

Communication Network in a Small Laboratory

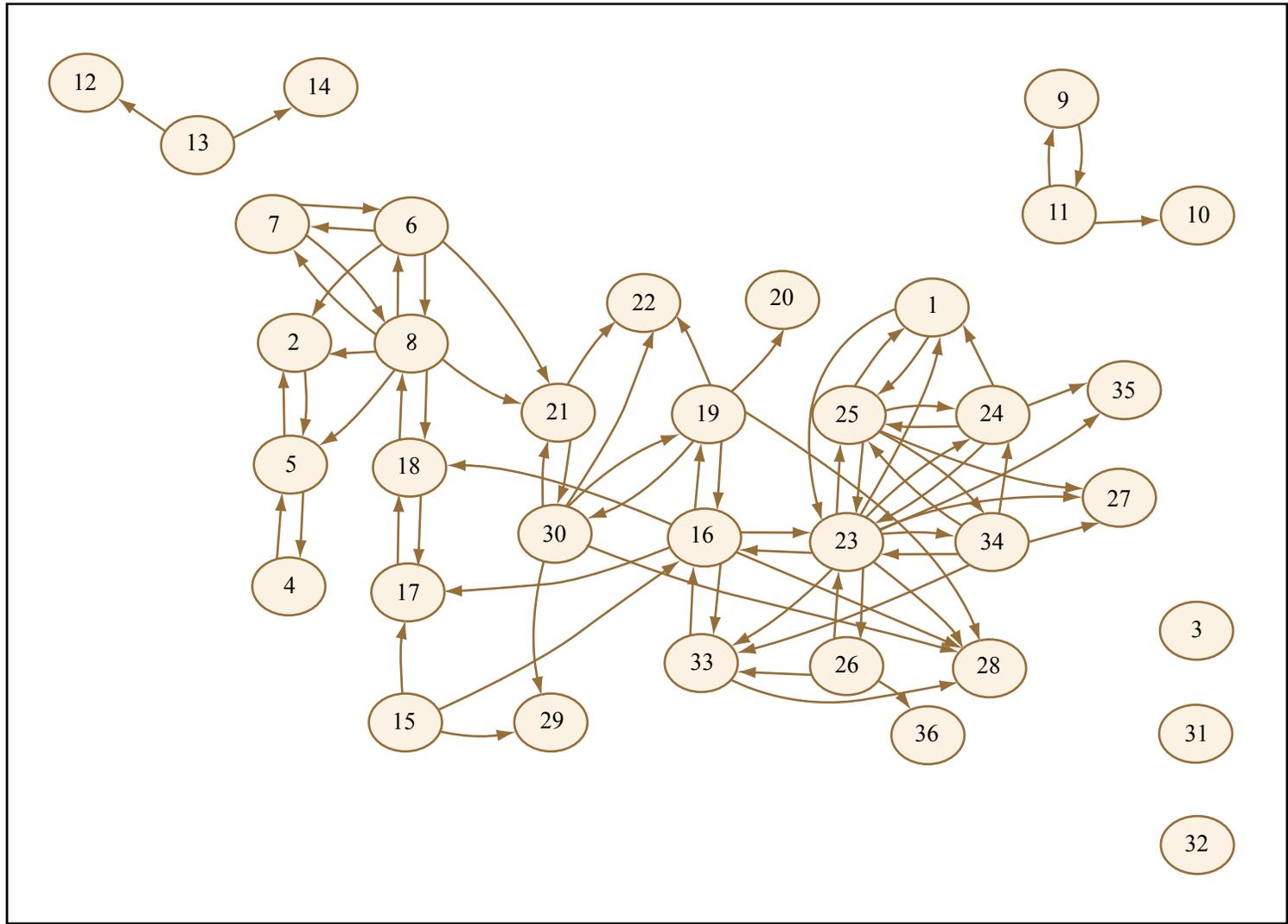
