### Infantile Amnesia

**婴幼儿期记忆缺失**

What do you remember about your life before you were three? ■ Few people can remember anything that happened to them in their early years. ■ Adults’ memories of the next few years also tend to be scanty. ■ Most people remember only a few events — usually ones that were meaningful and distinctive, such as being hospitalized or a sibling’s birth. ■

三岁前生活中发生的事情你还记得多少？很少有人能记得婴幼儿时期曾经发生在他们身上的事情。成年人对三岁之后那几年的记忆也很稀疏。大部分人只记得很少的一些特殊的事情，比如住院或者弟弟妹妹的出生。

How might this inability to recall early experiences be explained? The sheer passage of time does not account for it; adults have excellent recognition of pictures of people who attended high school with them 35 years earlier. Another seemingly plausible explanation — that infants do not form enduring memories at this point in development — also is incorrect. Children two and a half to three years old remember experiences that occurred in their first year, and eleven month olds remember some events a year later. Nor does the hypothesis that infantile amnesia reflects repression —or holding back — of sexually charged episodes explain the phenomenon. While such repression may occur, people cannot remember ordinary events from the infant and toddler periods either.

人们无法回忆起幼年事情的现象该如何解释呢？恐怕时间的流逝无法阐述清楚，成年人对35年前高中同学的照片仍可进行清楚地辨认。一种看似合理的解释认为，婴儿时期，孩子在发展的过程中对发生的事情尚未形成永久性记忆，这种说法并不准确。两岁半到三岁的孩子能够记得他们一岁时候的事情，11个月大的孩子一年以后仍会记得一些事情。那些认为婴幼儿健忘症反映了孩子们对充满性欲的插曲的压抑或隐藏的假设同样也解释不了这种现象。当这种压抑发生的时候，人们连孩提时代普通的事情都无法回忆起来。

Three other explanations seem more promising. One involves physiological changes relevant to memory. Maturation of the frontal lobes of the brain continues throughout early childhood, and this part of the brain may be critical for remembering particular episodes in ways that can be retrieved later. Demonstrations of infants’ and toddlers’ long-term memory have involved their repeating motor activities that they had seen or done earlier, such as reaching in the dark for objects, putting a bottle in a doll’s mouth, or pulling apart two pieces of a toy. The brain’s level of physiological maturation may support these types of memories, but not ones requiring explicit verbal descriptions.

除此之外的三种解释似乎更具说服力。一种观点涉及记忆相关的生理变化。在孩子们早期的童年时代中，脑前叶不断地成熟，它对记忆发生的特殊事件以及之后对这些事情的回想起着至关重要的作用。婴幼儿长期记忆的形成，还会涉及到他们之前看到的或者自身经历的运动神经活动的重复，比如：到黑暗的环境里取东西，把瓶子塞到了洋娃娃的嘴里，或者将玩具撕成两半等。他们大脑生理成熟的程度可能足以帮助他们记住这种特殊事件，而不是那些需要清晰语言描述的事件。

A second explanation involves the influence of the social world on children’s language use. Hearing and telling stories about events may help children store information in ways that will endure into later childhood and adulthood. Through hearing stories with a clear beginning, middle, and ending children may learn to extract the gist of events in ways that they will be able to describe many years later. Consistent with this view parents and children increasingly engage in discussions of past events when children are about three years old. However, hearing such stories is not sufficient for younger children to form enduring memories. Telling such stories to two year olds does not seem to produce long-lasting verbalizable memories.

第二种观点与社会环境对孩子运用语言的影响有关。听故事和讲故事将有助于储存信息，直到他们的童年和成年。听那些有清晰的开头、情节和结尾的故事会帮助孩子们提取事件的要点，并且使他们在过了很多年以后仍然可以描述这些事情。越来越多的家长们会在孩子三岁左右的时候和他们讨论过去发生的事情，这也与该理论一致。然而，仅仅听这些故事还是不足以帮更年幼的孩子形成永久的记忆。给两岁的孩子讲故事，并不能使他们形成语言化的记忆。

A third likely explanation for infantile amnesia involves incompatibilities between the ways in which infants encode information and the ways in which older children and adults retrieve it. Whether people can remember an event depends critically on the fit between the way in which they earlier encoded the information and the way in which they later attempt to retrieve it. The better able the person is to reconstruct the perspective from which the material was encoded, the more likely that recall will be successful.

第三种可能的解释认为婴幼儿健忘症与婴儿储存信息的方式和成年后进行回忆的方式不相容有关。人们是否能够回忆起一件事情很大程度上在于这两种方式的匹配程度。两种方式越匹配，越有助于人们成功回忆之前发生的事情。

This view is supported by a variety of factors that can create mismatches between very young children’s encoding and older children’s and adults’ retrieval efforts. The world looks very different to a person whose head is only two or three feet above the ground than to one whose head is five or six feet above it, older children and adults often try to retrieve the names of things they saw, but infants would not have encoded the information verbally. General knowledge of categories of events such as a birthday party or a visit to the doctor’s office helps older individuals encode their experiences, but again, infants and toddlers are unlikely to encode many experiences within such knowledge structures.

事实上，很多因素会导致婴幼儿储存信息的方式和成年人进行回忆的方式不匹配。对于一个年幼的孩子来说，这个世界与那些稍大点的孩子眼中的世界不尽相同。长大后的孩子和成人经常试图回忆那些他们曾经见过的事物的名字，但在他们的幼儿时期尚未对此进行语言化的信息储存。人们对类似生日聚会或者拜访医生诊所类似的事件的分类常识有助于人们记忆他们的经历，但是，婴幼儿时期的孩子们似乎缺乏这些知识结构来帮助他们储存信息。

These three explanations of infantile amnesia are not mutually exclusive: indeed, they support each other. Physiological immaturity may be part of why infants and toddlers do not form extremely enduring memories, even when they hear stories that promote such remembering in preschoolers. Hearing the stories may lead preschoolers to encode aspects of events that allow them to form memories they can access as adults. Conversely, improved encoding of what they hear may help them better understand and remember stories and thus make the stories more useful for remembering future events. Thus, all three explanations — physiological maturation hearing and producing stories about past events，and improved encoding of key aspects of events — seem likely to be involved in overcoming infantile amnesia.

以上三种关于幼儿期遗忘的解释实际上并非互斥，它们是相互支持的。生理上的不成熟是导致学龄前孩子无法形成长久记忆的原因之一，即使他们听到了那些可以促进他们回忆的故事。听那些故事将有助于学龄前孩子在脑中储存已经发生的事情，以便形成他们可以像成年人那样自由提取的记忆。相反，将他们听到的故事进行更进一步的编码将有助于他们更好地理解和记忆，因此，那些故事将对他们记住将来发生的事情更有帮助。综上所述，生理上的成熟、听故事和讲故事以及改进对事件关键信息的编码都有助于克服婴幼儿遗忘症。