"I" Contains Multitudes – An inquiry on the plurality of the self-construal

Keywords: Natural Language Processing, Habitus, Self-construal, embedding regression

Note. The present project is currently in the ideation stage. While we are confident to have preliminary empirical results by July, 2023, it is likely that some aspects of the methodology will change.

Extended Abstract

What constitutes a plural self? While pre-industrial societies were characterized by overlapping, homogenous circles of action, the socialization of modern individuals is undertaken by a plurality of institutions. School, work, family, sports-clubs; as individuals advance through life, they are in touch sequentially and simultaneously with diverse bundles of actors with various, sometimes contradictory logics. That individuals internalize differential schemes of action from their selected and imposed contextual differentials is not a new idea, it is however, one that has eluded systematic scientific inquiry. In this project, we build on the research agenda summarized by Lahire (2011) harnessing the tools of computational linguistics to scrutinize the schemes of action around individuals' self-construal – the answers to the question "who am I?" We research three aspects of the self-construal: we examine i) what constitutes a broader (vs. narrower) self-construal, ii) the biographic factors leading to it, and iii) if its construction follows environmental feedback.

First, the bulk of social psychological research on the self-construal has focused on explaining the way in which individuals see themselves in respect to others, circumscribing answers to the question "Who am I" to theoretical categories such as independent and interdependent. We argue that a different approach is necessary to capture the plurality of the self; an approach which zooms into the relationship among the categories individuals use in their self-narratives. The first goal of our study is thus to answer research question one (RQ1): *What constitutes breadth in the self-construal?* Second, a plural individual is described as being the product of heterogeneous and sometime contradictory ways of life. We thus dig into the biographies of individuals to answer our second research question (RQ2): *What are the socialization experiences leading to variation in breadth in the self-construal?* Third, plurality is not static, but it is built through person-environment exchanges. New experiences lead individuals to encounter situations for which their available schemes are not appropriate; while some remain monolithic in their future actions despite obtaining feedback, others internalize the new schemes and add them to their repertoire. We argue that, the more plural an individual is, the more weight the logics of the present, such as feedback from others, should have in explaining their future behavior. Our final research questions (RQ3a, RQ3b) are: *Can we observe environmental triggers which shift the self-construal? Is the effect of those triggers contingent on past socialization experiences?*

To answer our research questions, we need a setting which allows us to observe repeated instances of the same individuals in comparable situations, showing spontaneous self-referencing schemes of action, before and after receiving environmental feedback. Further, we need to have biographic information about these individuals. Consistent with Goffman's (1974) assertion that language is a reflection of biography and identity, we use the transcripts

of the Q&A section of quarterly earning calls from CEO's of fortune 500 companies from 2008 to 2016 (including ca. 25 calls per individual) for our project. This data is advantageous for our purposes because it includes spontaneous observations of the same individuals across time, obtaining feedback after each call (i.e., a post-call valuation), and because biographic information of these individuals is publicly available.

Our research plan roughly consists of the following steps:

1. We train a word embedding model in the full corpus of calls. This will lead to a semantic space enclosing all potential meanings of all words.
2. We construct a database of "diversifying experiences" (e.g., duration and breadth of time spent in a country different from their birth-place; Godart et al., 2015) for a sub-sample of CEOs from a variety of sources (e.g., Bloomberg, Wikipedia, compustat).
3. For each CEO of the sub-sample, we use the approach described by Rodriguez et al. (2023) to obtain, for each call, a list of the nearest neighbors of the self-referential words "I", "Me", "Myself" and "My". This approach is useful to detect and statistically test for polysemy in the use of specific words from short texts.
4. We project each list obtained in (3) to the semantic space obtained in (1) and obtain the location of their embedding centroid.
5. We determine the breadth of the self-construal of each CEO by obtaining the area of the (normalized) minimum volume ellipsoid containing all centroids of (4). Developed to measure the volume of narratives (Toubia et al., 2021), this captures the ground covered by CEOs' self-referential speech in the semantic space across all calls.
6. Per call, we code the overall delta of the valuation of the current vs. the past quarter. This reflects the environmental feedback received by the individuals.
7. We answer RQ1 by obtaining means of central tendency of (5). Plotting the distribution can answer if we have variation in our measure of self-construal breadth.
8. We answer RQ2 by regressing (6) on the diversifying experiences from (2) (Between subjects).
9. To study RQ3a, we perform an embedding regression to observe if (6) at t-1 is predictive of significant shifts in the self-construal between t-1 and t (Within subjects).
10. To study RQ3b, we perform multi-level analyses to determine if (9) is dependent on (2) (Cross-level interaction, within subjects).

References

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