A Balance Theory of Wisdom

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The author presents a balance theory of wisdom. First, some alternative approaches to wisdom are reviewed, including philosophical, implicit theoretical, and explicit theoretical ones. Second, the concept of tacit knowledge and its role in wisdom are discussed. Third, a balance theory of wisdom is presented, according to which wisdom is defined as the application of tacit knowledge as mediated by values toward the achievement of a common good through a balance among multiple (a) intrapersonal, (b) interpersonal, and (c) extrapersonal interests in order to achieve a balance among (a) adaptation to existing environments, (b) shaping of existing environments, and (c) selection of new environments. This theory is compared to some other theories, and wisdom as a construct is compared to some other constructs. Measurement issues are also discussed. It is concluded that it might be worthwhile for American society to emphasize development of wisdom in schooling more than it has in the past.

Wisdom can be defined as the "power of judging rightly and following the soundest course of action, based on knowledge, experience, understanding, etc." (Webster's New World College Dictionary, 1997, p. 1533). Such a power would seem to be of vast importance in a world that at times seems bent on destroying itself. My goal in this article is to provide the beginnings of a psychological theory of wisdom and to relate it to other psychological constructs. I will first review some major attempts to understand wisdom, then describe the proposed approach to wisdom, and finally suggest how wisdom might be measured and developed. Other more comprehensive reviews can be found elsewhere (Baltes, in press; Sternberg, 1990b).

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Major Approaches to Understanding Wisdom

A number of scholars have attempted to understand wisdom in different ways. The approaches underlying some of these attempts are summarized in Sternberg (1990a). The approaches might be classified as philosophical, implicit theoretical, and explicit theoretical approaches.

Philosophical Approaches

Philosophical approaches have been reviewed by Robinson (1990; see also Robinson, 1989, with regard to the Aristotelian approach in particular, and Labouvie-Vief, 1990, for further review). Robinson noted that the study of wisdom has a history that long antedates psychological study, with the Platonic dialogues offering the first intensive Western analysis of the concept of wisdom. Robinson pointed out that, in these dialogues, there are three different senses of wisdom: wisdom as (a) sophia, which is found in those who seek a contemplative life in search of truth; (b) phronesis, which is the kind of practical wisdom shown by statesmen and legislators; and (c) episteme, which is found in those who understand things from a scientific point of view.
the kind of practical wisdom mentioned above, and *theoreikes*, or theoretical knowledge devoted to truth. Robinson noted that, according to Aristotle, a wise individual knows more than the material, efficient, or formal causes behind events. This individual also knows the final cause, or that for the sake of which the other kinds of causes apply.

Other philosophical conceptions of wisdom have followed up on the early Greek ones. Of course, it is not possible to review all of these conceptions here. But as an example, an early Christian view emphasized the importance of a life lived in pursuit of divine and absolute truth. To this day, most religions aim for wisdom through an understanding not just of the material world, but also of the spiritual world and its relationship to the material world.

**Implicit Theoretical Approaches**

Implicit theoretical approaches to wisdom have in common the search for an understanding of people's folk conceptions of what wisdom is. Thus, the goal is not to provide a "psychologically true" account of wisdom, but rather an account that is true with respect to people's beliefs, whether these beliefs are right or wrong.

Some of the earliest work in this kind was done by Clayton (1975, 1976, 1982; Clayton & Birren, 1980), who multidimensionally scaled ratings of pairs of words potentially related to wisdom for three samples of adults differing in age (younger, middle aged, older). In her earliest study (Clayton, 1975), the terms scaled were ones such as *experienced, pragmatic, understanding,* and *knowledgeable.* In each study, participants were asked to rate similarities between all possible pairs of words. Two consistent dimensions of wisdom, which Clayton referred to as an *affective dimension* and a *reflective dimension,* emerged from the results of the scalings among age cohorts. There was also a suggestion of a dimension relating to age. The greatest difference among the age cohorts was that mental representations of wisdom seemed to become more differentiated (i.e., to increase in dimensionality) with increases in the ages of the participants.

Holliday and Chandler (1986) also used an implicit-theories approach to understanding wisdom. Approximately 500 participants were studied across a series of experiments. The investigators were interested in determining whether the concept of wisdom could be understood as a *prototype* (Rosch, 1975), or central concept. Principal-components analysis of one of their studies revealed five underlying factors: *Exceptional Understanding, Judgment and Communication Skills, General Competence, Interpersonal Skills,* and *Social Unobtrusiveness.*

Sternberg (1985b) has reported a series of studies investigating implicit theories of wisdom. In one study (Sternberg, 1985b), 200 professors each of art, business, philosophy, and physics were asked to rate the characteristicness of each of the behaviors obtained in a prestudy from the corresponding population with respect to the professors' ideal conception of each of an ideally wise, intelligent, or creative individual in their occupation. Laypersons were also asked to provide these ratings but for a hypothetical ideal individual without regard to occupation. Correlations were computed across the three ratings. In each group except philosophy, the highest correlation was between wisdom and intelligence; in philosophy, the highest correlation was between intelligence and creativity. The correlations between wisdom and intelligence ratings ranged from .42 to .78, with a median of .68. For all groups, the lowest correlation was between wisdom and creativity. Correlations between wisdom and creativity ratings ranged from -.24 to .48, with a median of .27. The only negative correlation (−.24) was for ratings of professors of business.

In a second study (Sternberg, 1985b), 40 college students were asked to sort three sets of 40 behaviors each into as many or as few piles on the basis of similarity as they wished. The 40 behaviors in each set were the top-rated wisdom, intelligence, and creativity behaviors from the previous study. The sortings were then each subjected to nonmetric multidimensional scaling. For wisdom, six components emerged: *Reasoning Ability, Sagacity, Learning From Ideas and Environment, Judgment, Expedient Use of Information,* and *Perspicacity.*

Examples of behaviors showing high loadings under reasoning ability were, "has the unique ability to look at a problem or situation and solve it," "has good problem-solving ability," and "has a logical mind." Participants characterized sagacity by identifying behaviors such as "displays concern for others," "consid-
ers advice," and "understands people through dealing with a variety of people." They characterized learning from ideas and environment with such qualities as "attaches importance to ideas," "is perceptive," and "learns from other people's mistakes." "Acts within own physical and intellectual limitations," "is sensible," and "has good judgment at all times" showed high loadings for judgment. The qualities "is experienced," "seeks out information, especially details," and "has age, maturity, or long experience" were key for expeditious use of information. "Has intuition," "can offer solutions that are on the side of right and truth," and "is able to see through things—read between the lines" showed high loadings for perspicacity.

