



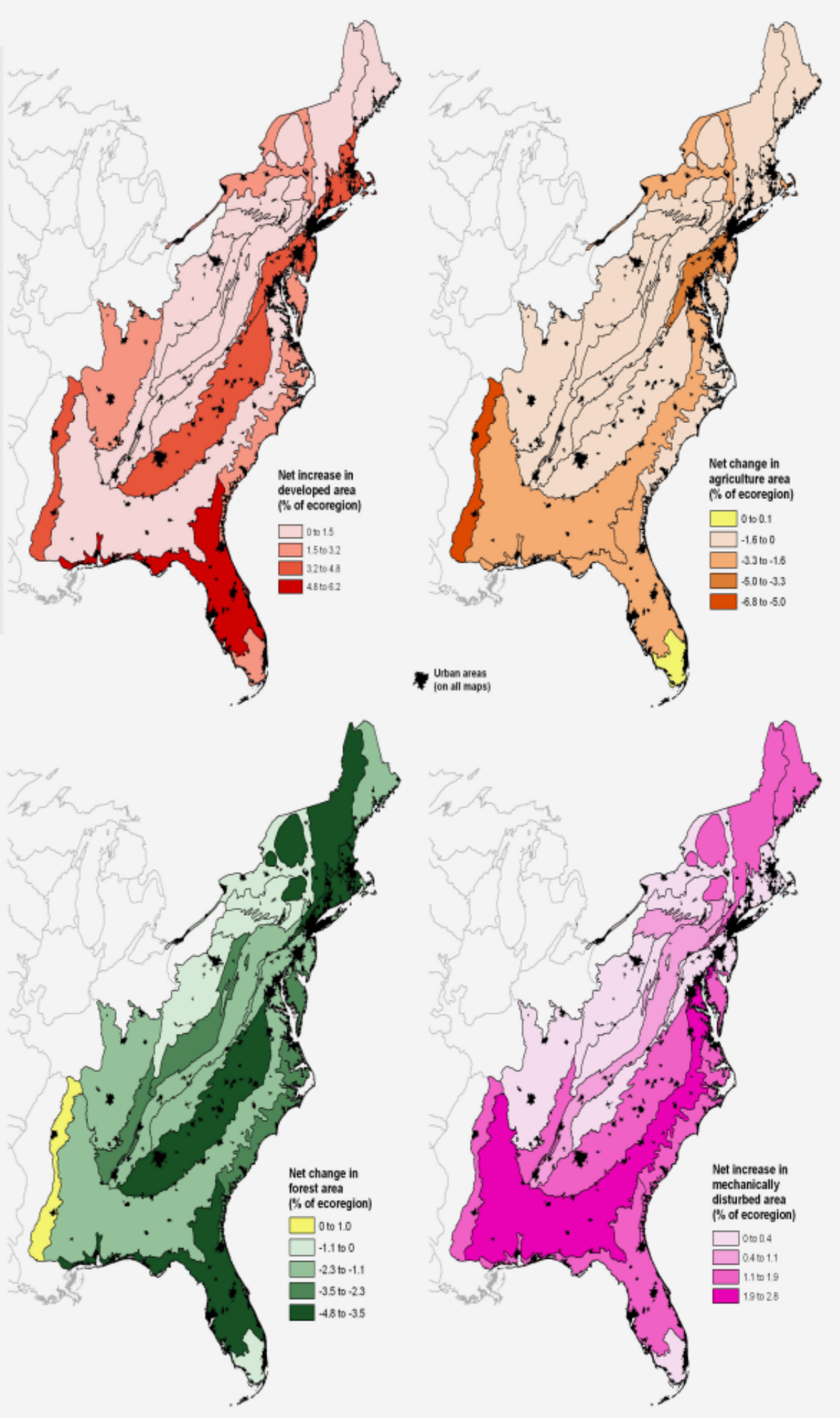
The Culture of a Changing Landscape: A Mid-Atlantic Case Study

ENVS 400 | Rachel Tanzer | June 2016



Questions
Framing Question: How is land cover and land use change reflected in culture?
Focus Question: Is land cover change reflected in popular film set in the Mid-Atlantic Region during 1970-2000? If so, how?

Background
Land Use Land Cover Change (LUCC): "a general term for the human modification of Earth's terrestrial surface" (Ellis 2010)
- Dynamic nature of landscape stems from effects of nature and society; change is an inherent characteristic of landscapes.
- Rates are higher than ever, causing "unprecedented changes in ecosystems and environmental processes at local, regional and global scales" (Ellis 2010).
- Biotic and abiotic characteristics of ecoregions influence land use patterns of each area.
Population
- Population forecasts help predict scenarios of land-use change.
- "Fast, abrupt changes might result in a loss of sense of place and a decline in people's identification with the landscape" (Burgi et al 2004, 862).
Cultural Landscape
- "Landscape modified by human activity" (Wu 2010).
- Broad to emphasize the fluidity of human-environment relations.
- Increasingly relevant with rise of anthropogenic influences on the biosphere.

