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Narendra Jaggi

Charlie Schlenker (Interviewer)

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A new paper suggests that racial segregation in this country is not inevitable after all…in spite of the persistence of segregation over decades and landmark legislation to counteract it. WGLT’s Charlie Schlenker talk with the Illinois Wesleyan University professor who is building on past computer modeling technique…

Charlie Schlenker: Thirty-five years after the Civil Rights Movement and well after the passing of the Fair Housing Act and the Equal Credit Opportunity Act, urban residential areas are as firmly segregated as they were in the 1960s. Only smaller towns with smaller minority populations have shown signs of easing the intensity of segregation. Illinois Wesleyan University Physics Professor Dr. Narendra Jaggi has done a study involving computer modeling of choices. Dr. Jaggi, until now, what has the explanation been for the lack of change on ethnic living patterns?

Narendra Jaggi: In the early 70s, people began to focus on some work which tended to suggest or at least so the claim was that very miniscule preferences for your own kind—in fact the phrase used was “color-blind”—or nearly color-blind preferences are enough in and of themselves to produce completely segregated communities. These were based upon computer simulations as if racial segregation is a nearly inevitable consequence of rather mild preferences for your own kind.

Charlie Schlenker: Your study includes one new factor that hasn’t been in the literature until now—the range of vision. Now what is that?

Narendra Jaggi: In some sense it is exactly what it says. People have put in the complexity of attractive geographical features like good schools, tennis courts, public libraries, but in almost all these studies, the agents, meaning folks, they look only at their immediate neighborhood, the neighbor to the left, to the right, north and south, in making their rational decisions about whether or not to move. What my simulation—our simulation I must say because Alex Laurie, my student, has worked with me intimately—our simulation says that this is unnatural. Nobody is that obsessed with the color of only your four or six immediate neighbors. Most people, in fact, when they make judgments about which neighborhood to move, they sample on a bigger range.

Charlie Schlenker: Well how does a block range or a neighborhood range or a sector of the city range affect how segregation occurs over time?

Narendra Jaggi: And this is what we were very, I would say, pleasantly surprised by the results. Increasing the range of vision beyond the mile-big immediate neighborhood effectively has a tendency of amplifying whatever the tendencies of the agents were to begin with so that if you wanted to have let’s say 60% of your neighbors to be of your own kind, I would call that scaredy cat, someone who is so afraid that he wants to have 60% of his own kind. That class of models, if you increase the vision, it makes a society
much more segregated, in fact, completely segregated into just two ghettos in a very short time. On the other hand, if your preference for your own kind was modest, let us say like 30%, okay, you were comfortable with about a third of the people being of your own kind, then when you increase the range of vision of these agents it is a remarkable effect. Societies get integrated, remain integrated and stable for very extended periods of time.

Charlie Schlenker: So what does that suggest for policy choices?

Narendra Jaggi: One immediate consequence that leaps out at you is that make the information about the racial composition on different scales available to all people who are in the market. Just the availability of what is the concentration of different ethnic groups over a two-block radius or a four-block radius around wherever you are looking, you see, so making vision explicitly available to an agent, even if he or she hasn’t actually thought about it, might help the process. Additionally, you could guide people. You say, “Well, you know, I see your point that you want a few more people of your own kind in a neighborhood but you don’t have to buy right here. A few blocks over there, you got about 30-40% people of your own kind. Do you want to look there?” And perhaps even have market-based encouragements not to move into neighborhoods that are already segregated, so small guiding away from regions that are developing excessive concentrations can have large influences if the agents have a slightly bigger vision.