrast their personal characteristics with the attributes of an idealized self and worry over whether the gap will ever be narrowed (Markus & Nurius, 1986). As one teenager put it, "I'd like to be friendly and tolerant all of the time. That's the kind of person I want to be, and I'm disappointed when I'm not" (Harter, 1990).

Adolescents can also reflect on the life experiences that have contributed to their unique personalities and believe that nobody else has the same personal outlook that they do (Elkind, 1967). They can ponder how others regard them and experience considerable self-consciousness that derives from assuming that others view them with the same critical scrutiny with which they regard themselves. They can also begin wondering about the roles and responsibilities they will assume as adults and in doing so begin the process of forging an occupational, religious, political, and sexual identity (Erikson, 1968; Kroger, 1993). The burgeoning capacities for abstract thought, together with the social circumstances of adolescence and the psychobiological changes associated with puberty, can foster significant changes in self-understanding, self-evaluation, and the social self. It can also make adolescence a period of introspection, disturbing self-criticism, and pain as well as pleasure at the new forms of self-awareness that emerge.

The effort to "discover" or "find" oneself in adolescence derives not necessarily from deficiencies in prior self-understanding but rather from the new questions about the self that are raised by new forms of self-awareness, as well as by new social roles and circumstances. The psychobiological changes of puberty mean that teenagers are perceiving themselves, and are being perceived by others, less as children and more like young adults, and these changes in how they are regarded by others can introduce welcomed as well as confusing revisions in self-perception depending on the timing of puberty and its meaning to the teenager (Brooks-Gunn & Reiter, 1990). Gender identity intensifies, along with teenagers' self-segregation, into gender-typed activities and interests (Ruble & Martin, 1998). At the same time, adolescents are departing from childhood roles (their schools are larger, classes more impersonal, expectations more stringent, and teachers more authoritarian; see Eccles & Roesner, this volume; Eccles et al., 1993) and are beginning to enter into adult roles and activities (in an after-school job, in classes that teach job skills or prepare for college, and in exploring romantic and sexual relationships). Given how much one's physical appearance and social context are bedrocks to personal identity at any stage of life, it is unsurprising that these rather dramatic pubertal and role-related changes can provoke significant questions about the self in adolescence. Such questions can invite anxious self-reflection, bold experimentation, or both. Indeed, two reasons that adolescents report for engaging in "false self" behavior, besides the effort to ensure acceptable self-presentation to significant others, are (a) because others devalue who they truly are and (b) to experiment with different roles and different possible selves (Harter, Marold, Whitesell, & Cobbs, 1996).

It might be expected that with the onset of these psychobiological, cognitive, and contextual changes in early adolescence, self-esteem declines. But the story of adolescence is similar to that of middle childhood: Self-esteem changes in various ways for different domains of self-perceived competence, such as academic, social, and physical capabilities (Cole et al., 2001). Consistent with their experience at earlier ages, adolescents can benefit from positive, supportive parenting that incorporates acceptance and approval, permitted self-expression, and behavioral guidelines that are rationally discussed (Harter, 1999). Indeed, contrary to popular stereotypes about the teenage years, parents remain important to adolescents' self-esteem even as peers also become important, partly because of parents' centrality to the teenager's life experience (Lamborn & Steinberg, 1993; Ryan & Lynch, 1989).

As many of the psychological, psychobiological, and social transitions of early adolescence are consolidated and accommodated, teenagers increasingly look to young adulthood with goals and plans that they are working to achieve. To be sure, the "Who am I?" questions that are inaugurated in adolescence are rarely answered with any certainty or completeness by the close of the teenage years. Issues of identity, multiple selves, and the dissonance between actual and ideal selves continue to be explored in early adulthood and may be re-evoked much later in life as the result of significant life changes (e.g., divorce, job loss, or personal injury). By contrast with the adolescent's initial encounter with these questions about self, however, the adult can approach these issues as familiar if nagging concerns, having crystallized a sense of self in the choices of occupation, marital partner, and lifestyle that both reflect and help to define who you are, and in the other life circumstances that provide stability and consistency to daily experience. In this respect, the sense of self is more reliable in adulthood because, having engaged in the explorations of the teenage years, the adult has made choices and commitments that (to a greater or lesser extent) are satisfactory and that provide a foundation for occupation, family, and other pursuits of life.

Conclusion and future directions.   A sense of self is such a familiar part of individuality and self-regard that it is easy to forget how painstakingly self-understanding is constructed through infancy, childhood, and adolescence. Moreover, a sense of self is such a central frame of reference for personal experience that it is easy to neglect how much it is a product of social influences. These influences begin with the quality of care an infant receives, continue with how autobiographical self-awareness is constructed through conversation, and extend even to the discovery of self in the context of adolescent peer relationships. This is important especially when we appreciate that a sense of self is a core feature of personality development. Personality derives, in part, from how people create a sense of themselves from personal self-reflection and self-awareness and also by looking in the mirror of others' regard for them.