In this same study, components for intelligence were Practical Problem-Solving Ability, Verbal Ability, Intellectual Balance and Integration, Goal Orientation and Attainment, Contextual Intelligence, and Fluid Thought. Components for creativity were Nonentrenchment, Integration and Intellectuality, Aesthetic Taste and Imagination, Decisional Skill and Flexibility, Perspicacity, Drive for Accomplishment and Recognition, Inquisitiveness, and Intuition.

In a third study (Sternberg, 1985b), 50 adults were asked to rate descriptions of hypothetical individuals for intelligence, creativity, and wisdom. Correlations were computed between pairs of ratings of the hypothetical individuals' levels of the three traits. Correlations between the ratings were .94 for wisdom and intelligence, .62 for wisdom and creativity, and .69 for intelligence and creativity, again suggesting that wisdom and intelligence are highly correlated in people's implicit theories.

Explicit Theoretical Approaches

Explicit theories are constructions of (supposedly) expert theorists and researchers rather than of laypeople. In the study of wisdom, most explicit-theoretical approaches are based on constructs from the psychology of human development.

The most extensive program of research in this area has been that conducted by Baltes and his colleagues. For example, Baltes and Smith (1987, 1990) gave adult participants life-management problems, such as, "A fourteen-year-old girl is pregnant. What should she, what should one, consider and do?" and "A fifteen-year-old girl wants to marry soon. What should she, what should one, consider and do?" Baltes and Smith tested a five-component model on participants' protocols in answering these and other questions, based on a notion of wisdom as expert knowledge about fundamental life matters (Smith & Baltes, 1990) or of wisdom as good judgment and advice in important but uncertain matters of life (Baltes & Staudinger, 1993).

A model of wisdom emerged from the work of Baltes and his colleagues (Baltes, in press): Three kinds of factors—general person factors, expertise-specific factors, and facilitative experiential contexts—facilitate wise judgments. These factors are used in life planning, management, and review. Wisdom is in turn then reflected in five components: (a) rich factual knowledge (general and specific knowledge about the conditions of life and its variations); (b) rich procedural knowledge (general and specific knowledge about strategies of judgment and advice concerning matters of life); (c) life-span contextualism (knowledge about the contexts of life and their temporal [developmental] relationships); (d) relativism (knowledge about differences in values, goals, and priorities); and (e) uncertainty (knowledge about the relative indeterminacy and unpredictability of life and ways to manage). An expert answer should reflect more of these components whereas a novice answer should reflect fewer of them. The data that Baltes has collected to date generally have been supportive of the model.

Over time, Baltes and his colleagues (e.g., Baltes, Smith, & Staudinger, 1992; Baltes & Staudinger, 1993) have collected a wide range of data showing the empirical usefulness of the proposed theoretical and measurement approaches to wisdom. For example, Staudinger, Lopez, and Baltes (1997) found that measures of intelligence and personality as well as their interface overlap with but are not identical to measures of wisdom in terms of constructs measured. Also, Staudinger, Smith, and Baltes (1992) showed that human-services professionals outperformed a control group on wisdom-related tasks. They also showed that older adults performed as well on such tasks as did younger adults and that older adults did better on such tasks if there was a match between their age...
and the age of the fictitious characters about whom they made judgments. Baltes, Staudinger, Maercker, and Smith (1995) found that older individuals nominated for their wisdom performed as well as did clinical psychologists on wisdom-related tasks. They also showed that up to the age of 80, older adults performed as well on such tasks as younger adults. In another set of studies, Staudinger and Baltes (1996) found that performance settings that were ecologically relevant to the lives of their participants and that provided for actual or "virtual" interaction of minds substantially increased wisdom-related performance.

Sternberg (1990b) also proposed an explicit theory, suggesting that the development of wisdom can be traced to six antecedent components: (a) knowledge, including an understanding of its presuppositions and meaning as well as its limitations; (b) processes, including an understanding of what problems should be solved automatically and what problems should not be so solved; (c) a judicial thinking style, characterized by the desire to judge and evaluate things in an in-depth way; (d) personality, including tolerance of ambiguity and of the role of obstacles in life; (e) motivation, especially the motivation to understand what is known and what it means; and (f) environmental context, involving an appreciation of the contextual factors in the environment that lead to various kinds of thoughts and actions. Whereas my (Sternberg, 1990b) theory specified a set of antecedents of wisdom, the balance theory I propose here specifies the processes (balancing of interests and of responses to environmental contexts) in relation to the goal of wisdom (achievement of a common good). My earlier theory is incorporated into the balance theory as specifying antecedent sources of developmental and individual differences, as discussed later.

Some theorists have viewed wisdom in terms of post–formal-operational thinking, thereby viewing wisdom as extending beyond the Piagetian stages of intelligence (Piaget, 1972). Wisdom thus might be a stage of thought beyond Piagetian formal operations. For example, some authors have argued that wise individuals are those who can think reflectively or dialectically, in the latter case with the individuals' realizing that truth is not always absolute but rather evolves in a historical context of theses, antitheses, and syntheses (e.g., Basseches, 1984; Kitchener, 1983, 1986; Kitchener & Brenner, 1990; Kitchener & Kitchener, 1981; Labovivie-Vief, 1980, 1982, 1990; Pascual-Leone, 1990; Riegel, 1973). Consider a very brief review of some specific dialectical approaches.

Kitchener and Brenner (1990) suggested that wisdom requires a synthesis of knowledge from opposing points of view. Similarly, Labovivie-Vief (1990) emphasized the importance of a smooth and balanced dialogue between logical forms of processing and more subjective forms of processing. Pascual-Leone (1990) argued for the importance of the dialectical integration of all aspects of a person's affect, cognition, conation (motivation), and life experience. Similarly, Orwoll and Perlmutter (1990) emphasized the importance of an integration of cognition with affect to wisdom. Kramer (1990) suggested the importance of the integration of relativistic and dialectical modes of thinking, affect, and reflection. And Birren and Fisher (1990), putting together a number of views of wisdom, also suggested the importance of the integration of cognitive, conative, and affective aspects of human abilities.

