

What is LOPS?

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LOPS is a method for studying the choices people make when describing themselves with words. Let's call the output of this act: *personally expressed identity*. It is *personal* – the individual is describing themselves. It is *expressed* – these are words the individual emits, where others might see them. And it describes *identity* – we are concerned with text whose explicit purpose is description of the author.

LOPS stands for *longitudinal online profile sampling*. Online profiles such as one finds on Facebook, Twitter and other social media contain a wealth of self-provided information about individuals. For our purposes, we are interested in short text self-descriptions, which we will call the *bio*. In Figure 1, former President Barack Obama's bio is circled in red.

To perform LOPS, one samples bios from online profiles as often as possible. For example, one might take a snapshot of each tweet from one user, including the user's profile at the time. This allows a series of time-stamped self-descriptions to be assembled to form a longitudinal picture of that user's personally expressed identity. From such series, compiled for many users (multiple millions of US Twitter users as one example) one can draw inferences about temporal trends in aggregate identity.

Here are two examples of such temporal trends, with links to the formal work discussing the data:

1. With Nick Rogers, I have demonstrated that US users of Twitter increasingly use political words to describe themselves. This increase has led the prevalence of political words (e.g. conservative, progressive) to eclipse the prevalence of religious words (e.g. Christian, Mormon).
 - a. Open Access Article: <https://doi.org/10.23919/JSC.2021.0002>
 - b. Nick Rogers: <http://www.nickrogers.net/>
2. With Irissa Cisternino, I have demonstrated that the prevalence of LGBTQ words within bios is consistently increasing. The *rate* of increase temporarily accelerates each June – corresponding to celebrations of Pride Month.
 - a. Preprint: <https://doi.org/10.31235/osf.io/8yjcm>
 - b. Irissa Cisternino: https://www.researchgate.net/profile/Irissa_Cisternino

The ultimate goal of this work is a scientific revolution in the study of identity. My aim with LOPS is vastly increased precision when estimating the prevalence of any given identity. Additionally, due to the time-stamped nature of the bio sampling, the temporal resolution is absurdly high. (We could study identity change at millisecond resolution if we were so inclined.) Collectively, I refer to these two advances (to reiterate: prevalence estimated with millions of observations plus observations time-stamped at fine temporal resolution) the *Identity Resolution Revolution*.



Figure 1 - Bio circled in red. This is the personally expressed identity of one user at one moment in time.