

SCIENCE BRIEFS

Where Does Our Past Begin? A Sociocultural Perspective on the Phenomenon of Childhood Amnesia

The phenomenon of childhood amnesia poses an intriguing dilemma.

By Qi Wang, PhD

Where does our past begin? The answer seems obvious: It begins right when we were born. However, very few of us remember things that took place in the first years of our life. So, although our life begins at birth, our past or our story begins only a few years later. This common inability among adults to consciously access personal event memories, or autobiographical memories, from early childhood is often referred to as childhood amnesia.

The phenomenon of childhood amnesia poses an intriguing dilemma: While children as young as age 2 or 3 are able to remember personal event information for considerable periods of time, especially with adults' assistance (e.g., Fivush & Hamond, 1990), adults generally show impoverished recall of early memories, and this discontinuity is not accountable entirely by normal forgetting with age (Howe & Courage, 1993). A number of theories have been offered over the past hundred years to explain this phenomenon. According to Freud (1905/1949), childhood amnesia results from the repression of sexual and aggressive impulses, with a blockage separating childhood memories from adult consciousness. From an information processing standpoint, cognitive and social discontinuity theories (Schachtel, 1947; Neisser, 1962) suggest that childhood amnesia results from the shift in cognitive schemata concomitant with the development toward adult modes of thought. This shift takes place as children come to assume new roles, new responsibilities, and new values in the adult world while growing up and makes early memories inaccessible.

More recently, theories have variously emphasized social-cultural-linguistic factors (see Nelson & Fivush, 2004), self and cognitive factors (e.g., Conway & Pleydell-Pearce, 2000; Howe & Courage, 1993, 1997), and neurological changes (e.g., Conway & Pleydell-Pearce, 2000) that render memories after the childhood amnesia period accessible. In particular, Howe and Courage (1993, 1997) propose that the development of a 'cognitive' self, structured around the distinction between "I" and "Me", during the period of 2 to 3 years of age is critical in providing an organizational structure within which memories can be represented and later on, retrieved. The age 2 to 3 also sees the emergence of language as a fully developing system, which has a profound effect on the accessibility of memories by rendering them verbally accessible (Nelson, 1996; Simcock & Hayne, 2002). Moreover, the emergence of language ushers in a whole new range of linguistic interactions with others, especially memory sharing with parents, which has important consequences for the later accessibility of memories (Nelson & Fivush, 2004). There is also a complex interaction between the developing self, emerging language abilities, and

verbally dominated social interactions (e.g., Reese, 2002), and all of these can be further influenced by cultural beliefs and practices that act to facilitate or attenuate the accessibility of early memories (Wang, 2003). In this article, I outline a sociocultural perspective on childhood amnesia and discuss relevant evidence from recent cross-cultural studies.

To fully explain childhood amnesia, or any other psychological phenomenon, we must ask this question: Is this phenomenon universal or culture specific? If childhood amnesia appears in many different cultures and may thus be universal, does culture play a role in shaping its length or severity and, thus, influencing the exact timing for childhood amnesia to end and for our past to begin? Cross-cultural studies have shown that adults from in a variety of cultures that differ in political-economic systems and cultural-historical-religious traditions are typically unable to recall events from their first years of life, suggesting childhood amnesia may indeed be a universal phenomenon (Wang, 2003). The question that remains is whether and how culture influences the accessibility of early memories and thus the length of childhood amnesia.

A sociocultural perspective suggests that cultures place varied emphases on the importance of the personal past, and this can have implications for the emergence and general accessibility of our childhood memories (See Wang & Ross, 2007). According to Western intellectual tradition, one critical function of our memories is to define who we are and to further help us build a unique individual identity. In his "Treatise on Human Nature," Hume (1739/1882, p. 542) proclaimed the importance of memory: "Had we no memory, we never should have any notion ... of that chain of causes and effects, which constitute our self or person." This emphasis on using personal memory to define one's self-identity may be intimately linked to the Western conception of selfhood, which focuses on autonomy and independence (Markus & Kitayama, 1991). Autobiographical memories often concern distinctive personal experiences and can help individuals distinguish themselves from others, thus serving as an important and even necessary component of an autonomous self. In many other cultures such as those in East Asia, however, autobiographical memory is not central to self-identity. In these cultures, a relational self is defined largely by one's social roles, status, and relationship networks. This conception stands in direct contrast to the Western notion of selfhood that focuses on one's psychological traits and depends on self-revealing autobiographical memories (Markus & Kitayama, 1991; Röttger-Rössler, 1993; Wang & Conway, 2004).

