

**Mental and Social Processes:  
Linguistic and Contextual Factors of Concern for Japanese Readers of EFL**

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Due Date: December 8, 2008  
Submission Date: December 8, 2008

## **Mental and Social Processes: Linguistic and Contextual Factors of Concern for Japanese Readers of EFL**

After nearly a half-century of cognitivist hegemony, Firth and Wagner's (1997) manifesto supporting "a reconceptualization of SLA... that endeavors to attend to... the *social* and *cognitive* dimensions of S/FL use and acquisition" (p. 286, their emphases) bifurcates an already contentious field (cf. Larson-Freeman, 1991; Berretta, 1991). Gass (1998) responds to Firth and Wagner stating that research should focus on the "*language* used and not on the act of communication" (p. 84, her emphasis). Likewise, after Freeman and Johnson (1998) assert that "language teaching cannot be understood apart from the sociocultural environments in which it takes place" (p. 409), Yates and Muchisky (2003) counter that by "ignoring the core subject areas of language and SLA research... the field [will] lose any coherence as a separate discipline" (p. 144). Today, the sociocontextualist/cognitivist debate on SLA's research scope continues (cf. Zuengler & Miller, 2006); so, after surveying the issue, I contend that for teachers and researchers not to consider language use and context as part of SLA research amounts to professional malpractice, since linguistic factors, as well as contextual factors, combine to affect acquisition, as can be observed in this examination of the factors that affect Japanese readers of EFL.

### **The Post-Firth-and-Wagner (1997) Bifurcation**

#### ***The Cognitivists***

Responding to Firth and Wagner's challenge, Long (1997) subsumes sociocontextual factors by insisting that the goal of research on SLA should be "to understand how changes in that internal mental state are achieved... and which learner, linguistic and social factors (and, where relevant, which instructional practices) affect and effect the process" (as cited in Larson-Freeman, 2007, p. 778). Doughty and Long (2003) even state that for SLA "to achieve the stability, stimulation, and research funding to survive as a viable field of inquiry [becoming a branch of] cognitive science is the logical choice" (as cited in Zuengler & Miller, 2006, p. 37). Even more recently, Han (2007) questions the relevance of a "Pedagogical Implications" section among *TESOL Quarterly's* research articles, warning that the combination of "empirical study and classroom practice may be counterproductive to research and practice" (p. 391).

#### ***The Sociocontextualists***

After Firth and Wagner (1997) state that pure cognitivism "obviates insight into the nature of language, most centrally the language use of second or foreign language (S/FL) speakers" (p. 285), they advocate for a research field that no longer prioritizes "the individual-as-'nonnative speaker'/'learner' over the participant-as-language-'user' in social interaction" (p. 286). Hall (1997) builds on these points by suggesting that SLA research should also involve "the discursive routinization of... communication practices and the means by which [they are realized]" (as cited in Larson-Freeman, 2007, p. 776). Lantolf and Johnson (2007) sum up the relativist stance when they stress "the argument is

not that social activity influences cognition, but that social activity is the process through which human cognition is formed” (p. 878).

### **Linguistic and Contextual Factors of Concern for Japanese Readers of EFL**

To help reduce this debate on SLA’s scope, an examination of factors that affect acquisition may provide insight. In the case of Japanese undergraduate EFL students, several linguistic factors, such as differences in orthography, morphology, orthographic depth, and phrasal structures, as well as several contextual factors, such as ethnocentric attitudes, enculturated writing patterns, unmotivating classrooms, and enculturated learning strategies, combine to affect L2 reading ability.