As this discussion of the complex, multifaceted features of the development of self suggests, researchers rarely strive to study the developing "self" in a comprehensive fashion. Rather, they study the growth of elements of self—self-concept, autobiographical memory, self-management, social comparison processes, self-esteem—and this is likely to continue in the future. This means that research methods must be carefully developed to index the specific self-related processes under study, as well as be suitable to the ages of the children under study. Researchers use different empirical tools for studying the growth of autobiographical memory (involving, e.g., guided recall of events in the recent or distant past with particular attention to the child's self-referential statements) than they use for investigating developmental changes in self-management (in which capacities to resist incentives to act in a disallowed manner are evaluated at home or in a laboratory) or self-esteem (in which affective self-regard is assessed, often in response to carefully designed interview questions). Each is a component of the developing "self," but each must be evaluated using methods that are specific to the particular domain of the self that is of special interest.

Studying the developing "self" is challenging also because the focus of empirical inquiry is on a young person's self-perceptions; thus, research methods often depend on self-report. The development of appropriate self-report measures for children of different ages can be challenging. Developmental scientists have long known, for example, that the conceptual capabilities of toddlers and preschoolers can be underestimated because of their limited capacities to verbalize their own thoughts and understanding, so researchers in this field have had to be creative in developing procedures to assess developing self-awareness in very young children who may not have the words to express what they think or feel. This can involve ingeneous procedures involving story construction (Emde, Wolfe, & Oppenheim, 2003), puppets (Measelle et al., 1998), or other carefully designed procedures to elucidate what young children know and think about themselves. Researchers' success in doing so has helped to reveal that young children think of themselves more complexly and with greater psychological insight than was earlier believed and has opened new questions for future research about how the foundations of self-concept emerge in early childhood.

At the same time, exciting new research studies have also focused on the development of self in adolescence, when a teenager's personal reflections, peer experiences, and encounters with teachers, coaches, parents, and mentors of various kinds contribute to a remarkably differentiated self-concept with complex associations with self-esteem. As a consequence, developmental scientists are increasingly interested in how influences like gender, the qualities of the educational environment, and parenting practices contribute to adolescents' perceptions of their strengths and weaknesses in different domains of intellectual, social, and physical competence (see Cole et al., 2001; Jacobs et al., 2002).

CONCLUSION: PERSONALITY

Although the newborn enters the world as a biologically unique individual, temperamental individuality provides only the most basic core of personality development. As capacities for emotional responding and understanding subsequently unfold, temperamental qualities become elaborated and integrated into a broader network of capabilities. And as a nascent sense of self and self-understanding also develop, temperament becomes incorporated into how the child experiences the self, how others perceive the child, and how self-understanding emerges from the interaction of these processes.

Personality development encompasses, of course, a broader range of influences than just temperament, emotion, and self-awareness. This discussion has touched on many of these additional contributors to personality growth. Personality is shaped by significant relationships, especially those with the mother, father, and other primary caregivers, who provide an emotional context of security and support (or, alternatively, insecure uncertainty) in which confidence, self-esteem, sociability, and empathy (or their opposites) can emerge (Lamb & Lewis, this volume; Thompson, 1998a). Personality is also forged by broader social experiences, such as with peers in the school and neighborhood (see Eccles & Roesner, this volume), the socioeconomic conditions of the family that shape life challenges and opportunities, and the cultural norms and beliefs that envelop all of these processes, that remind us that the development of "the individual child" is a theoretical abstraction. Personality development is also shaped by the emergence of conscience and moral understanding, social cognition and its influence on social behavior, and the emergence of gender identity that also infuse the growth of emotion and of self. In a sense, personality development is an inclusive construct that incorporates the variety of psychobiological, conceptual, social, and contextual influences that self-organize to constitute developing individuality through the life course (Lewis, 1997).

In focusing on temperament, emotion, and self, however, we have considered three of the earliest foundations to developing individuality that provide a basis for personality growth and the elaboration of personality in the years following infancy (Caspi, 1998). With the foundation in place in the initial years of life, personality unfolds and becomes individually refined, consolidated, and strengthened in many ways (Caspi, Thompson, 1988). Personality influences how experiences are construed and interpreted by people, and thus how they respond to social and nonsocial events, and the reciprocal effects they have on future development. Personality influences the choices of social partners, activities, and environmental settings, and the opportunities and challenges these choices pose for further growth. Personality influences the resiliency and vulnerabilities that all individuals experience in their encounters with stressful and everyday life events, as well as the resources people have for coping. Personality influences self-construction and the multifaceted ways that individuals perceive themselves in their current life circumstances in light of how they understand their personal past, their current dispositions, and their needs and desires. In these and many other ways, therefore, personality develops but also mediates between the individual and the social and nonsocial world, and the interaction between personality and the social context affects growth in many developmental domains and shapes the further growth of personality.

Developing individuality is thus both exceedingly personal—touching at the heart of our sense of self—and socially constituted. This is true at the beginning of life and throughout the life course. It is in this manner that we experience ourselves as unique actors in the social world, but share much in common with those with whom we live life.

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