I just saw NBA star Derrick Rose give thoughtful responses to a CNN interviewer asking about the murder spree that is currently hitting Chicago: 506 murders in 2012, of which around 400 were thought to be gang related. Rose, who is from Chicago and knows the neighborhoods hit by gun violence and murders, put the blame on poverty, as well as the increasing gap between the poverty that many experience and the lifestyle and success they see others have.

Explaining deadly violence is important because it is the start of reducing it. Violence is more deadly when the weaponry is better, so availability of large-capacity magazines and assault weapons leads to more murders. Chicago is actually a restrictive city in that respect, which may reduce the murder rate, but probably not much because Chicago is in the gun-friendly state Illinois, which recently made it harder for cities to regulate weapons. Poverty has been noted as an explanation before, because murders often occur while people commit crimes of enrichment such as robbery or car-jacking.

Murder has many causes, and the ones above are among them. But let’s move on to new research on a different killer: social networks. This is research from Chicago by Andrew Papachristos, published in American Journal of Sociology. The idea is simple and radical: just like a social network of individuals with friendly connections form a gang, so does a social network of gangs with hostile, neutral, or friendly connections form a larger social structure. This is important because it influences not just a murder rate, but also who is the killer, who is the victim, and when does the murder happen.

Gangs have territories. Gangs have status rankings. And gangs have members who defend territories, try to maintain and increase status, and react to provocations and threats from other gangs. Murder is one way that individuals serve the gang goal of control and status in their territory, and defense against other gangs that seem threatening. In fact, because the territories are stable, challenges are reciprocated, and murder invites revenge, there is a stable structure of violence between gangs that includes reciprocal murders. But the murder rate between pairs of gangs is not just determined by territory: it is shaped by their history of violence. Because murders are reciprocated, the history becomes a stable structure of repeated, reciprocated murder. Murder by social structure.