Dialecticism across the Lifespan: Towards a Deeper Understanding of the Ontogenetic and Cultural Factors Influencing Dialectical Thinking and Emotional Experience

Igor Grossmann

University of Waterloo, Canada

**Author’s note**

Correspondence should be addressed to: Igor Grossmann, Department of Psychology, University of Waterloo. E-mail: igrossma@uwaterloo.ca; Fax: +1 519-746-8631.

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**Abstract**

Before dialecticism became a topic of empirical inquiry in cultural psychology, scholars in related disciplines has discussed dialecticism as a model of human development, as an essential component of maturity and wisdom. This review chapter bridged these two perspectives, comparing conceptualizations of dialecticism in developmental and cultural psychology. After reviewing historical portrayals of dialecticism in various philosophical traditions, this chapter provides comparison of historical characterizations with the contemporary treatment of dialecticism in human development and cultural psychology. Both streams -- developmental and cross-cultural -- are proposed as essential for an integral understanding of the construct. Subsequently, the chapter discusses the emerging developmental models of dialecticism across the lifespan and reviews the accompanying empirical evidence, situating it in a cross-cultural context. It concludes with an outline of future directions of research on dialectical thought, with attention to psychological and socio-cultural processes engendering dialecticism across the lifespan.

Keywords: lifespan, cross-cultural context, dialecticism, human development, maturity, wisdom, cultural psychology

 Human development researchers were among the first to introduce dialecticism to psychology (e.g., Riegel, 1973), based on a long tradition of thought in Hellenistic and Western European philosophy. It is thus fitting to discuss the concept of dialecticism from a human developmental perspective. How does this conceptualization compare to the more recent discussion of dialecticism in cultural psychology? What are the similarities and differences in these conceptualizations? In this chapter, I start to address these questions. First, I will outline several definitions of dialecticism in philosophy, human development, and cross-cultural psychology. Next, I compare philosophical ideas to the contemporary treatment of dialecticism in developmental and cultural psychology. I also draw comparisons between the developmental and cross-cultural traditions, pointing out similarities and differences between them. Subsequently, I discuss the emerging developmental models of dialecticism across the lifespan and review the accompanying empirical evidence, situating them in a cross-cultural context. I conclude by outlining future directions of research on dialectical thought, with attention to psychological and socio-cultural processes engendering dialecticism across the lifespan.

**Dialecticism in Philosophy**

 Since Riegel’s introduction of dialecticism to mainstream psychology in the early 1970s, various streams of research -- from cognitive development, to emotion and emotion regulation, to cultural psychology -- have proposed a number of conceptual definitions of the construct. These conceptualizations have been grounded in researchers’ heterogeneous theoretical orientations (e.g., neo-Piagetian perspective on human development, cross-cultural objectivism, or constructivism and systems theory). What are the similarities and differences in views of dialecticism advocated by these different theoretical traditions? To draw parallels between human developmental and cross-cultural traditions, it is instrumental to first reflect on the philosophical underpinnings of dialecticism. The next section provides an initial step in this direction. The goal here is not to provide an exhaustive treatment of the concepts of dialecticism in philosophy, but rather to provide some background for situating psychological models of dialecticism in their socio-cultural context. Thus, the section is highly selective, and focuses only on a few reductionist definitions. As not to obscure the already complex representation of the concept, I will mainly borrow from specialists who have discussed this topic in the past.

**Dialecticism in the West**

 **Hellenistic roots of the concept**.The word “dialectic” has a very long history in Western philosophy, and historically referred to somewhat different concepts than it does now. Historians trace it back to the period of Hellenistic philosophy, and in particular, to the work of Aristotle, who in turn referred to Zeno of Alea (Hammer & McLaren, 1991). The etymology of the word stems from the Greek dialektikos -- dia meaning “through” or “between,” and lektikos which is derived from the verb lego, meaning “I say” or “I choose.” As a whole, the word dialektikos pertains to discourse or discussion. In the ancient Greek practice, it involved a presentation of a thesis by one person, followed by questions from another person, whose aim was to make the first speaker contradict himself and in doing so, see the error in his argument. Today, this method is often described as Socratic, after the famous ancient Greek philosopher who supposedly used this method as a teaching tool. Socrates (and Aristotle after him) applied this method to gain deeper insight into the truth by identifying the best argument as the one with the fewest contradictions between ideas. Central to this method is the development of an idea through movement from “one state (ignorance, uncertainty, error) to a qualitatively different state (knowledge, certainty, truth) by means of a process (conversation, debate, dialogue) that is characterized by opposition (contradiction, refutation, negation) and governed by an internal necessity (logic, deduction)” (Tolman, 1983; pp. 320-321). It is evident that this dialectical method is fairly *explicit* in its application to debate and reasoning*.* Further, dialectic in this fashion follows the law of non-contradiction (i.e., such statements as “A is B” and “A is not B” are mutually exclusive and cannot exist at the same time). Dialectic in this tradition mainly aids the individual to discern bad arguments (identified as those that violate the law of non-contradiction) from good ones (those arguments that do not violate the law of non-contradiction).

As some have argued (Tolman, 1983), Hellenistic philosophers also applied the ideas of dialectic to the explanation of natural events, which can be referred to as an *implicit* form of dialectic. In particular, Heraclitus conceptualized the world as:

“a unity in diversity, as being in a continuous developmental flux involving a strife between opposites, and as governed by an internal necessity which he termed “logos.” The natural world had for Heraclitus the same dialectical properties as the reasoning process had for the ancient dialecticians” (Tolman, 1983, p. 321).

For Heraclitus, the idea of logos does not involve an explicit opposition of contradiction, thus denying the law of non-contradiction. Rather, opposites are considered natural components of a unitary process of change, in contrast to Socratic and Aristotelian approaches to resolve the contradiction explicitly, through the means of traditional logic (Gier, 1983).

 **Dialecticism in Western European philosophy**. The popular view of ancient Greek philosophy in psychology is largely Aristotelian (e.g., Peng & Nisbett, 1999; Peng, Spencer-Rogers, & Nian, 2006), with little discussion of the dialectical thought discussed by Heraclitus. The modern view of dialectic in philosophy also differs from these ancient Greek roots, and is influenced by more recent interpretations of the concept of dialectic in the works of Spinoza, Descartes, Leibniz, Kant, Fichte, and Schelling. Fichte (1794/1997) in particular popularized the formula “thesis-antithesis-synthesis,” which has its roots in the philosophy of Immanuel Kant and was first mentioned by Heinrich Moritz Chalybäus. In this formula, thesis gives rise to a reaction, antithesis, which negates or contradicts the thesis, and the tension is resolved by means of synthesis. Note that this formula has been often erroneously attributed to Hegel (Kaufmann, 1965; Mueller, 1958), who used somewhat similar terms in his influential work. Hegel’s ideas influenced all major political and philosophical movements in the 20th century. I will briefly touch on them next.

 Hegel interprets Heraclitus’ ideas about the process of the world being in a continuous developmental flux as a central feature of nature itself. For Hegel, concepts and ideas can only be understood in historical terms. When abstracted, they become meaningless. For example, without context, such terms as “*pure being*” (Sein) and “*nothingness*” (Nichts) are nothing more than indistinguishable abstractions. However, both terms make sense when viewed in a historical context of a *process* from life to death (e.g., coming into being and returning into nothingness). This example demonstrated the model of Hegelian logic, which is often (mis-) characterized through the formula of “thesis-antithesis-synthesis.” Rather, Hegel starts with an *abstract* (e.g., “pure being”), which is inherently incomplete, and completed by the *negative* thereof (e.g., “nothing”). This negative is necessary to reach the *concrete* phase of thought (e.g. life cycle or “becoming”). The difference between the formula of “thesis-antithesis-synthesis” and “abstract-negative-concrete” is that the latter presupposes “negative” as implicitly related to the “abstract” on the way to the “concrete” – the contradiction is internal and immanent, and it is reconciled (“aufgehoben”) through the realization of the process of change. In contrast, antithesis is an explicit and external form of contradiction, without an explanation where it comes from or why it is needed in the first place (Kaufmann, 1965).

 Readers familiar with the notion of *dialectical materialism*, which are attributed to Marx and Engels (White, 1996), can see both the overlaps and the contradictions of the Hegelian principles just described. On the one hand, Marx and Engels adopted the historical approach to understanding social and intra-psychic phenomena, including the processes of motion and change advocated by Hegel. On the other hand, Marx and Engels moved the notion of dialecticism from implicit and internal to explicit and external, with the latter understood in materialistic terms. In some ways, they turned Hegelian idealism on its head, suggesting that the concrete (e.g., material existence) is driving the abstract and not vice versa. Note that this assertion is as much a theoretical one as it is a methodological approach to the study of social phenomena (Tolman, 1983). Later on, this assertion was again reinterpreted by Lenin and subsequent Soviet thinkers to explain the group dynamics and the development of relationships between different groups (e.g., the wealthy and the working class). The discourse on the dialectic of opposing forces moved from an emphasis on intra-psychic attributes to an emphasis on the attributes of the social world. For instance, class struggle is one of the classic forms of (dialectical) contradiction discussed by theorists in the Marxist-Leninist tradition. The motivation of these theorists to emphasize the societal (vs. intra-psychic) contradictions is likely due to historical reasons, with clearly evident class differentiation and disparities in the industrialized Western Europe of the 19th and early 20th centuries. Thus, though both Marx and Lenin discussed dialectics as a “science of the general laws of motion both of the external world and of human thought” (Lenin, 1980), the focus was mainly on the material (i.e. external) world, illuminating relational interdependence of different social groups and how these relationships may unfold over time.

**Dialecticism in the East**

 The core themes of Western philosophical ideas concerning dialectical thought, such as those involving (a) the awareness of contradictions and change in the relation between different entities, (b) the holistic (vs. essentialist) approach to understanding reality, and (c) the social-contextual orientation towards processes are evident in many philosophical themes from the East. This is not surprising, given that some Asian civilizations (particularly those in China and India) have an intellectual heritage that is much older than that in the West. Next, I will briefly outline a few principles from classic Indian philosophy, Buddhism, and Chinese Taoism.

 **Classic Indian philosophy**.Both the notions of dialectic polemics, and the tension between two opposing forces leading to synthesis can be found in Hindu philosophy. According to the Hindu worldview, existence is a result of the active cause (“purusha”) and the passive nature (“prakriti”), which in some ways resembles the Hegelian concepts of abstract-negative on the way to concrete. The dialectical principle of acceptance of contradictions is also evident in the *Bhagavad-Gita* scriptures, a sacred text of the Hindus, as suggested by Zaehner (1973):

Arjuna, like most Europeans, thinks in either/or categories: he has not yet realized that Krishna’s categories and those of the religion he inherits and further develops are not either/or but both-and. Opposites do not exclude each other but complement each other. (p. 200)

 Another important Indian philosophical tradition is Jainism, which influenced such historical figures as Gandhi, and is emphasized in the doctrine of *Anekantavada.* It suggests that an object has an infinite number of modes of existence, thus reality can be perceived from various perspectives, none of which would present the complete truth (Dundas, 2004). The classic illustration of this principle is the parable of the “blind men and the elephant.” In the story, blind men all touch parts of an elephant and claim to know the truth. Yet, even though each is correct in some ways, their explanation is only partial, owing to their limited perspective. As with Heraclitus and (to some extent) Hegel, this tradition can be conceptualized as discussing the implicit form of dialectic, because this tradition does not emphasize that contradiction has to be explicitly resolved, rather it accepts that contradiction as inherent to human existence.

 **Dialectical Thought in Buddhism**. Buddhist dialectical debates in India during the time of the Gupta Empire present a clear example of explicit dialecticism, during which opponents engaged in public debate-games, with serious consequences for the losing party (Anaker, 2005). The method of such dialectical debate shares a great deal in common with the traditional Platonic-Aristotelian treatment of dialecticism as a method of truth-seeking. In fact, many influential Buddhist philosophers, such as Nagarjuna, Dignaga, Trisong Detsen and Je Tsongkhapa refined Buddhist thought through such formalized dialectical debate about the truth. Note, however, that there are many facets to Buddhist thought. Generalizing Buddhism, which involves not only a philosophical tradition, but also a set of religious practices, to a certain time period during which some philosophers were concerned with the formalized version of dialectic, may be comparable to generalizing from early medieval Catholicism to Christianity at large. For instance, such Buddhist practices as mindfulness meditation can be also considered to be promoting insight (“vipassanā”) through self-awareness and acceptance on the way to Buddhist markers of existence such as impermanence (anicca). Impermanence itself can be viewed as analogous to the Heraclitean and Hegelian concepts, as it concerns the notion that existence is transient and depends on a constant state of flux. It thus seems that Buddhist thought includes both explicit dialecticism in the form of debate, and implicit dialecticism in the principles of explaining the world.

 **Dialectical Thought in Taoism**. Dialectical thought is also evident in the dominant East Asian philosophy associated with the teaching of the Tao, which operates through the interaction between yin and yang. Similarly to Hegelian dialectic, Taoism is oriented towards movement and plurality in nature. The first stanza of the second chapter of Tao Te Ching (Lao Tzu & Mitchell, 2006, p. 2), expresses this dialectical method well:

“When people see some things as beautiful, other things become ugly.

When people see some things as good, other things become bad.

Being and non-being create each other.

Difficult and ease support each other.

Long and short define each other.

High and low depend on each other.

Before and after follow each other.” (chapter 2).

 As evident from this quote, the principle of contradiction and the holistic approach to understanding reality is central to Taoist teaching. Further reading of the Tao Te Ching suggests clear exposition of the dialectical principle of change (chapter 40) and the notion of accepting the contradictions between yin and yang by “integrating their energy” (chapter 42).

