Peer interactions and study-abroad SLA: Harnessing insights from dynamic computational social network analysis

Target-language (TL, L2) gains are often listed as the primary outcomes and goals of international student mobility. The experience of potential immersion in an L2-speaking community coupled with the opportunity of engaging in meaningful communication are commonly believed to be conducive to accelerated progress. However, despite "folk beliefs" that mere presence in an L2-speaking country will automatically facilitate language acquisition virtually through osmosis, not all learners benefit equally from study-abroad sojourns, and considerable variation has been evinced in their linguistic attainment.

One line of enquiry that has attempted to explain the varied picture has investigated students' social networks as a factor conditioning their interactions and—subsequently—progress. This contribution analyses the longitudinal development of the social interaction network and its influence on L2 gains of 41 U.S. sojourners enrolled in a 3-month intensive study abroad Arabic program. Unlike extant research, the current study i) focuses on students' interactions with their alma mater classmates (which constitutes between 53 and 59% of their total communication) as well as other agents ii) reconstructing their complete network, iii) tracing the impact of each individual student's position in the social graph using centrality metrics, and iv) includes a dynamic developmental perspective with three measurement points at 4-week intervals each, gauging the extent to which changes in the interaction networks translate to changes in progress along a range of dimensions.

The learners formed mostly same-gender cliques changing minimally, with gender homophily strengthening over time. Closeness centrality significantly correlated with TL use. The best peer-connected students tended to be highly motivated females with high starting L2 proficiency. Interaction with classmates aligned with initial Arabic proficiency and multilingualism. Degree of multilingualism, more central and popular positioning in the network, and self-reported progress across most skills were positively correlated. The strongest predictors of objective global proficiency gains, measured with the Oral Proficiency Interview, were predeparture proficiency, multilingualism, perceived integration of the peer learner group, and the number of fellow learners speaking to the student ($F_{(5,21)}$=5.485, p=.002, altogether predicting 46.3% of variance). We also discuss non-trivial changes in the interaction network and progress over time.

The approach contributes novel methodology and rigorous insights into the dynamics of study-abroad SLA, with the finding offering tangible recommendations for study-abroad program stakeholders.

References:
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