#### ***Linguistic Factor #1: L1 Orthography Affects English Word Recognition***

Japanese readers of EFL must reduce the negative transfer resulting from different writing systems, as bottom-up word recognition skills remain vital for comprehension (Akamatsu, 1998, p. 16). Although not disadvantaged in terms of “visual discrimination” speed (Iwai, 2008, p. 47), Japanese students have less experience in the “intraword component... computational analysis” (Akamatsu, 1998, p. 20) required to produce phonemes compared to English learners whose L1 writing systems are “decomposable phonetically” (Morton & Sasanuma, 1984, p. 26), e.g. Italian or Korean. This inexperience results from Japan’s two types of writing systems: kana, which is read phonetically, and kanji, which is read visually (Morton & Sasanuma, 1984, p. 40).

As “syllabograms” (Iwata, 2007, p. 253), most kana, i.e. 40 out of 46, follow a consonant-vowel pattern. With no consonant clusters to contend with, “Japanese children learn kana-sound correspondences by rote” (Morton & Sasanuma, 1984, p. 26), relying on memory to attach phonemes to ideographic units. As a result, readers must nurture their analytical skills so that they can more easily bundle constituent units into speech units (Akamatsu, 1998, p. 20). Otherwise, when presented with English words, such as *hotdog* and *McDonalds*, they realize them, instead, as *hottodogu* and *Makudonarudo*.

As “morphograms” (Iwata, 2007, p. 253), kanji pictorially signify nouns and verbs. Even though phonemic units come attached, translating kanji into meaning “proceeds without any phonological activity” (Morton and Sasanuma’s, 1984, p. 38). One reason for this is the “[high] degree of homophony in Japanese” (p. 38) - phonological decoding does little to assist in accessing meaning. As a result, when kanji are read, the meaning forming “lateral fusiform gyrus” (Sakurai, Momose, Iwata, Sudo, Ohtomo, & Kanazawa, 2000, p. 113) activates, and the “middle occipital gyrus” (p. 113), the area believed to be responsible for “grapheme-to-phoneme conversion” (p. 114), remains inactivated. In contrast, when kana are read, the middle occipital gyrus activates as well (p. 113). Therefore, with so little inexperience in attaching phonemes to nouns and verbs, processing English sentences becomes counterintuitive and unnatural.

These “dual processing routes for word recognition” (Aro, 2006, p. 535), one based on syllabogram-sound translation and the other based on morphogram-word recognition - both dissimilar to the process of converting “letter clusters” (Akamatsu, 1998, p. 18) into phonemic units - make it difficult for Japanese students to become

“good readers” with “superior phonetic segmentation and recoding abilities” (Stanovich, 1980, p. 64).

### ***Linguistic Factor #2: Differences in Morphology Affect Reading Comprehension***

Japanese readers have much to learn regarding English morphology. For example, in Japanese there are no inflections on verbs to indicate person or number, but many other types exist, such as negation, desire, probability, obligation, volition, and causation, so relying on the L1 to inform morphological processing is not often an option. Inflections in Japanese are written in kana and attached to kanji, so morphological parsing remains clear (Morton & Sasanuma, 1984, p. 38). On the other hand, parsing in English is more difficult since there is nothing to signal when the “morph ends and the morpheme begins” (p. 38). In order to understand “novel forms such as *fruitpepper* and *reflocking*,” students must familiarize themselves with “the constituent morphemes of complex and compound words” (Libben, 2003, p. 221). One way to do to this is to improve their “ability to use the redundancy of text” (Smith, 1971, as cited in Stanovich, 1980, p. 37), since “the only path to comprehension is through morphological decomposition” (Libben, 2003, p. 221).

