Abstract: This paper presents evidence that even if two individuals exhibit similar reactions caused by their autonomous nervous systems towards the same external stimuli, one may form a memory that can be recalled consciously, whereas the other may form a memory that cannot be processed consciously. We had fifteen monitors watch films, and we recorded their heart rates. Two monitors exhibited similar autonomous nervous system reactions, measured by HR, to the same films. We conducted interviews and compared their episodic memory about the films that both watched. One monitor was able to verbalize in detail her behavior, whereas the other could recall little of what he had watched. We suggest that this phenomenon can be explained by assuming that for the two monitors System1 of Two Minds worked similarly to external stimuli, whereas System2 worked differently for each monitor, affecting the formation of episodic memory in terms of conscious recallability.