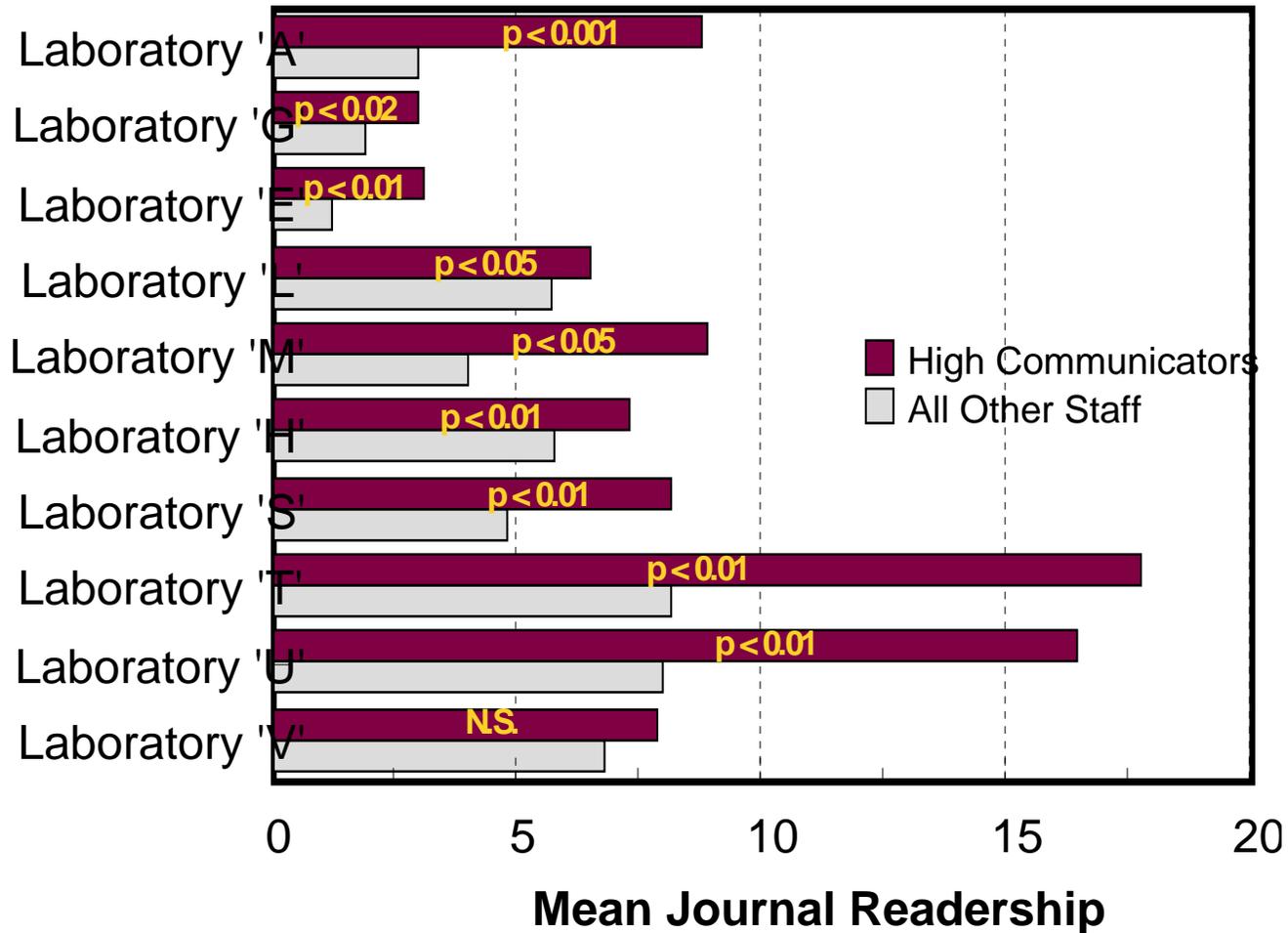
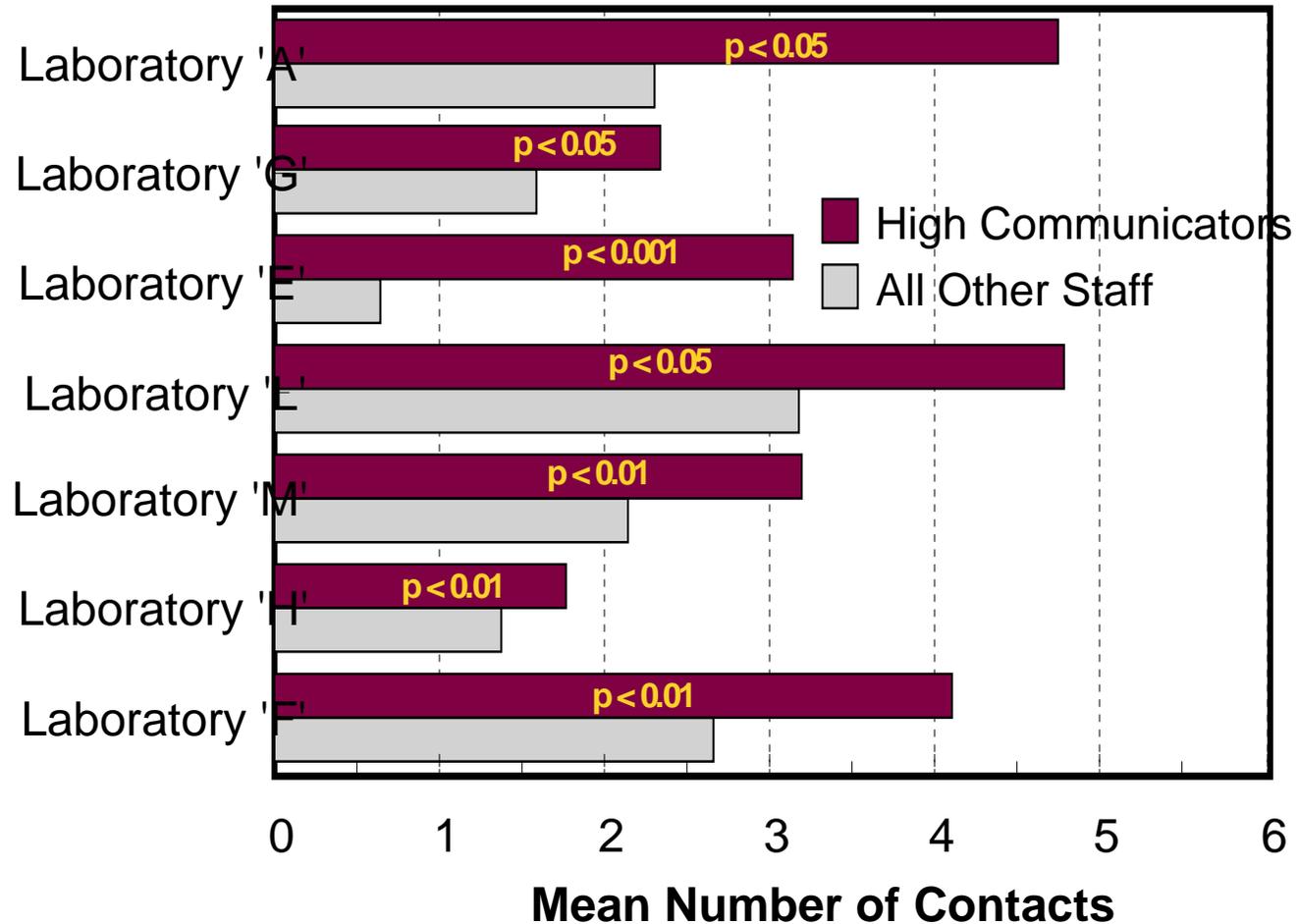


