

On the Bilingual's Two Sets of Memories

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People who grow up in one place and move in early adulthood or later to another country, adopt its customs, and learn its language, offer a unique window into the effects of language and culture on autobiographical memory. Linguistically speaking, such adult immigrants are “sequential” or “late” bilinguals, because they learn one language and then, after childhood and adolescence, learn a second language. Culturally speaking, they are individuals who, having been “enculturated” into the culture of origin from infancy, engage later in life in a subsequent process of “acculturation” into the culture of adoption (Schrauf, 2002). Because both of these changes—second language acquisition and acculturation—are complex psychological processes including cognitive and affective elements, immigration affords a kind of “natural” experiment for viewing the effects of culture change on memory. Culture and language (although confounded) are the “independent variable.” The “test group” comprises immigrants with a “dual” language and enculturation. In the “control group” are individuals left in a state of “single” language and enculturation. History has designed the experiment. People emigrate.

From the perspective of autobiographical memory, immigration occasions profound changes. In a crude cognitive sense, there are two of “something” here: two sets of mental organizations and two contexts of encoding and retrieval. Nevertheless, translating the complex experience of immigration—

at the intersection of psyche and culture—into the language of cognitive and psycholinguistic experiment has not been an easy task because the socio-cultural, linguistic, and cognitive factors seem too many and the directions of influence too diffuse. Nevertheless, by devising more sophisticated concepts of language, culture, and memory, it is possible to bring bilingual–bicultural autobiographical memory into focus.

This chapter addresses the issue in five steps. It begins (first) with a description of the bilingual experience of having different senses of the self and of the world in either language. Because identity is tied to one's memory for who one is and what one has done in the past, this leads (second) to an examination of bilingual autobiographical memory done in more formal studies: a consideration of bilingual retrieval of memories in psychotherapy and a review of some current experimental work on bilingual recollection. Giving an adequate account of these findings requires a revision of the notions of language and memory in current research. Therefore (third), a discussion of language moves from the notion of a decontextualized code to the interweaving of language and culture in "linguacultures" (Attinasi & Friedrich, 1995). A consideration of memory retrieval (fourth) suggests a shift from an emphasis on atomistic mnemonic traces to multimodal narrative wholes. These theoretical considerations make it possible to offer a more fruitful approach to bilingual autobiographical memory (fifth) by advocating a linguacultural view of the encoded experience and corresponding language-specific retrieval.

THE EXPERIENCE OF LIVING IN TWO WORLDS

There is a tantalizing array of evidence, from formal and experimental to informal and testimonial, that suggests that becoming bicultural and speaking two languages has the "feel" of living in two worlds and perhaps of being different persons in those worlds. In early experimental work, Ervin (1964) found that French-English bilinguals expressed different cultural themes when responding to TAT prompts in their native French versus their acquired English. She found the same results in sentence completion tests with Japanese-English war brides in the United States: systematic shifts in content were observed with changes in language. She replicated the results again with a 27-year-old Japanese-American telling a story in both languages in response to a picture prompt (Ervin-Tripp, 1973). Grosjean (1982, pp. 282–283) suggested that changes in personality are not language-specific but context-specific; that is, the shift in views or attitudes is due to situation, not language. But if situation or context can trigger the activation of a cultural mind-set proper to the

language being used, we may still see bilinguals as persons with resources for constructing multiple identities (Schrauf, 2000a).

Successor to the work of Ervin-Tripp is that of contemporary linguistic anthropologist Kovèn (1998, 2001) who argued that persons who are bilingual from birth possess not only two different languages but a whole array of registers and codes they can use to negotiate contextually appropriate (and strategic) presentations of the self. Kovèn worked in France with French-speaking children of Portuguese immigrants. Her (1998) published examples include transcripts of two women (“Ana” and “Isabel”) telling of a “bad experience with a stranger,” once in French to a Portuguese-French bilingual, and once in Portuguese to another Portuguese-French bilingual. Relating the exact same story in either language, the women cast themselves as protagonists differently in each language.

Both Ana and Isabel, in French, speak through a colloquial register that marks them as part of the landscape of urban French youth culture. Indeed, both seem to take on a more critical, irreverent stance in their French tellings and a more deferential, less empowered stance in Portuguese to convey their displeasure with their interlocutors in the narrated events. (Kovèn, 1998, p. 436)

These women use their dual cultural-linguistic resources to reflect different cultural roles in different tellings of their experiences. This is much the same point made by LePage & Tabouret-Keller (1985): speech acts are “acts of identity.” They reflect the social identity that the speaker wishes to effect. Although monolinguals may also do this (using the various registers and codes of one language), the bilingual–bicultural individual has distinctly cultural (vs. sub-cultural) resources for “being” a number of identities.

More informal, testimonial evidence for bilinguals’ sense of living in two worlds and having different identities in each comes from Pavlenko (1998) who gathered the autobiographical reflections of a number of individuals who acquired a second language as adults and who became writers in that language. For these individuals, more poignantly, immigration and second language learning brought with them a sense of profound loss of the mother tongue and “mother culture” and their replacement or substitution by the adopted culture. For these authors, the shift in language brought with it a corresponding shift in identity. She quoted the experience of the Russian-English writer Helen Jakobson: “My ‘Americanization’ took place at all levels of my existence; in one sweep I had lost not only my family and my familiar surroundings, but also my ethnic, cultural, and class identity” (Jakobson, 1994, p. 119).

Equally moving are these reflections from Hoffman’s (1989) autobiographical *Lost in Translation*:

All around me the Babel of American voices, hardy midwestern voices, sassy New York voices, quick youthful voices, voices arching under the pressure of various crosscurrents . . . Since I lack a voice of my own, the voices of others invade me as if I were a silent ventriloquist. They ricochet within me, carrying on conversations, lending me their modulations, intonations, rhythms. I do not yet possess them; they possess me. But some of them satisfy a need; some of them stick to my ribs . . . Eventually, the voices enter me; by assuming them, I gradually make them mine." (p. 220)

Pavlenko concluded that these "language learning' narratives also testify that languages are indeed separate worlds, which cannot be reduced to a simple mentalesse expressed in various codes" (Pavlenko, 1998, p. 17).

In sum, bilinguals may show different personality characteristics consistent somehow with the personas they exhibit in either of their languages. The experience of living life in one culture, speaking one language, and then changing wholesale to another culture and learning another language, can be a deeply transformative experience. Although the notions of *self* and *identity* are themselves quite complex, both are certainly tied to autobiographical memory. Philosophers have sewn identity to memory for centuries. For Hume (1739/1978): "... memory alone acquaints us with the continuance and extent of this succession of perceptions, 'tis to be considered, upon that account chiefly, as the source of personal identity" (p. 261). For Dennett (1991), the self is the "center of narrative gravity" (p. 418), the selfsame protagonist of a series of remembered stories. Reflecting on notions of personhood in Pakistan, anthropologist Ewing (1990) suggested that the notion of unitary personhood is illusory and that we possess different selves, each with its own *curriculum vitae*, a chain of memories (p. 267) reaching into the past. Might not the bilingual individual have at least two *curricula vitae*, two chains of associations, two sets of memories?

