

## The Systems Dynamics Of Geoscience Culture And Leverage Points To Effect Culture Shift

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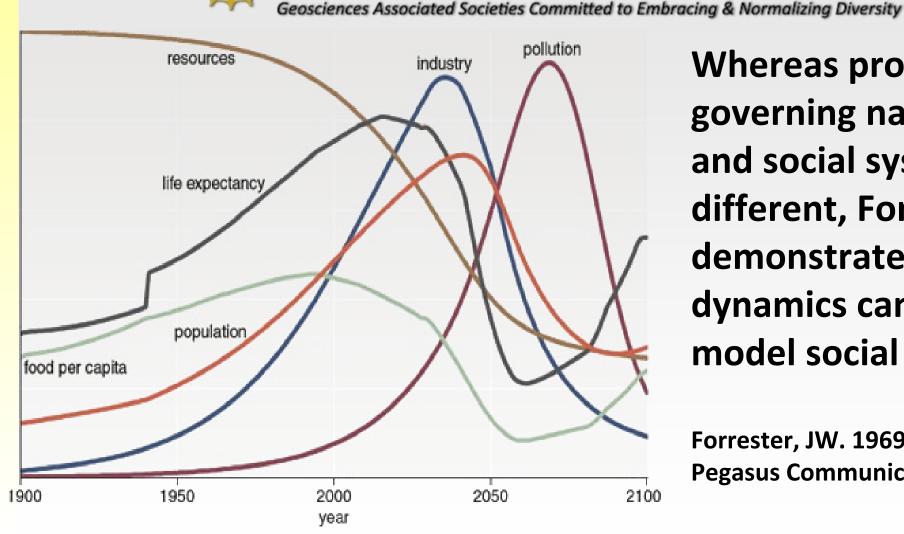


**CULTURE** consists of the beliefs, behaviors, objects, and other characteristics common to the members of a particular group or society.

https://www.cliffsnotes.com/study-guides/sociology/culture-and-societies/culture-and-society-defined

Through *CULTURE*, people and groups define themselves, conform to *CULTURE*'s shared values, establish and enforce cultural norms, contribute to and perpetuate *CULTURE*.

Thus, *CULTURE* is an emergent property of a complex system of social interactions.



Whereas processes governing natural systems and social systems are different, Forrester (1969) demonstrated that systems dynamics can be used to model social systems.

Forrester, JW. 1969. Urban Dynamics. Pegasus Communications: Waltham, MA.

https://www.americanscientist.org/article/computation-and-the-human-predicament



The objective of Geosciences ASCEND is to frame Geosciences Culture using a system dynamics perspective to:

- 1. Advance and accelerate cultural change in geosciences,
- 2. Broaden participation of diverse identities in geosciences, and
- 3. Create a more inclusive discipline in which all people can participate and contribute.



## Geosciences Associated Societies Committed to Embracing & Normalizing Diversity (Geosciences ASCEND) is an NSF-sponsored Research Coordination Network with 32 current member organizations:

**American Association of State Geologists** 

**American Geophysical Union** 

**American Geosciences Institute** 

**American Institute of Professional Geologists** 

**Arizona State University** 

**Association for Women Geoscientists** 

**Association of Environmental & Engineering Geologists** 

**Blueprint Earth** 

**Council on Undergraduate Research** 

**GeoLatinas** 

**Geological Society of London** 

**Geological Society of America** 

**Geoscience Alliance** 

**Geoscience Information Society** 

**History of Earth Science Society** 

Int'l Association for Geoscience Diversity

**International Association for Promoting Geoethics** 

**International Association of Hydrogeologists** 

IRIS/UNAVCO

**James Madison University** 

**Mineralogical Society of America** 

**National Association of Black Geoscientists** 

**National Association of Geoscience Teachers** 

**Paleontological Society** 

**Society of Economic Geologists** 

**Society for Sedimentary Geology** 

**Society for Vertebrate Paleontology** 

**Soil Science Societies of America** 

The Geochemical Society

**University of Arkansas** 

**University of Florida** 

**University of Texas - Austin** 



Thank you for attending today's presentation!

Geosciences-associated societies interested to join Geosciences ASCEND are encouraged to contact:

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