

Gentrification

Professor Loretta Lees

Ever since the 1960s, the global city of London has experienced a damaging process called gentrification. Whilst this process describes the renewal of urban inner city areas by individual middle class homeowners, it equally warps the social fabric of urban society. Displacement occurs of one social group (the less affluent) due to house price and rental increases.

'Urban renewal is positive; gentrification is a negative phenomenon.'

Key word

Hausmannization The first form of gentrification? This describes the action of a French administrator, George-Eugène Haussmann, who oversaw a huge urban demolition programme in the early 19th Century leading to the making of modern-day Paris.

Watch this lecture at www.rgs.org/smlgentrification

Plants need a balanced diet of carbon, nutrients and water, so stomata close when overwhelmed with CO₂. Less carbon is, therefore, pushed through the biosphere.

'Atmospheric carbon dioxide is now around 400 ppm. Until the Industrial Revolution it had never been over 280 ppm.'

Carbon Cycle

Professor Jeremy Pritchard

The carbon cycle is evident from the modular to the global.

Chlorophyll is an important part of a plant as it 'fixes' the carbon by capturing it. Carbon is taken from the atmosphere and put into carbohydrates.

Plants take in CO₂ and lose H₂O through pores called stomata. The solution to water loss is a waxy cuticle layer to prevent water loss with the stomata opening and closing.

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Quote of the day

The global response to climate change will be mediated at the plant sub-cellular level

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Japan is arguably one of the world's more equal countries. The poorest 10% take home 4.5 times less than the top 10%. There are more people paid over a million £ per year in the Canary Wharf skyscraper than in the whole of Japan! After WWII, the US divided the land equally between the Japanese and weakened the feudal system.