CLINICAL AND EXPERIMENTAL DATA ON BILINGUAL AUTOBIOGRAPHICAL MEMORY

The attempt to deal with such lyrical conceptions in any precisely scientific way is bound to seem pedestrian and tiresome, but the clinical and experimental study of bilingual autobiographical memory does yield interesting results. The following clinical cases were drawn from published reports of psychoanalytic therapists. The experimental studies were carried out in laboratories both in the United States and in Denmark.

Schrauf (2000a) reviewed 24 published case reports of psychoanalytic therapy with bilingual-bicultural clients. Of these 24 cases, 21 were immigrants

(having moved to another culture either during childhood or adulthood). Schrauf found five patterns of language shift during therapy. In all of the cases, therapy began in the second language and at moments or for extended periods of time shifted to the first language (Table 6.1). Type 1 described individuals who were seemingly unable to retrieve painful and/or important memories in the second language until some word or phrase in the mother tongue triggered an association. Type 2 described cases in which the language of therapy shifted entirely from the second language to the first, again “enabling” the client to access previously unavailable memory material. Type 3 described several cases in which memories for key past events were indeed recalled in the second language but rendered flat, colorless, and emotionally lifeless. When recalled in the mother tongue, however, such memories assumed the emotional force and detail of the original event. Type 4 described

TABLE 6.1
Language Shifts During Therapy: 24 Clinical Cases
of Psychoanalysis With Bilingual Patients

	<i>Number of Cases</i>	<i>Character of the Language Shift*</i>
Type 1	3	A specific word in L1 triggers a particular memory usually of intense emotional or anxiety producing character which was previously unretrieved in L2
Type 2	6	The global switch in therapeutic language from L2 to L1 facilitates abundant retrieval of memories from L1 associated with childhood/youth which were previously unavailable in L2
Type 3	6	Memories which were previously available in L2 but in abbreviated form, or which were lacking in appropriate emotional accompaniment, are retrieved in detail and with intense emotional involvement when accessed in L1. Alternately, L2 is employed tactically to maintain the stance of detached observer from personal recollections; L2 serves as the language of “experience-distant” as opposed to “experience-near” description
Type 4	8	L2 serves as the linguistic and cultural mediation of current conceptions of the self while simultaneously distancing past identity or the past self which is associated with L1 and the culture of childhood/youth
Type 5	1	Emotional outbursts directed in the present at the therapist take place in L1 which is not spoken at any other time during therapy

Note. *L1 = first language; L2 = second language.
Adapted from: Schrauf, R. W. (2000a).

cases in which recall in either language was felt by the clients to be consistent with their different “identities” in either language. (A fifth type of change in language during therapy, not pertinent here, concerned one individual who switched to the mother tongue when swearing).

Remembering, or “forgetting” in psychoanalytic therapy, is of course an act motivated by both conscious and unconscious dynamics. Choice of language can be a form of resistance, so that the analysand can either avoid or facilitate the possibility of recall (Types 1 & 2) or the analysand might relate a memory in a second language in order to avoid the associations that might render it frightening, disgusting, embarrassing, etc. (Type 3). This latter is “isolation of affect.” Or use of a second language might free up an individual to reframe his or her first language memories in the narrative context of a “new” life-story (Type 4). But the other side of strategically “choosing” a language in therapy is that such choice takes for granted that a memory or memories exist in some language-specific (mother-tongue) state that seems durable, pristine, adamant, and ineluctably interwoven in an associational network of meanings linguistically and culturally connected to the mother-culture. That a bilingual might feel himself or herself capable of self-expression and self-understanding in two culturally distinct ways is not, after all, so surprising. There seems to be a fund of memories (Ewing’s curriculum vitae) undergirding either identity. Therapy may act to dislodge and disengage certain memories from the original (e.g., mother-tongue) network to set them in different cultural frames, and indeed this may count as healing, but that they are encoded in a specific linguistic and cultural frame seems undeniable.

The notion that autobiographical memories are encoded and retrieved in specific natural languages has also been tested in a series of experimental studies (Larsen, Schrauf, Fromholt, & Rubin, 2001; Marian & Neisser, 2000; Schrauf & Rubin, 1998, 2000). This research starts from the question: Will memories cued in one language trigger retrievals in that same language? In Schrauf & Rubin (1998), 12 older adult, Spanish-English speakers, who had immigrated to the United States in their late 20s and 30s, were given 50 Spanish cue words to trigger memories on one day and 50 English words on another day. These older bilinguals did *not* show preferential retrieval according to language. That is, memories triggered by Spanish words commemorated events from throughout the life span; memories triggered by English showed the same pattern. However, participants were also asked to indicate if any of the memories seemed to come to them in Spanish during the English sessions (or in English during the Spanish sessions). These “crossover” memories showed dramatic differences. Memories that came in Spanish commemorated events that occurred when the participants were much younger (mean

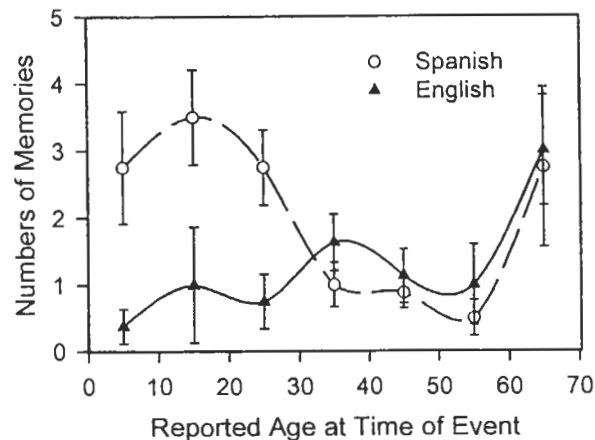


FIG. 6.1. Histogram of autobiographical memories of older (> 60) Spanish-English immigrants ($n = 8$) who identified memories given to word cues during Spanish and English sessions as coming to them in Spanish or in English. Error bars show standard errors.

age = 29.7) than memories in English (mean age = 46.5). This suggested that bilinguals were reporting memories in the language of the day (Spanish during Spanish sessions, English during English sessions), but that these reports were *mental translations* of retrievals in the “other” language. In other words, memories were like other “inner speech” activities (like dreaming or talking to oneself) and could occur in a specific language and be translated according to the circumstances of the situation.

To test this distinction between an *external language* of memory performance (“telling the memory”) and an *internal language* of memory retrieval (“the language in which it came to me”), Schrauf & Rubin (2000) designed a second experiment, modeled on the first, in which immigrant Spanish-English speakers were asked, immediately after retrieving each memory, whether they thought the memory came to them in either no language (pure imagery) or in either Spanish or English. Again, Spanish memories commemorated events from earlier in life (mean age at memory = 27.3), whereas English memories were much later (mean age at memory = 50.5; Fig. 6.1).