What this brief review of various intellectual traditions of dialecticism demonstrates is that there is no “single” dialecticism. Differences in the conceptualizations of dialecticism are evident both within Hellenistic philosophy (cf. Aristotle’s explicit notion of debate vs. Heraclitus’ intrinsic dialectic as a principle of life), within the Western European tradition (cf. Hegel’s idealism vs. Marxist materialism), and within various traditions in the East (cf. Buddhist formalized debate culture vs. Taoist notion of passive acceptance of change). There is likely no clear answer to the question of how the modern interpretation of ‘Hegelian’ dialecticism (with a heavy layer of interpretation during a century of Marxism-Leninism) differs from the 21st century interpretation of Taoism or the “new age” Buddhism.

**Post-formalist Approach to Dialectical Thought**

 **Piaget versus Riegel: The introduction of dialecticism to empirical psychology**. Klaus Riegel provided one of the first known definitions of dialecticism in modern psychological literature (Riegel, 1973). Riegel claimed to have derived his interpretation of dialecticism from Hegelian philosophy (see Hegel, 1812–1816/1929, 1807/1967):

“Every thing is itself and, at the same time, many other things. For example, any concrete object, such as a crystal, is itself but is also of many different properties. By selecting some and disregarding others we might develop one or another abstract notion (theory) about the crystal, as indeed the crystallographer, the glassgrinder, the watchmaker, or a housewife will do. But only when we conceive all properties in their complementary dependencies do we reach an appropriate, concrete comprehension. But what is then, the thing itself? It is the totality of all the different, often contradictory notions about it to which the thing itself stands in contradictory relations. Dialectical thinking comprehends itself, the world, and each concrete object in its multitude of contradictory relations.” (Riegel, 1973, p. 351)

In line with Hegelian dialectics, Riegel pointed out that many forms of thinking and their respective development across the lifespan similarly exist in a state of mutual interdependence ([Riegel, 1973](#_ENREF_73)). For Riegel, many concepts such as cause and effect, being and becoming, passivity and activity cannot be thought of in isolation but rather in terms of mutual dependence. Acknowledgement of this interdependence and acceptance of seeming contradiction represent the key aspect of Riegel’s theory of dialecticism. In the following section, I elaborate on how Riegel conceptualized this interdependence.

 In Riegel’s view, dialecticism is first and foremost a theoretical model of human development. More specifically, it is a revision of Jean Piaget’s model of cognitive development (Piaget & Inhelder, 1973). For Piaget, cognitive development unfolded through changes in levels of operations, progressing from intuitive to formal operations. Such formal operations involve “propositional thought” -- an abstract set of symbolic rules which help to determine whether something is true, solely on the basis of wording of the statement, irrespective of the social context (Piaget, 1972). According to Piaget, cognitive development follows a sequence of stages; one cannot move from the pre-operational stage (i.e. a stage at which thought processes are driven by intuitions; there is no understanding of concrete logic) to the formal operational stage (i.e. a stage at which abstract reasoning is developed) without passing through the concrete operational stage (i.e. understanding of logic, but lack of abstract thinking abilities). Movement across stages is enabled through the balance (i.e., equilibration) between assimilation of new information into previously existing schemas (i.e., assimilation) and the altering of the existing schemas in light of new information (i.e., accommodation). Piaget proposed that assimilative and accommodative processes explain how a person deals with contradictions, suggesting that people strive to resolve such contradictions. Explicit resolution of contradictions in the Piagetian theory reminds one of the philosophical principles of dialectical debate advocated by Plato, Aristotle, and some of the Buddhist teaching described above. Piagetian theory of development further suggests that once adults reached the formal operational stage, they cannot go back and reason in terms of pre-formal or concrete operations (Piaget & Inhelder, 1973).

 Riegel criticized the structuralism in Piaget’s view of human development, pointing out that Piaget’s theory provides insufficient explanation of development beyond young adulthood (and particularly, development in advanced adulthood). Riegel also disagreed with its focus on formal operations and “abstract thought, away from and toward a denial of contradictions” (Riegel, 1973, p. 350) as a finite developmental stage. In Riegel’s view, mature individuals can often jump between more and less advanced operational stages and are not required to linearly progress from one stage to another. Riegel (1973) pointed out that the permanence of formal thought is unrealistic when describing thinking of mature adults, with daily activities often demanding “logic and operations of much lower power” (p. 363) than those called for by the formal operational stage. For instance, creative scientific thinking often requires intuitive thought, as well as acceptance of contradictions and holistic reasoning, rather than systematic delineation of various issues and calculation of all possible outcomes for a given solution (as would be expected in the formal operational stage of thought).

 To address the limitations of the Piagetian model of development, Riegel suggested a stage of post-formal operations, in which one’s views are represented by dialectical patterns of thought. Achieving this dialectical stage enables mature individuals to operate simultaneously at different levels of cognition, switching back and forth between, or choosing different levels of cognition for different types of activities. For example, consider how a successful scientific or business project may unfold over time. The earlier stages of a project may involve a great deal of intuitive thought and holistic brainstorming about ideas to pursue. After this idea-generating phase, formal operations may help to identify which of the ideas are most promising with regard to the “knowns” in the field. While executing the ideas, concrete operations are likely useful. During the stage of interpreting the results and integrating them with trends in the field, one likely requires both intuitive and propositional thought. Whereas the Piagetian view on cognitive development sees the simultaneous co-existence of cognitive operations from different developmental stages as contradictory, Riegel’s model views this co-existence as a sign of natural cognitive development ([Riegel, 1973](#_ENREF_73)).

 In Riegel’s view (1973), “the individual does not necessarily equilibrate these conflicts, but is ready to live with these contradictions; stronger yet, the individual accepts these contradictions as a basic property of thought and creativity” (p. 366). The ideas in this qoute overlap both with the Hegelian principles, as well as some of the Taoist and Jainist writings – dialecticism is not about explicit confrontation to resolve a conflict along the lines of assimilation or accommodation, but rather acceptance of apparent contradictions and the principle of change.

 **A schemata-oriented representation of dialectical thought**. Riegel’s model remained largely theoretical until Michael Basseches elaborated on it by translating it into a set of 24 reasoning schemata in the early 1980s. Following Riegel, Basseches ([1980](#_ENREF_10), [1984](#_ENREF_11)) defined dialectical thinking as a form of cognitive organization, indicative of mature thought. Basseches approached dialecticism as a family of world outlooks with “common emphases on change, on wholeness, and on internal relations” (Basseches, 1980; p. 404). The principle of change referred to the temporary (vs. imutable) nature of “elements of existence” (1980; p. 404), whereas the principle of wholeness stands in contrast to the view of individual elements as separate from each other. Finally, the principle of internal relations describes the dynamics that occur within a whole. Putting these three principles together, Basseches defined dialectic as a “developmental transformation (i.e., developmental movement through forms) which occurs via constitutive and interactive relationships” (1980, p. 405), and dialectical thinking as “thinking which looks for and recognizes instances of dialectic, and which reflects this orientation in the way in which it engages in inquiry” (1980, p. 406). It becomes somewhat clearer what Basseches means with this abstract conceptualization when examining the schemata he proposed to represent dialectical thought. The schemata Basseches refers to are revealed as themes in utterances by participants reflecting on various complex social events. The “motion-oriented schemata” includes recognition of thesis-antithesis-synthesis movement, recognition of ongoing interaction as a source of movement, and/or understanding of the situation as moments of development. “Form-oriented schemata” include location of an element within the whole of which it is a part and an assumption of contextual relativism. Finally, “relationship-oriented schemata” include descriptions of a two-way reciprocal relationship, or recognition of the limits of separation and the value of relatedness. Basseches also included “meta-formal schemata” as a criticism of formalism based on the interdependence of form and content. Readers interested in examples of these themes in verbal responses may consult Basseches’ book from 1984.

 One of the most important contributions by Basseches to the study of dialecticism in psychology may have been his successful demonstration that it is possible to code for dialectical thinking in verbal responses. Basseches accomplished this task by surveying college students and faculty members at a small private liberal arts college on the East Coast of the United States ([Basseches, 1984](#_ENREF_11)). Results from 27 interviews he conducted showed that faculty members were somewhat more likely to apply dialectical schemata than the freshmen, suggesting that maturity may play a role in dialectical thinking.

 Whereas Riegel (1973) described his philosophical orientation as Hegelian, Basseches (1980) emphasized the complex relationship between the multitude of philosophical perspectives on dialecticism and their relationship to psychology:

“Prior to being suggested as a cognitive psychological concept, the term “dialectical thinking” referred to the thinking growing out of a philosophical tradition with which the word dialectic has become associated. It is difficult to define that philosophical tradition precisely. *Hegel* is said to have articulated the Hegelian dialectic, and Marxian philosophy is known as dialectical materialism. . . . [I]n determining which intellectual works grow out of the dialectical tradition and contribute to the meaning of dialectical thinking, one also must deal with the question of how to treat work reflecting similar central assumptions to work clearly within the tradition, but where no clear historical connection can be demonstrated. Further problems are encountered in trying to trace the pre-Hegelian sources of the tradition” (p. 403).

 Indeed, Basseches’ conceptualization shared a great deal in common with both the Hegelian and with some of the Asian dialectical philosophical traditions (i.e. the principles of change and holism). At the same time, his method of studying dialectical thought through analysis of utterances in participants’ interviews may be characterized as oriented towards Marxism given that the topic of the interviews involved transformation of social conflicts and other forms of societal changes, as well as the explicit reference to the concept of “thesis-antithesis-synthesis.”

 **A multitude of post-formal definitions of dialectical thinking**. Since the 1980s, other post-formalist developmental psychologists aimed to refine both the theory and the operationalization of dialecticism. For instance, Kramer and Melchior ([1990](#_ENREF_45)) characterized cognitive development in terms of absolutistic, relativistic, or dialectical thinking. In their view, *absolutistic thinking* lends itself to categorizing people into traits and types that are seen as inherent and fixed, thinking in terms of absolute principles and ideals, and/or understanding complex psychological phenomena by reducing them to single causes. This characterization shows similarities to the constructs of dualistic thinking ([King, Kitchener, Davison, Parker, & Wood, 1983](#_ENREF_39)), intrasystemic thinking ([Labouvie-Vief, 1982](#_ENREF_48)), late formal thinking ([Pascual-Leone, 1983](#_ENREF_64)), and more recently, to entity beliefs ([Dweck, Chiu, & Hong, 1995](#_ENREF_17)).

In contrast to absolutistic thinking, *relativistic thinking* capitalizes views of the world as uncertain and ever-changing. Knowledge is perceived as subjective, and contradiction is simply accepted, as it seems inherent and impossible to change. In their extreme form, such beliefs are viewed as ineffective in judgment and decision-making because they deter individuals from acting in a given situation. Such extreme relativistic beliefs resonate with what social psychologists refer to as attitudinal ambivalence ([Thompson, Zanna, & Griffin, 1995](#_ENREF_82)). The general view of relativistic thinking is related to the constructs of dogmatism-skepticism ([Chandler, 1987](#_ENREF_16)), intersystemic thinking ([Labouvie-Vief, 1982](#_ENREF_48)), multiplicity ([King et al., 1983](#_ENREF_39); [Perry, 1970](#_ENREF_68)), and predialectical thinking ([Pascual-Leone, 1983](#_ENREF_64)).

Finally, *dialectical thinking* integrates absolute and relativistic concepts. Similar to relativistic thinking, it construes all phenomena as ever changing and contradictory. However, it allows one to provide order and direction to the change, and enables one to focus on the resolution of apparent contradictions or to realize that the seemingly contradictory statements are both part of a larger system. This view of dialectical thinking shows some parallels to autonomous thinking ([Labouvie-Vief, 1982](#_ENREF_48)), post-skeptical rationalism ([Chandler, 1987](#_ENREF_16)), relativistic operations ([Sinnott, 1984](#_ENREF_79)), and has been most recently evident in the psychological scholarship on wisdom (Grossmann, 2017).

Since developmental researchers proposed a multitude of definitions, each emphasizing somewhat different facets of dialecticism, it is important to keep in mind that the central themes featured in these constructs remained largely analogous to those advocated by Riegel (1973) and Basseches (1984). They deal with the principles of change and relativism, acceptance of contradictions, and the notion of internal relations and interdependence thereof as a means to integrate apparent contradictions (e.g., Yan & Arlin, 1995). As such, they build on the philosophical heritage of both Hegelian dialectic and (to a lesser extent) Marxist dialectical materialism, as well as share a great deal in common with the treatment of dialecticism in the classic Indian, (some) Buddhist, and Taoist philosophies.

**Dialectical Thought in Cultural Psychology**

 **Lay dialecticism**. In the last few decades, cross-cultural researchers have become interested in the concept of dialecticism. This growing interest in cultural variation in dialectical thinking has culminated in the present handbook. Importantly, when Peng and Nisbett ([1999](#_ENREF_66)) introduced dialecticism to the cultural psychological community, they conceptualized dialectical thinking broadly, referring to a cluster of concepts and not just to the forms of dialectical reasoning that cognitive and developmental psychologists had spoken of ([Peng & Nisbett, 2000](#_ENREF_67)). Peng & Nisbett (1999) considered dialectical dynamics at the societal level (e.g., Marxist dialectics), at the level of interpersonal discourse (e.g., dialectical argumentation), and at the intra-psychic level (e.g., integrative complexity). Synthesizing these different perspectives, they proposed that a key aspect of dialecticism deals with understanding the interaction between seeming oppositions in thought, as well as the reconciliation of such oppositions. Peng and colleagues (e.g., Peng & Nisbett, 1999; Peng et al., 2006) further proposed that dialectical thought is prevalent in modern Chinese psychology as a sort of folk belief system. This “naïve dialecticism” is proposed to be guided by the principles of change, contradiction, relationship and unity. The principle of change concerns the notion that reality is a process and events are constantly in flux, dynamic and changeable. As Peng and Nisbett (1999) pointed out, if one follows this principle, “to be or not to be” becomes a meaningless question. Building on the principle of change, the principle of contradiction suggests that reality is not at all clear and is full of contradictions, as exemplified in the paragraph from Tao Te Ching quoted earlier. Finally, the principle of relationship and unity builds on the principles of change and contradiction, proposing that nothing in the world exists in isolation, but rather is interconnected, similar to how individual musical notes only become meaningful when embedded in a melody.