Other theorists have suggested the importance of knowing the limits of one's own extant knowledge and of then trying to go beyond it. For example, Meacham (1990) suggested that an important aspect of wisdom is an awareness of one's own fallibility and a knowledge of what one does and does not know. Kitchener and Brenner (1990) also emphasized the importance of knowing the limitations of one's own knowledge. Arlin (1990) linked wisdom to problem finding, the first step of which is the recognition that how one currently defines a problem may be inadequate. Arlin views problem finding as a possible stage of post–formal-operational thinking. Such a view is not necessarily inconsistent with the view of dialectical thinking as such a post–formal-operational stage. Dialectical thinking and problem finding could represent distinct post–formal-operational stages or two manifestations of the same post–formal-operational stage.

Although most developmental approaches to wisdom are ontogenetic, Csikszentmihalyi and Rathunde (1990) have taken a phylogenetic or evolutionary approach, arguing that constructs such as wisdom must have been selected for over time; at least in a cultural sense (see also Csikszentmihalyi, 1988). In other words, wise ideas should survive better over time than
unwise ideas in a culture. The theorists define wisdom as having three basic dimensions of meaning: (a) that of a cognitive process, or a particular way of obtaining and processing information; (b) that of a virtue, or socially valued pattern of behavior; and (c) that of a good, or personally desirable state or condition.

Tacit Knowledge as the Core of Wisdom

The Nature of Tacit Knowledge

The view of wisdom proposed here has at its core the notion of tacit knowledge (Polanyi, 1976) about oneself, others, and situational contexts. Tacit knowledge is action oriented, typically acquired without direct help from others, and allows individuals to achieve goals they personally value (Sternberg, Wagner, Williams, & Horvath, 1995). Tacit knowledge thus has three main features: (a) it is procedural; (b) it is relevant to the attainment of goals people value; and (c) it typically is acquired with little help from others. Tacit knowledge is an important part of practical intelligence, and indeed, the particular notion of tacit knowledge used here derives from my triarchic theory of intelligence (Sternberg, 1985a, 1997a). An advantage of the proposed theory is that it draws on a theory of intelligence (the triarchic one) at the same time that it makes explicit how wisdom is different from the various aspects of intelligence as they are typically encountered.

When people refer to tacit knowledge as being procedural and as intimately related to action, they are viewing it as a form of "knowing how" rather than of "knowing that" (Ryle, 1949). In our work (Sternberg et al., 1995), we view condition-action sequences (production systems) as a useful formalism for understanding the mental representation of tacit knowledge (see also Horvath et al., 1996). For example, if one needs to deliver bad news to one's boss, and it is Monday morning, and the boss's golf game was rained out the day before, and the boss's staff seems to be "walking on eggshells," then it is better to wait until later to deliver the news. Note that tacit knowledge is always wedded to particular uses in particular situations or classes of situations.

Tacit knowledge also is practically useful. It is instrumental to the attainment of goals that people value. Thus people use this knowledge in order to achieve success in life, however they may define success. Abstract academic knowledge about procedures for solving problems with no relevance to life would not be viewed, in this perspective, as constituting tacit knowledge.

Finally, tacit knowledge typically is acquired without direct help from others. At best, others can guide one to acquire this knowledge. Often, environmental support for the acquisition of this knowledge is minimal, and sometimes organizations actually suppress the acquisition of tacit knowledge. For example, an organization might not want its employees to know how personnel decisions are really made, as opposed to how they are supposed to be made. From a developmental standpoint, this view suggests that wisdom is not taught so much as indirectly acquired. One can provide the circumstances for the development of wisdom and case studies to help students develop wisdom, but one cannot teach particular courses of action that would be considered wise, regardless of circumstances. Indeed, tacit knowledge is wedded to contexts, so that the tacit knowledge that would apply in one context would not necessarily apply in another context. To help someone develop tacit knowledge, one would provide mediated learning experiences rather than direct instruction as to what to do, when.

Measurement of Tacit Knowledge

In a series of studies (summarized in Sternberg, Wagner, & Okagaki, 1993; Sternberg et al., 1995), my colleagues and I have sought to develop assessments of tacit knowledge in real-world pursuits. The methodology for constructing assessments is rather complex (Horvath et al., 1996), but it involves interviewing individuals for how they have handled critical situations on their jobs. We then extract the tacit knowledge implicit in these interviews. Assessments then are constructed that ask people to solve the kinds of problems they find in managing themselves, others, and tasks on the job. Examples of two tacit-knowledge problems, one for an academic psychologist and one for a business manager, are shown in the Appendix of Sternberg et al. (1995). Each of these problems typically presents a scenario about a job-related problem along with possible options for dealing with that problem. For example, an academic psychologist might be
asked to solve a problem in which a psychology professor has too much to do in the time available to do it. The participant (an academic psychologist) would be given statements suggesting how the hypothetical professor might allocate his or her time, and would be asked to rate the goodness of each of the options on a 1- to 9-point Likert scale. The response profile for all items then is typically scored against the averaged profile of a nominated expert group.

**Tacit Knowledge as an Aspect of Practical Intelligence**

My colleagues and I argued that tacit knowledge is a key aspect of practical intelligence (Sternberg, 1985b, 1997b; Sternberg & Wagner, 1993; Sternberg et al., 1993; Sternberg et al., 1995), or the ability to apply various kinds of information-processing components of intelligence to experience for the purposes of adaptation to, shaping of, and selection of environments. Practical intelligence requires adaptation, shaping, and selection, in that different kinds of environments and environmental situations require different kinds of responses. It has been distinguished conceptually and statistically in research from analytical and creative aspects of intelligence (Sternberg, 1985a; Sternberg, Ferrari, Clinkenbeard, & Grigorenko, 1996; Sternberg, Grigorenko, Ferr-ari, & Clinkenbeard, in press).

In a series of studies (see review in Sternberg et al., 1995), my colleagues and I showed that tacit knowledge tends to increase with experience on a job, but it is what one learns from the experience rather than the experience itself that seems to matter. Measures of tacit knowledge tend to be correlated with each other, both within and across measures for different occupations. For example, Wagner (1987) found a correlation at the .6 level between scores on tacit-knowledge measures for academic psychology and management with undergraduates as participants. Our measures of tacit knowledge also predict actual performance in jobs such as sales, management, and college teaching. Not only is this prediction statistically significant and fairly substantial in magnitude (with correlations typically at about the .3 level), but this prediction is largely independent of the prediction provided by conventional tests of academic intelligence. In a study at the Center for Creative Leadership (described in Sternberg et al., 1993), my colleagues and I found that tacit knowledge for management was the best single predictor of performance on two managerial simulations and that even after entering (conventional) cognitive abilities, personality-scale measures, styles, and interpersonal orientation into a hierarchical regression equation predicting performance on the simulations, tacit knowledge still contributed significantly and substantially to prediction of performance on the simulations. This is true within a fairly broad range of academic abilities (Eddy, 1988). But the prediction is not always independent. In one study among Kenyan school children, we actually found a significant negative correlation between tacit knowledge relevant to environmental adaptation (knowledge of natural herbal medicines believed to fight infections) and performance on measures of crystallized abilities (see Sternberg & Grig-orenko, 1997a).