Not just economics: why social inequality persists

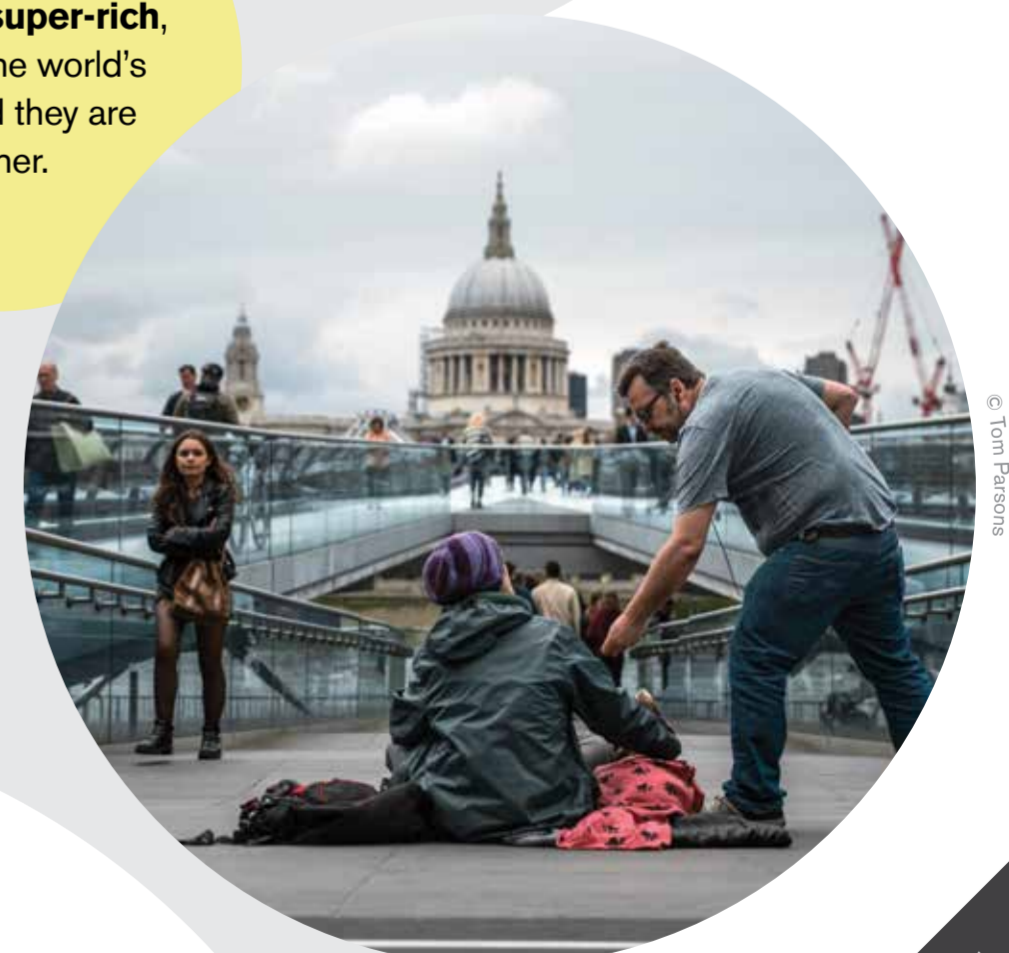
Professor Danny Dorling

The modal job a hundred years ago for a woman was being a servant. During the 20th Century the top 1% were taxed highly because of costly world wars, a nervousness around the Russian Revolution, and the Great Depression. The best off 1% took only 6% of all income in the 1970s. This was an income of £100,000 after tax. We have become more unequal since then. We now live in a very **polarised society**.

Why does it persist? Some countries don't win wars, some people don't argue enough against it, historical racism (USA) and class (UK), extreme poverty and excessive division in Singapore and Israel.

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The world's richest 1% – the **super-rich**, hold half the world's wealth and they are getting richer.



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Extension tasks

Antarctica is not the biggest cryosphere contributor to sea level rise, it is the **Greenland ice sheet** which adds 0.7-0.9mm/yr. to global sea levels.

What's going on in Greenland?

Professor Alun Hubbard

Glaciers are machines for moving mass from high to low elevation. Essentially a glacier is a river of ice which moves slowly under its own weight.

Climate change has caused glacial melting which has led to further formation of moulins. Moulins allow waterways to flow and act as vertical 'pipes' to relieve pressure. This prevents water from becoming trapped as subglacial rivers form at the base of the glacier.

The Greenland ice sheet, therefore, has a drainage system underneath it! However, the colossal weight of the glacier can counter the force of meltwater runoff, closing the sub-glacial river channels.

It operates self-regulating feedback.

A **moulin** is a vertical well-like shaft in a glacier. It drops from the glacier surface right down to the interface between the ice and the bedrock. This water lubricates the bottom of the ice sheet.

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Low probability, high impact events remain a challenge e.g. the megathrust earthquake and Boxing Day Tsunami of 2004.

Hazard management

Professor Dr Amy Donovan

Often the most vulnerable suffer. Currently early warnings systems are prioritised, particularly in LICs but do they work? The demographic of the population must be considered.

If an emergency SMS is sent out as a natural hazard response it may make people without mobile phones more vulnerable.

'More people die from natural hazards in LICs compared to HICs. Did you know that LICs also suffer greater losses financially when measured as a percentage of GDP?'

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Disaster management requires an **interdisciplinary** approach i.e. understand the physical geography but also governance and the sociocultural contexts.

There is no such thing as a natural disaster! There are only **natural hazards**.

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Google a cup of tea with a refugee to read or donate or organise a tea party!

Beyond borders: changing geographies of migration and asylum

Dr. Jonathan Darling

Borders are delineations for: methods of control, demonstrations of authority, markers of identity and sites for taxation and commerce. National identity is formed by cultural facets but also by borders.

However, borders should no longer be thought of as a 'line in the sand' but more of a zone. For example, the mayor of Ásotthalom in Hungary, Laszlo Toroczkai, released a video instructing Syrian migrants to move through other eastern European countries. It was in English and was arguably aimed not at migrating Syrians but Hungarians themselves, in order to exhibit a sense of control. Borders also operate *within countries* normalising the border internally. **Within countries** landlords check immigration rights of tenants, doctors have a duty to check immigration status and lorry drivers are responsible for their cargo.

Watch this lecture at www.rgs.org/smlbeyondborders



Australia has **stretched its borders** with immigration detention centres offshore on Manus Island, Papua New Guinea and in Nauru.

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