

Title: What drives spellings to change over time?

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English spelling is marked by substantial sound-to-spelling inconsistency (cf. *bon-us*, *por-ous*, *atl-as*). How and why has this complexity emerged? Our recent work suggests that the disorder in the spelling-sound mapping has allowed higher-level regularities between spelling and meaning to emerge (Ulicheva, Harvey, Aronoff, & Rastle, 2018). In an artificial language learning experiment, we explore forces that may contribute to these evolutionary changes. Pairs of participants learned a new spoken language that included ambiguous forms (e.g. /faʊp/ referring to a shape or to a colour), and were later asked to interact with each other in writing. We found that written labels mutated as the experiment progressed making the written analogue of the spoken language more expressive. Interestingly, spelling change was constrained by sound-to-meaning regularities in the input, as well as several other variables such as the success of communication on a given trial.

References

Ulicheva, A., Harvey, H., Aronoff, M. & Rastle, K. (2018). Skilled readers' sensitivity to meaningful regularities in English writing. *Cognition*. Epub ahead of print <https://www.sciencedirect.com/science/article/pii/S001002771830249X>