 **Holistic cognitive style and interdependent social orientation**. Cultural psychologists have also discussed values and behaviors linked with dialecticism within the bodies of research on individualism/collectivism and holistic (vs. analytic) cognitive style. These concepts were initially developed to describe systematic cross-cultural differences in patterns of thought and behavior between East Asian and Western individuals (mainly North Americans and Western Europeans; Markus & Kitayama, 1991), and since then were extended to describing variations in other cultural regions (e.g., Grossmann & Kross, 2010; Grossmann & Na, 2014; Grossmann & Varnum, 2011; Varnum, Grossmann, Kitayama, & Nisbett, 2010). Individualism/collectivism has been described as the degree to which individuals are focused on their relational/interdependent (vs. autonomous/independent) self, and act on the basis of socially shared norms and values (vs. the self’s desires, attitudes, and personal goals; Hofstede, 1991). Collectivism is associated with a view of the self as interconnected and encompassed in important relationships, whereas individualism is associated with a view of the self as separate from social others (Markus & Kitayama, 1991). Empirical cross-cultural studies revealed that members of East Asian societies tend to be collectivist/interdependent, as indicated by a relatively greater focus on harmony, relatedness, and social connection, whereas members of Western societies (e.g., Australia, Canada, Germany, the UK, or the U.S.) tend to be individualist/independent, as indicated by a relatively greater emphasis on self-direction, autonomy, and self-expression (e.g., Kitayama, Ishii, Imada, Takemura, & Ramaswamy, 2006; Kitayama, Mesquita, & Karasawa, 2006; Nisbett, Peng, Choi, & Norenzayan, 2001).

 In terms of cognitive style, the holistic versus analytic distinction is made mainly on the basis of whether one’s cognitive strategies enable a contextualized or de-contextualized focus in perception, cognition, or information processing (Grossmann & Na, 2014; Nisbett et al., 2001; Varnum et al., 2010). The holistic cognitive style has been characterized by a focus on contextual information in visual attention and relationships with an emphasis on situational explanations of behavior, dialectical reasoning, and relation-focused categorization of objects. In contrast, analytic cognitive style has been characterized by a narrow focus on focal objects in the visual field, a preference for dispositional explanations of behavior, formal logic in reasoning, and use of rule-based categorization of objects. What unites the elements of the analytic style is a tendency to focus on a single dimension or aspect and a tendency to disentangle phenomena from the contexts in which they are embedded. Similar to prior work on lay dialecticism and social orientation, empirical research indicated that members of studied Western societies tend to be analytic, whereas members of studied East Asian societies tend to be holistic.

 **Emotional dialecticism**. As the conceptualization of dialecticism became broader, researchers started to examine its relevance to other forms of human functioning other than cognition. Specifically, cross-cultural researchers of emotion began to conceptualize dialecticism as the experience of pleasant and unpleasant states in a coincidental or temporally-related fashion (e.g., [Bagozzi, Wong, & Yi, 1999](#_ENREF_2); Grossmann, Huynh, & Ellsworth, 2016; Miyamoto, Uchida, & Ellsworth, 2010).[[1]](#footnote-1)

**Comparison of Dialectical Thought in Cultural and Developmental Psychology**

 How do the cultural psychological concepts of lay dialecticism, collectivism/interdependence (vs. individualism/independence), and holistic (vs. analytic) cognitive style just discussed compare to the various philosophical treatments of dialecticism, as well as the body of developmental literature? It is evident that lay dialecticism and holistic cognitive style are largely comparable to Hegelian as well as Taoist and classic Indian philosophical ideas, because each of these theories considers the principles of change, contradiction, and holism. When focusing on these principles, the notions of lay dialecticism, collectivism, and holistic cognitive style in cultural psychology are also consistent with the writings of Riegel, Basseches and other developmental psychologists. It is less clear if the dialectical traditions in philosophy can be viewed as directly analogous to the concept of collectivism versus individualism. Perhaps the central overlap of the notion of collectivism-individualism and dialectical thought in Western and Eastern philosophy concerns the notions of internal relations between parts constituting the whole.

 Some differences between philosophical and psychological concepts of dialectic are also evident. Lay dialecticism and holistic cognitive style are clearly distinct from the dialectical (debate) traditions in the Hellenistic and Buddhist philosophies, because the latter traditions largely use the dialectical method as a way to seek a “single” truth. The single truth is a priori the one that does not involve a contradiction, which is diametrically opposed to the core principles of lay dialecticism and the holistic cognitive style. Lay dialecticism is also somewhat different from the principles of dialecticism in the Marxist tradition, because the latter assumes an explicit and permanent struggle between opposite poles, whereas the former accepts the unity of the opposites (cf. Peng et al., 2006), much like the Jainists and Taoists do. Finally, cultural psychological concepts of lay dialecticism, collectivism, and holistic cognitive style are distinct from human developmental concepts of dialecticism, because they concern a different level of analysis. Whereas lay dialecticism, collectivism, and holistic cognitive style concern cultural psychological phenomena – folk beliefs, shared meaning systems, and their manifestations in culturally-transmitted behavior of cultural groups (Na et al., 2010), the discussion of dialectical thought in developmental psychology mainly addresses the question of cognitive development of an individual towards maturity.

**Development of Dialectical Thought and Emotion**

 So far, I have discussed how different models of dialectical thought have come about in the human development literature and subsequently in cultural psychology. Yet, what are the psychological models concerning the *development* of dialectical thought? To examine this question, I will review several theoretical propositions for how dialecticism develops, as well as corresponding empirical evidence. Subsequently, I will contrast these models with the ideas discussed in cultural psychology and evaluate them against the existing cross-cultural evidence.

**Development of Dialectical Thought in the West**

 **Theoretical models.** Dialecticism was initially introduced to scientific psychology as a developmental concept representing a form of mature thought. Yet, developmental researchers differ in the age-range they consider (e.g., child development vs. lifespan development).

 Post-formal researchers ([Kramer, 1983](#_ENREF_40); [Labouvie-Vief, 1982](#_ENREF_48), [2003a](#_ENREF_49); [Sinnott, 1984](#_ENREF_79)) suggested several ontogenetic models of dialecticism. As I mentioned earlier, these models use somewhat different terminology, but share many similarities, including a view of dialecticism-related thought processes as an indicator of cognitive maturity. A developmental model with a relatively large empirical base is that proposed by Kramer and colleagues ([Kramer, 1989](#_ENREF_41); [Kramer & Melchior, 1990](#_ENREF_45)). Kramer suggested that *absolutistic beliefs* develop during early adolescence, *relativistic concepts* during early to middle adolescence, and *dialectical schemata* in late adolescence and emerging adulthood. Comparable models also have been proposed for the development of faith-related beliefs. For instance, Fowler and Dell ([2006](#_ENREF_21)) proposed a developmental stage-theory of faith, in which different stages – ‘synthetic conventional’, ‘individuative-reflective faith,’ ‘conjunctive faith,’ and ‘universalizing faith’ – map onto stages of development towards dialectical thinking in general.

 Similar to Kramer ([Kramer, 1989](#_ENREF_41); [Kramer & Melchior, 1990](#_ENREF_45)), Fowler and Dell ([2006](#_ENREF_21)) emphasize the notion of an on-set period for the development of dialecticism by proposing that there is a minimum age below which the more advanced stages of thought are not normally present. Yet, on-set models do not agree on the exact timing of transition from one stage to another. In contrast to Kramer ([1989](#_ENREF_41)), Fowler and Dell ([2006](#_ENREF_21)) view dialecticism as emerging later in life. In their view, the early 20s is the time of the on-set of *development* of relativistic concepts, and this development continues throughout one’s lifespan. Moreover, these exemplar views of post-formal dialectical development emphasize that the progress from earlier stages towards dialecticism is not a given. In fact, many people may not reach the stage of dialectical beliefs.

 Researchers interested in *habitual* tendencies to reason dialectically often view dialecticism as an attribute of later life. Here, dialecticism represents a key cognitive component of wisdom in older age[[2]](#footnote-2). Starting with Riegel’s (1973) original critique of the Piagetian model of development (Piaget & Inhelder, 1973), post-formal developmental researchers characterized dialecticism as a sign of successful aging, which allows for flexibility in switching between different modes of cognitive operation in the face of aging-related declines of fluid cognitive abilities (e.g., [Baltes, 1993](#_ENREF_3); [Labouvie-Vief & Blanchard-Fields, 1982](#_ENREF_51)). For instance, Labouvie-Vief and Blanchard-Fields ([1982](#_ENREF_51)) argued that apparent deficits found in cognitive aging are due to over-emphasis on Piaget-style formal operations and logic. In their view, examination of dialectical thought processes (e.g., contextualization of formal logic) suggests a progression rather than a decline in later adulthood. Similarly, Baltes proposed that cognitive “pragmatics” (e.g., experience-based wisdom) are less subject to aging-related cognitive declines than cognitive “mechanics” (e.g., basic processes of memory). He suggested in his theory of Selective Optimization with Compensation (SOC) that pragmatics may compensate for some corresponding aging-related losses in mechanics ([Baltes, 1997](#_ENREF_4)). Importantly, Baltes’ conceptualization of “pragmatics“ included dialectical thought ([Baltes & Staudinger, 1993](#_ENREF_7)).

 To date, little theoretical work has proposed specific age norms for habitual-level dialecticism. The notion that dialecticism is more commonly found in later life could refer to any time after middle age, in people’s early 50s, post-retirement, or even among octogenarians.

 **Empirical evidence from Western samples.** Basseches was among the first to empirically investigate age differences in dialecticism ([Basseches, 1984](#_ENREF_11)). He asked younger college freshmen, graduate students, and older professors at Swarthmore College to reflect on social issues, and content-analyzed their responses according to 24 dialecticism schemata. He observed more dialecticism among older professors than among graduate students, who in turn. showed greater dialecticism than college freshmen. This evidence was preliminary, however, because in his study older age was confounded with education and likely with intelligence. In addition, Basseches’ elaborate coding was impractical, hence other researchers subsequently proposed simplified criteria and developed questionnaires with items modelled on previous theory and coding of dialectical thought (e.g., Baltes & Smith, 2008; Grossmann et al., 2010; Grossmann & Kross, 2014, see Grossmann, 2017, for review).

 In her theoretical extension of Riegel’s model, Labouvie-Vief proposed the inclusion of emotions and the self ([Labouvie-Vief, 2003](#_ENREF_49)). Blanchard-Fields wrote her dissertation under Labouvie-Vief’s supervision, and hence was guided by the former’s theoretical model in her empirical research on the post-formal development of dialecticism ([Blanchard-Fields, 1986](#_ENREF_12)). She conducted interviews with a community sample from Detroit, prompting high school students, young adults, and middle-aged participants to reflect on two contradictory accounts of social conflicts and life dilemmas. She subsequently coded participants’ responses on several reasoning “levels,” some of which were conceptually derived from earlier definitions of dialectical thought by Riegel and Basseches. These levels included acceptance of contradiction between event descriptions (level 5, second-highest level) and the interpretation and recognition of multiple perspectives on a conflict, grounded in different interpretative frameworks (level 6, highest level). Only about 10% of high school students obtained scores on the second highest level, and only middle-aged adults obtained scores on the highest level of reasoning, suggesting that the on-set of dialecticism development is likely to occur in young adulthood. Moreover, middle-aged adults’ statements were twice as likely to be on the second-highest level as were those of younger adults. Unfortunately, Blanchard-Field’s restricted age range did not permit inferences about habitual level differences across the full lifespan.

 Kramer and Woodruff (1986) were also early adopters of Basseches’ operational framework of dialectical thought. In their initial empirical work on dialectical thinking, they presented an age-heterogeneous group of predominantly European American participants (full-time and continuing education college students at Temple University and members of the investigators’ social network) with social dilemmas designed to assess dialectical thought and scored their verbal responses with respect to dialectical reasoning ([Kramer & Woodruff, 1986](#_ENREF_46)). Results indicated that older adults scored higher on dialectical reasoning than did younger and middle-aged adults. In another study, Kramer and Kahlbaugh ([1994](#_ENREF_43)) examined memory for dialectical vs. non-dialectical statements among college students and older adults, who were alumni of the same university. They found that older (but not younger) adults were more likely to recall non-dialectical statements as if they included dialectical components. Moreover, older (vs. younger) adults were more likely to provide additional dialectical themes that were not explicitly stated in a dialectical passage.

 To simplify the procedure of measuring dialectical thought even further, Kramer and colleagues ([Kramer, Kahlbaugh, & Goldston, 1992](#_ENREF_44); [Kramer & Melchior, 1990](#_ENREF_45)) developed a questionnaire: the Social Paradigm Belief Inventory (SPBI). The SPBI requires participants to provide Likert-type scale responses to statements about the social world, with some responses modelled on previously discussed dimensions of dialectical thought. Kramer and Melchior (1990) initially tested the SPBI among college students and found that seniors were relatively more dialectical than college freshmen, particularly when comparing male students. In subsequent studies, Kramer and colleagues ([e.g., Kramer, et al., 1992](#_ENREF_44)) examined SPBI responses from an age-heterogeneous sample of middle-class European Americans, and found a weak positive relationship between age and preference for dialectical items, with an increase between young and middle adulthood. Independently from Kramer, McBride ([1998](#_ENREF_60)) used the SPBI in her dissertation to explore age differences in preference for dialectical statements with an ethnically and economically diverse sample of Americans. Consistent with Kramer and Woodruff ([1986](#_ENREF_46)), McBride found greater preference for dialectical statements among older (60+ years) than among younger (19-23 years) and middle-aged (38-43 years) adults.