In a third experiment, Larsen, Schrauf, Fromholt, and Rubin (2002) tested 20 Polish-speaking immigrants who were forced to leave Poland in 1969–1970. Recruitment into the study divided participants into two groups. Ten Early Immigrants were on average 24.1 years old at the time of immigration, and 10 Later Immigrants were 33.6 years old (and 51.4 and 61.4 years of age

respectively at the time of testing). Thus, although all participants had spent the last 30 years in Denmark, the first group was younger at immigration than the second group. Using the measures of inner speech developed in the previous studies, Larsen et al. found that Early Immigrants tended to think, dream, talk to themselves, write notes to themselves, appreciate jokes, and prefer emotional expression more in Danish, whereas Later Immigrants still favored Polish. Again, using the methods of the previous studies, memories were cued in both languages; participants were asked to report the memory in the language of the session; and they indicated in which language “the memory came to them.” To test for internal language of retrieval for events in the decades before and after immigration, the data were analyzed by displaying the proportions of memories recalled internally in Polish versus Danish for each decade of life (Fig. 6.2). Both groups showed a higher proportion of retrievals in Polish for the period preceding immigration and a decreased proportion of recalls in Polish for each decade after immigration. Early Immigrants showed a decrease in Polish recalls during their 20s and Later Immigrants showed the decrease in their 30s. This follows the pattern seen with other inner speech behaviors: Early Immigrants recall more memories in Danish, Later Immigrants recall more memories in Polish.

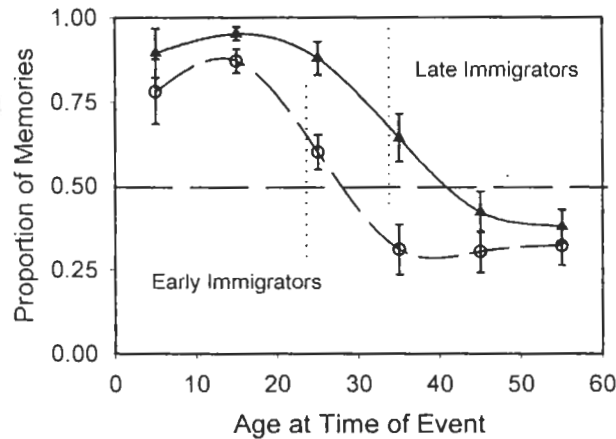


FIG. 6.2. Proportion of autobiographical memories of Polish-Danish immigrants retrieved in Polish. “Early immigrants” immigrated to Denmark from Poland at a mean age of 24 years old; “Late immigrants” immigrated at a mean age of 34 years old. Both curves represent the proportion of memories retrieved in Polish per decade (leaving unpictured the mirror image Danish retrievals). Error bars show standard errors.

Finally, in an experiment not directly related to the internal language of retrieval, Marian and Neisser (2000) used the cuing procedure with younger Russian-English bilinguals (mean age = 20.2) who had immigrated during early adolescence (mean age at immigration = 13.4). Each participant took part in a Russian and an English session in which all communication, except for some of the cue words, was in either Russian or English. Russian-English bilinguals were cued in both Russian and English and asked whether Russian or English “was spoken by, to, or around the participant” (p. 362) at the time of the event. If Russian were spoken at the time of the event, that memory was deemed a “Russian memory.” Russian cues presented during Russian sessions elicited more “Russian memories;” English cues presented during English sessions elicited more “English” memories (Experiment 1). This held true even when cues from both languages were presented during “Russian sessions” (or alternately, “English sessions”). That is, in a Russian session during which a person might be expected to be “thinking” in Russian, more Russian memories were recalled, and across sessions Russian words triggered more Russian than English memories (Experiment 2). Marian and Neisser interpreted these results in terms of a language-dependence recall: language at retrieval correlates with the language at encoding.

This study differs from the previous studies in finding language-specific recall to cues in the external language of the report (without considering the internal language of retrieval). This may be attributable to the participants’ having fewer years of bicultural experience and corresponding fewer years of experience with the second language. Indeed, it would be interesting to know in what languages these students carried out the other activities of inner speech. Nevertheless, the overall finding is consistent with those of the previous studies: bilinguals seem to retrieve memories in the same language in which they were encoded. These are instances of encoding specificity where the relevant feature is the language of encoding (Tulving & Thompson, 1973).

In sum, bilingual clients in therapy give evidence of possessing certain memories, encoded during youth and childhood, that are only fully retrieved in terms of detail and emotional salience when retrieval takes place in the mother tongue. Experimental studies also suggest that some memories are encoded in a specific language and internally retrieved in that same language, although these memories can be translated to any other language the bilingual speaks. Both these lines of evidence suggest that some memories are durably encoded in particular languages. This is our best scientific approximation of the more colorful testimonials mentioned earlier. Bringing these views together, however, requires considerable revision of approaches to memory, language, and culture than are common in formal inquiry. Minimally, an

adequate interpretation of the linguistic data requires, first, a change in our understanding of how language achieves semantic reference and is tied to its contexts of use. That is, we need a more nuanced view of language than the notion that it “provides names for things.” Secondly, an adequate understanding of the memory data requires a shift in our understanding of memory as the retrieval of atomistic mnemonic traces to the coactivation of multiple sensory and associational systems in the construction of narrative wholes. That is, we need a view of memory different from the notion of a “getting an item off a (mental) shelf and taking it to the counter (consciousness).” The remainder of this chapter explicates these two theoretical revisions, the first on language, the second on the nature of memory, in order to explain better the phenomenon of bilingual autobiographical memory.

LANGUAGE: FROM DECONTEXTUALIZED CODE TO MEANING HOLISM AND “LINGUACULTURE”

Grammarians and formal linguists usually approach language as a system of phonological, morphological, and syntactic forms with fixed semantic referents in a hypothetically changeless universe of meanings. Methodologically, the native speaker is privileged as the arbiter of what is acceptable and unacceptable, and the linguist is charged with systematizing these insights. This is, of course, the legacy of Saussure’s (1959) distinction between *langue* and *parole* and Chomsky’s (1965) distinction between “competence” and “performance.” Linguists are concerned with the former elements in these pairs (language as a formal system), rather than the latter elements (language in use). That is, their concern is with the abstracted formal properties of phonology, morphology, syntax, and semantic reference and with how these may be combined to make acceptable sentences by the “ideal” speaker. They are much less concerned with individual and necessarily idiosyncratic messages of real speakers.

This way of understanding language underlies much work on the psycholinguistics of bilingualism as well. When a lexical decision task requires that a person review a list of words and distinguish nonsense items from first or second language items, or when the task requires naming a picture in either language or providing a translation of words from one language to another, such tasks rely on the insights of an individual as a native speaker versus his or her insights as a speaker of a second language. And in each of these cases, the emphasis is placed on the individual’s knowledge of language as a decontext-

tualized system. Actual usage, the *parole*, language as “performance” (implying individual differences), is not at issue.

This decontextualization of language tends to reduce it to its referential or ostensive function; that is, language is just about *naming* things. This is the Wittgenstein of the *Tractatus-Logico-Philosophicus* (1922/1961). For the early Wittgenstein, language, more particularly “meaning,” is a question of hooking up *word*-elements with *world*-elements. Words link up with the world by picturing pieces of it. But, as the later Wittgenstein of the *Philosophical Investigations* (1953) was to concede, such a view cannot do justice to the complexity of language. Not all language use has to do with correct naming or accurate reference. Consider, for instance, the person who has been in the habit of calling her mother on the phone every Sunday for 20 years and who finds herself having the same conversation every Sunday. This is a “game” that is not about naming things. In his later view, Wittgenstein maintained that people engage in many, different language games, and that people learn the meaning of words by knowing the larger games in which words figure. These latter sorts of language games may, in fact, predominate in daily experience and be only loosely connected to the ostensive function of securing accurate semantic reference (e.g., we joke, we fantasize, we tell stories, we navigate, we balance budgets, we do therapy, we mourn, etc.).

