

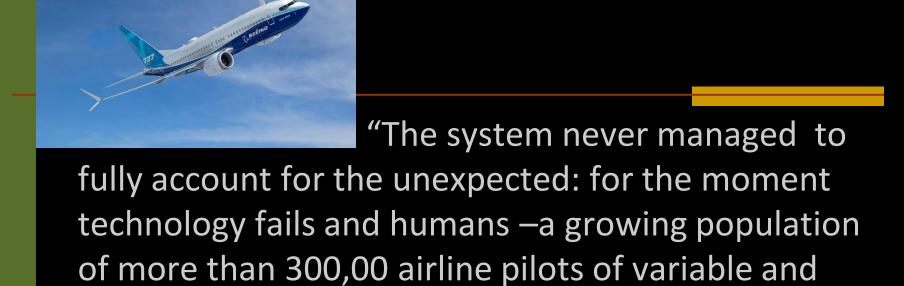
Building on Workers' Knowledge to Enhance Safety and Productivity Among Field Workers

Tom Juravich
Professor of Labor Studies and Sociology UMass Amherst

Worker's knowledge more complex, multidimensional and nuanced than conventionally conceived

This complex knowledge base unrecognized and under utilized

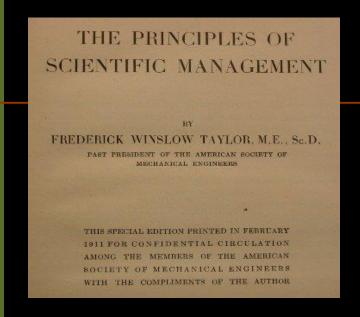
A fundamental bridge in human computer interaction



unpredictable skills – are required to intervene...

...it was the decisions made by four of these pilots, more than the failure of a single component that led to 346 deaths..."

--William Longeweische



"Therefore the workman who is best suited to handling pig

iron is unable to understand the real science of doing this class of work. He is so stupid that the word 'percentage' has no meaning to him, and he must consequently be trained by a man more intelligent than himself."

--Frederick Taylor, 1911

Polanyi and Bourdieu's Corrective

```
Tacit Knowledge
```

[ˈtasət] [ˈnäləj]

Habitus

['habədəs]



To be both effective and embraced by workers

Any technology must acknowledge and make integral place for the deep habitus and tacit knowledge of field workers