Making Friends in New Places

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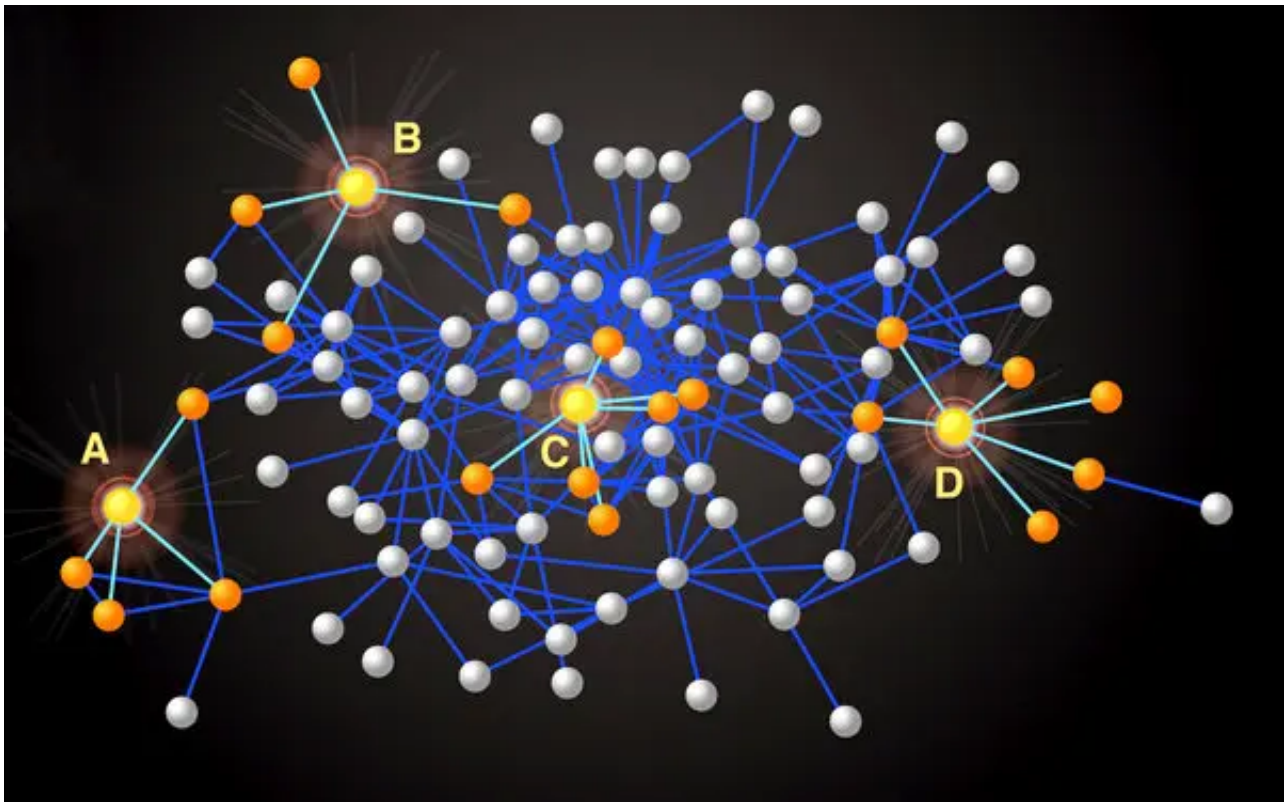

A network of 105 students (dots) at a Northeastern university and their friendships (lines); four students and their close friends are highlighted.Cavan Huang and Nicholas A. Christakis

By Nicholas A. Christakis

Freshman year is critical, but not for the reasons most students (and their parents) imagine. American students have the luxury of a long horizon to settle on good classes, select a major and chart a career; there's plenty of time to make academic mistakes and recover from them. But it's important to set off on the right foot in one respect: making friends.

At the start of freshman year, there's a window of opportunity, when customary rules about social interactions are suspended, and when it seems perfectly normal for someone to sit down next to you at lunch or in class and

strike up a conversation.

Social inhibitions tend to dissolve when a group of strangers enters a new environment. Think of adults on a cruise, teenagers at a summer camp, or Chaucer's garrulous pilgrims, chatting and revealing volumes about themselves. The bond is all the more guaranteed when facing a shared hardship — say, the boredom of freshman orientation sessions or the stress of placement exams.

But after that critical window, a curtain begins to fall on the welcoming social scene. In my experience, which includes serving as master of a residential college at both Yale and Harvard, this tends to occur about three weeks in. Attitudes begin to solidify. Friendships become fixed. And behaviors that initially seemed open and generous might come to feel forced, or even a little creepy.