Figure by MIT OCW.

High Communicators Compared with Colleagues in Readership of Refereed Journals



High Communicators Compared with Colleagues in Terms of Regular Informal Contact Outside of the Organization



Gatekeeper Characteristics

- **High Technical Performance**
- Not 'just communicators'
- Highest technical performers in the organization.
- Cannot be created by management.
- **Low in the Organizational Hierarchy**
- Concentrated at first level of technical supervision or below.
- Seldom found at higher levels of management.
- Seldom found on the technical ladder.
- **Visibility**
- They are easy to identify.
- Everyone knows who they are.
- **Approachability**
- Must be at least receptive to people.

International Gatekeepers

- International Gatekeepers tend to be Engineers or Scientists, who have worked in other countries and returned home.
- Engineers and Scientists visiting from other countries had very high foreign contact, but insufficient domestic contact to be International Gatekeepers.

Lessons From the Study of International Gatekeepers

- ✍ Transplanting Staff from Home Laboratory into Subsidiary is Unlikely to Produce Gatekeepers
- ✍ Technical Bringing Technical Staff from the Foreign Subsidiary to the Home Laboratory and then Returning Them Can Create International Gatekeepers, Provided that the Appropriate People are Chosen.

Reward Systems

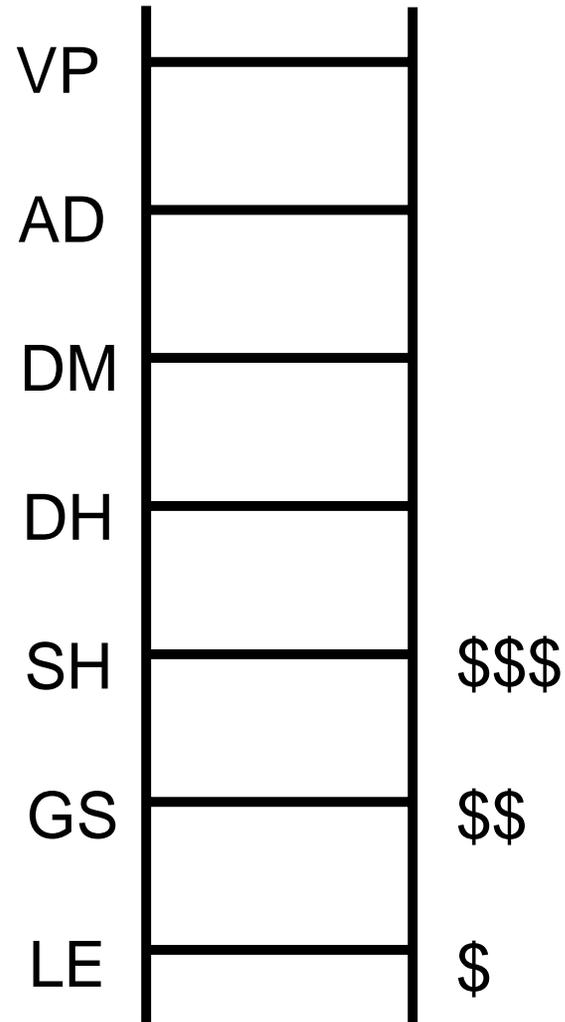
The 'Dual Ladder'



Reward Systems

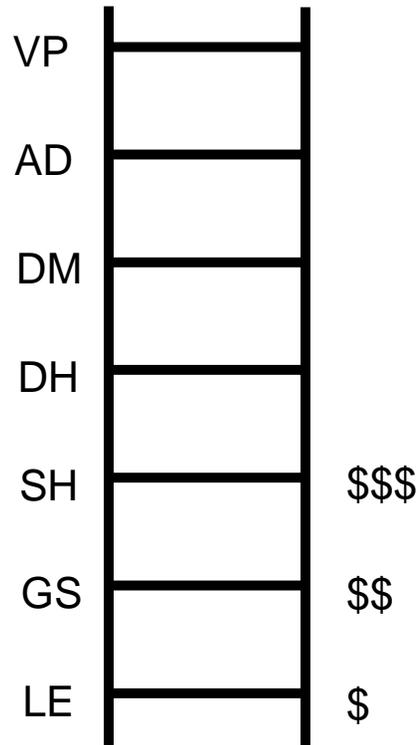
- The Technical Ladder
 - Where did it originate?
 - Does it work?

