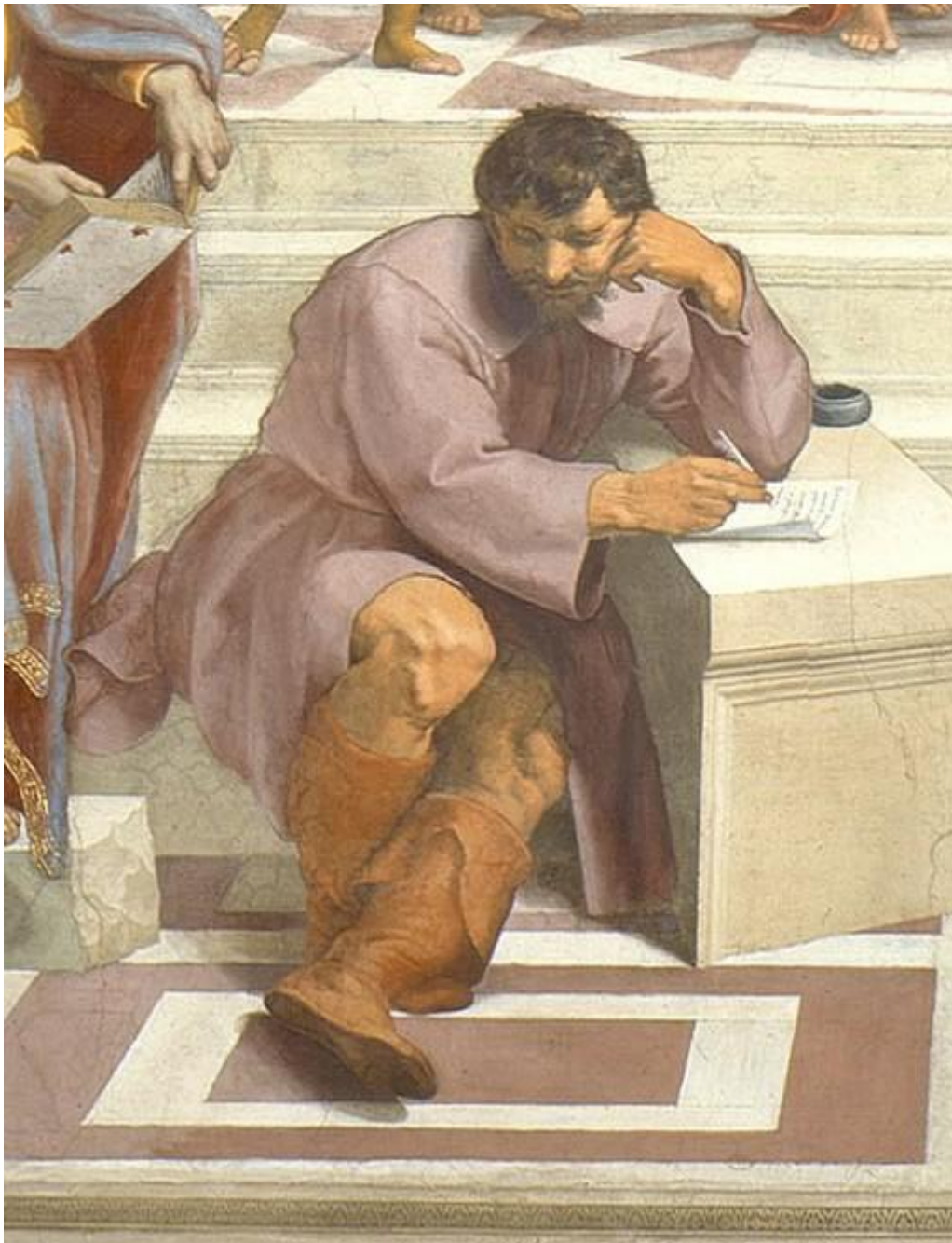


# The Obscure One

31 December 2017 · random, regression, unexpected

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Heraclitus wrote these words 2500 years ago: “Ever-newer waters flow on those who step into the same rivers.” or paraphrased in more colloquial English: You never stand in the same river twice.



Known as the “The obscure one” to some of his contemporaries, he was known to make statements that were considered paradoxical and sometimes unhelpfully contradictory. I don't

know about you - but sometimes when discussing testing feedback - I feel like I am channeling the ghost of Heraclitus.

His comments regarding walking through rivers are an apt description of our work with software and its versioning. Do we ever play with the same app twice? On a trivial level, we do. When we widen our view we can see that the waters have moved on.

For example,

- The time has changed. It may even have gone back to a previous date and time.
- The code is probably located in a different memory location.
- The app and operating system are probably facing different types of automated attack from various pieces of malware on the same device and across the network
- Your typing / swiping speed has changed
- Libraries used by the app may have been patched
- The OS has probably been patched
- Your training/test datasets' random split is slightly different
- Other programs or apps have probably been patched.

Etc.

Add to this the changes in your test tools and test data, then an application some might naively see as the 'same version', can behave quite differently.

So when someone says a test is flaky or the app is flaky, think about the river of change that's running through your app. Smile to yourself, and know that people have been explaining what you are about to explain for at least 2500 years.