 With the exception of McBride’s dissertation, initial empirical work on the development of dialecticism was largely limited in its focus, concentrating mostly on middle-class, highly-educated samples of European Americans. In addition, the work examining actual behavioural tendencies associated with dialecticism (assessed in interview responses, as opposed to self-report questionnaires) was based on small samples (*N* < 100) of restricted age range, limiting possibilities for lifespan inferences about dialecticism. Moreover, evidence provided by these post-formal researchers were contradicted by findings from the series of studies on wisdom across the lifespan, conducted by Paul Baltes and his colleagues (e.g., Baltes & Smith, 2008).

 In the 1990s, researchers at the Max-Plank Institute for Human Development in Berlin, Germany, led by Paul Baltes, conducted a series of studies to explore age differences in ”wisdom-related thought” – aspects of thinking that may be distinct from fluid cognitive abilities, and thus less subject to cognitive decline in advanced adulthood. To explore these aspects of thought, Baltes’ group developed the Berlin Wisdom Paradigm (BWP; [Baltes & Smith, 2008](#_ENREF_6); [Baltes & Staudinger, 2000](#_ENREF_8); [Smith & Baltes, 1990](#_ENREF_80)), which was similar to methods used by post-formal researchers like Kramer, Labouvie-Vief and Blanchard-Fields. In this paradigm, people were asked to read hypothetical stories about uncertain and difficult life dilemmas, and researchers coded their verbal responses for wisdom-related thought. Some of the wisdom coding dimensions included value relativism, lifespan contextualism, and recognition and management of uncertainty and change. These three dimensions were closely related to the characterization of dialectical thought by post-formal researchers (e.g., [Basseches, 1984](#_ENREF_11); [Blanchard-Fields, 1986](#_ENREF_12); [Kramer, 2000](#_ENREF_42); [Labouvie-Vief, 1982](#_ENREF_48); [Riegel, 1973](#_ENREF_73)). The BWP provided a set of important insights relevant to understanding dialecticism across the lifespan. First, dialectical scores were fairly rare, with only a few people displaying high levels of wise reasoning in their responses ([Baltes & Smith, 2008](#_ENREF_6); [Baltes & Staudinger, 2000](#_ENREF_8)). Second, Baltes and colleagues found that the period of late adolescence and early adulthood appeared to be the primary time for the on-set of dialecticism ([e.g., Pasupathi, Staudinger, & Baltes, 2001](#_ENREF_65)). However, and in contrast to post-formal researchers, the BWP studies did not yield conclusive evidence regarding differences in dialecticism between younger and older (60+) adults. On the one hand, older adults in their samples were more frequently among the top performers of dialecticism ([Baltes, Staudinger, Maercker, & Smith, 1995](#_ENREF_9)). On the other hand, Baltes and colleagues failed to observe mean-level differences in several systematic studies within the BWP paradigm ([for a review, see Baltes & Smith, 2008](#_ENREF_6); [Baltes & Staudinger, 2000](#_ENREF_8)).

 Recently, my colleagues and I attempted to resolve this inconsistency in findings on dialectical thinking and wisdom across the lifespan ([Grossmann et al., 2010](#_ENREF_28); Grossmann, Na, Varnum, Kitayama, & Nisbett, 2013). We noticed a few possible limitations of the BWP project. One such limitation dealt with sample selection and associated history effects. Younger and older adults were recruited in Berlin right after the fall of the Berlin Wall, during which time many younger adults were actively engaged in promoting the resulting societal changes. If life-based experience with contradictions plays a role in the development of dialecticism, younger German adults may have experienced an atypically large number of dialectical experiences during that time. Second, the BWP materials were very brief and devoid of contextual information. The experiments were conducted in a largely artificial setting (e.g., in some studies, there was no interaction partner and participants spoke into a microphone in an empty room). In contrast, my colleagues and I thought that a naturalistic interview setting and substantial contextual detail (provided in the descriptions of the social problems) may be essential to encourage older individuals to reason in a dialectical fashion. Therefore, we examined “wise” aspects of reasoning (including dialecticism) using naturalistic, context-rich materials about social conﬂicts, and then measured dialecticism in a structured face-to-face interview. In these interviews, a community sample of participants read six newspaper articles describing a series of intergroup conflicts (e.g., political power, immigration, natural resources) and interpersonal conflicts (e.g., friends, relatives, spouses). Participants discussed the articles with an interviewer, who used a set of standardized probes (e.g., “What do you think will happen after the events you read about?” “Anything else?” “Why do you think it will happen this way?” “What do you think should be done?”). To address the sample limitations of previous work, we recruited a representative community sample of 25 to 90 year olds from the Midwest, with participants ranging from uneducated blue-collar workers to affluent college professors. As Figure 1 indicates, older Americans, relative to young and middle-aged Americans, displayed greater dialecticism when analyzing social conflicts.

Figure 1. Performance on dialectical reasoning tasks among Americans.



*Note*. Results represent an average score across two studies reported by Grossmann and colleagues (2010). For visual clarity, individuals were split into top 20% and bottom 80% of dialectical reasoning performance on the tasks.

 These results held when controlling for various relevant variables (e.g. cognitive abilities, social class, and education). Moreover, a recent follow-up on this study indicated that a tendency towards greater dialecticism in reasoning about social conflicts contributes to *successful* aging. Dialectical thinking was related to various aspects of individual well-being, ranging from relationship quality to emotion regulation and life satisfaction. Additionally, the magnitude of this association was greater in older age ([Grossmann et al., 2013](#_ENREF_29)).

 Taken together, the last 30 years of empirical research on the development of dialectical thinking across the lifespan suggests that Westerners become increasingly dialectical with age, and that, on average, the tendency to reason dialectically seems to be more common in older age (but see Grossmann & Kross, 2014, Study 3, for a failure to observe age-related differences for personal situations).[[3]](#footnote-3) Next, I turn to body of research on emotional dialecticism across the full lifespan.

**Development of Emotional Dialecticism in the West**

 **Theoretical models.** Emotion researchers view dialecticism as a form of emotional complexity (Grossmann & Ellsworth, 2017; [Lindquist & Barrett, 2008](#_ENREF_57)). One theoretical framework that addressed the lifespan trends in emotional dialecticism built on the previously mentioned theory of Selective Optimization and Compensation (P. [Baltes, & M. Baltes, 1990](#_ENREF_5)). The theoretical framework of Socio-emotional Selectivity Theory (SST) postulates that younger people view the future as expansive, and they prioritize goals that prepare them for a long future, particularly goals of gaining knowledge and information ([Carstensen, Isaacowitz, & Charles, 1999](#_ENREF_13)). However, as people age, they may realize that their time is limited and, as a consequence, they may reorient themselves towards present goals of emotional well-being over future-oriented goals ([Carstensen et al., 1999](#_ENREF_13)),because people come to appreciate and invest more effort in matters of life important to them at a given moment. Importantly, Carstensen and colleagues do not suggest that the emotional lives of older people are uniformly happy -- quite the opposite. Rather, the focus on meaningful activities under time-limited conditions elicits richly complex emotional experiences (e.g., gratitude accompanied by a sense of fragility, happiness tinged with sadness). Such complexity of emotional experience (operationalized as dialecticism) may lead to improved emotion regulation ([Roberts & Gotlib, 1997](#_ENREF_75)). It thus follows that older adults report greater well-being than younger adults because they have more dialectical experiences in their lives, and the focus on these complex and meaningful emotional experiences is instigated by the diminishing time horizon.

 A different theory has been proposed by Labouvie-Vief. Labouvie-Vief’s Cognitive-affective Developmental Theory (CADT; 2003) postulates that emotional experiences become more complex and dialectical as the individual progresses in their cognitive and ego-development ([Labouvie-Vief, 2003a](#_ENREF_49); [Labouvie-Vief & Diehl, 2000](#_ENREF_53); [Labouvie-Vief, Hakim-Larson, DeVoe, & Schoeberlein, 1989](#_ENREF_54)). In fact, Labouvie-Vief was the first to propose that integration of emotions and the self is essential for the development of dialecticism ([Labouvie-Vief, 1982](#_ENREF_48)), foreshadowing future work on the dialectical self in cultural psychology (see chapter 14 in this volume). Similar to other neo-Piagetian models, Labouvie-Vief proposes that emotional dialecticism starts to develop after formal operations are established in early adulthood. Importantly, in more recent iterations of the CADT, Labouvie-Vief has gone beyond characterization of on-sets of emotional dialecticism, focusing on general improvements in emotion regulation across the lifespan ([Labouvie-Vief, 2003](#_ENREF_49)). In contrast to Carstensen and colleagues, Labouvie-Vief differentiates emotional dialecticism from *affect optimization* (maximization of positive affect and minimization of negative affect), proposing that middle age provides plenty of experiences with conflicting feelings, and that such experiences can boost emotional dialecticism among middle-aged adults as compared to younger adults. In Labouvie-Vief’s view, emotional dialecticism is closely interconnected with cognitive abilities. In light of empirical work on demonstrated aging-related declines in many such cognitive abilities ([e.g., fluid cognitive abilities; Park & Reuter-Lorenz, 2009](#_ENREF_63)), Labouvie-Vief proposed that emotional dialecticism peaks in middle age and declines after middle-aged adulthood because the cognitive losses begin to outweigh the gains in experience.

 **Empirical evidence.** A number of researchers have examined how young Americans acquire an understanding of mixed emotions, with a particular focus on positive and negative emotions. In many ways, these studies on instances of mixed emotions (or mixed affect) are synonymous with the idea of emotional dialecticism, and I review them below. Kestenbaum and Gelman ([1995; Study 2](#_ENREF_38)) conducted one of the first empirical studies along these lines, presenting U.S. children with stories that would either elicit dialectical emotions (happy/mad, happy/sad, or sad/mad) or pure emotions (happy, sad, or mad), and asked them to choose a response indicating what the person in the story was feeling, such as “both happy and sad” or “just happy” or ‘just sad”. In addition, the children had to select a facial expression (mixed or “pure”) that would go with the story. Their results showed that 5-years-olds matched emotionally dialectical verbal labels to emotionally dialectical experiences well, whereas 4-year-olds tended not to choose mixed emotion verbal labels, irrespective of story type. In addition, 5-year-olds identified dialectical facial expressions and linked them to the appropriate scenarios, whereas 4-year-olds failed on the task. Overall, this initial work suggested that the development of dialectical emotional experience in the West begins to unfold between the ages of 4 and 5. More recently, Pons, Harris, and de Rosnay ([2004](#_ENREF_69)) tested whether children understood the concept of emotional dialecticism among a larger age range of children. Children viewed a cartoon that was likely to provoke ambivalent feelings in the protagonist and were asked what the protagonist felt. Similar to Kestenbaum and Gelman’s (1995) work, they found an increase in the understanding of mixed emotions between the 3-year-olds and 5-year-olds. However, this increase was rather small in comparison to the difference between 7-year-olds and 9-year-olds. Whereas only 20% of the 7-year-olds mentioned that the protagonist felt mixed emotions, 95% of the 9-year-olds did so.

Larsen, To, and Fireman ([2007](#_ENREF_55)) extended this early work examining U.S. children’s experience of emotional dialecticism by asking children about their own feelings after watching an emotionally ambivalent movie clip from the Disney movie “The Little Mermaid”. Larsen and colleagues (2007) differentiated between reports of the protagonist’s experience of both positive and negative emotions when the children were prompted to do so and the *spontaneous* mentioning of the experience of positive and negative emotions. Similar to results from previous work, they found that older children (8 to 12-year-olds) were more likely to view the protagonist (Arielle’s father Triton) as experiencing mixed emotions, relative to the 5 to 6-year-olds. In fact, only 6% of boys and no girls aged 5-6 spontaneously reported Triton as experiencing mixed emotions. Importantly, older children were more likely to spontaneously mention experiencing mixed emotions, whereas no children aged 5-6 spontaneously did so.

 Whereas the work on the *on-set* of emotional dialecticism suggests that the concept of emotional dialecticism is both understood and experienced by children, work on *habitual tendencies* to experience dialecticism in daily life cumulatively suggests that this tendency is more prevalent among older adults. Williams and Aaker ([2002](#_ENREF_87)) examined age differences in attitudes towards mixed emotion information in advertisements. Their results indicated that older adults exhibit relatively more positive attitudes toward emotional dialecticism in advertisements than do their younger counterparts, in part because younger adults felt discomfort with the mixed emotional information. Similarly, Hong and Lee ([2010](#_ENREF_35)) showed that younger participants had less favorable attitudes toward a mixed emotion advertisement than toward a happy advertisement, whereas older participants’ attitudes toward the mixed-emotion advertisement and the happy advertisement were equally favorable.

