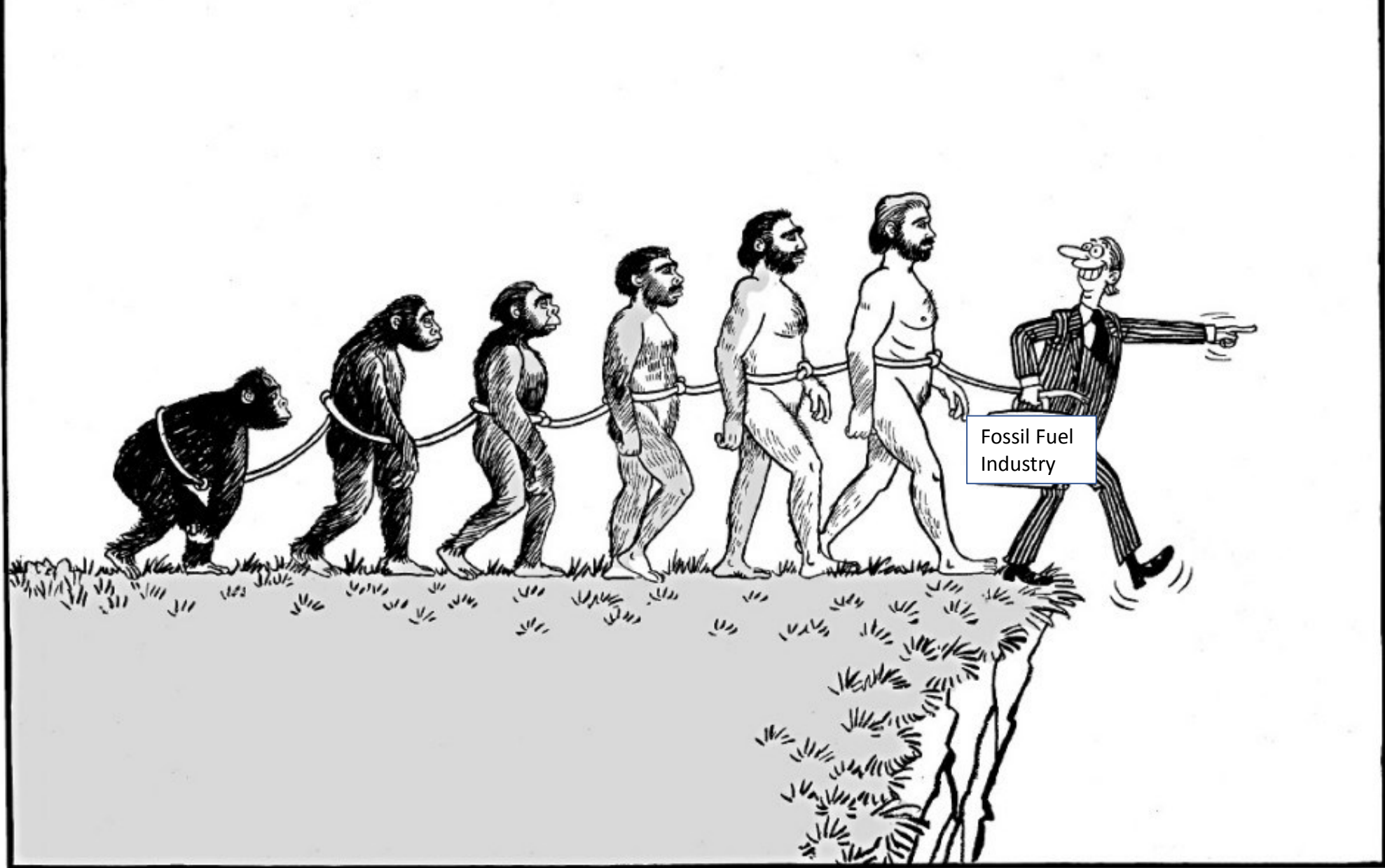


Transit Improvements

An effective way to cut CO₂ emissions

James S. Quinn, PhD



Evolution stops here

Humans focus on the here and now and discount the future!