The different self-views across cultures may influence the extent to which people value the importance of remembering in defining one's self, and may be further reflected in their ability to recall very long-term memories, including their earliest childhood experiences. Conceivably, an autonomous self-view may motivate individuals to attend to, encode, and retain information of events that happened to "me." Consequently, individuals' cognitive resources may be channeled into the early development of an organized, articulated, and durable autobiographical memory system. In contrast, a relational self-view may instead promote the retention of knowledge critical for social harmony and collective solidarity. The development of a structured memory system for one's own experiences may not be accentuated in this context. This may lead to a longer period of childhood amnesia and thus the later emergence of a personal past.

**Table 1*****Age of Earlier Memory (In Months) in Cross-Cultural Studies***

Source	Task	Group	N	Mean Age
Fiske & Pillemer (2006)  (Study 1; Age of earliest dream memory)	EM	European American	45	67.7
		Asean American	33	81.8
Gur-Yaish & Wang (2006)	EM	European American	119	41.9
		Israrli	83	49.8
Kassoff & Wang (unpublished data)	EM	European American	119	41.9
		French	35	41.8
MacDonald, Uesiliana, & Hayne (2000),  (Experiment 1)	EM	NewZealand European	32	42.9
		NewZealand Maori	32	52.6
		NewZealand Asean	32	57.8
Matsumoto & Stanny (2006)	EM	European American	15	48.0
		Japanese	18	38.4
Mullen - Yi (1994)	EM	European American	545	38.8
		Asean American	129	45.1
		Korean	41	55.5
Peterson, Wang & (under review)  (8-14 year olds)	MF	European Canadian	225	28.2
		Chinese	133	41.4
Wang (2001)	EM	European American	119	41.9
		Chinese	137	47.5

Wang (2006 a)	WC	European American	52	53.3
		Taiwanese	59	69.3
Wang, Cole, & Lord (unpublished data)	EM	European American	92	38.1
		Malagasy	94	64.5
Wang, Conway, & Hou(2004)	MF	European American	101	32.4
		British	104	31.0
		Chinese	97	37.6
Wang & Ross(2005) (study 1)	EM	European American	136	41.0
		Asean American	132	48.0

\*Indicates whether the age of the earliest memory was from an earliest memory task (EM), where participants were asked to recall and date their earliest childhood memory; a memory fluency test (MF), where participants were asked to recall their early childhood memories as many and as quickly as they could and their earliest memory was identified; or a word-cued method (WC), where participants were asked to recall their earliest memories in response to cue word and the age estimates were then averaged across the memories.

^Indicates the cultural background of the participating group.

A number of cross-cultural studies have examined earliest childhood recollections. In line with the theoretical proposal, a prediction can be readily made: Individuals in cultures, particularly European American culture, that prize an autonomous sense of self would be able to retrieve earlier memories than individuals in cultures that value a relational self. As shown in Table 1, although the age of earliest memory varied across studies depending on the nature of the tasks such as how facilitative they are for memory accessibility (Wang, 2006a), this prediction of cultural difference is confirmed regardless of task. Most of the studies involved the comparisons between Europeans or European Americans and Asians or Asian Americans, and the age differences for those groups in the earliest childhood memory ranged between 16.7 (Mullen, 1994) and 5.2 months (Wang, Conway, & Hou, 2004). Participants in most of the studies were young adults, except in one recent study by Peterson, Wang and Hou (under review) that examined the earliest childhood memory in 8-, 11-, and 14-year-olds. The researchers found that consistent with adult data, European Canadian children had earlier memories than did Chinese children across all age groups, and the cultural difference became larger with age. Interestingly, the difference in the age of earliest memory was also found between cultural groups that differ in the degree to which they value individuality and an autonomous sense of self. For instance, Gur-Yaish and Wang (2006)

examined earliest childhood memories in European Americans and Israelis. European American culture puts a prime value on personal autonomy and self sufficiency; these qualities are also emphasized but less strongly so in Israeli culture (Oyserman, Coon, & Kimmelmeier, 2002). As expected, European Americans recalled earlier memories than Israeli participants.

A few exceptions should be noted. In MacDonald, Uesiliana, and Hayne (2000), New Zealand Maori adults recalled earlier memories than those of European and Asian descents. Maori culture traditionally places a strong emphasis on the past and the oral histories of individuals and families. Accordingly, talking about past experiences is actively encouraged in the family and community, which may further facilitate the retention of early memories (Reese, Hayne, & MacDonald, 2008). These findings suggest that many dimensions of culture, in addition to predominant cultural self-views, can influence our remembering of the personal past. Another exception is that in the only study involving Japanese participants (Matsumoto & Stanny, 2006), no cultural difference was found in the age of earliest memory. Given the small sample size in the study, this finding requires corroboration in future research.