 Other empirical research suggests that older adults are able to acknowledge complexity in their own feelings and work through the tension between positive and negative emotions better than younger adults ([Labouvie-Vief, DeVoe et al., 1989](#_ENREF_52)). Finally, several studies assessed individuals’ daily experience of mixed emotions by examining intra-individual variations between positive and negative affect in the context of experience-sampling research ([Carstensen, Pasupathi, Mayr, & Nesselroade, 2000](#_ENREF_14); [Ong & Bergeman, 2004](#_ENREF_62)). Most of the studies in this tradition indicate a linear increase in emotional dialecticism with age; that is, older adults tend to report more mixed and bittersweet emotions within the same sampled moment than younger adults do (al[though see work by Grühn and colleagues for a notable exception to this trend; 2013](#_ENREF_31))[[4]](#footnote-4). Much of this research comes from a longitudinal project by Carstensen and colleagues. In the initial wave of the project (i.e., an experience-sampling study of American participants ranging in age from 18 to 94), pleasant and unpleasant emotions were inversely related among younger participants, but this correlation diminished and even reversed with age ([Carstensen et al., 2000](#_ENREF_14); [also see Ong & Bergeman, 2004, for a similar observation of a positive correlation between pleasant and unpleasant emotions among older adults](#_ENREF_62)). Further analyses showed that this age-related pattern was also manifested in a subsequent sampling of the same participants ten years later (Carstensen, Turan, Scheibe, Ram, Ersner-Hershfield, Samenez-Larking & Nesselroade, 2011). Moreover, adults reported more emotional dialecticism over time ([Carstensen et al., 2011](#_ENREF_15); [Ersner-Hershfield, Mikels, Sullivan, & Carstensen, 2008](#_ENREF_20); [Hershfield, Scheibe, Sims, & Carstensen, 2013](#_ENREF_33)), a finding suggesting a longitudinal positive relationship between age and emotional dialecticism. Similar results were observed in other studies in which adults reported their emotions in a narrative form. Magai and colleagues ([Magai, Consedine, Krivoshekova, Kudadjie-Gyamfi, & McPherson, 2006](#_ENREF_58)) observed greater co-occurrence of mixed emotions among middle-aged and older adults than among younger adults. Consistent with this body of literature on emotional dialecticism across the lifespan, other researchers have observed age differences in the organization of positive and negative information in memory, indicating that older adults organize and represent emotional memories in a more dialectic fashion than do younger adults ([Ready, Robinson, & Weinberger, 2006](#_ENREF_70)). Moreover, related work on facial expressions suggests that older, as compared with younger, women show more complex facial expressions, and that they combine multiple emotions in a single expression ([Malatesta & Kalnok, 1984](#_ENREF_59)).

 Taken together, these different streams of empirical work suggest that older adults in the West tend to think about social dilemmas in a more dialectical fashion and experience greater emotional dialecticism than do younger adults. Middle-aged Westerners are somewhere in-between, but somewhat closer to older-aged adults than younger adults in terms of emotional experience ([Magai et al., 2006](#_ENREF_58)) and some aspects of cognitive dialecticism ([Kramer et al., 1992](#_ENREF_44)). Middle-aged Westerners also tend to be distinct from younger Westerners on emotional and cognitive dialecticism. Yet, it is important to point out that studies on the full range of the adult lifespan have been relatively rare, and thus any conclusions about age-related *changes* in dialecticism are still premature. Age-related effects in dialecticism are likely context-specific (Grossmann, 2017; Grossmann et al., 2016; Study 3). Only one study so far ([Carstensen et al., 2011](#_ENREF_15)) has examined emotional aspects of dialecticism longitudinally, and no published empirical work has examined dialectical reasoning (cognitive dialecticism) longitudinally. Moreover, work on the on-set of the development of dialecticism (particularly among children) has been fairly limited.

**Development of Dialectical Thought from a Cross-Cultural Perspective: Theory and Findings**

It is difficult to characterize the specifics of the non-Western models of dialecticism, because the notion of development is not well integrated into the body of research on cultural psychology. Cultural psychologists interested in the concept of lay dialecticism or holistic cognitive style have mainly focused on college students, with limited attention to how processes of acquiring and maintaining dialectical thought unfold over one’s lifespan (cf. Grossmann, Karasawa, Kan, & Kitayama, 2014; Keller & Greenfield, 2000). Thus, the non-Western literature on the development and maintenance of dialecticism appears to be much less systematic than the Western literature. With this caveat, the existing streams of theoretical thought on this topic can be roughly divided into those dealing with indigenous concepts of early childhood development of dialecticism, and theories concerning cross-cultural differences in socialization, parenting styles, or aging-related processes.

 **Indigenous concepts**.Indigenous concepts about the development of dialecticism focus largely on its onset and on the contribution of early childhood socialization. A prominent indigenous model of infant development among the Japanese has been proposed by Doi (1973). Before the age of seven months, Japanese infants are believed to experience “oneness” with their social environment, which is supposedly oriented towards the development of the unique Japanese characteristic called “amae” – a relatively pleasant feeling of knowing that one is dependent on others (including the awareness that one may take advantage of other individuals and social groups of which one is a part in order to gain personal support, or the knowledge that one may even act inappropriately toward a close other as a sign of a close bond; Niiya, Ellsworth, & Yamaguchi, 2006). According to Doi (1973), amae does not begin until the 7-8th month of life, when the infant becomes aware of the presence of the mother as separate from him or herself. My interpretation of Doi’s theorizing (without a claim for accuracy) is that the infant strives to preserve the sense of oneness, now seeking the experience of amae as a way to overcome the evident separation. Doi (1973) suggests that the development of amae has profound implications for Japanese individuals’ later personality. One can extend this theoretical model to the discussion about the development of dialecticism. Amae, with its focus on interdependence and acceptance of situationally-inappropriate behavior may be exactly the strategy that promotes the early on-set of dialecticism in emotion and thought among the Japanese.

 **Cross-cultural perspectives on the development of dialecticism**. A different approach to understanding the role of culture in the development of dialecticism has been taken by researchers comparing social cognitive development in different cultural groups. Some researchers construe culture-specific developmental processes as orienting individuals towards cultural themes dominant in a given region (B. Whiting, & J. Whiting, 1977). Given that lay dialecticism, holistic cognitive style, and interdependent social orientation are more prevalent among East Asian societies, and that orientation towards “lay Aristotelianism” (i.e. linear determinism, adherence to the law of non-contradiction; Peng & Nisbett, 1999), analytic cognitive style, and independent social orientation are more prevalent among Western societies (for reviews, see Grossmann & Na, 2014; Markus & Kitayama, 1991; Nisbett, 2003), some researchers have also theorized about how developmental processes (e.g., parenting, and schooling) contribute to these differences (Keller & Greenfield, 2000).

 ***Early childhood*.** Researchers proposed and found that in cultures in which an interdependent social orientation is dominant, customs endorse extensive body contact and body stimulations of the infant, which are conducive to close ties and a sense of relatedness. This is in contrast to cultures in which independent social orientation is dominant, which in turn encourage face-to-face interactions, with reduced bodily interaction, and conducive to the sense of individuation and separateness (Keller & Greenfield, 2000; MacDonald 1992). In some interdependent cultures such as Japan (Rothbaum, Pott et al. 2000), Cameroon (Yovsi & Keller, 2000), India (Saraswathi & Pai 1997), and Mexico (Brazelton et al. 1969) it has been shown that parents also tend to react immediately to infants’ distress signals, thus minimizing the self-other distinction (Greenfield, Keller, Fuligni, & Maynard, 2003). Mothers in interdependently-oriented cultures such as Japan also tend to view the baby as an extension of the self and emphasize proximal contact and dependence. Moreover, in many parts of Africa, Asia, and South America infants tend to sleep with their parents (particularly mothers), with separation of the infant from the mother viewed as undesirable (Morelli, Rogoff, Oppenheim, & Goldsmith, 1992, Shweder et al., 1998). Comparatively, mothers in such independently oriented cultures as the U.S., view the baby as a separate and autonomous being and emphasize separateness (e.g., Caudill, 1971; Vogel, 1976; for review also see Miyake, Campos, Kagan, & Bradshaw, 1986; Greenfield et al., 2003). Connection-oriented interdependent forms of parent-child interactions may be viewed as early socialization factors promoting the early on-set of dialecticism in non-Western societies.

 A sizeable body of research has examined cultural differences in beliefs about individual abilities and school effort. Specifically, Chinese and Japanese adults and school children alike have been found to endorse beliefs that abilities are malleable and that effort is important, whereas Americans endorse entity views of intelligence and school abilities (Dweck, Chiu, & Hong, 1995; Holloway, 1988; Hong, 2001; Li, 2003; Stevenson & Stigler, 1992). Entity views of abilities include the belief that intelligence and other school abilities are not changeable (i.e. are fixed) dispositions (also see Kung, Eibach, & Grossmann, 2016). It is possible that entity views of abilities carry over to other forms of reasoning in a way that prevents the early childhood development of dialecticism in general and ideas about change in particular. In contrast, the view that school abilities are changeable via the efforts of the student may be conducive to promoting dialecticism in reasoning and emotion. A recent study of elementary school textbook themes also indicated that children in non-Western societies such as Japan are explicitly taught to reason in a socially-interdependent and dialectical fashion, as indicated by such themes as “accepting one’s portion in life,” “responsibleness,” “modesty,” “moderation,” “sympathy,” “pleasure in making others happy,” “collaboration,” “sharing,” or “friendship and affection.” In contrast, comparable textbooks from the U.S. teach children to aspire to individual achievement and self-entitlement, as indicated by such themes as “freedom,” “independence,” “choosing own goals,” “self-respect,” “control,” ambition,” or “competition” (Imada, 2012).

Finally, some emerging research started to examine how children develop intuitions concerning change– a key component of “naïve dialecticism.” For instance, Ji (2008) compared how Chinese and Canadian children of different age to read a set of standardized stories and make predictions about various social matters depicted in these stories (e.g., relationships, happiness, or parental income). Across the board, Chinese children predicted more change than did Canadian children. Importantly, however, the magnitude of cultural difference depended on the age of the children, increasing with age. At age 7, Chinese and Canadian children did not differ in their change predictions. The difference started to emerge among 9-year olds and was substantial among 11-year olds. Though preliminary, research by Ji suggests that cultural differences in lay beliefs about change start to emerge in middle childhood (also see chapter 3 in this volume).

 ***Adolescent development*.** For a long time, Western researchers have speculated that adolescence is a general period during which children begin the process of separation from their parents (e.g., Freud, 1969), suggesting adolescents become orientated away from the principles of wholeness and internal relations common to dialectical thought. However, cross-cultural developmental studies have provided a more nuanced view of how cultures vary in the degree to which they emphasize both autonomy and relatedness and how these qualities are valued for and by adolescents (for review, see Greenfield et al., 2003). Feldman and Rosenthal (1991) examined the age at which adolescents in Australia, Hong Kong and the U.S. were expected to be capable of autonomy (e.g., to go out at night, choose their own clothes, stay home alone), finding that Hong Kong Chinese adolescents had later expectations for autonomy than their Western counterparts. Furthermore, familial duty and obligation were emphasized in non-Western (Asian, African, and Latin American) cultures to a greater extent than in Western cultures (for a review, see Greenfield et al., 2003).

 ***Adult development*.** Cognitive and emotional development is a life-long process, and it can take different forms in older age (Baltes, 1997). In this respect, it is worth considering what “age” in developmental models means in the first place. Many theorists have argued that age itself is not an independent variable per se ([Schaie, 1977](#_ENREF_77); [Wohlwill, 1970](#_ENREF_88)). For instance, age differences in cognition may represent biological aging. Thus, it may be that changes in cognitive structures due to biological aging lead to changes in emotional experience and dialecticism. Coping with biological losses, as well as losses in autonomy, may lead to heightened awareness of life being in flux, thus promoting dialecticism. Aging can also be construed as a rough proxy for accumulated socio-cultural experiences over one’s lifespan. Given that a person is likely to become increasingly aware of contradictions due to social conflicts they encounter in their lifetime, they may also gradually become more oriented towards the principles of change and acceptance of contradictions indicative of dialecticism. Both models are consistent with prior findings of aging-related gains in dialectical reasoning among Americans (Grossmann et al., 2010).

 Note, however, that these models of adult development are largely individual-centered, ignoring the fundamental role of the social context for shaping the type of experiences one encounters across the lifespan and the acquired rules and norms for dealing with these experiences. Children in Western cultures are socialized and taught to develop an individual-centered focus (e.g., development of personal preferences and individuation in relationships), whereas children in non-Western cultures such as Japan are socialized and taught to develop a sensitivity to the social context and interpersonal harmony. Consequently, Western adults tend to resolve contradictions and interpersonal conflicts they encounter over their lifespans using direct conflict management strategies (e.g., direct persuasion), whereas non-Western adults (e.g., Chinese and Japanese) prefer less direct forms of social-conflict management (e.g., avoidance strategies, third-party mediation; Leung, 1988; Morris et al., 1998; Ohbuchi & Takahashi, 1994), potentially resulting in fewer explicit cases of conflict resolution over one’s lifespan. If cultures differ in their focus towards either the social context and interpersonal harmony or individual and personal achievement, one may expect corresponding differences in the development of dialecticism. Specifically, people from cultures that encourage a focus on social context (e.g., Japan) may show a greater ability to reason dialectically early on than people from cultures that encourage an individual-centered focus (e.g., U.S.). Moreover, as a result of the earlier acquisition of dialecticism, aging-related gains in dialecticism may be attenuated in non-Western (vs. Western) cultural groups.

 What about the additional aging-related gains in dialecticism due to awareness of one’s losses and limitations? Although biological losses are evident across cultures, the consequences thereof differ dramatically across societies. Non-Western societies such as Japan socialize individuals towards personal limitations and self-control earlier on (Rothbaum, Pott, Azuma, Miyake, & Weisz, 2000), thus aging-related limitations may not be as subjectively salient for adults reaching advanced adulthood. Moreover, older adults in non-Western societies are not expected to be independent and self-reliant, often living with younger family members, and relying on their children and relatives to compensate for their losses. Thus, an interdependent family structure may prevent elderly persons from seeking opportunities to develop their level of dialecticism beyond what they have been socialized into earlier in life.