A Managerial Career

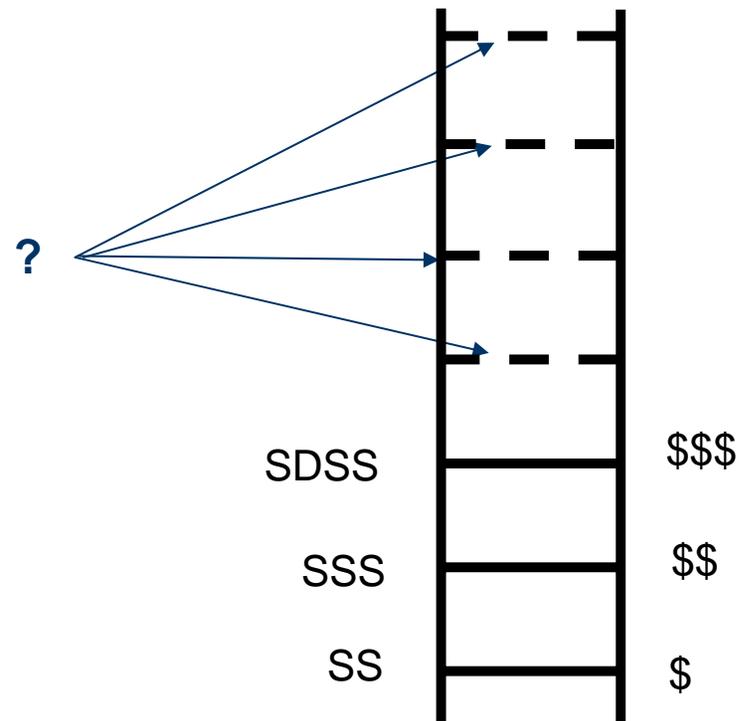


The Dual Ladder

Managerial

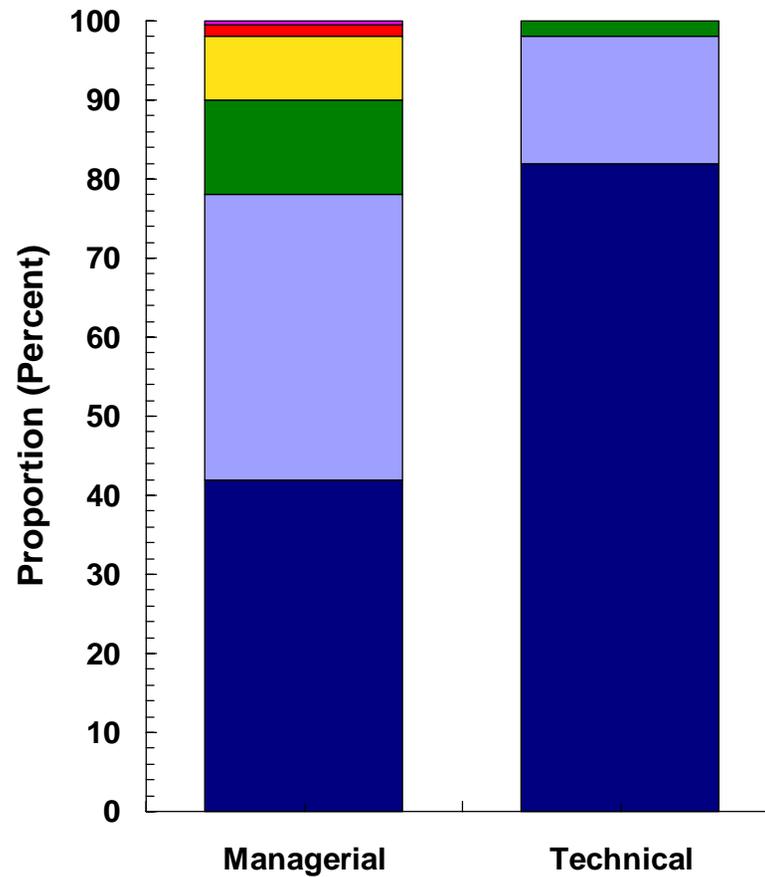


Technical



Engineer A
Engineer B
Engineer C

Distribution of Positions in One Firm's Dual Ladder



The Inherent Problems

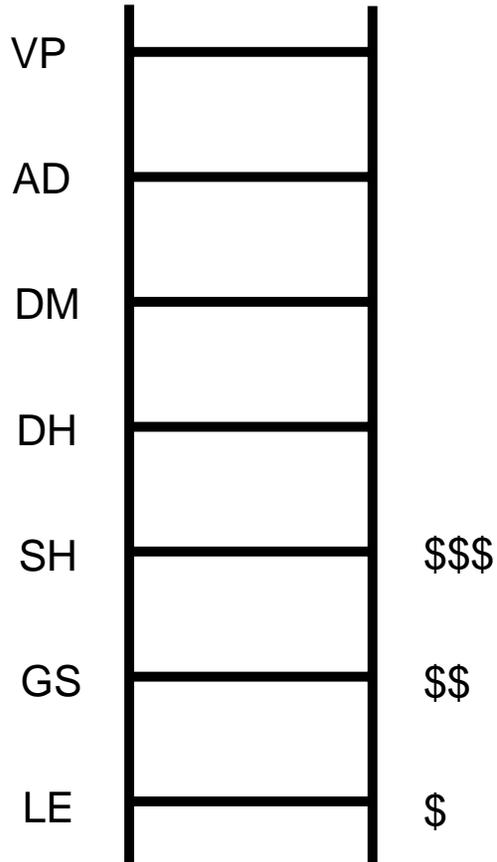
- Continued Power Imbalance
- Cultural Biases