Giving an adequate account of language, therefore, requires a fair consideration of how multifunctional language is for us. Reference remains one of the essential functions, of course, but hooking up individual words with individual things does not accurately portray how language “refers.” Quine (1964) argued that it is not words, nor even propositions, that mirror the world of sense; rather, it is the whole network of interrelated words and propositions. For example, if I say to you: “This is a long chapter. Countless forests have given their lives to make this chapter possible,” the sentence has meaning, not because we can sit down together in an analytic fit and demonstrate concrete linkages between each of the terms and real referents (*This* chapter? *This* very chapter? The pages in front of you? What forests? “Lives” in what sense? And doesn’t the quip invoke a whole history of the production of paper out of wood and possibly the contemporary destruction of the Amazon rain forest? But no reference was made to the Amazon rain forest, right?). Reference to the real world is integral to meaning but:

... it is only sentences taken collectively—bodies of theory, or our whole going theory of the world—that have or has empirical meaning. Empirical meaning or content is spread across the sentences that together can be tested against experience. (Nelson & Nelson, 2000, p. 34)

This is what contemporary philosophers refer to as *meaning holism*. “Our statements about the external world face the tribunal of sense experience not individually but only as a corporate body” (Quine, 1964, p. 41).

Natural languages are many, of course, and possess this same relationship to the worlds they mirror. That is, different natural languages exhibit referential links to the world as linguistic networks and not in terms of item-to-item correspondences. And that raises the question: Would different natural languages reflect different versions of experience or are they simply alternate “codes” for experience? After all, if languages are merely codes, learning another language is just learning another way of coding the world. This assumes that there is an objective, essentially noncultural world coded slightly differently by different languages. By implication, either the codes are interchangeable, or, more perniciously, “our code” is normative and “our world” is the “real” world. Thus,

. . . we project the objects of our language, our semiotic world, onto another language. From the start, we erase a field of difference between the two languages. We habitually ignore the fact that *different linguistic and cultural forms of expression have different objects*. By doing so, we create a new field of difference in which the speakers of the other language must be using language differently: deluding themselves (intentionally or habitually) with contradictions, metaphors, symbols, and analogies while we are forthright and literal. And so we translate their language differently than our own: ours is instrumental, referentially flat and transparent, unelaborated and thin; their expressions are poetic, symbolically loaded and deep, thick with meanings, but always referring to our world of objects. (Becker & Mannheim, 1995, p. 238; italics ours)

The “code” metaphor suggests that language only *reflects* the world (again, it “names” things), whereas language in fact has the power to *shape* the world we experience. Insofar as language has the power to shape a world, it suggests that we inhabit different worlds (Goodman, 1978), although this need not imply either the incommensurability of these worlds or the impossibility of translation.

In practical terms, in both reflecting and shaping the world, language does so in real-life speech events involving engaged social actors who use language to accomplish specific ends. This approach to language-in-use is the special province of sociolinguistics (Hudson, 1980) and linguistic anthropology: “the study of language as a cultural resource and of speaking as a cultural practice” (Duranti, 1997, p. 2). Lost in the view of language as a decontextualized system is the way in which meaning is constructed and negotiated in real speech.

Much work in linguistic anthropology in the recent past focused on showing how meaning is deeply dependent on situation or context (Hanks, 1996a,

1996b; Lucy, 1993; Silverstein, 1976, 1979, 1987). This is the notion of *indexicality*, including standard deictic elements (e.g., words like “here,” “then,” “this,” “you,”) that obviously depend on context for their interpretation, but extending to many other forms as well (e.g., honorifics in Japanese). Language-in-use derives its meaning from the contexts in which it is used:

In this view, meaning (of messages, acts, situations) is made possible not only through conventional relationships between signs and their contents—e.g., the word *desk* means a certain type of material object at which people sit and carry out other tasks—but also through signs-activated connections between selected aspects of the on-going situation and aspects of other situations. (Duranti, 1997, p. 37)

Thus, language in any one context points backward to past or laterally to current or forward to future contexts, and meaning is dependent on how these other contexts are invoked or shaped in this present context. Thus, “meaning—even literal sense—derives from the fusion of language form with context” (Hanks, 1996b, p. 232). There are many speech behaviors that enter into the contextual constitution of meaning (Goodwin & Duranti, 1992). Speakers focus their attention, now jointly, now to some new object or context. They continually refocus figure and ground. Speakers continuously provide one another with the necessary “contextualization cues” (Gumperz, 1992, 1996) for the ongoing interpretation of discourse. Speakers presume and invoke background knowledge, both proximal and from distant, other contexts. Speakers “position” one another in speech and do so from particular moral discourses (Harre & van Langenhove, 1999; Schrauf, 2000b). In short, meaning is achieved situationally because language depends on context for its interpretation, because speakers use language to invoke relevant contexts, and because speakers position their own and their interlocutor’s “voice.” Words have meaning because they have associated with them a whole “discourse history” of contextual associations (Schrauf, 2002).

From a developmental perspective, when children learn a language, they do not learn a decontextualized “code.” Rather, they are engaged as active participants by caregivers in context-specific, socially constituted speech events in which cultural knowledge is learned and mediated in subtle and pervasive ways by language. Enculturation and language socialization are integrated and simultaneous processes for children in their own culture and often for immigrants in a second culture. This is the research paradigm of “language socialization” (Ochs, 1988; Schieffelin & Ochs, 1986a, 1986b). The cultural desideratum is that children (and immigrants) come to be competent members of their culture(s). This requires *linguistic competence*, or “the tacit

knowledge underlying the grammatical structure of clauses and sentences” (Ochs, 1988, p. 33), *communicative competence*, or the knowledge of how language—for example, specific genres and registers—is used in particular speech situations (Hymes, 1971), and *cultural competence*, or “competence in the ideational realm that constitutes a culture—schemata, scripts, models, frames . . . that are culturally constituted, socially distributed, and personally construed” (Poole, 1994, p. 833). Perhaps the best term for the interwoven linguistic-cultural whole in which a person comes to such competence is *linguaculture* (Attinasi & Friedrich, 1995).

To say that a fluent bilingual immigrant has two interchangeable codes is wholly to miss the point. Further, to say that she inhabits two different “worlds” is not simply lyrical and metaphorical. Rather, her mother tongue is tied to an innumerable concatenation of vividly remembered, half-remembered, and nearly forgotten contexts in which she came to communicative and cultural competence, learning where and when and how to be unconsciously “native.” She grew up in a world whose features were distinguished by her linguistic interaction with her contemporaries. The same holds for her life in her second language. In cognitive terms, the fluent immigrant who possesses communicative and cultural competence in both her culture and language of origin as well as the culture of adoption is a person with dual associational networks of meaning or sociocultural worlds (meaning holism). Mother tongue and second language are for her, not codes (although when talking to “foreigners” she is probably capable of reducing them to codes), but *linguacultures*. And, yes, according to both informal testimonials and experimental evidence, she seems to have two of them.