 ***Cross-cultural differences in the effects of aging on dialectical thought***. These ideas were recently put to the test in a multi-session study involving age- and social-class-heterogeneous samples of Americans from the Midwest and Japanese from the Tokyo metropolitan area (age range: 25-75 years; Grossmann, Karasawa, Izumi, Na, Varnum, Kitayama, & Nisbett, 2012), In these studies, my colleagues and I used a design comparable to that used in our earlier work, instructing Japanese participants to take part in the same series of intergroup (political power, immigration, natural resources; Grossmann et al., 2010; session 1) and interpersonal conflicts (friends, relatives, spouses; Grossmann et al., 2010; session 2) described earlier. An interviewer asked participants to reflect out loud on the future development of the issues described in the article, using such probes as “What do you think will happen next?”, “Why do you think it will happen as you just said?”, and “What do you think should be done?” Participants’ responses were transcribed and content-analyzed by independent coders for various aspects of reasoning, including recognition of uncertainty and limits of knowledge, recognition of the world being in flux, consideration of different perspectives on an issue, recognition of the importance of integrating different perspectives, and compromise.

 Results indicated that younger and middle-aged Japanese showed greater ability to reason more dialectically about societal and interpersonal conflicts than their American counterparts (see Figure 2). These results held when controlling for cognitive abilities, occupational prestige, and response length. Across cultures, older participants in this study talked more, often digressed, showed lower performance on tests of fluid cognitive abilities and had a similar level of crystallized cognitive abilities, compared to their younger counterparts, which are all consistent with a large body of research on aging-related changes in general cognitive abilities and distractibility (e.g., Healey, Campbell, & Hasher, 2008; Schaie, 1994). Yet, despite these limitations, older (compared to younger) Americans showed a greater level of dialectical reasoning about social conflicts, whereas there was no age effect among Japanese participants (see Figure 2).

 ***Cross-cultural differences in the effects of aging on emotional dialecticism*.**  Does culture also influence aging-related differences emotional experiences? Preliminary evidence indicates that it may be the case. For instance, my colleagues and I (Grossmann et al., 2014) examined the universality of the claim that older adults place a greater priority on goals of maintaining positive experiences and distancing from negative experiences. We hypothesized that these aging-related differences in emotional experiences are more pronounced in the United States, given that American culture encourages linear approaches to well-being, whereas East Asian cultures encourage more dialectic approaches to well-being. We compared reports of positive and negative emotional experiences from stratified random samples of Americans (a culture characterized by focus on positive experiences and distancing from negative experiences; samples collected in the Midwest) and Japanese (a culture characterized by its endorsement of dialectical experiences; samples collected in the Tokyo metropolitan area). In support of our hypothesis, older Americans reported significantly less negative emotions in unpleasant situations, relative to their younger counterparts. Furthermore, both trait-level negativity (i.e., rumination) and interpersonal negativity (i.e., recall of unpleasant relationships and intensity of an unpleasant interpersonal experience) were lower among older than among younger Americans. However, such aging-related effects were absent in the Japanese respondents. Further, although older and younger Japanese participants reported the same amount of negative emotions in unpleasant situations, older Japanese also reported more positive emotions in the same unpleasant situations. Yet, we did not observe corresponding aging-related differences among the Americans. Taken together, these findings suggest culture-specific paths to satisfying one’s well-being across adulthood, with the “linear” way (i.e. maximizing the positive and distancing from the negative) being more prevalent among older Americans, and the “dialectical way” (i.e. maintaining the positive across the adulthood and emphasizing the positive in the negative) being more prevalent among older Japanese.

Figure 2. Wise reasoning scores by age and culture.

 

***Note.*** Full sample standardized T-scores (i.e. mean is 50 and standard deviation is 10). Mean estimates at 25, 50, and 75 years of age. Error bars represent standard errors of the estimate. Actual means for 3 age groups (25-39; 40-59; 60-75) are similar, except that the wisdom of the 40-59 group as a whole is lower than implied by the point estimate.

 Note that not all social experiences are equally likely to promote dialecticism. Some experiences involve greater challenges to one’s existing knowledge structures and promote dialecticism, whereas others do not. These challenging life experiences are likely to happen across many periods of one’s lifespan, and the relative salience of these transitional periods may vary substantially from one culture to another. Given the preliminary evidence for an age-related difference in dialecticism among Americans but not among Japanese, it is possible that the transition into older age provides a more significant period for restructuring one’s self- and world-related knowledge for Americans than for Japanese. One of the reasons for this observation may have something to do with the salience of older adulthood across the two countries. According to the official census data, Japan’s population is much older in general, with over 23% being 65 years or older in 2011 ([Statistics Japan, 2011](#_ENREF_81)). Although the proportion of older adults is currently increasing in North America, current census forecasts suggest that the U.S. may need another twenty years to reach this quota of adults 65 years and older ([Holder & Clark, 2008](#_ENREF_34)). A larger proportion of older individuals in Japan means greater familiarity with challenges associated with upcoming old age earlier on for aging Japanese than for aging North Americans. This could make the transition into older adulthood less abrupt for Japanese and enable middle-aged Japanese transitioning into older adulthood to approach such a transition with more knowledge about it.

**Outlook and Future Directions**

 Some key unanswered questions about dialecticism across the lifespan concern the psychological and socio-cultural mechanisms underlying the development of dialecticism. First, it is not yet clear if the cultural differences in the unfolding of dialecticism across the lifespan reflect differences in the *on-set* of dialecticism, the *habitual* preferences for dialectical thought and emotion, or a combination of both. Future work should test these questions by designing studies that address the growth and peak in dialecticism (addressing the *on-set* questions) and studies involving naturalistic observations of *habitual* dialecticism in daily life.

 Second, it is not clear what psychological processes enable the development of dialecticism. In the concluding section, I will review emerging experimental work on psychological processes that enable the development of dialecticism, and I will outline a few future directions for research at the intersection of cultural and developmental psychology.

**Psychological Self-distance and Generativity in Older Age: Evidence from Experiments**

 **Self-distancing.** Early human development theory suggested that successful aging and maturity are linked to generativity ([Erikson, 1980](#_ENREF_18), [1984](#_ENREF_19)), a central element of which deals with a focus on others. Given that dialecticism is often viewed as a central element of successful aging and maturity (e.g., [Baltes, 1993](#_ENREF_3); [Grossmann et al., 2010](#_ENREF_28); [Grossmann, Na et al., 2013](#_ENREF_29); [Kramer, 2000](#_ENREF_42); [Labouvie-Vief, 1982](#_ENREF_48)), it is possible that psychological mechanisms dealing with a focus away from the self and towards others may promote this tendency. Recent research conducted by my colleagues and myself addressed this question in three ways. Ethan Kross and I examined how the *focus away from the self* is linked to dialecticism (Grossmann & Kross, 2014; [Kross & Grossmann, 2012](#_ENREF_47)), experimentally cueing participants to adopt a self-distanced perspective when reasoning about future life dilemmas. We conducted a series of experiments in which we randomly assigned participants to adopt an immersed (“watching the situation through your own eyes”) versus a distanced (“watching the situation as a fly on the wall”) perspective as they reasoned about how a series of personally meaningful future life events could transpire. For instance, we found that participants who adopted a visually distanced perspective displayed a more dialectical view of change and a recognition of uncertainty when reflecting on personal employment outcomes of the economic recession (Kross & Grossmann, 2012; Study 1). Similarly, when asking participants to predict the economic and political developments in the U.S. during a time of highly polarized opinions on politics (a week before the 2012 presidential election), we found that psychological distance promoted greater dialecticism (Kross & Grossmann, 2012; Study 2).

 Similar effects were observed when instructing participants to take a temporally distant perspective (one year from now vs. right now) on a recent conflict with a romantic partner or a friend ([Huynh, Yang & Grossmann, 201](#_ENREF_36)6): participants spontaneously mentioned more self-growth and change when reflecting on their recent interpersonal conflict from a temporally distant, as opposed to a temporally close perspective.

 **Generativity – orientation towards others**. My colleagues and I further examined how focus *towards others* influences dialectical reasoning. We reasoned that adopting the role of a mentor represents one form of orientation towards others. From a social cognitive perspective, assuming the role of a mentor may result in a social distance from the issue, which is a form of psychological distance ([Trope & Liberman, 2003](#_ENREF_83), 2010). Based on the findings that some forms of psychological distance may promote dialecticism ([Kross & Grossmann, 2012](#_ENREF_47)), we hypothesized that assuming the role of a mentor may similarly facilitate greater dialecticism in reasoning. Consistent with our hypothesis, we found that individuals describing a contentious political issue to a 12-year-old child resulted in a more balanced view of the issue (including dialectical synthesis of different perspectives on the issue), than when merely reflecting on the issue or describing the same issue to a friend (Huynh, Santos, Tse, & Grossmann, 2017).

 Beyond explicit advice-giving, diary evidence indicates that situations in which one is surrounded by people one cares about (e.g., one’s co-workers or family members), one is more likely to reason dialectically, as compared to situations that do not involve people one cares about (Grossmann, Gerlach & Denissen, 2016). Finally, in another set of recent studies, Ethan Kross and I wondered if a mere change in target focus would promote greater dialecticism in reasoning about meaningful social issues. We contrasted reasoning about personal vs. close other’s relationship dilemma (e.g., partner’s infidelity or trust betrayal by a close friend) and found that participants displayed greater dialecticism when reasoning about their friend’s than about their own situation ([Grossmann & Kross, 2014](#_ENREF_27)). These effects were largely comparable for younger and older adults, suggesting that greater wisdom among older than younger adults ([Grossmann et al., 2010](#_ENREF_28)) is confined to reasoning about others, rather than reasoning about the self.

Taken together, this emerging body of work provides initial experimental support for one of the key mechanisms of dialecticism and its unfolding in daily life: a focus away from the self towards other people. In light of the developmental focus of this chapter, one caveat is in order. Much of this work has yet to examine the effectiveness of these strategies beyond college students and younger adults, which is one of the outstanding issues for future investigations.

**Testing Cultural Differences (and Similarities) in Dialecticism across the Lifespan**

 Even though a large body of cross-cultural work suggests that the development of dialecticism would unfold differently across cultures, this research is far from being systematic. For instance, little is known about the cross-cultural variations in folk beliefs about how the development of dialecticism *should* unfold over the lifespan. Such folk beliefs are in turn likely influenced by general folk beliefs about change. So far, existing work on folks beliefs (or implicit theories) mainly addresses beliefs about the malleability of the self (e.g., Dweck et al., 1995). Less is known about folk beliefs concerning the malleability of various aspects of the social world (although see Ji et al., 2008 and Kung et al., 2016). Ideally, one would want to cast the net wide with a multi-method approach that uses experiments (e.g., random assignment of participants to situations in which one has to react to hypothetical scenarios concerning developmental change in the self), surveys (e.g., design of scale-based measurements of beliefs about developmental stability vs. change), and the study of cultural products (e.g., comparison of depictions of developmental change and stability in East Asian vs. Western folklore).

 Another important direction for future research concerns the systematic cross-cultural investigation of developmental *change* (as compared to age differences) in dialecticism-related cognitive and emotional processes. To decouple cohort and aging effects (Grossmann & Varnum, 2015; Santos, Varnum, & Grossmann, 2017; Varnum, & Grossmann, 2017), a successful project requires a combination of in-situ experiments and longitudinal studies. In-situ experiments could include studies with younger and older adults from respective cultures, in which participants would be randomly assigned to dialecticism-boosting vs. control conditions (e.g., self-distancing, advice-giving), whereas longitudinal observations could trace the development of dialecticism over time and systematically study the conditions preceding changes in dialecticism.

**Concluding comments**

 In light of the emerging evidence on cross-cultural differences in dialecticism across the lifespan, it seems unwise to ignore either the cross-cultural or the human developmental perspectives on this topic. Much more has to be done in developing our understanding of both the cultural variations in dialecticism and how they unfold over the lifespan. An integrative picture of cultural and ontogenetic factors and a consideration of their dialectical interdependence can prove fruitful for a more complete, holistic model of human psychology ([Riegel, 1976](#_ENREF_74); [Sameroff, 2010](#_ENREF_76)).

**References**

Aaker, J., Drolet, A., & Griffin, D. (2008). Recalling mixed emotions. *Journal of Consumer Research, 35*(2), 268–278.

Anacker, S. (2005). *Seven works of Vasubandhu: The Buddhist psychological doctor* (Rev. ed.)*.* Delhi: Motilal Banarsidass.

Bagozzi, R. P., Wong, N., & Yi, Y. (1999). The role of culture and gender in the relationship between positive and negative affect. *Cognition and Emotion, 13*(6), 641–672.

Baltes, P. B. (1993). The aging mind: Potential and limits. *Gerontologist, 33*(5), 580–594.

Baltes, P. B. (1997). On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist, 52*(4), 366–380. doi:10.1037/0003-066x.52.4.366

Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 397). New York: Cambridge University Press.

Baltes, P. B., & Smith, J. (2008). The fascination of wisdom: Its nature, ontogeny, and function. *Perspectives on Psychological Science, 3*(1), 56–64.

Baltes, P. B., & Staudinger, U. M. (1993). The search for a psychology of wisdom. *Current Directions in Psychological Science, 2*(3), 75–80.

Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *American Psychologist, 55*(1), 122–136.

Baltes, P. B., Staudinger, U. M., Maercker, A., & Smith, J. (1995). People nominated as wise: A comparative study of wisdom-related knowledge. *Psychology and Aging, 10*(2), 155.

Basseches, M. (1980). Dialectical schemata: A framework for the empirical study of the development of dialectical thinking. *Human Development, 23*(6), 400–421.

