Destination memory refers to remembering the destination of information that people output. This present paper establishes a new distinction between external and internal processes within this memory system for both normal aging and Alzheimer's Disease (AD). Young adults, older adults, and mild AD patients were asked either to tell facts (i.e., external destination memory condition) or to imagine telling facts (i.e., internal destination memory condition) to pictures of famous people. The experiment established three major findings. First, the destination memory performance of the AD patients was significantly poorer than that of older adults, which in turn was poorer than that of the young adults. Furthermore, internal destination processes were more prone to being forgotten than external destination memory processes. In other words, participants had more difficulty in remembering whether they had previously imagined telling the facts to the pictures or not (i.e., imagined condition) than in remembering whether they had previously told the facts to the pictures or not (i.e., enacted condition). Second, significant correlations were detected between performances on destination memory and several executive measures such as the Stroop, the Plus-Minus and the Binding tasks. Third, among the executive measures, regression analyses showed that performance on the Stroop task was a main factor in explaining variance in destination memory performance. Our findings reflect the difficulty in remembering the destination of internally generated information. They also demonstrate the involvement of inhibitory processes in destination memory.