MEMORY: FROM MNEMONIC ATOMS (LEXICAL-CONCEPTUAL PAIRINGS) TO MULTIMODAL NARRATIVE WHOLES

Also necessary for a more accurate view of bilingual autobiographical memory is a revision of what we understand to be the object of memory or, perhaps better, the *memory trace*. Theoretical models of bilingual memory, based generally on psycholinguistic models of speech production (Levelt, 1989), suggest that the bilingual individual possesses dual linguistic facilities (Language One and Language Two) for the recognition and production of appropriate forms at phonological, morphological, and syntactic levels. These forms are represented in a Language One Lexicon and in the Language Two Lexicon and are connected to representations in an underlying, nonlinguistic Conceptual

Store (semantic representations). Additionally, the Lexicons are connected to one another, and this facilitates translation. This is the *Revised Hierarchical Model* (Dufour & Kroll, 1995; Kroll & Sholl, 1992; Kroll & Stewart, 1994; Sholl, Sankaranarayanan, & Kroll, 1995). Alternately, the *Conceptual Features Model* (De Groot, 1992a, 1992b, 1993), inspired by semantic activation and parallel distributed processing paradigms, portrays individual lexemes as having links to series of nodes in conceptual memory. Translation equivalents with very concrete referents (e.g., “rock”) might completely share an underlying set of nodes. Others, more abstract and culturally distinct (e.g., “privacy,” see Pavlenko, 1999), might activate overlapping but distinct sets of underlying conceptual nodes.

Among the laboratory tasks typically employed to examine bilingual memory, there are priming tasks, lexical decision tasks, Stroop tests, picture naming, word association, word translation, and semantic differential tasks (for a review, see Francis, 1999). These tasks, like the models they are designed to test, focus on lexical–conceptual pairings. Lexical–conceptual pairings are problematic, however, for the study of bilingual autobiographical memory for two reasons. On the one hand, such pairings work from the code metaphor of language and reduce it to its “ostensive function” (albeit intramentally). On the other hand, an autobiographical memory, understood as a sequenced narrative, is far more complex than an assemblage of referents or nodes from a Conceptual Store. Unlike the memory-objects of lexical decision tasks or list-learning, an autobiographical memory is an extremely complex cognitive phenomenon.

Next is an account of the structure of autobiographical memory centering on a treatment of its phenomenological properties with consideration of the neurophysiological underpinnings of these properties. This is the “multi-systems approach” (Rubin, 1998; Rubin & Greenberg, 1998; Rubin, Schrauf, & Greenberg, 2002).

One approach to analyzing autobiographical memories is to describe them according to the multiple phenomenological properties of which they are comprised (Casey, 1987; Johnson, Suenegas, Foley, & Raye, 1988; Robinson & Swanson, 1990). We have explored and identified the key phenomenological properties of recollective experience with both bilinguals (Schrauf & Rubin, 2000) and more extensively with monolinguals (Rubin et al., 2002) and measured the relationships among them.

A first phenomenological property is the rememberer’s present consciousness of a prior conscious experience (Wheeler, Stuss, & Tulving, 1997). To tap into this property, individuals were asked to think of a memory and then asked to judge whether they had a sense of reliving the experience they had

remembered. Like each of the following properties, this awareness is variable. On one extreme, there might be no sense of reliving (“I just know it happened”); on the other, there might be the sense that the experience is so strong that it is “as if it were happening right now.” A philosophical implication of this is the patently obvious notion that if I have a sense of reexperiencing an event, then I am concomitantly convinced that the prior experience is *my* experience and not the experience of some other person (this is Kant’s “synthetic unity of apperception”—Kant, 1781/1965). Although this seems obvious, however, the “feel” that an experience is mine grounds the very nature of autobiographical memory (a memory “related to the self”—Brewer, 1986, 1996). Parenthetically, in the case of confabulation, a person may “have a memory” for an event that simply never occurred and yet possess an incorrigible feel that the memory is hers.

Secondly, autobiographical memories have various component processes. Some of these are clearly sensory and have to do with the “feel” of the memory. Memories may have *visual* detail, either “not at all” or “as clearly as if it were happening right now.” There may be *auditory* information: sounds, voices (one’s own or others). The rememberer may be distinctly aware of the *setting* in which the event took place; alternately, he or she may be only dimly aware of the physical and spatial circumstances of the event remembered. Sometimes memories come in *words* (propositional renderings of events) or memories contain words (snatches of conversation, self-talk during an event, texts like signs, newspapers, notes). Memories are frequently accompanied by the re-experience of the *emotions* of the original event, other times the feeling is “washed out” of the event. Some memories simply have no attendant feel; the event was mundane and quotidian. Another phenomenological property, not sensory per se, but relevant to the form of the memory, is the *narrative* quality of the memory. Sometimes events surface in memory as narrative wholes, storied sequences complete with plots and resolutions; other times they are isolated or jumbled scenes.

A third class of properties links autobiographical memories to the cognitive and affective processes of the ongoing life story of the rememberer. Some memories recall *specific*, one-moment-in-time events; others are amalgamations of several similar events and have a *merged* quality. The *importance* of memories varies from “no importance” to “as important as any event in my life.” Some memories are frequently thought about or talked about; others are rarely invoked. This is the memory process of *rehearsal*. Finally, memories for events have a particular *age-of-memory* according as they commemorate events that happened long ago and are very old memories or they commemorate events from the last few years and are recent memories.

6. BILINGUAL MEMORIES

The component processes and phenomenological properties are mapped onto the neural circuitry that supports them. This is the *multisystems approach* to autobiographical memory. Based on available evidence, the component processes are an integrative memory system (which is classically attributed to the medial temporal lobe and more recently has been expanded to include the frontal lobes), imagery in individual modalities as well as a multimodal spatial imagery system, language, narrative reasoning, and emotions. A full-blown autobiographical memory requires the integrative memory system, at least one modality-specific imagery system (usually visual imagery), and, to varying degrees, spatial imagery, imagery in the other senses, narrative reasoning, and emotions. Thus, insofar as many cerebral systems are collectively and coordinately involved in having an experience and rendering it present in short-term memory, so the same systems are involved in retrieving the experience and making it present again—with more or less attention, imagery, and emotion.

It is instructive to consider just how complex a neural event an autobiographical memory is in contrast to the usual tasks employed in the study of bilingual memory. The time taken to complete a lexical decision task, Stroop test, or picture versus word naming task is on the order of seconds, often milliseconds. Contrariwise, the average undergraduate takes approximately 10 seconds (an older adult 15 to 20 seconds) to retrieve an autobiographical memory to a cue word (Rubin, 1998). The coactivation of multiple brain areas and coordination and sequencing of sensory, linguistic, and emotional information require a considerable amount of “psychological time.” Thus, the object of autobiographical retrieval is an extremely complex mental representation.