Problems Created by Management

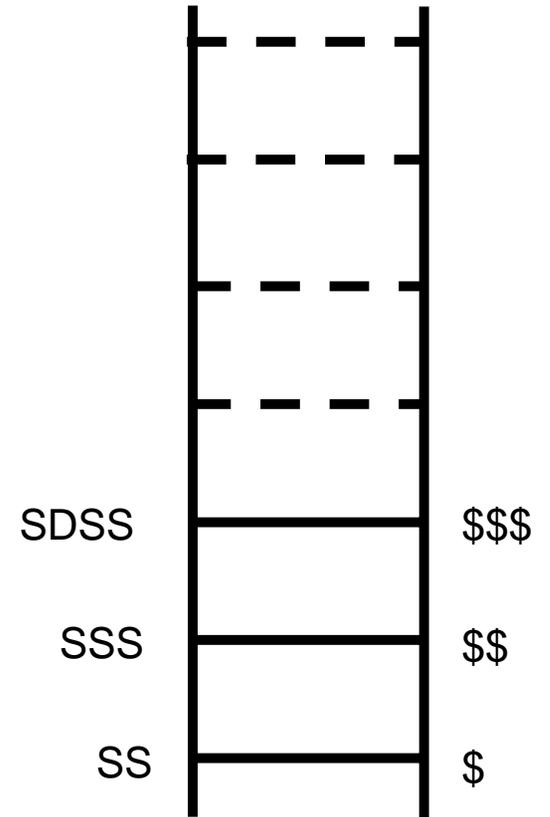
- Promotion Criteria
- Plateaued Managers