Why should tacit knowledge be relatively independent of academic abilities or even, in some cases, inversely related to them? Along with Neisser (1979), we believe it is in part because the characteristics of academic and practical problems differ. In particular, academic problems tend to be (a) formulated by others; (b) intrinsically uninteresting for the most part; (c) self-contained, in that all needed information is available from the beginning; (d) disembedded from an individual's ordinary experience; (e) well defined; (f) characterized by a "correct" answer; and (g) characterized by a single method of obtaining the correct answer. In contrast, practical problems tend to be (a) unformulated or in need of reformulation; (b) personally interesting; (c) lacking information necessary for solution; (d) related to everyday experience; (e) poorly defined; (f) characterized by multiple correct or at least "acceptable" solutions, each with liabilities as well as assets; and (g) characterized by multiple methods for picking a problem solution (Sternberg et al., 1995).

Practical intelligence and the role of tacit knowledge in it provide an entrée for understanding wisdom, but they do not provide a complete basis for its understanding. Consider the balance theory of wisdom in more detail.
A BALANCE THEORY OF WISDOM

Sketch of a Balance Theory of Wisdom

Balance is a crucial construct in the theory proposed here. Several of the theories described above also emphasize the importance of various kinds of integrations or balances in wisdom. At least three major kinds of balances have been proposed: balance among various kinds of thinking (e.g., Labouvie-Vief, 1990); among various self systems, such as the cognitive, conative, and affective (e.g., Kramer, 1990); and among various points of view (e.g., Kitchener & Brenner, 1990). The view presented here expands on but also differs from these kinds of notions in providing for particular kinds of balance in wisdom.

The balance theory views wisdom as inherent in the interaction between an individual and a situational context, much as intelligence (Stemberg, 1997a; Valsiner & Leung, 1994) involves a person-context interaction, as does creativity (Csikszentmihalyi, 1996; Sternberg & Lubart, 1995). For this reason, the balances proposed by the theory are in the interaction between a person and his or her context, rather than, say, in internal systems of functioning (such as cognitive, conative, and affective). On the current view, someone could be balanced in terms of the internal systems by which they process information but not in the products that result from these processes. Because wisdom is in the interaction of person and situation, information processing in and of itself is not wise or unwise. Its degree of wisdom depends on the fit of a wise solution to its context.

On this view, the same balance of cognitive, conative, and affective processes that in one situational context might result in a wise solution in another context might not. This result might derive, for example, from a lack of tacit knowledge or incorrect tacit knowledge about one situation but not another. Judgments in any domain require a substantial tacit-knowledge base in order consistently to be wise.

Wisdom as Tacit Knowledge Used for Balancing Interests

The definition of wisdom proposed here (see Figure 1) draws both on the notion of tacit knowledge, as described above, and on the notion of balance. In particular, wisdom is defined as the application of tacit knowledge as mediated by values toward the goal of achieving a common good (a) through a balance among multiple intrapersonal, interpersonal, and extrapersonal interests and (b) in order to achieve a balance among responses to environmental contexts: adaptation to existing environmental contexts, shaping of existing environmental contexts, and selection of new environmental contexts.

In its application to wisdom, the features of tacit knowledge take on a special cast. Wisdom is procedural knowledge; it is about what to do in usually difficult and complex circumstances. Wisdom is also relevant to the attainment of particular goals people value, although not just any goals, but rather, a balance of responses to the environment—adaptation, shaping, and selection—so as to achieve a common good for all relevant stakeholders. Finally, wisdom is typically acquired with little direct help from others. One typically learns it from experience, not from formal instruction. Formal instruction might give one contexts in which to develop wisdom, but one cannot impart wisdom the way, say, multiplication facts can be imparted.

Wisdom is probably best developed through role modeling and through the incorporation of dialectical thinking into one's processing of problems (Basseches, 1984; Labouvie-Vief, 1990; Pascual-Leone, 1990; Riegel, 1973; Sternberg, 1998, in press). Thinking can be dialectical either with respect to time or with respect to place. When it is with respect to time, it involves the recognition that ideas evolve over time through an ongoing, unending process of thesis, followed by antithesis followed by synthesis, with the synthesis in turn becoming the next thesis (Hegel, 1807/1931). When dialectical thinking occurs with respect to place (or space), it involves the recognition that at a given point in time, people may have diverging viewpoints on problems that seem uniquely valid or at least reasonable to them.

Thus, wisdom is related to practical intelligence in that it draws on tacit knowledge about oneself, others, and situational contexts, but it is only a refined subset of the tacit knowledge involved in practical intelligence. Practical intelligence has been defined in terms of maximizing practical outcomes. The practical outcomes may be for any one or more particular
Figure 1. A balance theory of wisdom. Tacit knowledge underlying practical intelligence is applied to balance intrapersonal, interpersonal, and extrapersonal interests to achieve a balance of the responses to the environmental context of adaptation to, shaping of, and selection of environments in order to achieve a common good. Values mediate how people use their tacit knowledge in balancing interests and responses.

individuals, but usually these outcomes are the outcomes of an individual and most typically of oneself. For example, when one manages oneself, others, or tasks (Wagner, 1987; Wagner & Sternberg, 1985), one's ultimate goal often is to maximize one's self-interest. Wisdom is involved when practical intelligence is applied to maximizing not just one's own or someone else's self-interest, but rather a balance of various self-interests (intrapersonal) with the interests of others (interpersonal) and of other aspects of the context in which one lives (extrapersonal), such as one's city or country or environment or even God.

Thus, whereas practical intelligence can be applied toward the maximization of any set of
interests—whether of an individual or a collective—wisdom is practical intelligence applied in particular to a balance of intrapersonal, interpersonal, and extrapersonal interests. It is a very special case of practical intelligence, one that requires balancing of multiple and often competing interests. Practical intelligence may or may not involve a balancing of interests, but wisdom must. Its output is typically in the form of advice, usually to another person, but sometimes for oneself.