Interestingly, although reaction time from cue to retrieval is of particular interest both in lexical–conceptual pairing experiments and autobiographical memory experiments alike, an autobiographical memory usually requires considerably more time in the telling. The recall of an event is itself *durative*. That is, it takes time to relate, not simply because the teller might explain the details or the context or the meaning of the memory. It takes time because event-memories are “storied.” They have beginnings, middles, ends; they require, in Labovian terms, an orientation in space and time, some “complicating event” that motivates the action, the result, and often some evaluation of the story (a “point”; Labov & Waletzky, 1967). From the simple story “I got the scab from falling off my bike” to the extended story of “When Jennifer and I were going to see the priest about getting married we got into this big fight in the car and she got so mad she nearly drove off the road and we stopped the car and yelled at one another in the church parking lot and finally the priest came out to see what was going on but we were too upset

to be embarrassed," *it takes time to remember*. No doubt it also takes time to remember in the lexical retrieval paradigm, but for rather different reasons. Again, the multimodal retrieval of an event memory requires more processing time.

The linguacultural context of the original event is integrally encoded with the event. If the language of encoding is lost, specific aspects of the event tied to the original linguacultural context will be lost because the knowledge needed to retrieve them will be lost. Thus, for instance, loss of the mother tongue would entail losses in memories for childhood events (not total amnesia, but losses in detail and connections in the associative network). This need not affect retrieval of events encoded in the second language, however. A parallel can be drawn to visual-memory-loss amnesia (Rubin & Greenberg, 1998), in which loss of visual memory due to neurological damage causes a loss in all aspects of autobiographical memory because so much of the information needed to access the nonvisual information is visual. In such cases, events experienced after the visual loss can be remembered because they are experienced and encoded without visual information. Events experienced in the second linguaculture are recalled in it and not in the first.

In sum, fundamental differences exist between bilingual memory approached from an experimental and theoretical paradigm that is driven by lexical-conceptual pairings, what are here called *mnemonic atoms*, and a paradigm driven by the retrieval of multimodal (sensory, linguistic, conceptual) autobiographical memories. The latter is more accurately described as a temporally extended, coordinated coactivation of multiple kinds of information. An autobiographical memory is a sequenced narrative whole.

LINGUACULTURAL EXPERIENCE AND BILINGUAL AUTOBIOGRAPHICAL MEMORY

How do these perorations on the interweaving of language and cultural context (the notion of *linguaculture*) and on autobiographical memory as a multimodal, sequenced retrieval help us to understand the experiences of the Portuguese-French-speaking "Ana" and "Isabel," Pavlenko's displaced authors, the bilingual analysts, and the Spanish-English, Polish-Danish, and Russian-English experimental subjects discussed earlier? Gathering up the threads of the argument, we propose that *encoding* and *retrieval*, the two key structural moments in autobiographical memory, are linguistically marked, if not constitutively linguistic, and that this accounts for language-specific retrieval.

What is *encoded* is an experience, and that experience takes place in some linguaculturally defined space. Epistemologically speaking, there is no objective, nonsemiotic, noncultural world. More precisely, there is no such world *for us*. The world as we know it is precisely that: the world *as we know it*. (This is true even from a neurophysiological perspective: every freshman philosophy student learns that “color isn’t out there” but is rather a human visual coding of electromagnetic radiation). More to the point, the world we learn is a thoroughly cultural world. The features we learn to distinguish are the features that our particular speech community has found relevant. The language of this community “hooks onto” the world in some idiosyncratic way as a total network of propositions about the world (this is meaning holism). Further, language not only reflects but also shapes the world (and this is the force of the discussion on indexicality). Language not only depends on context for its meaning but invokes context as well (else we would be filling in details every time we opened our mouths). Any experience, then, if complex in any way, will be marked by the linguacultural context that makes it possible as a meaningful human event.

Think how the following list of activities invoke “context” in American English and the culture of the United States in ways that they would not in Spanish and in Spain: buying a T-bone, getting a pink slip, or hearing Auld Lang Syne. Could these items be translated? Of course they could be translated—there are similar events in both places—but in both places these events are embedded in different linguistic networks of meaning. In Spanish and to the Spaniard, the different phrases would invoke different contexts.

Turning to the bilingual immigrant, then, is a matter of grasping that her experiences do not belong to an objective, nonsemiotic, noncultural world for which she has two entirely interchangeable codes. Rather, her experiences take place in one of two different subjective, already semiotic, cultural contexts, each of which she has appropriated through different processes of language socialization. The encoding of these experiences in memory necessarily includes the encoding of the linguacultural worlds in which and through which they have meaning.

The various sensory and emotional systems interact with more atomistic language processes and narrative systems in ways that affect how an event is encoded and therefore how it will be remembered later. That is, the pattern of activation among these systems at the time the event is experienced will select those aspects of the sensory, emotional, linguistic, and narrative systems that will be most likely to be active at retrieval. Raw, pure, untainted, primitive, sensory, and emotional information, as viewed by a mythical neutral observer, will not be encoded and will not be available for reconstructive

retrieval by the narrative system. The information is encoded in a specific cultural context and is subsequently available through associative networks proper to that *mental* linguacultural context.

Retrieval matches these moments in the temporally extended reconstruction of the experience in consciousness, and this “storied,” narrative whole is extremely complex. Consider that an autobiographical memory preserves, in different systems, the sights and sounds and settings and emotions of the commemorated event. Consider that it preserves not only words but also a linguistically shaped world, through language, as a layered phonological, morphological, syntactic, and semantic set of resources tied, always idiosyncratically, to the social, microcontext of the encoded event. Consider that it preserves this specific or generic event in the larger sequence of the life story, and in this story interlinked to other linguistically and culturally similar larger and smaller contexts (Schrauf, 1997).

The bilingual immigrant might recall the first day of school from her childhood in Costa Rica and in this mental (and neurophysiological) reconstruction, she activates sights and sounds and settings and emotions and the whole semantic network of linguacultural associations in which and through which her recollection has meaning, and all of this is ineluctably tied to childhood in her homeland. Or she might think of Christmas last year in New Jersey with very different results.

Immigrants of long standing, those who moved from their homelands and took up permanent residence in another culture, those who adopted its ways and became fluent in its language, those like the professional writers whom Pavlenko described (1998), may have a sense of loss as the linguaculture of their homeland recedes from them and becomes less accessible even in memory. In cognitive terms, the reasons for this may be a lack of rehearsal of old memories and a consequent loss of content. From their reflections, it would seem that it is not the loss of this or that memory that they principally mourn but the fading of the network itself. And the fading of the network may amount to the fading of that network of memories that undergird the identity tied to the culture of origin—that particular curriculum vitae of memories. This results in a sense of loss of identity, or a replacement of it by another.

The experience of the analysts in psychoanalytic therapy reflects another dimension: that of bilingual “forgetting.” The notion that bilingual clients tend to recall old and powerful memories in detail and with full emotional salience only in the mother-tongue was offered earlier as evidence that these memories are indeed integrally encoded in a stable state in the languages in which they took place. That these memories seem forgotten in the second language suggests two things. From a psychoanalytic perspective, it may suggest that the material is threatening and that a motivated forgetting is taking

place. But from a cognitive–linguistic perspective, it may suggest that retrieval is state-dependent (Weingartner, 1978), and, as Schrauf (2000a) suggested, the relevant “state” here may be linguistically shaped “selves.” That is, the associative network that has come to define the self of the immigrant may act as a sort of state. Insofar as retrieval is state-dependent, memory is blocked.