The Dual Ladder

Managerial



Technical

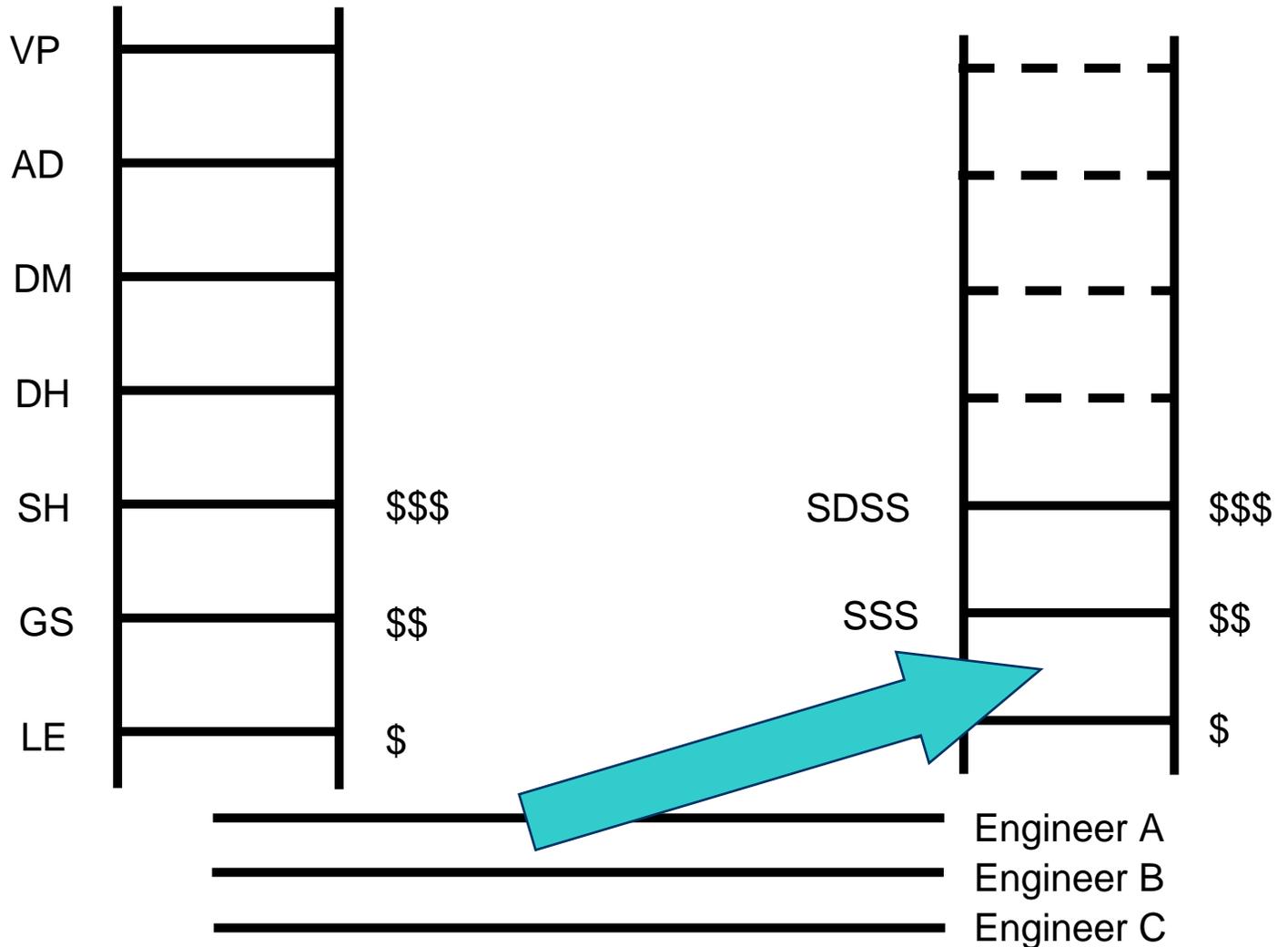


Engineer A
Engineer B
Engineer C

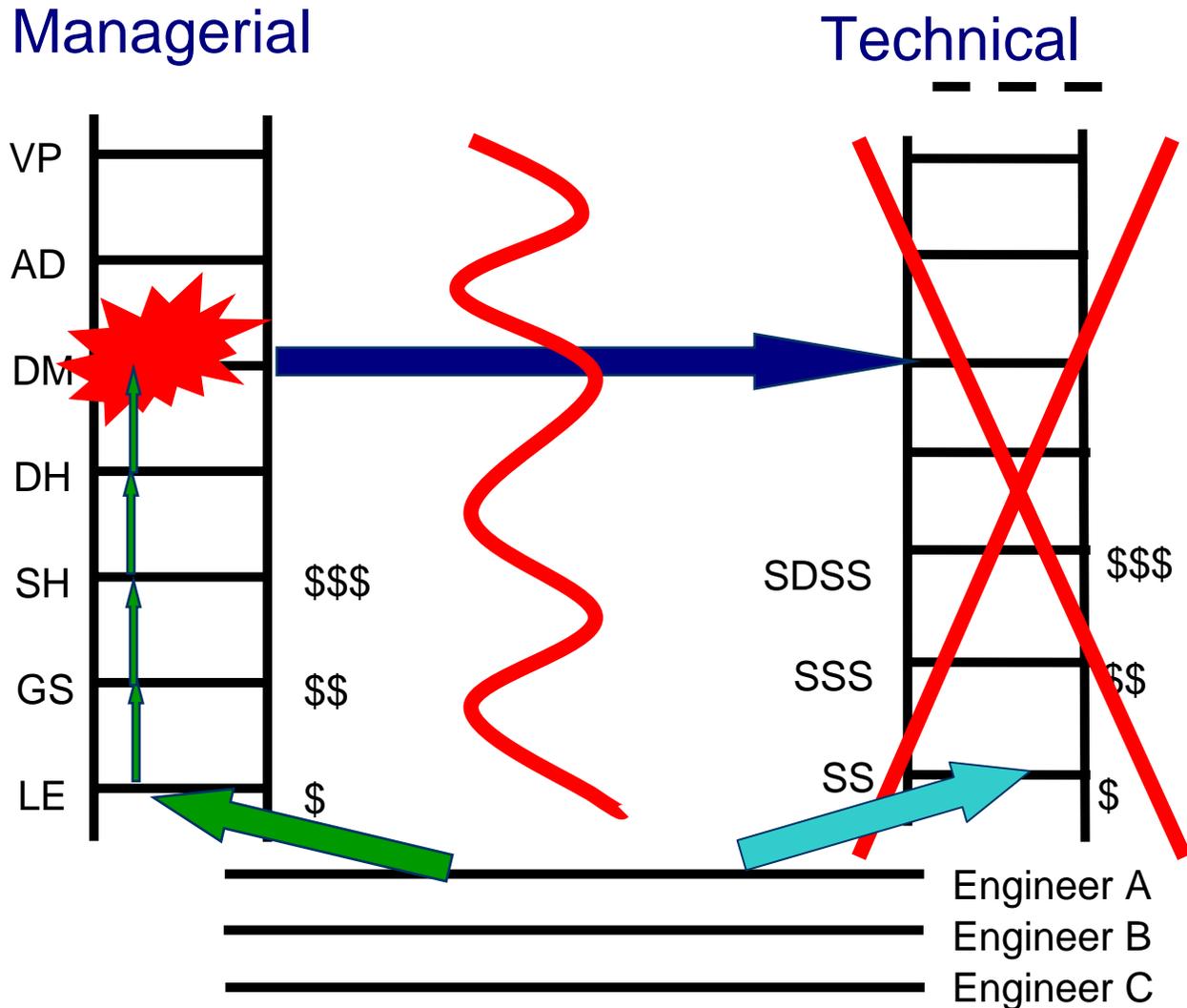
Criteria for Technical Ladder Promotion

Managerial

Technical



