Linguistic Similarities Build Friendships and Echo Chambers

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People with traits, interests, and experiences in common are more likely to become friends, but research suggests that friendship may cause us to develop more similar traits as well. In fact, findings in *Psychological Science* indicate that not only are individuals with similar linguistic styles more likely to form friendships, but also [that friends influence one another's linguistic styles over time](#), contributing to the relational "echo chambers" common on social media and in society as a whole.

"A key driver of social interaction is the principle of homophily: "birds of a feather flock together," write Balazs Kovacs (Yale University) and colleague Adam M. Kleinbaum (Dartmouth College). "We suggest that the causal arrow points in the other direction as well: In addition to linguistic similarity driving tie formation, friendship ties will also induce increases in linguistic similarity."

Kovacs and Kleinbaum investigated this cyclical relationship through a set of two complementary studies: one analyzing the linguistic styles and in-person social networks of graduate students and another following the relationships between users of the online review platform Yelp.

In the university study, Kovacs and Kleinbaum compared the linguistic styles of 285 first-year graduate students using both their application essay and an exam essay written 2 months later. The researchers also

collected information about students' social networks within the graduateprogram at both time points.

Next, the researchers analyzed the writing samples using theLinguistic Inquiry and Word Count (LIWC) coding system, which is used to codelinguistic style on the basis of differences in pronoun usage, among otherfactors. Heavy use of first-person pronouns such as "I" and "me" in writing,for example, has been associated with introversion and depression, whereasfrequent use of the third-person pronouns "he," "she," and "they" has beenassociated with higher levels of abstract thinking.

In line with previous findings, Kovacs and Kleinbaum foundthat students who began the semester with more similar linguistic styles werealso more likely to report spending free time together and were more likely toremain friends if they had already formed a connection at the beginning of theprogram. Additionally, students who became friends early in the programdemonstrated more similar linguistic styles during the written exam.

"Even though these markers of linguistic style areunconscious, they reflect students' psychology in ways that are observable toone another and that, consequently, affect their choices of whom to befriend,"Kovacs and Kleinbaum write.

These effects, however, were small the researcherscautioned, possibly because of the relatively short duration of the study. Inorder to investigate the relationship between social networks and linguisticstyle over a larger timescale, Kovacs and Kleinbaum made use of 1.7 millionYelp reviews written by 159,651 users in in six cities in the United States whoalso used the site's social networking functions during 2016 and 2017.

Once again, the researchers used the LIWC system to codeparticipants' linguistic style at each time point, this time computing anaverage score for each year based on all of the reviews each user hadpublished. As in the first study, Kovacs and Kleinbaum found that participantswith more similar linguistic styles in 2016 were more likely to have becomefriends on Yelp by 2017 and that users who were already friends developed moresimilar linguistic styles over the course of the year.

This effect was stronger for Yelp users than it was for thestudent participants, possibly because they interacted primarily throughreading one another's written reviews online, the researchers note. Unlike inthe previous study, the data may also have been influenced by the fact thatpeople are far more likely to add friends than to drop them in online settings.

In-person friendships often end by simply falling dormantwhen people see each other less often and stop talking, the researchers explain,but because actively unfriending someone on social media is generally perceivedto be openly hostile, people often remain friends online when they mightotherwise have drifted apart. Thislimitation, however, is addressed by the in-person nature of the first study .

"The two studies together constitute robust evidence of theselection and convergence mechanisms that give rise to linguistic homophily,"Kovacs and Kleinbaum write. "These mechanisms go beyond mere clustering ofpolitical views and give rise to more fundamental social 'echo chambers' thatinsulate us from dissimilar others."

Works Cited

Kovacs, B., & Kleinbaum, A. M. (2019). Language-stylesimilarity and social networks. *PsychologicalScience*. Advance online publication. https://doi.org/10.1177/0956797619894557