It turns out that we are hard-wired to seek and make friends in novel, stressful circumstances. Students naturally assemble themselves into elaborate social networks — and not just Snapchat, Tumblr, Facebook or Twitter. Our modern technology is merely put into the service of more ancient and powerful impulses.

In fact, studies that my colleagues and I have conducted of face-to-face social networks of college students and of the Hadza hunter-gatherers of Tanzania reveal that, in fundamental ways, they are not very different. Whether in a college dormitory or on the African savanna, living as they might have 10,000 years ago, people form the same sort of network — one or two best friends, in a group of five to six close friends, within a still broader group of 150 people.

And the intricate structure of these friendship webs is similar too. The networks we form obey certain mathematical and sociological rules, and

they have profound influence on our lives.

Whether students feel happy or sad, or catch the flu, or learn new things can all depend, in significant measure, on their ties to one another. The network pictured above represents 105 students at a Northeastern university. Every dot is a person, and the ties between the dots are friendships the students have identified.

Carbon atoms connected one way form graphite, suitable for a pencil; connected another, they form diamond. Same atoms, different connections, different properties. And so it is with people.Cavan Huang and Nicholas A. Christakis

Now consider an outbreak of H1N1 flu, as we did at Harvard College in 2009. Students A and B each have four friends, but Student B is at greater risk for infection than A because A's friends are all friends with one another, forming an insular community, whereas B's friends have friends who are farther away in the network and so can carry germs from a greater social distance. Still, B is at lower risk than D, who has six friends to B's four.

Of course, if you are in the center of a network — like C, whose six friends all in turn have many friends — you are much more likely to catch the flu than individuals with the same number of friends but located on the social periphery, like D. So, in the case of flu spreading in a population, it would be best to be Student A. On the other hand, if useful information (about cool classes or hot parties) were spreading through the network, it would be best to be Student C.

We acquire other properties from our friends, in what is known as "peer effects." The economist Bruce Sacerdote showed that roommates at Dartmouth, who are randomly assigned to live together, affect each other's grade-point average and the effort put into studying, for better or worse. Other studies have found a correlation between being happy and having

happy friends (and the inverse) as well as a likelihood that a student will binge drink if a roommate does.

But something more is going on in social networks. The actual mathematical structure of the social ties also seems to matter. In our lab experiments, we have created artificial networks — by defining ties between research subjects and specifying permissible paths for them to communicate online. When we change the particular arrangement of the social ties within the group, we have been able to affect whether the groups behave altruistically or selfishly — in one exercise, whether the group shared money from a supply we gave them or, conversely, contributed nothing.

Same people, same number of social ties; different social structure, different behavior. An analogy: If you connect carbon atoms one way, they form graphite, which is soft, dark and suitable for a pencil; connected another way, they form diamond, which is hard and clear. Same atoms, different connections, different properties.

To elicit an optimal amount of altruism in the group, there seems to be a sweet spot between rigidly forced and overly fluid connections, both of which foster less altruistic behavior. When research subjects were not allowed to make their own connections or to cut ties to people who bugged them, they behaved less kindly. At the other extreme, when the people to whom they were connected came and went quickly, the group also behaved less kindly — perhaps too much “social fluidity” made the group less appealing to invest in.

Humans are hard-wired for friendship in one final way: We like the company of people we resemble, a property known as homophily. We evolved as a species by preferring those with shared objectives — all the better to coordinate a hunt for a mammoth. But natural selection has equipped us

with a taste for similarity at a cost: the loss of new insights and information that lead to innovation.

One of the most dispiriting things I have observed as a faculty member is that, despite herculean efforts to curate diversity in the student body through the admissions process, students often restrict themselves to social groups defined by narrow traits. In dining halls, swimmers sit with swimmers, computer scientists with computer scientists, conservatives with conservatives, Latinos with Latinos.

So what does all this mean for incoming freshmen?

It means that you may be considerably happier in a dorm where people can change roommates should things go bad, but where it's not too easy to do so. And that befriending different kinds of people — people with a different religion or major, say — is indeed a good thing. Students learn as much about themselves and about the world from the informal curriculum provided by their friends as they do from the formal curriculum provided by the faculty.

Once you get to college, you can hang out with anyone you want to, and you can be whoever you want to be, not just the person you described in your admissions essay. Take advantage of the first few weeks, reaching out while everyone is fresh and new, to make — and, yes, break — some friendship ties.

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