

will be bad, it will bad. But how deep are these influences? Do they just change our beliefs, or do they also change the physiology of the experience itself? In other words, can previous knowledge actually modify the neural activity underlying the taste itself, so that when we expect something to taste good (or bad), it will actually taste that way?

To test this possibility, Leonard, Shane, and I conducted the beer experiments again, but with an important twist. We had already tested our MIT Brew in two ways—by telling our participants about the presence of vinegar in the beer *before* they tasted the brew, and by not telling them anything at all about it. But suppose we initially didn't tell them about the vinegar, then had them taste the beer, then revealed the presence of the vinegar, and then asked for their reactions. Would the placement of the knowledge—coming just after the experience—evoke a different response from what we received when the participants got the knowledge before the experience?

For a moment, let's switch from beer to another example. Suppose you heard that a particular sports car was fantastically exciting to drive, took one for a test drive, and then gave your impressions of the car. Would your impressions be different from those of people who didn't know anything about the sports car, took the test drive, then heard the car was hot, and then wrote down their impressions? In other words, does it matter if knowledge comes before or after the experience? And if so, which type of input is more important—knowledge before the experience, or an input of information after an experience has taken place?

The significance of this question is that if knowledge merely informs us of a state of affairs, then it shouldn't matter whether our participants received the information before