Basseches, M. (1984). *Dialectical thinking and adult development*. Norwood, NJ: Ablex.

Blanchard-Fields, F. (1986). Reasoning on social dilemmas varying in emotional saliency: An adult developmental perspective. *Psychology and Aging, 1*(4), 325–333.

Brazelton, T. B., Robey, J. S., & Collier, G. (1969). Infant development in the Sincanteco Indians of Southern Mexico. *Pediatrics, 44*(2), 274–283.

Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously. *American Psychologist, 54*(3), 165–181.

Carstensen, L. L., Pasupathi, M., Mayr, U., & Nesselroade, J. R. (2000). Emotional experience in everyday life across the adult life span. *Journal of Personality and Social Psychology, 79*(4), 644–655. doi:10.1037/0022-3514.79.4.644

Carstensen, L. L., Turan, B., Scheibe, S., Ram, N., Ersner-Hershfield, H., Samanez-Larkin, G. R., & Nesselroade, J. R. (2011). Emotional experience improves with age: evidence based on over 10 years of experience sampling. *Psychology and Aging, 26*(1), 21–33.

Caudill, W. (1971). Tiny dramas: Vocal communication between mother and infant in Japanese and American families. In W. Lebra (Ed.), *Mental health research in Asia and the Pacific* (Vol. II, pp. 25–48). Honolulu: East-West Center Press.

Chandler, M. (1987). The Othello effect. *Human Development, 30*(3), 137–159.

Chen, J., Wang, L., Huang, M., & Spencer-Rodgers, J. (2012). Naive dialecticism and Chinese employees’ commitment to change. *Journal of Managerial Psychology*, *27*(1), 48–70.

Doi, T. (1973). *The anatomy of dependence*. Tokyo: Kodansha International Ltd.

Dundas, P. (2004). *Beyond Anekāntavāda: A Jain approach to religious tolerance*. In T. Sethia (Ed.), *Ahimsā, Anekānta, and Jaininsm* (pp. 123–136). Delhi: Motilal Banarsidass.

Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories and their role in judgments and reactions: A world from two perspectives. *Psychological Inquiry, 6*(4), 267–285.

Erikson, E. H. (1980). *Identity and the life cycle*. New York: W. W. Norton & Co.

Erikson, E. H. (1984). Reflections on the last stage—and the first. *Psychoanalytic Study of the Child, 39*, 155–165.

Ersner-Hershfield, H., Mikels, J. A., Sullivan, S. J., & Carstensen, L. L. (2008). Poignancy: Mixed emotional experience in the face of meaningful endings. *Journal of Personality and Social Psychology, 94*(1), 158.

Feldman, S. S., & Rosenthal, D. A. (1991). Age expectations of behavioural autonomy in Hon Kon, Australian, and American youth: The influence of family variables and adolescents’ values. *International Journal of Psychology, 26*(1), 1–23.

Fichte, J. G. (1794/1997). *Grundlage der gesamten Wissenschaftslehre*.Hamburg: Meiner*.*

Fowler, J. W., & Dell, M. L. (2006). Stages of faith from infancy through adolescence: Reflections on three decades of faith development theory. In E. C. Roehlkepartain (Ed.), *The handbook of spiritual development in childhood and adolescence* (pp. 34–45). Sage Publications.

Freud, A. (1969). Adolescence as a developmental disturbance. In G. Caplan & S. Ledovici (Eds.), *Adolescence: Psychosocial perspectives* (pp. 5–10). Cambridge, MA: Harvard University Press.

Gier, N. (1983). Dialectic: East and West. *Indian Philosophical Quarterly: Journal of the Department of Philosophy University of Poona, 10*, 207–218.

Greenfield, P. M., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology*, *54*(1), 461–490.

Grossmann, I. (2017). Wisdom in context. *Perspectives on Psychological Science, 12*(2), 233–257. doi: 10.1177/1745691616672066

Grossmann, I. & Ellsworth, P.C. (2017). What are mixed emotions and what conditions foster them? Life-span experiences, culture and social awareness. *Current Opinion in Behavioral Science, 15,*1-5*.*doi: 10.1016/j.cobeha.2017.05.001

Grossmann, I., Ellsworth, P. C., & Huynh, A. C. (2016). Emotional complexity: Clarifying definitions and cultural correlates*. Journal of Personality and Social Psychology, 111*(6), 895-916. doi: 10.1037/pspp0000084

Grossmann, I., Gerlach, T.M., & Denissen, J.J.A. (2016). Wise reasoning in the face of everyday life challenges. *Social Psychological and Personality Science, 7*(7), 611–622*.* doi: 10.1177/1948550616652206Grossmann, I., Karasawa, M., Izumi, S., Na, J., Varnum, M. E. W., Kitayama, S., & Nisbett, R. E. (2012). Aging and wisdom: Culture matters. *Psychological Science, 23*(10), 1059–1066. doi:10.1177/0956797612446025

Grossmann, I., Karasawa, M., Kan, C., & Kitayama, S. (2014). A cultural perspective on emotional experiences across the lifespan. *Emotion*, *14*(4), 679

Grossmann, I., & Kross, E. (2010). The impact of culture on adaptive versus maladaptive self-reflection. *Psychological Science, 21*(8), 1150–1157. doi:10.1177/0956797610376655

Grossmann, I., & Kross, E. (2014). Exploring “Solomon’s paradox”: Self-distancing eliminates the self-other asymmetry in wise reasoning about close relations in younger and older adults. *Psychological Science*, *25*(8), 1571–1580.

Grossmann, I., & Na, J. (2014). Research in culture and psychology: past lessons and future challenges. *Wiley Interdisciplinary Reviews: Cognitive Science*, *5*(1), 1–14.

Grossmann, I., Na, J., Varnum, M. E. W., Kitayama, S., & Nisbett, R. E. (2013). A route to well-being: Intelligence versus wise reasoning. *Journal of Experimental Psychology: General, 142*(3). doi:10.1037/a0029560

Grossmann, I., Na, J., Varnum, M. E., Park, D. C., Kitayama, S., & Nisbett, R. E. (2010). Reasoning about social conflicts improves into old age. *Proceedings of the National Academy of Sciences of the United States of America, 107*(16), 7246–7250. doi:10.1073/pnas.1001715107

Grossmann, I. & Varnum, M.E.W. (2011). Culture, social class, and cognition. *Social Psychological and Personality Science*. *2*(1), 81-89. doi: 10.1177/1948550610377119

Grossmann, I. & Varnum, M. E. W. (2015). Social structure, infectious diseases, disasters, secularism, and cultural change in America. *Psychological Science, 26*(3), 311-324. doi: 10.1177/0956797614563765

Grühn, D., Lumley, M. A., Diehl, M., & Labouvie-Vief, G. (2013). Time-based indicators of emotional complexity: Interrelations and correlates. *Emotion, 13*(2), 226.

Hammer, R., & McLaren, P. (1991). Rethinking the dialectic: A social semiotic perspective for educators. *Educational Theory, 41*(1), 23–46. doi:10.1111/j.1741-5446.1991.00023.x

Healy, M. K., Campbell, K. L., & Hasher, L. (2008). Cognitive aging and increased distractibility: Costs and potential benefits. *Progress in Brain Research, 169,* 353–363.

Hegel, G. W. F. (1929). *Science of logic* (W. H. Johnston & L.G. Struthers, trans.). London: G. Allen & Unwin. (Original work published 1812–1816.)

Hegel, G. W. F. (1967). *The phenomenology of mind* (J. B. Baillie, trans.). New York: Harper-Torch Books. (Original work published 1807.)

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*(2-3), 61–83.

Hershfield, H. E., Scheibe, S., Sims, T. L., & Carstensen, L. L. (2013). When feeling bad can be good: Mixed emotions benefit physical health across adulthood. *Social Psychological and Personality Science, 4*(1), 54–61.

Hofstede, G. (1991). Empirical models of cultural differences. In N. Bleichrodt & P. J. D. Drenth (Eds.), *Contemporary issues in cross-cultural psychology* (pp. 4–20). Amsterdam: Swets & Zeitlinger.

Holder, K. A., & Clark, S. L. (2008). *Working beyond retirement age*. U.S. Census Bureau. Retrieved from http://www.census.gov/people/laborforce/publications/Working-Beyond-Retirement-Age.pdf.

Holloway, S. (1988). Concepts of ability and effort in Japan and the United States. *Review of Educational Research, 58*(3), 327–345.

Hong, J., & Lee, A. Y. (2010). Feeling mixed but not torn: The moderating role of construal level in mixed emotions appeals. *Journal of Consumer Research, 37*(3), 456–472.

Hong, Y. (2001). Student motivation. In F. Salili, C. Y. Chiu, & Y. Y. Hong (Eds.), *Student motivation* (pp. 105–120). Boston: Springer. doi:10.1007/978-1-4615-1273-8

Huynh, A. C., Santos, H. C., Tse, C., & Grossmann, I. (2017). *The Socrates Effect: How a teacher’s mind impacts political reasoning*. Manuscript in preparation.

Huynh, A. C., Yang, D. Y. & Grossmann, I. (2016). The value of prospective reasoning for close relationships. *Social Psychological and Personality Science*, *7*(8), 893-902. doi: 10.1177/1948550616660591

Imada, T. (2012). Cultural narratives of individualism and collectivism: A content analysis of textbook stories in the United States and japan. *Journal of Cross-Cultural Psychology, 43*(4), 576–591. doi:10.1177/0022022110383312

Ji, L. J. (2008). The leopard cannot change his spots, or can he? Culture and the development of lay theories of change. *Personality and Social Psychology Bulletin*, *34*(5), 613–622.

Kaufmann, W. (1965). *Hegel: Reinterpretation, texts. commentary.* Garden City, NY: Doubleday.

Keller, H., & Greenfield, P. M. (2000). History and future of development in cross-cultural psychology. *Journal of Cross Cultural Psychology, 31*(1), 52–62.

Kestenbaum, R., & Gelman, S. A. (1995). Preschool children’s identification and understanding of mixed emotions. *Cognitive Development, 10*(3), 443–458.

King, P. M., Kitchener, K. S., Davison, M. L., Parker, C. A., & Wood, P. K. (1983). The justification of beliefs in young adults: A longitudinal study. *Human Development, 26*(2), 106–116.

Kitayama, S., Ishii, K., Imada, T., Takemura, K., & Ramaswamy, J. (2006). Volunary settlement and the spirit of independence: Evidence from Japan’s “northern frontier.” *Journal of Personality and Social Psychology, 91*(3), 809–903.

Kitayama, S., Mesquita, B., & Karasawa, M. (2006). Cultural affordances and emotional experiences: Socially engaging and disengaging emotions in Japan and the United States. *Journal of Personality and Social Psychology, 91*(5), 890–903.

Kramer, D. A. (1983). Post-formal operations? A need for further conceptualization. *Human Development, 26*(2), 91–105.

Kramer, D. A. (1989). Development of an awareness of contradiction across the lifespan and the question of postformal operations. *Adult Development, 1*, 133–159.

Kramer, D. A. (2000). Wisdom as a classical source of human strength: Conceptualization and empirical inquiry. *Journal of Social and Clinical Psychology, 19*(1), 83–101.

Kramer, D. A., & Kahlbaugh, P. E. (1994). Memory for a dialectical and a nondialectical prose passage in young and older adults. *Journal of Adult Development, 1*(1), 13–26.

Kramer, D. A., Kahlbaugh, P. E., & Goldston, R. B. (1992). A measure of paradigm beliefs about the social world. *Journal of Gerontology, 47*(3), 180–189.

Kramer, D. A., & Melchior, J. (1990). Gender, role conflict, and the development of relativistic and dialectical thinking. *Sex Roles, 23*(9-10), 553–575.

Kramer, D. A., & Woodruff, D. S. (1986). Relativistic and dialectical thought in three adult age-groups. *Human Development, 29*(5), 280–290.

Kross, E., & Grossmann, I. (2012). Boosting wisdom: Distance from the self enhances wise reasoning, attitudes, and behavior. *Journal of Experimental Psychology: General, 141*(1), 43–48. doi:10.1037/a0024158

Kung, F., Eibach, R., & Grossmann, I. (2016, June 6). Culture, fixed-world beliefs, relationships and perceptions of identity change. *Social Psychological and Personality Science, 7*(7), 631-639*.* doi: 10.1177/1948550616652208

Labouvie-Vief, G. (1982). Dynamic development and mature autonomy: A theoretical prologue. *Human Development, 25*(3), 161–191.

Labouvie-Vief, G. (2003). Dynamic Integration: Affect, Cognition, and the Self in Adulthood. *Current directions in psychological science, 12*(6), 201–206.

Labouvie-Vief, G., & Blanchard-Fields, F. (1982). Cognitive ageing and psychological growth. *Ageing & Society, 2*(02), 183–209. doi:10.1017/S0144686X00009429

Labouvie-Vief, G., DeVoe, M., & Bulka, D. (1989). Speaking about feelings: Conceptions of emotion across the life span. *Psychology and Aging, 4*(4), 425–437.

Labouvie-Vief, G., & Diehl, M. (2000). Cognitive complexity and cognitive-affective integration: Related or separate domains of adult development. *Psychology and Aging, 15*(3), 490–504.

Labouvie-Vief, G., Hakim-Larson, J., DeVoe, M., & Schoeberlein, S. (1989). Emotions and self-regulation: A life span view. *Human Development, 32*(5), 279–299.

Lao Tzu & Lin, D. (2006). *Tao Te Ching: Annotated & explained*. Nashville, TN: Skylight Paths Publishing.

Lao Tzu & Mitchell, S. (2006). *Tao Te Ching: A new English version*. New York: Harper Perennial Classics.