Experimental work on bilingual autobiographical memory looks initially as if it shares the experimental paradigm with lexical–conceptual pairings. Memories are triggered with individual cue words in sessions devoted, now to the first, now to the second language. Cue words, and the languages of the sessions, are expected to carry the full weight of the languages (and cultures) from which they are taken. It would be surprising if single words, or a session devoted to one language, would have the ability to cue the “linguaculturally saturated” character of memories that we have already described. But they do. Time and again in this experimental work, the mother-tongue triggers mother-tongue memories, and the second-language, second-language memories, either at face value (Marian & Neisser, 2000) or via the medium of inner speech (Larsen et al., 2002; Schrauf & Rubin, 1998, 2000). As with the clinical data, this suggests that memories are in fact encoded in stable manner in one language and preferentially retrieved in that same language.

Is retrieval language-specific for the bilingual? What counts against this notion is a view of language that treats words as elements of interchangeable code linked to an essentially noncultural world paired with a view of memory that links words from dual bilingual lexicons with nonlinguistic conceptual representations. This theory would not predict anything like the different worlds bilinguals claim to experience, nor the different selves they feel themselves to be. As researchers, we are fortunate that nature has designed an experiment that tests these notions. Immigration presents us with a sample of individuals whose language socialization took place in one culture, and who later in life took up language socialization in another culture. The results of this natural experiment (the anecdotal, testimonial, clinical, and experimental data that we have presented) suggest that neither of the aforementioned views of language and memory tell the whole story. Rather, by sophisticating our understanding of language so that it connotes culturally contextualized language-in-use and our understanding of memory so that it denotes a temporally extended, coordinated, coactivation of multiple kinds of information, we are confident that remembering is, in fact, language-specific for the bilingual. And insofar as memory is language-specific, it makes sense to think of the bilingual immigrant as inhabiting different worlds and having the experience of language-specific selves.

In this sense, then, a bilingual has two “sets,” more precisely, two networks, of memories.

ACKNOWLEDGMENTS

Research and writing for this chapter were supported by National Institute of Aging grant #R0-1 AG16340 "Memory, Language, Culture."

REFERENCES

- Attinasi, J., & Friedrich, P. (1995). Dialogic breakthrough: Catalysis and synthesis in life-changing dialogue. In D. Tedlock & B. Mannheim (Eds.), *The dialogic emergence of culture* (pp. 32–53). Chicago: Illinois University Press.
- Becker, A., & Mannheim, B. (1995). Culture troping: Languages, codes, and texts. In D. Tedlock & B. Mannheim (Eds.), *The dialogic emergence of culture* (pp. 237–252). Chicago: University of Illinois Press.
- Brewer, W. F. (1986). What is autobiographical memory? In D. C. Rubin (Ed.), *Autobiographical memory* (pp. 25–49). Cambridge: Cambridge University Press.
- Brewer, W. F. (1996). What is recollective memory? In D. C. Rubin (Ed.), *Remembering our past: Studies in autobiographical memory* (pp. 19–66). Cambridge: Cambridge University Press.
- Casey, E. S. (1987). *Remembering: A phenomenological study*. Bloomington, IN: Indiana University Press.
- Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.
- De Groot, A. M. B. (1992a). Bilingual lexical representation: A closer look at conceptual representations. In R. Frost & L. Katz (Eds.), *Orthography, phonology, morphology, and meaning* (pp. 389–412). Amsterdam: Elsevier Science Publishers.
- De Groot, A. M. B. (1992b). Determinants of word translations. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 18(5), 1001–1018.
- De Groot, A. M. B. (1993). Word-type effects in bilingual processing tasks: Support for a mixed representational system. In R. Schreuder & B. Weltens (Eds.), *The Bilingual Lexicon* (pp. 27–51). Amsterdam: John Benjamins.
- Dennett, D. C. (1991). *Consciousness explained*. Boston: Little, Brown, and Company.
- Dufour, R., & Kroll, J. F. (1995). Matching words to concepts in two languages: A test concept of The Concept Mediation Model of Bilingual Memory. *Memory and Cognition*, 23(2), 166–180.
- Duranti, A. (1997). *Linguistic anthropology*. Cambridge: Cambridge University Press.
- Ervin, S. M. (1964). Language and TAT content in bilinguals. *Journal of Abnormal and Social Psychology*, 68, 500–507.
- Ervin-Tripp, S. (1973). Learning and recall in bilinguals. In S. Ervin-Tripp (Ed.), *Language acquisition and communicative choice*. Stanford, CA: Stanford University Press.
- Ewing, K. P. (1990). The illusion of wholeness: Culture, self, and the experience of inconsistency. *Ethos*, 18(3), 251–278.
- Francis, W. S. (1999). Cognitive integration of language and memory in bilinguals: Semantic representations. *Psychological Bulletin*, 125(2), 193–222.
- Goodman, N. (1978). *Ways of worldmaking*. Indianapolis: Hackett.
- Goodwin, C., & Duranti, A. (1992). Rethinking context: an introduction, *Rethinking Context: language as interactive phenomenon* (pp. 1–42). Cambridge, UK: Cambridge University Press.

- Grosjean, F. (1982). *Life with two languages: An introduction to bilingualism*. Cambridge, MA: Harvard University Press.
- Gumperz, J. J. (1992). Contextualization and understanding. In A. Duranti & C. Goodwin (Eds.), *Rethinking context: Language as an interactive phenomenon* (pp. 229–252). New York: Cambridge University Press.
- Gumperz, J. J. (1996). The linguistic and cultural relativity of inference. In J. J. Gumperz & S. C. Levinson (Eds.), *Rethinking linguistic relativity* (pp. 374–406). Cambridge, UK: Cambridge University Press.
- Hanks, W. F. (1996a). *Language and communicative practices*. Boulder, CO: Westview.
- Hanks, W. F. (1996b). Language form and communicative practices. In J. J. Gumperz & S. C. Levinson (Eds.), *Rethinking linguistic relativity* (pp. 232–270). Cambridge, UK: Cambridge University Press.
- Harre, R., & van Langenhove, L. (Eds.). (1999). *Positioning theory: Moral contexts of intentional action*. Oxford: Blackwell.
- Hoffman, E. (1989). *Lost in translation: A life in a new language*. New York: E. P. Dutton.
- Hudson, R. (1980). *Sociolinguistics*. Cambridge: Cambridge University Press.
- Hume, D. (1978). *A treatise of human nature*. Oxford: Clarendon Press. (Original work published 1739)
- Hymes, D. (1971). *On communicative competence*. Philadelphia: University of Pennsylvania Press.
- Johnson, M. K., Suenegas, A. G., Foley, M. A., & Raye, C. L. (1988). Phenomenal characteristics of memories for perceived and imagined autobiographical events. *Journal of Experimental Psychology: General*, 117(4), 371–376.
- Kant, I. (1965). *Critique of pure reason* (Norman Kemp Smith, Trans.). (Unabridged edition). New York: Saint Martin's Press. (Original work published 1781)
- Kovèn, M. (1998). Two languages in the self/the self in two languages: French-Portuguese bilinguals' verbal enactments and experience of self in narrative discourse. *Ethos*, 26(4), 410–455.
- Kovèn, M. (2001). Comparing bilinguals' quoted performances of self and others in tellings of the same experience in two languages. *Language in Society*, 30(4), 513–558.
- Kroll, J. F., & Sholl, A. (1992). Lexical and conceptual memory in fluent and nonfluent bilinguals. In R. J. Harris (Ed.), *Cognitive processing in bilinguals* (pp. 191–204). Amsterdam: Elsevier Science Publishers.
- Kroll, J. F., & Stewart, E. (1994). Category interference in translation and picture naming: Evidence for asymmetric connection between bilingual memory representations. *Journal of Memory and Language*, 33(2), 149–174.
- Labov, W., & Waletzky, J. (1967). Narrative analysis: Oral versions of personal experience. In J. Helm (Ed.), *Essays on the verbal and visual arts: Proceedings of the 1966 annual spring meeting of the American Ethnological Society* (pp. 12–44). Seattle, WA: University of Washington Press.
- Larsen, S., Schrauf, R. W., Fromholt, P., & Rubin, D. C. (2002). Inner speech and bilingual autobiographical memory: A Polish-Danish cross-cultural study. *Memory*, 10(7), 45–54.
- LePage, R. B., & Tabouret-Keller, A. (1985). *Acts of identity: Creole-based approaches to language and ethnicity*. Cambridge: Cambridge University Press.
- Levelt, W. J. M. (1989). *Speaking: From intention to articulation*. Cambridge, MA: MIT Press (Bradford Books).
- Lucy, J. A. (Ed.). (1993). *Reflexive language: Reported speech and metapragmatics*. New York: Cambridge University Press.