An implication of this view is that when one applies practical intelligence, one deliberately may seek outcomes that are good for oneself or one’s family and friends but bad for the common good. For example, despots typically are practically intelligent, managing to control an entire country largely for their own benefit. Despots such as Hitler or Stalin even may have balanced factors in their judgments, but not for the common good. Or one may apply practical intelligence to maximize someone else’s benefit, as does a lawyer. In the subset of practical intelligence that is wisdom, one certainly may seek good ends for oneself (intrapersonal interests), but one also seeks to balance them with good outcomes for others (interpersonal interests) and with the contextual factors (extrapersonal interests) involved. The balance is then used to adapt to, shape, and select environments. For example, after hearing about as many relevant factors as possible, one might advise a college student to stay with his or her major but to work harder (adapt), to stay with the major but try to obtain waiver of a certain requirement or set of requirements (shape), or to find another major (select).

If one’s motivations are to maximize certain people’s interests and minimize other people’s, wisdom is not involved. In wisdom, one seeks a common good, realizing that this common good may be better for some than for others. A person who uses his mental powers to become an evil genius may be academically or practically intelligent, but the person cannot be wise. I do not attempt here a disquisition on what constitutes “good” and “evil,” believing such questions to be better dealt with by moral philosophy and religion.

I refer here to interests, which, together with the perceived facts of a situation, are the content to which wisdom is applied. Interests are related to the multiple points of view that are a common feature of many theories of wisdom (as reviewed in Sternberg, 1990a). Diverse interests encompass multiple points of view and thus the use of the term interests is intended to include points of view. Interests go beyond points of view, however, in that they include not only cognitive aspects of divergences but affective and motivational divergences also. Sometimes differences in points of view derive not so much from differences in cognitions as from differences in motivations. For example, executives in the tobacco industry for many years have defended their products. Their point of view may be divergent from those of many others, but the motivation of maintaining a multimillion dollar business may have more to do with the divergences in points of view than do any kinds of cognitive analysis. Economic interests no doubt motivate these executives to adopt a point of view favorable to the continued use in society of tobacco products. In order to be wise, therefore, one must understand not only people’s cognitions, but also their motivations and even their affects. Such understanding may involve applying one’s own cognitions, motivations, and affects to the understanding of other people’s. Wisdom involves, then, understanding people’s cognitions, motivations, and affects.

Problems requiring wisdom always involve at least some element of each of intrapersonal, interpersonal, and extrapersonal interests, although the weights may be different in different instances, just as they may be different for adaptation, shaping, and selection. For example, one might decide that it is wise to go to college, a problem that seemingly involves only one person. But many people are typically affected by an individual’s decision to go to college—parents, friends, significant others, children, and the like. And the decision always has to be made in the context of the whole range of available options. In making the decision, one selects a future environment and, in doing so, adapts to and shapes one’s current environment, as well as the environments of others. Similarly, a decision about whether to have an abortion requires wisdom because it involves not only oneself, but the baby who would be born; others to whom one is close, such as the father; and the rules and customs of the society. One also simultaneously is profoundly adapting to, shaping, and selecting the environment, both for oneself and for a potential infant.
The Role of Values

It is impossible to speak of wisdom outside the context of a set of values, which in combination may lead one to a moral stance or, in Kohlberg's (1969, 1983) view, a stage. Values mediate how one balances interests and responses and collectively contribute even to how one defines a common good. I do not believe it is the mission of psychology, as a discipline, to specify what the common good is or what values should be brought to bear in what proportion toward its attainment. Such specifications are perhaps more the job of religion or moral philosophy. I, at least, would be skeptical of any psychologist who claims to specify what people should think rather than how or why they think or should think. But I believe the intersection of wisdom with the moral domain can be seen by there being some overlap in the notion of wisdom presented here and the notion of moral reasoning as it applies in the two highest stages (4 and 5) of Kohlberg's (1969) theory. At the same time, wisdom is broader than moral reasoning. It applies to any human problem involving a balance of intrapersonal, interpersonal, and extrapersonal interests, regardless of whether moral issues are at stake.

Mental Processes Underlying Wisdom

As is true with all aspects of practical intelligence (Sternberg, 1985a, 1997a), wisdom involves a balancing not only of the three kinds of interests, but also of three possible courses of action in response to the balancing of interests: adaptation of oneself or others to existing environments, shaping of environments in order to render them more compatible with oneself or others, and selection of new environments. In adaptation, the individual tries to find ways to conform to the existing environment that forms his or her context. Sometimes adaptation is the best course of action under a given set of circumstances. But typically one seeks a balance between adaptation and shaping, realizing that fit to an environment requires not only changing oneself, but changing the environment also. When an individual finds it impossible or at least implausible to attain such a fit, he or she may decide to select a new environment altogether, leaving, for example, a job, a community, a marriage, or whatever.

Underlying wisdom in action is a series of processes executed in a manner that is typically cyclical and variable with respect to order of process execution. Among these processes are what I have referred to as metacomponents of thought (Sternberg, 1985a), which include (a) recognizing the existence of a problem, (b) defining the nature of the problem, (c) representing information about the problem, (d) formulating a strategy for solving the problem, (e) allocating resources to the solution of a problem, (f) monitoring one's solution of the problem, and (g) evaluating feedback regarding that solution. In deciding about college, for example, one first has to see both going to college and not going as viable options (problem recognition); then figure out exactly what going or not going to college would mean for oneself (defining the problem); then consider the costs and benefits to oneself and others of going or not going to college (representing information about the problem); and so forth. In wisdom, these processes are applied to balancing off the various interests of parties about which one needs to make a judgment or series of judgments.

The balance theory suggests that wisdom is at least partially domain specific, in that tacit knowledge is acquired within a given context or set of contexts. It typically is acquired by selectively encoding new information that is relevant for one's purposes in learning about that context, selectively comparing this information to old information in order to see how the new fits with the old, and selectively combining pieces of information in order to make them fit together into an orderly whole (Sternberg et al., 1993). These processes are referred to as knowledge-acquisition components in the triarchic theory of intelligence (Sternberg, 1985a).

The use of metacomponents and knowledge acquisition in wisdom or any other kind of practical intelligence points out a key relationship between wisdom and intelligence (as conceptualized by the triarchic theory). All aspects of intelligence—analytical, creative, and practical—involves use of metacomponents for executive processing and of knowledge-acquisition components for learning. What differs is the kind of context in which they are applied. Analytic intelligence is called on for relatively familiar, decontextualized, abstract, and often academic kinds of situations. Creative
intelligence is called on for relatively unfamiliar, novel kinds of situations. Practical intelligence is called on for highly contextualized situations encountered in the normal course of one's daily life.

