

What Actors Can Teach Us About Memory and Learning

The most effective memorization techniques draw on physical and emotional engagement as much as they do pure brain power

By Annie Murphy Paul (first published 2012)

So you say you have a wedding toast to memorize? A 20-min. speech you have to know by heart? A list of people's names you absolutely must remember?

Imagine delivering the long soliloquies of Shakespeare or the impassioned speeches of Arthur Miller or the cut-glass dialogue of David Mamet. When it comes to memorization, professional actors can claim bragging rights. They must reproduce their scripts exactly — no improvising allowed — night after night, under blinding lights, in front of a demanding audience. How do they do it? Helga Noice, a professor of psychology at Elmhurst College in Illinois, has spent more than 20 years investigating that question.

Noice's first and most surprising discovery is that most actors don't memorize their lines in the traditional sense at all. Rather, they begin by reading the script over and over again, looking for what they call the "throughline" — the causal chain that leads one event in the play to topple into the next and the next. "Almost every line of the script is mined for clues as to the characters, situations, or relationships," Noice writes, commenting on the method practiced by the actors she interviewed.

They are searching for the intentions of the play's characters: why they do what they do, and especially, why they say what they say. Actors pay minute attention to every snatch of dialogue because each word offers a hint of the speaker's motivations and desires. As they engage in this "micro-level" processing of the material, Noice notes, memorization of the lines just happens: "At no time did the actors attempt to memorize the words directly, but rather tried to discern why the character would use those particular words to express that particular thought."

Another key to actors' superlative memories: words are often intimately connected to actions onstage. Cast members' movements are carefully blocked out during rehearsal, and so their lines are always matched to the same physical motions, forming a kind of bodily mnemonic device. Indeed, Noice's studies show that months after the final performance of a play, actors recalled dialogue that had been accompanied by movement about the stage better than dialogue that had been spoken while remaining in place. "You've got to have these two tracks going simultaneously — 'This is what I say, and this is when and where I move,'" one of the actors told Noice. "One feeds the other, and you move and say the line" in a synchrony of speech and action.

Lastly, the emotions actors bring to their parts sear the words into their memories. Acting is no dry recitation, but an evocation of actual emotion and the visceral feelings brought forth on stage make the words that go with them hard to forget. Although these principles were enumerated by professional actors and not cognitive psychologists, all three of them — deep processing, physical movement and emotional associations — find substantial support in the scientific literature on memory. So the next time you need to know something by heart, take a cue from those who learn lines for a living. Try "to find out the whys," as one actor described his process of searching for the deeper meaning behind a text. Try to tie the words you speak to the moves your body makes — the

gestures you proffer at certain points in a speech, for example, or the welcoming posture you adopt when you're greeting new acquaintances. And infuse your delivery with some real emotion. Applause will surely follow.