A frequent question about this suite of research concerns the accuracy of the memories and their age estimates. Extant data of memory verification by an external criterion of accuracy can shed light on this issue. When submitted to external sources such as adults present at the time of the event, early childhood memories prove mostly accurate in content and age estimates (Bruce, Dolan, & Phillips-Grant, 2000; Eacott & Crawley, 1998), and this is true across cultural groups (Peterson et al., under review). Although individuals do make errors in dating memories, especially memories from the distant past, they are generally accurate and show little systematic bias (Larsen, Thompson, & Hansen, 1996; Rubin, 1982). Furthermore, there is evidence that Asians and European Americans use similar strategies, such as to relate memories temporally to landmark events, when dating earliest childhood memories (Mullen, 1994). These data suggest that individual and cultural variations in the age of earliest memory cannot be simply attributed to systematic dating errors. In addition, although it is possible that participants' memories of early childhood events are affected by photos they have seen or stories they have heard, researchers studying early memories attempt to focus on events participants remembered independently of external sources.

If different cultural self-views indeed influence how we remember our childhood experiences, we should be able to observe that, even within a single culture, individuals with a greater autonomous sense of self show greater accessibility to childhood memories than individuals with a greater relational sense of self. Researchers have obtained these very results (Kasoff & Wang, unpublished data; Wang, 2001, 2006b; Wang, Leichtman, & White, 1998). In the European American, French, and Chinese samples examined, participants who dwelled more on personal unique attributes and qualities when describing themselves tended to report earlier and more detailed childhood memories than did participants who dwelled more on social roles and relationships when describing themselves.

Mediation analysis has proved particularly useful in revealing the contributing factors that give rise to observed cultural differences. In Wang (2006b), 3-year-olds from Chinese families in China, first-generation Chinese immigrant families in the U.S., and European American families were interviewed for memories of recent events and self-descriptions. European American youngsters described themselves

in more personal as opposed to social terms and recalled more memory information than did their Chinese and Chinese immigrant peers. Mediation analysis indicated that the children's cultural self-views accounted for the cultural differences in their memory reports.

Experimental studies that prompt individuals to focus temporarily on either their relatively unique personal self or their relational self have provided further evidence for the effect of cultural self-views on memory accessibility. In a study by Wang and Ross (2005), European and Asian American participants were asked to describe themselves as either a unique individual (personal prime) or as a member of various social groups (relational prime). They were then asked to recall their earliest childhood memory. The personal prime increased the accessibility of earlier memories among Asians, such that they reported their earliest childhood memories from approximately 3.5 years of age, just as European Americans did. European Americans were unaffected by the prime presumably because they had accessed the earliest memories possible in this experimental paradigm (Mullen, 1994; Wang, 2006a).

The influence of cultural self-views on personal remembering takes place through family narrative practices early on (e.g., Mullen & Yi, 1995; Wang, 2007; Wang & Fivush, 2005). When sharing memories with their young children, European American mothers often use an elaborative conversational style in which they provide embellished information to actively scaffold children's participation and frequently refer to the child's roles, preferences, and feelings. Such conversations reflect the underlying value of constructing elaborate personal stories and, in turn, a unique individual identity in European American culture. Asian mothers, in contrast, tend to use a pragmatic, test-like conversational style where they take a directive role in posing pointed questions, frequently discuss social norms and behavioral expectations, and focus on the roles of significant others. Such conversations are in line with the Confucian emphasis on relational hierarchy and social conformity. They encourage children to abide by rules and to develop a sense of belonging, while downplaying the use of memory to construct one's unique individual identity. Indeed, the use of an elaborative conversational style, as opposed to a pragmatic style, is positively associated with mothers' endorsement of independence and an autonomous self-view, and negatively related to their orientation towards interdependence and a relational self-view (Wang, 2007). Given the different values and practices in early family socialization, from as young as age 3, European American children often recall more memory information than their Asian peers when sharing memories with their mothers or independently recounting past experiences with a researcher (e.g., Han, Leichtman, & Wang, 1998; Wang, 2004; 2006b). Thus, early narrative practices embody rich cultural messages to prioritize the development of personal remembering versus social knowledge, which further influence how children come to represent, rehearse, and remember autobiographical events over the long term.

Our remembered past starts a few years after our coming to the world, regardless where we live. Yet the exact timing varies across cultures, reflecting different cultural value orientations in the construction of an autonomous self through elaborate remembering of one's personal past, versus a relational self via one's social roles and relationships. The varied values placed on autonomy and interrelatedness across cultures are readily present in parents' interactions with their young children, which further contributes to cultural differences in the long-term accessibility of autobiographical memory and thus the offset of childhood amnesia.

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