People who acquire wisdom in one context may be those who would be well able to develop it in another context, but the tacit knowledge needed to be wise in different contexts may itself differ. For example, the wise individual in one society may be able to give useful advice in the context of that society. But the same advice might be suicidal in another society (e.g., to criticize a governmental policy as it applies to a particular individual). Thus the ability to be wise may transfer, but the actual content of wise advice may vary. A wise person will therefore know not only when to give advice, but when not to (see Meacham, 1990) because the individual will know the limitations of his or her own tacit knowledge.

As noted above, however, research has found significant correlations on scores of tacit knowledge across domains. For example, my colleagues and I found that scores on tests of tacit knowledge for academic psychology and management correlate significantly (Wagner & Sternberg, 1985), as do scores on tests of tacit knowledge for management and military leadership (Forsythe et al., 1998). Thus, although one's development of wisdom might be domain specific, the tacit knowledge one learns in one domain can extend to other domains.

Although tacit knowledge is acquired within a domain, it more typically applies to a field, following a distinction made by Csikszentmihalyi (1988, 1996). Csikszentmihalyi refers to the domain as the formal knowledge of a socially defined field. So, for example, knowing how to construct, conduct, or analyze the results of experiments would be knowledge important to the domain of experimental psychology. But knowing how to speak about the results persuasively, how to get the results published, or knowing how to turn the results into the next grant proposal would constitute knowledge of the field. Thus, academic intelligence seems to apply primarily in the domain, whereas practical intelligence in general and wisdom in particular seem to apply primarily in the field. Because the field represents the social organization of the domain, it is primarily in the field that intra-personal, interpersonal, and extrapersonal interactions take place.

The much greater importance for wisdom of the field than of the domain helps to clarify why, in the balance theory, tacit, informal knowledge rather than explicit formal knowledge is the basis of wisdom. Formal knowledge about the subject matter of a discipline is certainly essential to expertise in that discipline (Chi, Glaser, & Farr, 1988; Hoffman, 1992), but domain-based expertise is neither necessary nor sufficient for wisdom. Most people know domain-based experts who seem pretty near the bottom of any scale when it comes to wisdom. At least some people also know very wise individuals who have little formal education. Their education is in the "school of life," which is in the acquisition of tacit (informal) knowledge.

**Sources of Developmental and Individual Differences in Wisdom**

The balance theory suggests a number of sources of developmental and individual differences in wisdom. In particular, there are two kinds of sources, those directly affecting the balance processes and those that are antecedent. *Individual and developmental differences directly affecting the balance processes.* There are five such sources:

1. Goals: People may differ in terms of the extent to which they seek a common good and thus in the extent to which they aim for the essential goal of wisdom.
2. Balancing of responses to environmental contexts: People may differ in their balance of responses to environmental contexts. Responses always reflect an interaction of the individual making the judgment and the environmental context, and people can interact with contexts in myriad ways.
3. Balancing of interests: People may balance interests in different ways.
4. Practical intelligence manifested as tacit knowledge: People bring different kinds and levels of tacit knowledge to judgmental situations, which are likely to affect their responses.
5. Values: People have different values mediating their utilization of tacit knowledge in the balancing of interests and responses.

These sources of differences produce variation in how wise people are and in how well they
Wisdom is something that unfolds over the course of the life span and not just during childhood or even in early years of adulthood. The above sources of individual differences pertain to the balancing processes. Other sources are antecedent to these processes.

**Developmental and individual differences in antecedent variables.** Antecedent variables leading to developmental and individual differences are those specified by my earlier theory (Sternberg, 1990b). They include (a) knowledge, (b) analytical and creative as well as practical thinking (Sternberg, 1997a), (c) a judicial thinking style (Sternberg, 1997b), (d) personality variables, (e) motivation to think wisely, and (f) environmental variables.

**Relation of the Proposed Balance Theory to Other Balance Theories in Psychology**

The idea of balance in psychological theories is certainly not new. For example, Heider (1958) proposed a balance theory of interpersonal attraction, although the balance to which he referred was among polarities (positive or negative) in the interpersonal relationships between all three pairings of the triad among three persons (i.e., the A to B, A to C, and B to C relationships linking A, B, and C). The triad was said to be balanced when there was an even number of negatives (e.g., A and B both feel negatively toward C and vice versa, but A and B both feel positively toward each other). An odd number of negatives resulted in an unbalanced, unstable triad (e.g., A and B feel positively toward C, and vice versa, but negatively toward each other). These balances are not relevant to the present theory of wisdom, however.

In the cognitive and developmental literatures, balance has been suggested as important in some theories of intelligence. For example, Piaget (1972) proposed that the development of intelligence involves an equilibration, or balance, between assimilation (modification of the way one understands a concept or object). As another example, Sternberg and Frensch (1989) proposed a balance-level theory of intelligent thinking involving a balance between coping with novelty and proceduralization. These kinds of balance, too, are not directly relevant to the theory proposed in this article.

The notion of balance also has played an important role in theories of wisdom. Philosophical conceptions of wisdom (reviewed in Baltes, in press; see especially Hartshorne, 1987) and especially Chinese conceptions (reviewed in Yang, 1998) note the importance of balance, as do psychological theories such as the ontogenetic theory of wisdom proposed by Baltes and his colleagues (see Baltes, 1993; Staudinger & Baltes, 1994; Staudinger et al., 1997).

Staudinger and Baltes (1996) specified a family of five criteria, mentioned above, that characterize wisdom and wisdom-related performance. In contrast, the theory proposed here views wisdom as inherent in the extent to which a task requires a person to balance the interests of him or herself, others, and the context for a common good, such that the decision making leads to adaptation to, shaping of, and selection of environments. Although the basic claim is simple, the actual balancing is extremely complex, and it is unlikely that any theory of wisdom can provide a normative “formula” to be used to achieve this balance.

What is new in the balance theory is not the concept of balance, per se, but the proposed specification of the particular conjunction of elements that are balanced (intrapersonal, interpersonal, and extrapersonal interests balanced to achieve a common good through a balance among adaptation to, shaping of, and selection of environments). Also new is the proposed specification of the relation between wisdom and practical intelligence, in particular, and intelligence, more generally.

The balance theory is further related to other theories of wisdom in a variety of ways. Consider some of the main theories and the relation to the balance theory proposed here.

