在人类表现出的各种认知过程中，最重要的就是能够学习和记忆。人类的记忆被认为是自动联想的。它可以将学习到的概念存储在记忆中，并在看到部分或破碎的模式时进行回忆。【face】研究了人类大脑中的面部编码和识别原理，发现海马和相邻的皮层参与记忆功能

主要是在新的记忆编码的时候。此外，脸部识别并不是简单地通过重现编码时的操作来介导的，而是涉及到在解剖学上是可以分离的操作。在人工智能的许多研究中，我们都尝试去模拟人类大脑的行为，在记忆方面也是一样。阿Atkinson and Shiffrin [8]认为，人类记忆有三个模块，即感觉记忆，短期记忆，以及长期记忆，这些模块的运作关系非常密切。在[2]中提到类人记忆有三个基本特征：首先，减少了内存中的内容随着时间的流逝。这叫做遗忘。其次，管理内存以不浪费不必要的内存空间。这包括短期记忆和长期记忆之间的适当互动。第三，人类记忆可以快速识别查询模式是否为存储的查询模式之一。

Atkinson and Shiffrin [8] suggest that human memory has

three modules, i.e., sensory memory, short-term memory, and

long-term memory and these modules operate with very close

relationship. And there are also three essential features in

human-like memory [2]. First, the contents in memory are

reduced as time elapse. This is called forgetting. Second,

memory is managed not to waste unnecessary memory space.

This includes the proper interaction between short-term

memory and long-term memory. Third, human memory can

fast recognize whether a query pattern is one of the stored or

not.

Hyun-Chul Choi等人提出了一种高效的类似人类记忆和内存管理，利用基于Walsh的分布式关联存储器，以减少计算机储存和处理的模式识别。但是将类人记忆应用到大规模摄像机下人脸隐私保护方面的研究甚少，而本文从类人认知角度出发，为类人记忆探索新的应用领域，为探索大规模摄像头城市应用的新模式开展基础理论研究。

Of the various cognitive processes that humans exhibit, the most important is the ability to learn and recall. Human memory is thought to be automatically associative. It can store learned concepts in memory and recall them when it sees partial or broken patterns. [face] studied the principles of face encoding and recognition in the human brain and found that the hippocampus and adjacent cortex are involved in memory function primarily when new memories are encoded. Furthermore, face recognition is not simply mediated by recreating operations at the time of encoding, but involves operations that are anatomically separable. In much of the research in artificial intelligence, we have tried to emulate the behaviour of the human brain, and the same is true in the case of memory. Atkinson and Shiffrin [8] suggest that human memory has three modules, sensory memory, short-term memory, and long-term memory, and that these modules operate in a very close relationship. Three fundamental characteristics of human-like memory are listed in [2]. The first is the gradual loss of stored information. We refer to this as forgetting. Second, memory is controlled to prevent the wastage of memory. The proper interaction of short-term and long-term memory is part of this. Third, a query pattern can be swiftly verified as one of the previously stored question patterns using human memory. Hyun-Chul Choi et al. proposed an efficient human-like memory and memory management using Walsh-based distributed associative memory to reduce computer storage and processing for pattern recognition. However, there are few studies applying human-like memory to face privacy protection under large-scale cameras, and this paper explores new application areas for human-like memory from the perspective of human-like cognition, and conducts fundamental theoretical research for exploring new models for large-scale camera urban applications.