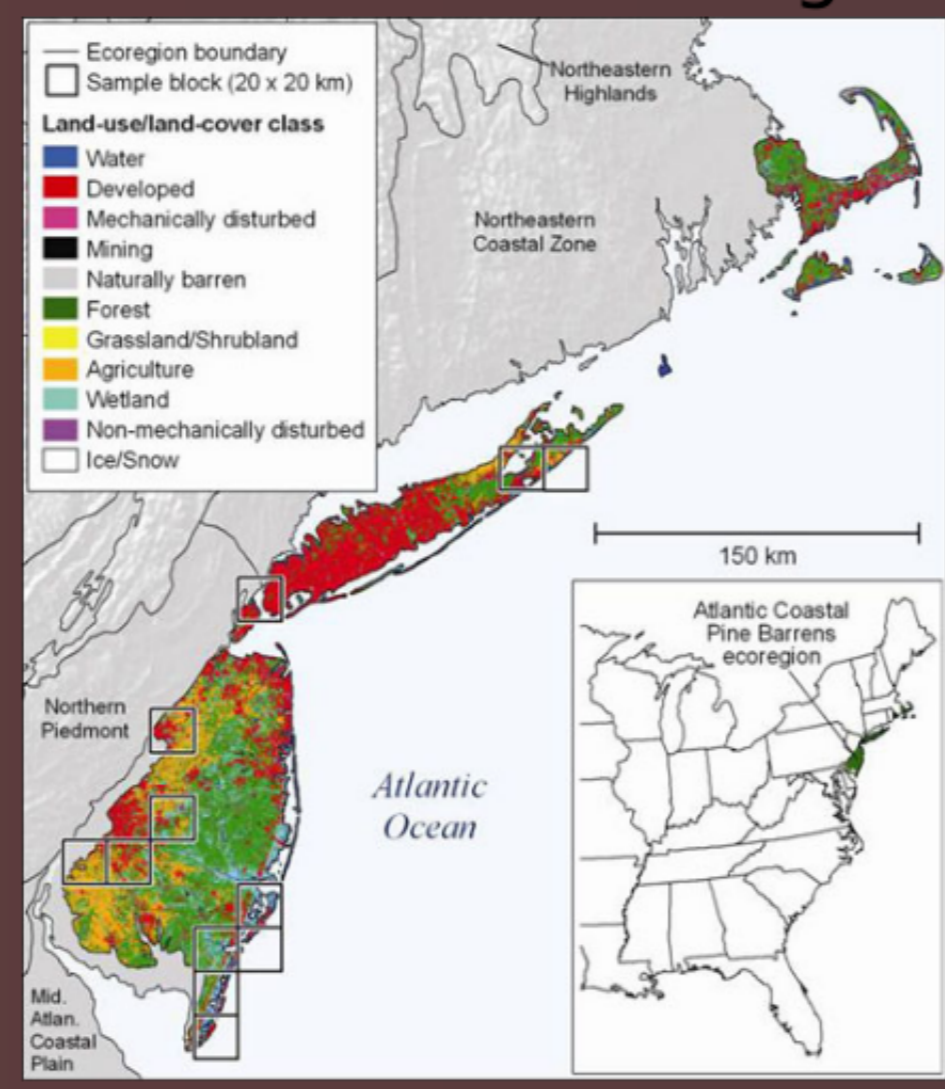


The LUCC-Film Connection

- Trends in popular culture evidence common beliefs and attitudes.
- Film--one of the most influential cultural mediums in modern America--evidences implications of physical and cultural landscape change.
- Revolutionary for ability to capture movement and record change
- Developed "during critical years of change in the social structure of American life when a new social order was emerging in the modern industry" (Skylar 1994, 3).

USGS Land Cover Trends Project

- The Project tracks "rates, causes, and consequences of contemporary [LUCC]" (USGS).
- Measures aggregate change in the Eastern United States and characteristics of change occurring in each of 20 Eastern U.S. ecoregions" (USGS)



12.5% Average Eastern U.S. land change during 1970-2000
2.3% Decrease in forest cover
1.7% Decrease in agricultural land

Developed Land: "the built-up surfaces of the East," mostly associated with urban and exurban growth (USGS).
10.6% of land cover -- a **2.2%** increase by 2000
Population 1970-2000, population in the 20 eastern ecoregions increased by 32.6%, That's an addition of almost a third.

Analyze Existing Data

USGS Land Cover Trends Project and Census Data

Film Selection: Set in the Mid-Atlantic region and ranked as one of the top 50 movies of its decade.

Selected films must also take place during the 1970-2000 time frame, or in the future

Film Observation
- Quantitative: Timed total time of each film shot outside, and the total time outside and no humans are present--i.e. Landscape shots. I also ranked the significance of each Land Cover Classification within each film using a 0-5 scale.

- Qualitative: critical analysis of the films, noting significant trends or themes and their relation to the quantitative data.