Wisdom requires an individual to see the other's point of view, a skill emphasized in Kitchener's (1986) model of reflective judgment. But wisdom requires not only the ability to see each point of view, but further requires the ability to formulate a solution that takes into account these points of view and that also will
be acceptable to all parties to a negotiation. Thus, one needs not only understand each party's perspective, but also to understand how to craft a solution, given these points of view. It further requires one to recognize the interests underlying the points of view, as mentioned earlier. Wisdom in the balance theory is also directed toward a good, as in Csikszentmihalyi and Rathunde's (1990) theory.

The nature of balance in the theory proposed here is somewhat different from the nature of balance in some of the other models (e.g., Kramer, 1990), which are intrapersonal balances of cognitive, conative, and affective systems. In the present model, the individual can use whatever internal systems he or she wants in making judgments. But the individual must understand how these systems work in him or herself and in others. Intrapersonal balance refers not to a balance of such systems, but of the various kinds of interests one has oneself. For example, wisdom from an intrapersonal standpoint might balance one's own short- and long-term interests, or one's desire to engage in an activity that one enjoys with the recognition that the activity one enjoys poses substantial risks.

**Relation of Wisdom to Other Constructs**

According to the balance view, wisdom is related to practical intelligence, a point also made in the extensive work of Baltes and his colleagues (e.g., Baltes & Smith, 1990), but the two constructs are not the same. In practical intelligence in general, tacit knowledge typically is used in a way that does not balance interests to achieve a common good. The subset of practical intelligence that is wisdom applies when the tacit knowledge is used maximally to advance the balanced joint interests of oneself, others, and the context for a common good to adapt to, shape, and select environments. One may actually take a loss for oneself in advancing the joint benefit. On this view, wisdom and egocentricity are incompatible. People who are practically intelligent but not wise, however, can be quite egocentric. Some of the most successful individuals, at least by the conventional standards of society, seem to be people who have gotten where they are by not taking other people's interests into account or even by actively thwarting the interests of others. They might be viewed as practically intelligent, but on the view proposed here, they would not be viewed as wise.

Consider a concrete example where practical intelligence and wisdom are not the same. In a negotiation between management and a union, negotiators are often chosen for their practical intelligence—their ability maximally to advance the interests of their respective parties. But negotiations in which the two sides seek only to advance their own interests typically go nowhere. If the two parties do not have the wisdom to reach an agreement, sometimes a third party is brought in who, it is hoped, will have the wisdom to help the negotiating parties reach a settlement. Such an individual must take into account his or her own (intrapersonal) role, as well as the interpersonal and extrapersonal factors involved in the negotiation. Similarly, in international relations, if the parties to a dispute cannot reach an agreement, a mediating party (such as the United Nations) is hoped to have the wisdom to help the disputants reach some kind of settlement.

Wisdom seems to bear at least some relation to constructs such as social intelligence (Cantor & Kihlstrom, 1987; Sternberg & Smith, 1985), emotional intelligence (Goleman, 1995; Mayer & Salovey, 1993; Salovey & Mayer, 1990), and interpersonal and intrapersonal intelligences (Gardner, 1983). There are also differences, however. Social intelligence can be applied to understanding and getting along with others, to any ends, for any purposes. Wisdom seeks out a good through a balancing of interests. Thus, a salesperson who figures out how to sell a worthless product to a customer might do so through using social intelligence to understand the customer's wants, but has not applied wisdom in the process. Emotional intelligence involves understanding, judging, and regulating emotions. These skills are an important part of wisdom. But making wise judgments requires going beyond the understanding, regulation, or judgment of emotions. It requires processing the information to achieve a balance of interests and formulating a judgment that makes effective use of the information to achieve a common good. Moreover, wisdom may require a balance of interpersonal and intrapersonal intelligences, but it also requires an understanding of extrapersonal factors and a balance of these three factors to attain a common good. Thus wisdom seems to
go somewhat beyond these two theoretically distinct kinds of intelligences also. Perhaps the most salient difference among constructs is that wisdom is applied toward the achievement of ends that are perceived as yielding a common good, whereas the various kinds of intelligences may be applied deliberately toward achieving either good ends or bad ones, at least for some of the parties involved. Interestingly, the conception of wisdom proposed here is substantially closer to Chinese conceptions of intelligence than to many European and American conceptions of intelligence (Yang & Sternberg, 1997a, 1997b). Indeed, one of the words used in Chinese to characterize intelligence is the same as the word used to characterize wisdom.

Problems Measuring (and Not Measuring) Wisdom

If one looks at the kinds of problems that have been used to measure wisdom in empirical work, notably of Baltes and his colleagues, one can evaluate the degree to which they measure wisdom, at least according to this balance theory. A life-planning task (Baltes, Staudinger, Maercker, & Smith, 1995) would be an excellent task for measuring wisdom because it involves one's own interests, but may and usually will take into account the interests of others about whom one cares deeply as well as the context in which one lives and may live in the future. A task in which one must decide what to do when a good friend calls and says he or she wants to commit suicide (Staudinger & Baltes, 1996) would also involve the interests of the other, one's own interest in getting involved and possibly failing to convince the person not to commit suicide, and also the difficulty of acting in the context of an unexpected telephone call. Similarly, counseling a 14-year-old girl who is pregnant or a 16-year-old boy who wants to marry soon (Baltes & Smith, 1990) both involve balancing of the interests of the individuals to be counseled, the other people in their lives, and the costs of giving the wrong advice.

Perhaps the ideal problems for measuring wisdom, in light of the balance theory proposed here, are complex conflict-resolution problems involving the formation of judgments, given multiple competing interests and no clear resolution of how these interests can be reconciled (see, e.g., Sternberg & Dobson, 1987; Sternberg & Soriano, 1984). For example, one might be asked to resolve a conflict between a couple over whether the husband's mother should be allowed to come to live with the couple. Given the relevance of such problems, it makes sense that Baltes and his colleagues (Smith, Staudinger, & Baltes, 1994) would have found that clinical psychologists would do particularly well on wisdom-related tasks. Another group who might be expected to do well would be experienced foreign-service officers and other negotiators who have helped nations in conflict reach resolutions of their disagreements.

Part of wisdom is deciding not only what course of action best balances off various interests, but whose interests are at stake and what the contextual factors are under which one is operating. A high-level display of wisdom requires identification of all relevant stakeholders. Thus some wisdom might be involved in resolving a conflict between management and a trade union in a way that provides equitable benefits to both. But a higher level of wisdom might be needed to take into account as well that other stakeholders' interests are involved, including share holders, customers, people who live near to the organization, and perhaps others also.

