

April 17, 2006
MEMORANDUM

To: EC 237 Students
From: Prof. Loury

Re: An Extended Theory of Stereotypes

Consider the following scenario:

1. Employers and workers interact in a dynamic setting. A worker's type is multi-dimensional. (For instance, "race" and "class" could take binary values, and any worker belongs of one of the four possible race/class combinations.) However, due to presumed cognitive limitations, firms are only able to classify workers as belonging to one of two possible "groups." (That is, firms see workers as being either "black" or "white," ignoring class; or, they see workers as being either "upper class" or "lower class," ignoring race; or, they see workers as being either "lower class blacks" or "not lower class blacks," etc. They must impose a two-member classification scheme on data regarding persons who come in one of four "flavors."
2. Firms estimate any individual's productivity by combining idiosyncratic information about that individual (say a "test score") with statistically valid generalizations about the "group" to which that worker belongs, where the manner in which firms group workers is endogenous. Firms act on these estimates by taking some action vis a vis individual workers (hire or not; promote or not, etc.), where that action affects workers' payoffs and thus affects workers incentives.
3. Workers must make some human capital investment decision which affects their productivity. And, prior to making this decision they must classify themselves -- in the sense that, while each worker has two traits (race/class), he can "identify" as being in only one "community". A lower class black worker, for instance, must choose to think of himself as being either a poor person, or a black person. People making like choices in this regard constitute a "community" within which spillover externalities in human capital investments occur.
4. It's an overlapping generations set-up with a stationary worker population. Firms are infinitely lived, but workers live for a finite period of time, and are replaced by new workers when they expire. New workers choose an identification at the beginning of life. It is costly to a worker to adopt a self-identification that differs from the one previously adopted by his/her "parent" (i.e., by the worker he/she replaces in the overlapping generations demography.)
5. Everybody is fully rational and correctly anticipates the future path of aggregate variables in the equilibrium. (That is, workers anticipate correctly the classificatory schemes to be adopted by firms along the equilibrium path,

and firms correctly anticipate the population distribution of worker productivities by worker race/class type.

This is a natural approach to the problem of making “groups” endogenous in a theory of group stereotypes. I invite you to consider how these ideas might be formalized. Here is food for thought in that regard:

6. In this setting, we can study the asymptotic behavior of equilibria of the model, demonstrating the existence and stability of steady states, and focusing on the nature of firms' stereotyping behavior and workers' self-identifying behavior in these steady states. The idea is to illustrate the multiplicity of equilibrium outcomes, to assess their relative efficiency (in terms of information management by firms and resource allocation decisions by firms and workers), and to emphasize the interdependence of the classificatory behaviors of agents on either side of the labor market.
7. For instance, we can ask: Under what conditions does the model converge to a world in which race (class) distinctions are salient in the minds of workers and firms, but class (race) distinctions are not salient? When can a lack of congruity persist between the ways that firms classify workers and the way that workers classify themselves? How do the equilibrium classificatory schemes depend on the fundamentals of the model (e.g., informativeness of idiosyncratic signals, or demographic data like the size of racial minority, the distribution of class status, and the race-class correlation)? And, how might certain interventions (like barring differential treatment by firms of workers based on race) be expected to alter equilibrium classifying behaviors by workers and firms?
8. The overarching perspective here is that the construction and maintenance of group boundaries is a social process which involves the active participation of agents on either side of any given boundary, and on both sides of the relevant markets.

I close by noting that the specific approach to implementing this general idea, sketched above, builds on previous work that I've done some time ago on stereotyping and statistical discrimination (1993, with Stephen Coate), and on the more recent work that I've done on the efficiency of self-identity choice given limited classification resources (2005, with Hanming Fang.)