Larsen, J. T., To, Y. M., & Fireman, G. (2007). Children’s understanding and experience of mixed emotions. *Psychological Science, 18*(2), 186–191.

Lemieux, A. (2012). Post-formal thought in gerontagogy or beyond Piaget. *Journal of Behavioral and Brain Science, 2*(3), 399–406.

Lenin, V. I. (1980). *On the question of dialectics: A collection*. Moscow: Progress Publishers.

Leung, K. (1988). Some determinants of conflict avoidance. *Journal of Cross-Cultural Psychology, 19*(1), 125–136.

Li, J. (2003). US and Chinese cultural beliefs about learning. *Journal of Educational Psychology, 95*(2), 258–267. doi:10.1037/0022-0663.95.2.258

Lindquist, K. A., & Barrett, L. F. (2008). Emotional complexity. In M. Lewis, J. M. Haviland-Jones, & L. Feldman Barrett (Eds.), *Handbook of emotions* (pp. 513–530). New York: Guilford Press.

MacDonald, K. B. (1992). Warmth as a developmental construct: An evolutionary analysis. *Child Development*, *63*(4), 753–773.

Magai, C., Consedine, N. S., Krivoshekova, Y. S., Kudadjie-Gyamfi, E., & McPherson, R. (2006). Emotion experience and expression across the adult life span: Insights from a multimodal assessment study. *Psychology and Aging, 21*(2), 303–317.

Malatesta, C. Z., & Kalnok, M. (1984). Emotional experience in younger and older adults. *Journal of Gerontology, 39*(3), 301–308.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2), 224–253.

McBride, L. R. (1998). *A comparison of postformal operations in diverse adult populations: Contrasting African Americans and standard-average-European Americans*. PhD doctoral dissertation, Texas Tech University, Lubbock, TX.

Miyake, K., Campos, J., Kagan, J., & Bradshaw, D. (1986). Issues in socioemotional development in Japan. In H. Azuma, I. Hakuta, & H. Stevenson (Eds.), *Kodomo: Child development and education in Japan* (pp. 239–261). San Francisco: Ereeman.

Miyamoto, Y., Uchida, Y., & Ellsworth, P. C. (2010). Culture and mixed emotions: Co-occurrence of positive and negative emotions in Japan and the United States. *Emotion, 10*(3), 404–415.

Morelli, G. A., Rogoff, B., Oppenheim, D., & Goldsmith, D. (1992). Cultural variation in infants’ sleeping arrangements: questions of independence. *Developmental Psychology, 28*(4), 604–613.

Morris, M. W., Williams, K. Y., Leung, K., Larrick, R., Mendoza, M. T., Bhatnagar, D., . . . Hu, J.-C. (1998). Conflict management style: Accounting for cross-cultural differences. *Journal of International Business Studies, 29*(4), 729–747.

Mueller, G. E. (1958). The Hegel legend of “thesis-antithesis-synthesis”. *Journal of the History of Ideas*, *19*(3), 411–414.

Na, J., Grossmann, I., Varnum, M.E.W., Gonzalez, R., Kitayama, S., & Nisbett, R.E. (2010). When cultural differences are not reducible to individual differences. *Proceedings of the National Academy of Sciences of the United States of America, 107(14), 6192-6197*. doi: 10.1073/pnas.1001911107

Niiya, Y., Ellsworth, P. C., & Yamaguchi, S. (2006). Amae in Japan and the United States: An exploration of a “culturally unique” emotion. *Emotion, 6*(2), 279–295. doi:10.1037/1528-3542.6.2.279.

Nisbett, R. E. (2003). *The geography of thought: How Asians and Westerners think differently . . . and why.* New York: Free Press.

Nisbett, R. E., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic versus analytic cognition. *Psychological Review, 108*(2), 291–310.

Ohbuchi, K.-I., & Takahashi, Y. (1994). Cultural styles of conflict management in Japanese and Americans: Passivity, covertness, and effectiveness of strategies. *Journal of Applied Social Psychology*, *24*(15), 1345–1366.

Ong, A. D., & Bergeman, C. S. (2004). The complexity of emotions in later life. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 59*(3), P117–P122.

Park, D. C., & Reuter-Lorenz, P. (2009). The adaptive brain: Aging and neurocognitive scaffolding. *Annual Review of Psychology, 60*, 173.

Pascual-Leone, J. (1983). Growing into human maturity: Toward a metasubjective theory of adulthood stages. *Life-Span Development and Behavior, 5*, 117–156.

Pasupathi, M., Staudinger, U. M., & Baltes, P. B. (2001). Seeds of wisdom: Adolescents’ knowledge and judgment about difficult life problems. *Developmental Psychology, 37*(3), 351–361.

Peng, K., & Nisbett, R. E. (1999). Culture, dialectics, and reasoning about contradiction. *American Psychologist, 54*(9), 741–754.

Peng, K., & Nisbett, R. E. (2000). Dialectical responses to questions about dialectical thinking. *American Psychologist, 55*(9), 1067–1068.

Peng, K., Spencer-Rodgers, J., & Nian, Z. (2006). Naïve dialecticism and the Tao of Chinese thought. In *Indigenous and Cultural Psychology* (pp. 247–262). New York: Springer.

Perry, J. (1970). *Forms of intellectual and ethical development in the college years*. New York: Holt, Rinehart & Winston.

Piaget, J. (1972). *The principles of genetic epistemology.* New York: Basic Books.

Piaget, J., & Inhelder, B. (1973). *Memory and intelligence*. London: Routledge and Kegan Paul.

Pons, F., Harris, P. L., & de Rosnay, M. (2004). Emotion comprehension between 3 and 11 years: Developmental periods and hierarchical organization. *European Journal of Developmental Psychology, 1*(2), 127–152.

Ready, R. E., Robinson, M. D., & Weinberger, M. (2006). Age differences in the organization of emotion knowledge: Effects involving valence and time frame. *Psychology and Aging, 21*(4), 726.

Riediger, M., Schmiedek, F., Wagner, G. G., & Lindenberger, U. (2009). Seeking pleasure and seeking pain: Differences in prohedonic and contra-hedonic motivation from adolescence to old age. *Psychological Science, 20*(12), 1529–1535. doi:10.1111/j.1467-9280.2009.02473.x

Riegel, K. F. (1973). Dialectic operations: The final period of cognitive development. *Human Development, 16*(5), 346–370.

Riegel, K. F. (1976). The dialectics of human development. *American Psychologist, 31*(10), 689–700.

Roberts, J. E., & Gotlib, I. H. (1997). Temporal variability in global self-esteem and specific self-evaluation as prospective predictors of emotional distress: Specificity in predictors and outcome. *Journal of Abnormal Psychology, 106*(4), 521–529.

Rothbaum, F., Pott, M., Azuma, H., Miyake, K., & Weisz, J. (2000). The development of close relationships in Japan and the United States: Paths of symbiotic harmony and generative tension. *Child Development*, *71*(5), 1121–1142.

Sameroff, A. (2010). A unified theory of development: A dialectic integration of nature and nurture. *Child Development, 81*(1), 6–22.

*Santos, H. C*., Varnum, M. E. W., Grossmann, I. (2017). Global increases in individualism. *Psychological Science*. doi: 10.1177/0956797617700622

Saraswathi, T. S., & Pai, S. (1997). Socialization in the Indian context. In H. S. R. Kao & D. Sinha (Eds.), *Cross-cultural research and methodology series, Vol. 19. Asian perspectives on psychology* (pp. 74-92). Thousand Oaks, CA: Sage Publications.Schaie, K. W. (1977). Quasi-experimental research designs in the psychology of aging. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of the psychology of aging* (Vol. 1, (pp. 39–69). New York: Van Nostrand Reinhold.

Schaie, K. W. (1994). The course of adult intellectual development. *American Psychologist, 49*(4), 304–313.

Scheibe, S., English, T., Tsai, J. L., & Carstensen, L. L. (2013). Striving to feel good: Ideal affect, actual affect, and their correspondence across adulthood. *Psychology and Aging, 28*(1), 160–171.

Shweder, R. A., Goodnow, J., Hatano, G., LeVine, R. A., Markus, H. & Miller, P. (1998). The cultural psychology of development: One mind, many mentalities. In R. M. Lerner (Ed.), *Handbook of child psychology, volume 1: Theoretical models of human development* (5th ed., pp. 865–937). New York: Wiley.

Sinnott, J. D. (1984). Postformal reasoning: The relativistic stage. In *Beyond formal operations* (pp. 298–325). New York: Praeger Publishers.

Smith, J., & Baltes, P. B. (1990). Wisdom-related knowledge: Age/cohort differences in response to life-planning problems. *Developmental Psychology, 26*(3), 494–505.

Spencer-Rodgers, J., Peng, K., Wang, L., & Hou, Y. (2004). Dialectical self-esteem and East-West differences in psychological well-being. *Personality and Social Psychology Bulletin*, *30*(11), 1416–1432.

Statistics Japan (2011). *Population census*. Ministry of Internal Affaird and Communications. Retrieved from http://www.stat.go.jp/data/jinsui/.

Stevenson, H. W., & Stigler, J. W. (1992). *The learning gap: Why our schools are failing and what an we learn from Japanese and Chinese education.* New York: Summit Books.

Thompson, M. M., Zanna, M. P., & Griffin, D. W. (1995). Let’s not be indifferent about (attitudinal) ambivalence. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 361–386). New York: Psychology Press.

Tolman, C. W. (1983). Further comments on the meaning of dialectic. *Human Development*, *26*(6), 320–324.

Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological Review, 110*(3), 403–421.

Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review, 117*(2), 440–463.

Varnum, M. E., Grossmann, I. (2017). Cultural change: The How and Why. *Perspectives on Psychological Science*.

Varnum, M. E., Grossmann, I., Kitayama, S., & Nisbett, R. E. (2010). The origin of cultural differences in cognition: The social orientation hypothesis. *Current Directions in Psychological Science, 19*(1), 9–13. doi:10.1177/0963721409359301

Vogel, E. (1976). *Japan’s new middle class: The salaryman and his family in a Tokyo suburb.* Berkeley: University of California Press.

White, J. D. (1996). *Karl Marx and the intellectual origins of dialectical materialism*. New York: St. Martin’s Press.

Whiting, B. B., & Whiting, J. (1977). *Children of six cultures.* Cambridge, MA: Harvard University Press.

Williams, P., & Aaker, J. L. (2002). Can mixed emotions peacefully coexist? *Journal of Consumer Research, 28*(4), 636–649.

Wohlwill, J. F. (1970). The age variable in psychological research. *Psychological Review, 77*(1), 49–64.

Yan, B., & Arlin, P. K. (1995). Nonabsolute/relativistic thinking: A common factor underlying models of postformal reasoning? *Journal of Adult Development, 2*(4), 223–240.

Yovsi, R. D., & Keller, H. (2000). Breastfeeding: An adaptive process. Presented at Conf. Int. Union Anthropol. Ethnolog. Sci. (IUCAES). Presented in Agrigento, Italy.

Zaehner, R. C. (1973). *The Bhagavad-Gita*. New York: Oxford University Press.

1. Independent of cross-cultural researchers, Gisela Labouvie-Vief also proposed a model of cognitive-affective development, with emotional dialecticism as an indicator of more advanced human development ([Labouvie-Vief, DeVoe, & Bulka, 1989](#_ENREF_52)). Labouvie-Vief’s model of cognitive-affective development views emotional dialecticism as indicative of affective complexity and emotion regulation ([Labouvie-Vief, 2003](#_ENREF_50)). [↑](#footnote-ref-1)
2. As others and myself have argued elsewhere, dialecticism represents one of the wisdom-related reasoning strategies, because it is instrumental for navigating challenging life dilemmas (e.g., [Baltes & Smith, 2008](#_ENREF_6); Grossmann & Kross, 2014; [Grossmann, Na, Varnum, Parkm Kitayama, & Nisbett, 2010](#_ENREF_28); [Grossmann, Na, Varnum, Kitayama, & Nisbett, 2013](#_ENREF_29); [Kross & Grossmann, 2012](#_ENREF_47); [Lemieux, 2012](#_ENREF_56)). [↑](#footnote-ref-2)
3. Some scholars have also examined the association between age and participants’ responses on the Dialectical Self Scale (DSS). Spencer-Rodgers, Peng, Wang, and Hou (2004; Study 3) found no correlation between age and DSS scores among European Americans, Asian Americans, and Chinese college students in Beijing. Chen and colleagues (Chen, Wang, Huang, & Spencer-Rodgers, 2012) also failed to find a significant relationship between age and participants’ scores on the contradiction and change subscales of the DSS. The participants were employees in China, around 35 years of age. This lack of correlation is not that surprising, however, given the restriction of age range. [↑](#footnote-ref-3)
4. Another exception to this trend was observed in a cross-sectional experience-sampling study by Riediger and colleagues ([Riediger, Schmiedek, Wagner, & Lindenberger, 2009](#_ENREF_72)). They conceptualized emotional dialecticism/mixed affect by counting the number of episodes in which both positive and negative affect were simultaneously above the average level of emotional intensity for an individual across all episodes. In this work, adolescents showed the greatest level of mixed affect, and the level of mixed affect linearly declined across the lifespan into older age. The researchers’ focus on high intensity emotional experiences may explain the discrepancy in findings. Other work indicates that the recall of mixed emotional experiences is typically less intense than the recall of single-valenced emotions ([Aaker, Drolet, & Griffin, 2008](#_ENREF_1)). Older adults tend to prefer lower arousal emotional experiences than younger adults ([Scheibe, English, Tsai, & Carstensen, 2013](#_ENREF_78)), thus complicating the interpretation of Riediger et al.’s finding. [↑](#footnote-ref-4)