The tacit-knowledge approach to measurement described above might present a useful way of measuring wisdom. The exact problems would differ, however, from those we have used to measure practical intelligence. In particular, the problems would involve solutions that maximize not just one's own self-interest, but a variety of intrapersonal, interpersonal, and extrapersonal interests. The stakes, therefore, would be higher and more complex, because so many different interests would be involved. In our current work, my colleagues and I are using tacit-knowledge problems of these kinds to assess wisdom and its relation to other constructs.

In contrast to problems such as the ones suggested above or the ones Baltes (in press) and his colleagues have used, typical problems found on conventional tests of intelligence, such as the Stanford-Binet (Thordike, Hagen, & Sattler, 1986) or the Wechsler (Wechsler, 1991), measure wisdom minimally or not at all, according to the balance theory. There is no obvious similarity between these problems and
the kinds of problems described above that would measure wisdom. Even when they measure thinking in a variety of domains, they typically do not involve balancing judgments about intrapersonal, interpersonal, and extrapersonal interests for purposes of adapting to, shaping, and selecting environments. Similarly, there is little apparent similarity between problems measuring wisdom and those measuring creativity, whether from a psychometric point of view (e.g., Torrance, 1974) or from a systems point of view (e.g., Sternberg & Lubart, 1995). For example, wisdom-related problems seem remote either from finding unusual uses of a paper clip or from writing creative short stories, drawing creative pictures, or devising creative scientific experiments or explanations.

Although wisdom problems seem remote from problems found on conventional intelligence tests, people's implicit theories of wisdom are rather close to their implicit theories of intelligence and people expect, to a large degree, that people high in wisdom will be high in intelligence. The same relation holds true, but to a lesser extent, for creativity (see Sternberg, 1985b). Scores on wisdom-related tasks also overlap with scores on tasks measuring intelligence and other abilities as well as tasks measuring personality and thinking styles (Staudinger et al., 1997). For example, the groups of participants that Baltes and his colleagues have tested and identified as high in wisdom, such as expert clinical psychologists, could be expected to be high in IQ. But the evidence is not clear that other groups as high or higher in IQ (e.g., expert physicists or mathematicians) necessarily would be as wise (and of course they might be wiser—no one knows at this point). The evidence that old adults perform about as well as young adults on wisdom-related tasks (e.g., Staudinger et al., 1992) suggests that, to the extent that wisdom covaries with intelligence, it covaries more with crystallized than with fluid abilities (Cattell, 1971).

Much is still to be learned about how wisdom functions as an individual-differences variable. It is plausible to speculate that the potential for wisdom may be in part genetic, given that other kinds of potentials seem to be at least in part genetic (see Sternberg & Grigorenko, 1997b). But the tacit knowledge necessary for wisdom must be environmentally acquired, so that genetic factors could only be necessary but never sufficient for the development of wisdom. (Indeed, the same argument could be made for any ability, as abilities always manifest themselves in an environmental context.) Far more important, it seems, would be the kinds of experiences one has and what one learns from them. The development and display of wisdom also would seem to be partly attitudinal, involving a decision that one wishes to use one's tacit knowledge for the balanced benefit of others and the environment, not just for the benefit of oneself.

There is one source of evidence that suggests that, as individual-difference variables, wisdom and intelligence might be rather different "kettles of fish." Researchers have shown that IQs have been rising substantially over the past several generations (Flynn, 1987; Neisser, 1998). The gains have been experienced both for fluid and for crystallized abilities, although the gains are substantially greater for fluid than for crystallized abilities. Yet it is difficult for some to discern any increase in the wisdom of the peoples of the world. Of course tests administered over time might have revealed otherwise. But the levels of conflict in the world show no sign of deescalating, and conflicts recently have intensified in many parts of the world where formerly they lay dormant (as in the former Yugoslavia). So maybe it is time that psychologists, as a profession, take much more seriously the measurement of wisdom and the formulation of theories and theory-based measures of wisdom. Although there has been work in the area, the amount of work is dwarfed by work on intelligence. And perhaps psychologists even need to be concerned about how they might create experiences that would guide people to develop wisdom as much as psychologists have been concerned in some quarters about guiding people to develop their intelligence (see, e.g., Perkins & Grotzer, 1997).

From a theoretical standpoint, wisdom is quite distinct both from intelligence as traditionally defined and from creativity. In terms of the triarchic theory (Sternberg, 1985a), wisdom derives primarily from practical intelligence, traditional intelligence primarily from analytical intelligence, and creativity primarily from creative intelligence. The three aspects of intelligence are statistically quite distinct (Sternberg, 1997a). In terms of the theory of mental self-government (Sternberg, 1997b), wisdom
draws primarily on a judicial (judgmental, evaluative) style, traditional intelligence primarily on an executive (implementing, executing) style, and creativity primarily on a legislative (inventive, rebellious) style. The wise person uses knowledge primarily to make balanced judgments about problems in the context of a field, whereas the creative person typically uses knowledge primarily in extending a domain, often in a decidedly unbalanced and extreme way. The traditionally intelligent person is someone who has shown an ability to use knowledge that is as abstracted as possible from traditional context-rich domains (as can be seen by the inclusion of abstract-reasoning items on conventional intelligence tests). In terms of personality, the wise individual seeks to resolve ambiguities whereas the traditionally intelligent person excels in problems that have few or no ambiguities (and thus can be “objectively” scored as right or wrong). The creative person often creates ambiguity or at least must be tolerant of it (according to the investment theory of creativity; Sternberg & Lubart, 1995).

To the extent psychologists want people to be simultaneously intelligent, creative, and wise, they need to develop different skills and dispositions in people. Psychologists also have to realize that in the future as in the past, the people who are notable for being traditionally intelligent, creative, or wise often may not be the same people. None of these attributions is any guarantee of any of the others. Schools cannot assume that developing or measuring one will spill over into developing or measuring another.

Schools place a great deal of emphasis on developing academic skills. But in a society that seems largely ruled by self-interests, students often start to develop practical skills in order to use schooling primarily to maximize their self-interests. Perhaps if schools put into the development of wisdom even a small fraction of the effort they put into the development of an often inert knowledge base, some of the conflicts that have arisen so quickly in the world would also disappear, if not quickly, at least in due course. One cannot know for sure, but is it not worth the effort to find out?

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