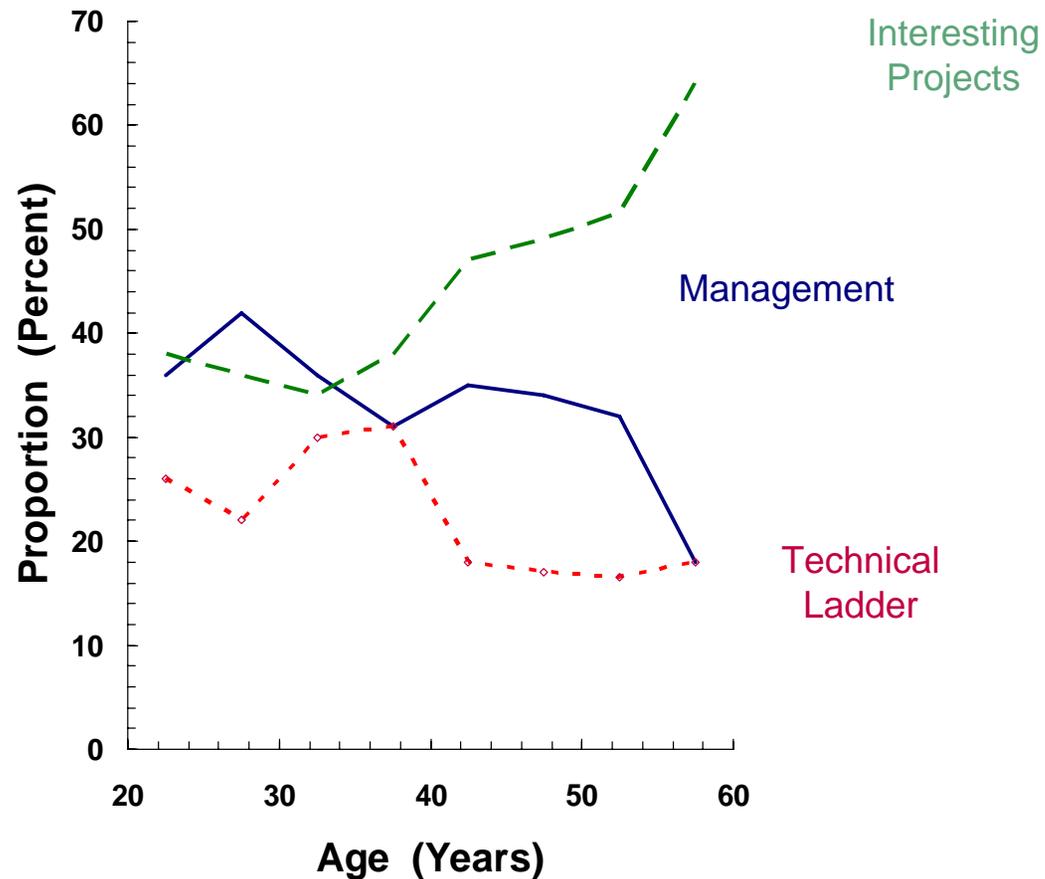
The Dual Ladder System's Biggest Problems



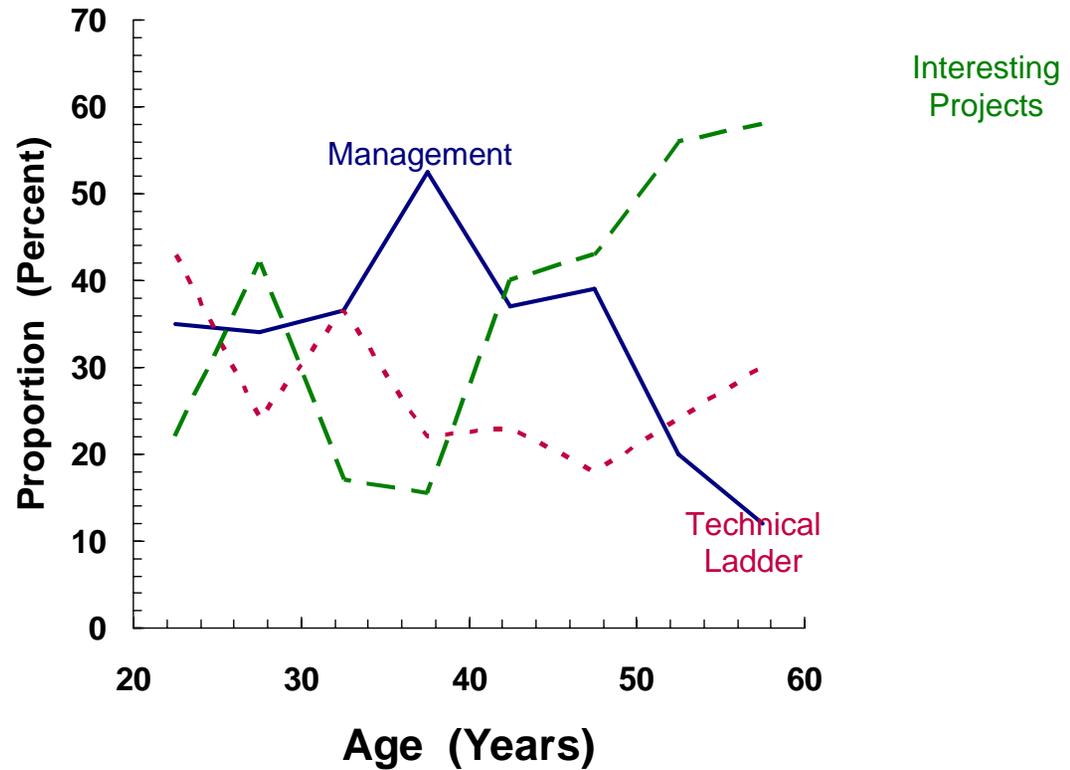
Proportion of Engineers & Scientists in Ten Organizations Choosing Each of Three Possible Career Paths