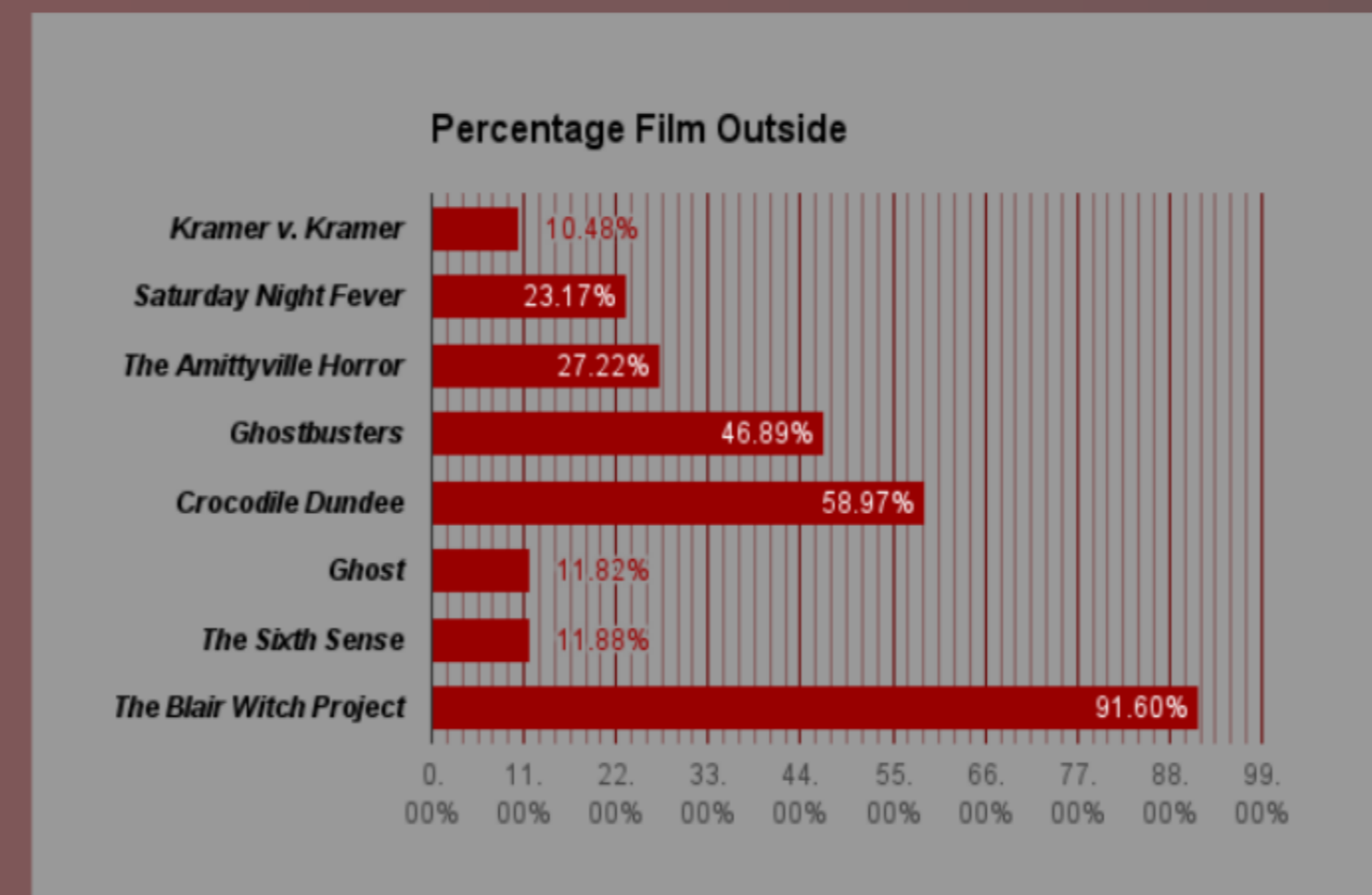
1970s | **1980s** | **1990s**

1970s: Rocky, Kramer vs. Kramer, The Amityville Horror, Saturday Night Fever

1980s: Crocodile Dundee, Ghostbusters

1990s: The Blair Witch Project, Ghost, The Sixth Sense

Results



- Film, as an artistic expression, is a key indicator of shifting cultural attitudes and reflections.

It is not all encompassing and may not be an accurate measurement of LUCC

- Quantitative results were inconclusive; there is no evident correlation between LUCC and film.

- Qualitative analysis provided a better glimpse of the landscape-culture relationship

Take Away:
Selected films did not suggest culture change directly results from LUCC.

Key References:
- Bürgi et al. 2004. "Driving Forces of Landscape Change — Current and New Directions." Landscape Ecology.
- Wu, Jianguo. 2010. "Landscape of Culture and Culture of Landscape: Does Landscape Ecology Need Culture?" Landscape Ecology..

"Land Cover Change." 2016. Accessed June 30. <http://landcover.trends.usgs.gov/east/regionalSummary.html>