

Modeling threshold associations in linguistics – Evidence from psycholinguistics and SLA

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Second language (L2) acquisition has been described as (a) both continuous and discontinuous (Rastelli 2014) and (b) influenced by environmental changes (Ramscar et al. 2013). The possible existence and nature of discontinuity patterns and thresholds in the process of language learning and use across the lifespan raises many questions. For instance, although the existence of thresholds has often been suggested in various fields of linguistics – such as critical periods in infant speech perception development (Werker & Hensch 2015) and L2 learning (Lenneberg 1967), internal resources thresholds (e.g. brain and cognitive reserves, Stern 2002), thresholds in language maintenance and shifts (Grin 1993), minimum comprehension thresholds in the legal community (Pavlenko et al. 2019), as well as thresholds for a diagnosis of dyslexia (Cilibrasi & Tsimpli 2020) – the search for the most likely location for a threshold has turned out to be difficult.

In this talk, I propose novel ways of detecting and estimating thresholds in the association between a continuous independent variable and a continuous dependent variable. My main focus is on retirement as a socially determined and linguistically constructed concept that potentially alters the process of cognitive aging and language acquisition, use and attrition later in life. Life course theory (Elder 1992) emphasizes that retirement, like so many other significant life events, is not an isolated event, but rather a transition and *process* embedded in a person's biography of prior and current roles and relationships. I suggest that this requires not only more complex, non-linear statistical models to estimate the point of change in a slope as a function of retirement, but also qualitative approaches that examine how L2 learners interpret their experiences 'here and now' as being coherent with their own internal frameworks, and how socially constructed categories are changing. I will also propose that apart from its analytical relevance, a clear concept of 'threshold' could provide a powerful tool for planning and intervention.

References

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