- MANAGEMENT 32%
- TECHNICAL LADDER 20%
- PROJECT ASSIGNMENT 48%

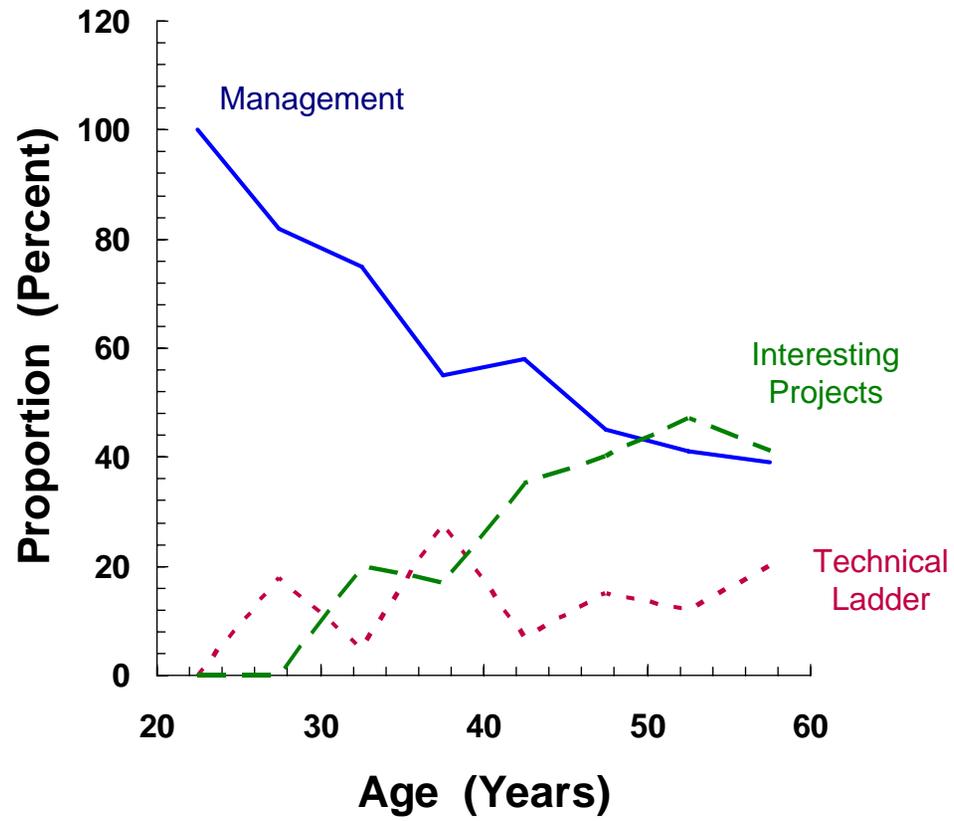
Career Preference as a Function of Age (N = 1,402)



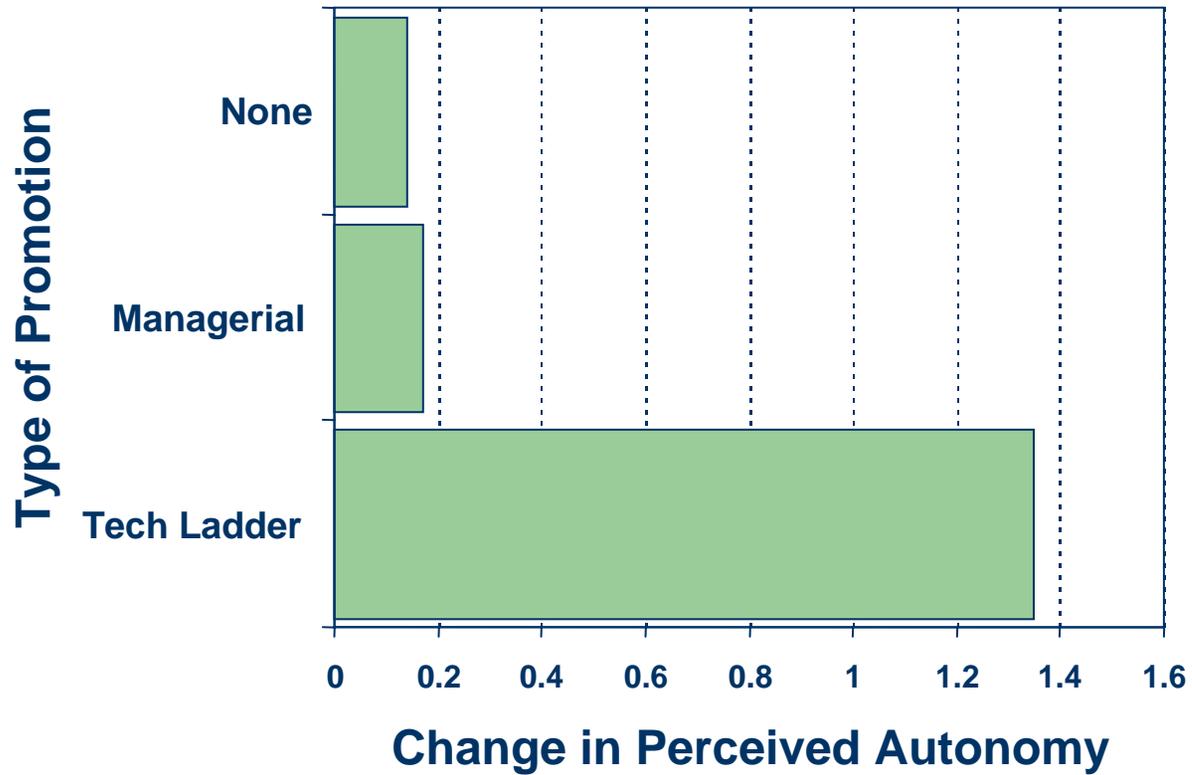
Career Preferences of *Technical Ladder Staff* as a Function of Age (N = 351)



Career Preferences of *Managers* as a Function of Age (N = 374)



Effect of Promotion (Nine Year Period) on Perceived Autonomy



The Gatekeeper as a Link to Outside Technology