### ***Linguistic Factor #3: Orthographic Depth Affects Word Recognition***

The orthographic depth hypothesis, promulgated by Katz and Frost (1992) states that “the ability to read a text is dependent... [on] the regularity of transcription of phonemes” (as cited in Spencer, 2006, p. 42), and Aro (2006) suggests that depth depends on “transparency, regularity, and consistency” (p. 532). Japanese became a shallow orthography with a simple grapheme-phoneme correspondence as a result of the Meiji government’s (1868-1912) decree to establish a one-to-one relationship between pronunciation and kana (Coulmas, 2002, p. 211). English, on the other hand remains a deep orthography, where “grapheme-phoneme correspondences are complex and irregular” (Aro, 2006, p. 532). In fact, “31% of English monosyllabic words are inconsistent (Ziegler, Stone, & Jacobs, 1997, as cited in Aro, 2006, p. 533), mainly because of the preservation of spelling and pronunciation in loan words and the lack of standardisation until the middle of the 18<sup>th</sup> century (p. 534). Another factor that creates orthographic depth in English is its “morphophonemic” (p. 534) spelling system, i.e. the spelling of roots is phonemic, and the spelling of derivatives and compounds tends to be morphemic. As a result of these inconsistencies, reading in English takes two or three years longer to master than other European languages (Seymour et al., 2003, as cited in Spencer, 2006, p. 42.). Beginning readers must, therefore, learn to replace grapheme-phoneme conversion strategies with strategies that encourage the recognition of “units such as rime and whole word” (Aro, p. 532).

### ***Linguistic Factor #4: L1 Phrase Structure Affects English Sentence Reading***

Another major hurdle for Japanese EFL readers is the fact that merging individual words into “larger phrase or clause units” (Fender, 2003, p. 305) proves challenging as their L1 is, structurally, a head-last language. Results from a reading task comparing the word integration skills of a head-first ESL group, Arabic, with a Japanese ESL group,

indicate that lexical integration for Japanese speakers takes longer, since parsing prepositions instead of postpositions and placing verbs before objects are not automatic processes (p. 301). Juffs (1998) also indicates that since so many “different argument structure requirements” (p. 413) exist, postlexical word processing skills remain challenging even for highly proficient Japanese readers of English.

### ***Contextual Factor #1: Ethnocentric Influences Affect Attitude***

Compounding Japanese EFL linguistic-based problems are contextual factors, such as Japan’s strong sense of nationalism. Although Japan is the first country to consciously and deliberately emulate the West, “they did it on their own terms” (Smith 1965, as cited in Coulmas, p. 204). Nevertheless, the late 19<sup>th</sup> century drive toward modernization provoked mass “anti-Western nationalism” (Coulmas, 2002, p. 212 ). With suggestions to remove kanji, and even to adopt the English alphabet, resulting in a violent backlash, the language of Japanese became known as the “spiritual blood of the people” (Coulmas, 2002, p. 212), and a “key symbol of Japan’s ethno-national identity” (p. 203). Indeed, whereas high school students in Canada take *English* class, Japanese students take *national language* class. In modern times, nationalistic sentiment still incites debate regarding the “necessity of promoting English language education” (Kawai, 2007, p. 41). With such strong nationalistic sentiment tied to language, individual citizens’ motivation to adopt an L2 may falter.

### ***Contextual Factor #2: Cultural Writing Patterns Influence Formal Schemata***

As a result of students’ culturally learned formal schemata, arriving at the “top-level ideas” (Carrell, 1987, 469) of a Western-style English academic text could prove challenging. The contrast between Japan’s commonly used “specific-to-general (inductive) pattern” and Western countries’ “general-to-specific (deductive)... pattern” (Silva, 1993, p. 664) does little to serve Japanese readers of English, since “rhetorical form is a significant factor, more important than content, in the comprehension of the top-level episodic structure of a text” (Carrell, 1987, p. 476). Without “multicultural pluralism” (Connor, 1996, p. 7) or the “appropriate formal schema for a particular text” in order to organize “recall protocols according to that formal schema” (Carrell, 1984, as cited in Barnett, 1989, p. 46) readers retrieve and retain less information.

### ***Contextual Factor #3: Classrooms Affect Motivation***

Japanese public English classrooms cause readers to lack motivation, since they tend to be overcrowded, teacher-centred, and non-communicative (Nishino & Watanabe, 2008, p. 135). Teachers often focus more on students streamlined for university; so, below-average students may fall even further behind or feel uncompelled to study since every student passes to the next grade regardless of performance (p. 14). Reader interest also drops because Ministry prescribed texts are often boring (Atsuta, 2003, p. 13). Japan’s enculturated “perfectionistic tendency” (Sumi & Kanda, 2002, p. 824) may also demotivate students to attempt speaking English for fear of making a mistake and

shaming themselves. Since the above factors influence students' ability to learn English, reading comprehension also suffers.