- Marian, V., & Neisser, U. (2000). Language-dependent recall of autobiographical memories. *Journal of Experimental Psychology: General*, 129(3), 361–368.
- Nelson, L. H., & Nelson, J. (2000). *On Quine*. Belmont, CA: Wadsworth Thomas Learning.
- Ochs, E. (1988). *Culture and language development: Language acquisition and language socialization in a Samoan village*. Cambridge: Cambridge University Press.
- Pavlenko, A. (1998). Second language learning by adults: Testimonies of bilingual writers. *Issues in Applied Linguistics*, 9(1), 3–19.
- Pavlenko, A. (1999). New approaches to concepts in bilingual memory. *Bilingualism: Language and Cognition*, 2(3), 209–230.
- Poole, F. J. P. (1994). Socialization, enculturation and the development of personal identity. In T. Ingold (Ed.), *Companion encyclopedia of anthropology* (pp. 831–890). New York: Routledge.
- Quine, W. V. O. (1964). *Word and object*. Cambridge, MA: MIT Press.
- Robinson, J. A., & Swanson, K. L. (1990). Autobiographical memory: The next phase. *Applied Cognitive Psychology*, 4, 321–335.
- Rubin, D. C. (1998). Beginnings of a theory of autobiographical remembering. In C. P. Thompson, D. J. Herrman, D. Bruce, J. D. Read, D. G. Payne, & M. P. Toglia (Eds.), *Autobiographical memory: Theoretical and applied perspectives* (pp. 47–67). Mahwah, NJ: Lawrence Erlbaum Associates.
- Rubin, D. C., & Greenberg, D. (1998). Visual memory-deficit amnesia: A distinct amnesic presentation and etiology. *Proceedings of The National Academy of Sciences*, 95, 5413–5416.
- Rubin, D. C., Schrauf, R. W., & Greenberg, D. L. (2002). Belief and recollection of autobiographical memories. Manuscript submitted for publication.
- Saussure, F. D. (1959). *Course in general linguistics* (W. Baskin, Trans.). New York: Philosophical Library.
- Schieffelin, B. B., & Ochs, E. (1986a). Language socialization. *Annual Review of Anthropology*, 15, 163–91.
- Schieffelin, B. B., & Ochs, E. (Eds.). (1986b). *Language socialization across cultures*. Cambridge: Cambridge University Press.
- Schrauf, R. W. (1997). ¡Costalero quiero ser! Autobiographical memory and the oral life story of a Holy Week brother in southern Spain. *Ethos*, 25(4), 428–453.
- Schrauf, R. W. (2000a). Bilingual autobiographical memory: Experimental studies and clinical cases. *Culture & Psychology*, 6(4), 387–417.
- Schrauf, R. W. (2000b). Narrative repair of threatened identity. *Narrative Inquiry* 10(1), 127–145.
- Schrauf, R. W. (2002). Comparing cultures within subjects: A cognitive account of acculturation as a framework for cross-cultural study. *Anthropological Theory*, 2(1), 101–118.
- Schrauf, R. W., & Rubin, D. C. (1998). Bilingual autobiographical memory in older adult immigrants: A test of cognitive explanations of the reminiscence bump and the linguistic encoding of memories. *Journal of Memory and Language*, 39(3), 437–457.
- Schrauf, R. W., & Rubin, D. C. (2000). Internal languages of retrieval: The bilingual encoding of memories for the personal past. *Memory and Cognition*, 28(4), 616–623.
- Sholl, A., Sankaranarayanan, A., & Kroll, J. F. (1995). Transfer between picture naming and translation: A test of asymmetries in bilingual memory. *Psychological Science*, 6(1), 45–49.
- Silverstein, M. (1976). Shifter, linguistic categories, and cultural description. In K. H. Basso & H. A. Selby (Eds.), *Meaning in anthropology* (pp. 11–56). Albuquerque, NM: University of New Mexico Press.

- Silverstein, M. (1979). Language structure and linguistic ideology. In P. R. Clyne, W. F. Hanks, & C. L. Hofbauer (Eds.), *The elements: A parasection on linguistic units and levels* (pp. 193–247). Chicago: Chicago Linguistic Society.
- Silverstein, M. (1987). The three faces of function: Preliminaries to a psychology of language. In M. Hickmann (Ed.), *Social and functional approaches to language and thought* (pp. 17–38). New York: Academic Press.
- Tulving, E., & Thompson, D. M. (1973). Encoding specificity and retrieval processes in episodic memory. *Psychological Review*, *80*, 352–373.
- Weingartner, H. (1978). Human state-dependent learning. In B. T. Ho, D. W. Richards, & D. C. Chute (Eds.), *Drug discrimination and state-dependent learning* (pp. 361–382). New York: Academic Press.
- Wheeler, M. A., Stuss, D. T., & Tulving, E. (1997). Toward a theory of episodic memory: The frontal lobes and autoegetic consciousness. *Psychological Bulletin*, *121*(3), 331–354.
- Wittgenstein, L. (1961). *Tractatus-Logico-Philosophicus* (O. F. Pears & B. F. McGuinness, Trans.). London: Routledge and Kegan Paul. (Original work published 1922)
- Wittgenstein, L. (1953). *Philosophical investigations*. Oxford: Blackwell.
- Yakobson, H. (1994). *Crossing borders: From revolutionary Russia to China to America*. Tenafly, NJ: Hermitage.

Autobiographical Memory and the Construction of a Narrative Self

Developmental and Cultural Perspectives

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2003

LAWRENCE ERLBAUM ASSOCIATES, PUBLISHERS
Mahwah, New Jersey

London