Constructing Evaluations: The Meaning-Making Process of Adjectives

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This dissertation analyzes evaluation and adjectival meaning, focusing on their production processes. Whether they are expressed as language or any other form, evaluative judgments appear to be considerably frequent and ubiquitous. Imagine, for example, when you move outside and see various things such as shops, cars, people, and the sky, you might think, "this shop is *cute*," "that car is very *fast*," "these men are *gentle*," "the weather is *bad*," *etc*. Although it is obvious that they emerge from the mind, how such judgments are created within the mind remains a mystery. For instance, *why* did you judge that shop as *cute*? *How* did you regard those men as *gentle*? Furthermore, it is of key importance here that such appraisals, when represented linguistically, are externalized with an adjective in many cases, as they are considered an inherent portion of adjectives' meaning. Although the adjective category has long been examined by linguistic surveys from different perspectives, no linguist has been able to accurately answer the following questions: How does one produce an adjective? How does the brain create an adjectival meaning? How does such a meaning-making for adjectives vary by individual or culture? To address these questions, considering the mapping of evaluation and adjectives' meaning, the author first discusses them theoretically before proceeding with an experimental demonstration to ensure empirical reliability.

This thesis is composed of three parts (Parts I–III). As for the overall design, the author approaches the project from the ground up, moving from basic foundations to application. Part I begins by laying the foundation for all the following sections, exhibiting the basic attitude toward the meaning study. Part II, or the following three chapters, theorizes the structure and process of evaluation, from elements responsible for an assessment to a wide range of actual applications. Part III conducts an experimental examination from both universal and cultural viewpoints. As for the former, Chapter 6 demonstrates some of the components that lead to an appraisal (*competitor, standard, background scale,* and *judge*) through drawing and eye-tracking tasks. In terms of the latter, Chapters 7 to 10 attend to cultural effects related to the evaluative process from different perspectives—*objectivization, relativity, empathy,* and *Figure-Ground reversal*—and test them using the size evaluation task and the situation-based sentence acceptance test. Finally, the concluding chapter summarizes all the proposals, points out limitations and future research directions, and discusses applications to other academic fields and daily life.

Chapters 1 and 2—Part I—form the basis for discussion. Chapter 1 starts by defining the research targets, methods, and purposes while presenting an overview of all sections. It introduces significant research questions that have never been resolved by previous studies and should be addressed now. Chapter 2 lays out the fundamental view of how semantic studies should be developed for the coming era in linguistics, in reference to other fields of science. This chapter is based on the belief that language must be realized by lower levels: psychological and biological (or neurological) functions. Thus, studying language as a cognitive (neuro)science, which does not mean cognitive linguistics, allows one to approach the core system of meaning, using scientific methods of building a hypothesis (cognitive model) and proving it empirically with experiments. This chapter also states that cognitive scientists (including language scientists) should consider

the assumption of cultural psychology that cognitive processes are not universal but vary according to culture or society, strongly affected by the cultural values acquired and accumulated through life experiences.

Chapters 3 to 5—Part II—are devoted to constructing a theory of evaluation. Chapter 3 enumerates and characterizes the evaluative components that make up an assessment: *target, competitor, foreground scale, background scale, standard, norm, speaker, hearer, judge, time axis*, and *subsequent action*. As these are significant elements of appraisal, their explanations serve as the basis for all the remaining chapters. Chapter 4 explains the canonical evaluative process, breaking it down into smaller pieces, from start to end. The process of evaluation is regarded as a combination of these small processes. Under full *transparency* and *analyzability*, a series of this process turns out to be considerably complicated and requires heavy computation from the speaker. Chapter 5 identifies several factors that diversify the process for daily but complex evaluations. After categorizing numerous kinds of value judgments used frequently in life, the functional differences between them are discussed to specify the factors by which different realistic appraisals are created.

Chapter 6, the first section of Part III, embarks on experimental work. The author starts by focusing on competitor, standard, background scale, and judge—commonly classified as *background* elements—and puts them to test. Two experiments, drawing and eye-tracking tasks, examine what are *drawn* and *watched*, respectively, as relevant contexts when perceiving an adjective expression. The results of these experiments revealed that participants were significantly more inclined to draw images pertaining to those components and pay more attention to objects presenting them than other surrounding items. This suggests that all these elements are relevant and important for adjectives and their meaning-making process.

Chapters 7 to 10—the following sections of Part III—reveal cultural or social impacts on the cognitive process of assessment by experimental means, recruiting participants via the Internet. Chapter 7 addresses cultural differences in *objectivization*, which is initially sorted into four senses (1. *exclude judges*, 2. *increase judges*, 3. *focus on a target*, 4. *broaden a scope*), and in part demonstrates the opposite direction between Japanese (stressing the 2nd and 4th senses) and American English speakers (emphasizing the 1st and 3rd senses), after narrowing down to some adjectives. Chapter 8 analyzes cross-cultural distinctions in the relative degree of two criteria, or the *standard* and *norm*, corresponding to *absolute* and *relative* judgments, respectively. The size evaluation task, which presents images containing different situations (visual contexts) as a stimulus and then asks participants to evaluate a target in height, indicated that American and Japanese judgments were affected by absolute and relative contexts, respectively, if compared to one another.

Chapter 9 attends to *joint attention* from a cultural standpoint. Such an intersubjective act itself is not culturally tied (i.e., it is universal), but its strength and manner seem to depend on the cultural context. According to the experiment, Japanese participants showed a stronger tendency than their American counterparts to read one's judgment when evaluating a target. Moreover, they preferred to rate an object from the viewpoint of a *child* or a *little animal*, compared to English speakers. Chapter 10 addresses the *fictive motion* based on *Figure-Ground reversal* (e.g., "my town felt *smaller*") and its cultural/linguistic differences. The results of the experiment showed that Japanese speakers, compared to English speakers, posited a stronger constraint (i.e., more idiosyncratic) on these types of expressions. This suggests that the *metacognitive* bias of the Japanese, proposed by studies of cultural psychology, prevents them from taking an egocentric sight involved in those expressions when compared to English speakers.

Chapter 11 concludes this thesis. After restating all the proposals and findings, the author reasons that

future studies need to address several limitations. Owing to both the broad nature of the theory and the narrow focus of each of the current experimental studies, there is still plenty of room for other empirical demonstrations. Moreover, to unravel the mental behavior of the evaluation or meaning-making process, acquiring not only psychological but also biological realities, it is necessary to conduct neurological surveys in the future. Finally, the author describes different contributions made not only to the linguistic sphere but also to other academic fields and the general public. The author hopes that research based originally on linguistic meaning could be useful for other scientific disciplines, including psychology, economics, sociology, AI fabrication, and cognitive science, and that it would finally urge people to reflect more on their own evaluations, thereby affecting their behaviors and attitudes toward things around them.