#### ***Contextual Factor #4: Enculturated Learning Practices Affect Comprehension***

Other contextual factors include the intensive-reading and grammar translation strategies students develop in preparation for university entrance exams (Nishino & Watanabe, 2008, p. 136). Rather than read to learn or read for enjoyment, tenets of extensive-reading programs, high school students read intensively to strengthen their analytical and grammatical skills (Iwai, 2008, p. 45). By reading short passages for accuracy, students build their vocabulary and attempt to understand, not only meaning, but also how syntax produces meaning (Brumfit, 1978, pp. 175-176). School-taught grammar-translation methods, as well, rather than promote “[thinking] about... meaning in context” (Iwai, 2008, p. 45), emphasize understanding mainly at the lexical level. As a result, students miss out on “process-oriented instruction” that provides “an awareness of the nature of the reading process” (Block, 1992, p. 336). Even after entering university, students continue to “consult their dictionaries every time they come across an unknown word” (Iwai, 2008, p. 47), putting themselves in danger of “forgetting what they have already read” (p. 47).

### **Discussion**

Just as clinical psychology split into cognitive and applied psychology 50 years ago, and is just now coming together to form social-cognitive psychology (Barone, Maddux, & Snyder, 1997, pp. 7-8), SLA research could be experiencing growing pains. As a result, SLA cognitivists and sociocontextualists continue to debate about purity, perspective, and practical application; however, as can be deduced, both linguistic and contextual factors, such as orthography, morphology, orthographic depth, phrasal structure, ethnocentric influence, enculturated writing patterns, unmotivating classrooms, and enculturated learning strategies all affect L2 reading comprehension. By only considering linguistic factors, efforts to improve reading comprehension are at best limited. Lave and Wegner (1991), for example, view learning “as participation, as relational and interactive, and as constrained by unequal power relations” (as cited in Zuengler & Miller, 2006, p. 51). These sociocontextual aspects, which have little to do with acquisition *per se*, demand research since they affect how students learn. Cognitivists, however, draw upon the term *acquisition* in the initialism “SLA” to girder their purist position, so one wonders if “SLA” is the *mot juste* for the field. Perhaps the categories of Sociocontext and Acquisition would be perceived more equally if they were placed under a broader term, such as “Bilingualism” or “Bilinguaology”. In this way, L2 social theories of learning and pedagogical implications could be more firmly established, and *acquisition* could maintain its “coherence as a separate discipline” (Yates & Muchisky, 2003, p. 144). To place a positive spin on this debate, each side pursuing their own agenda could provide “the necessary checks and balances in preventing hegemony in either direction” (Wagner, 2004, as cited in Larson-Freeman, 2007, p. 781). Optimally, as these sides pursue distinct objectives, the scope of traditional SLA research could convex into a “sociocognitive perspective” (p. 784). This might make the most sense, since SLA

researchers, just like the psychological researchers, are unlikely to change “the way they frame their understanding of learning” (Larsen-Freeman, 2002, as cited in Zuengler & Miller, 2006, p. 46).

### **Conclusion**

As can be deduced by looking at the factors that influence the learning of Japanese readers of English, it becomes obvious that a research orientation that takes into account linguistic as well as contextual factors allows teachers and researchers to come up with solutions greater than the sum of its parts. In other words, attempts to get Japanese EFL readers to read logographically cannot take place when external conditions cause them to not open their books. Therefore, views of language as a “social phenomenon” should *not* be separated from the language that “reside[s] in the individual” (Gass, 1998, p. 88) - if not for the reasons mentioned above, then for the fact that each individual is a social being.

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