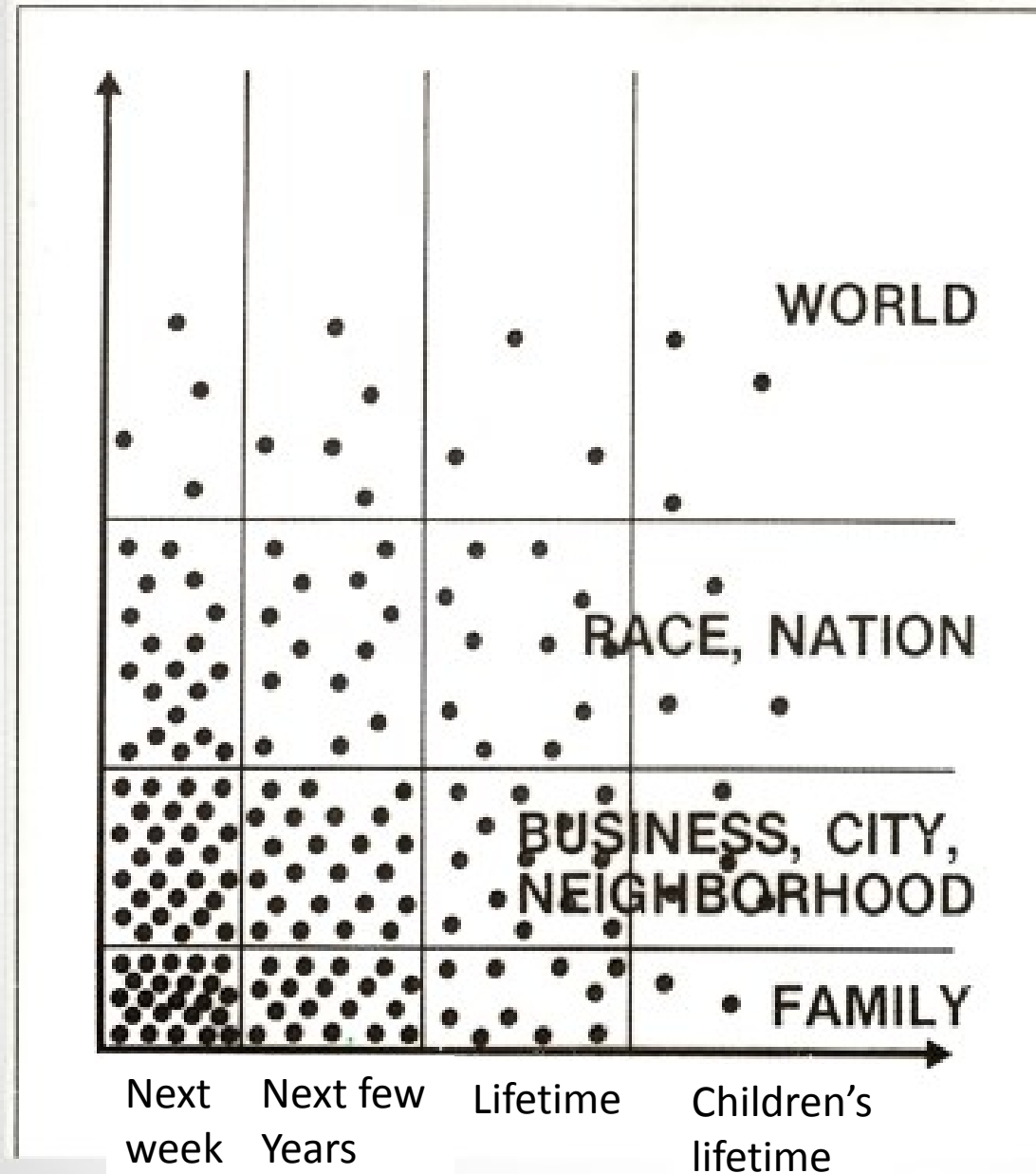
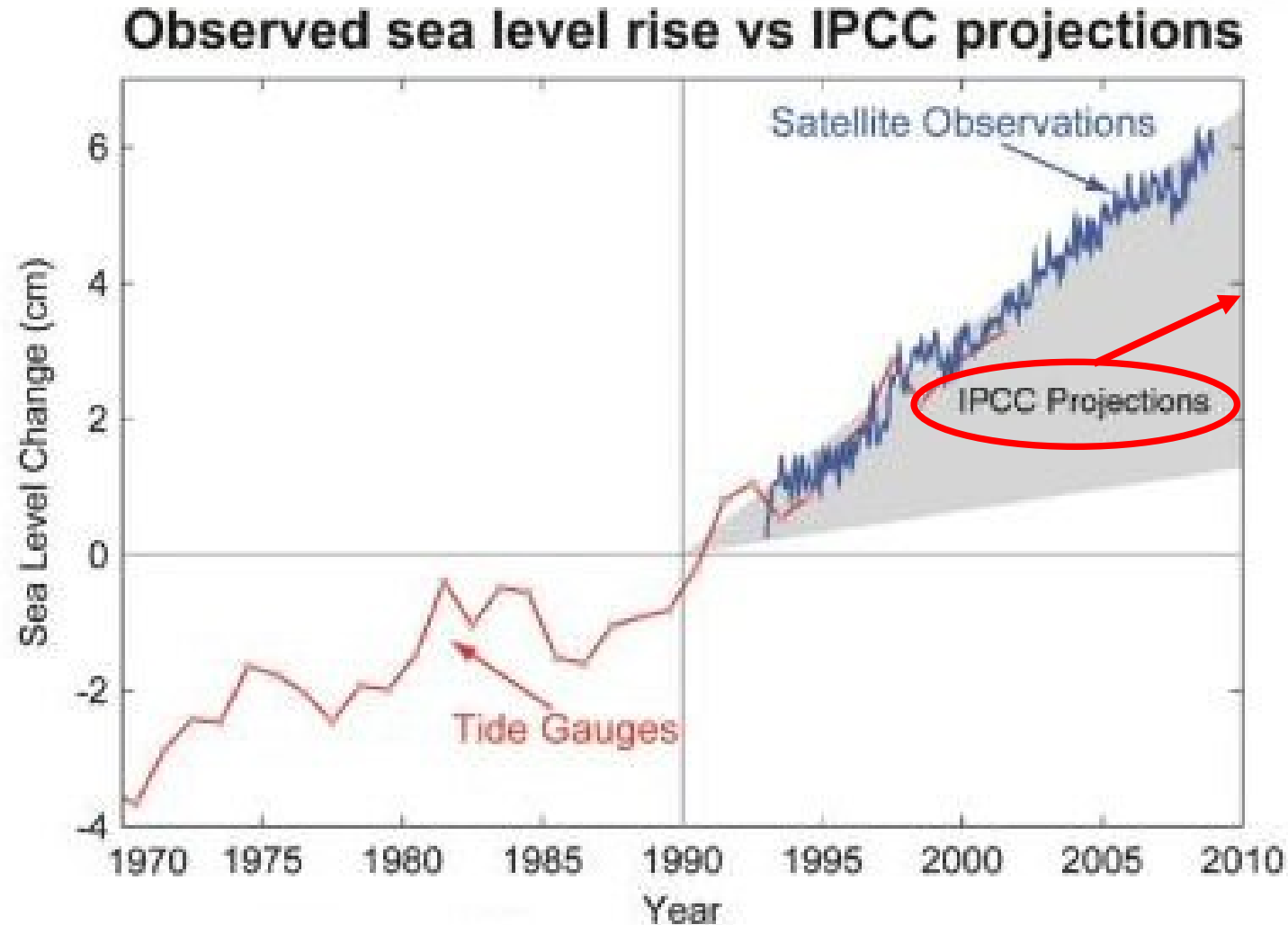


FIGURE 75. *Human perspectives. Most people are less concerned about future cost and benefits than present ones. (Dennis L. Meadows Limits to Growth, 1972.)*

Predictions by the Intergovernmental Panel on Climate Change (IPCC)
are underestimates of rate and magnitude



IPCC underestimated impacts (earlier reports)

Underestimated impacts

- Temperature ↑
- Arctic ice melting
- Ice sheets (Greenland, Antarctica)
- Sea level rise

What they missed

- Melting of arctic permafrost
→ Release of methane and CO₂
- Unrecognized environmental interactions
- Lubrication, ice cracks, sliding of ice sheets
- Left out Greenland/Antarctic ice sheet contributions to reach consensus.

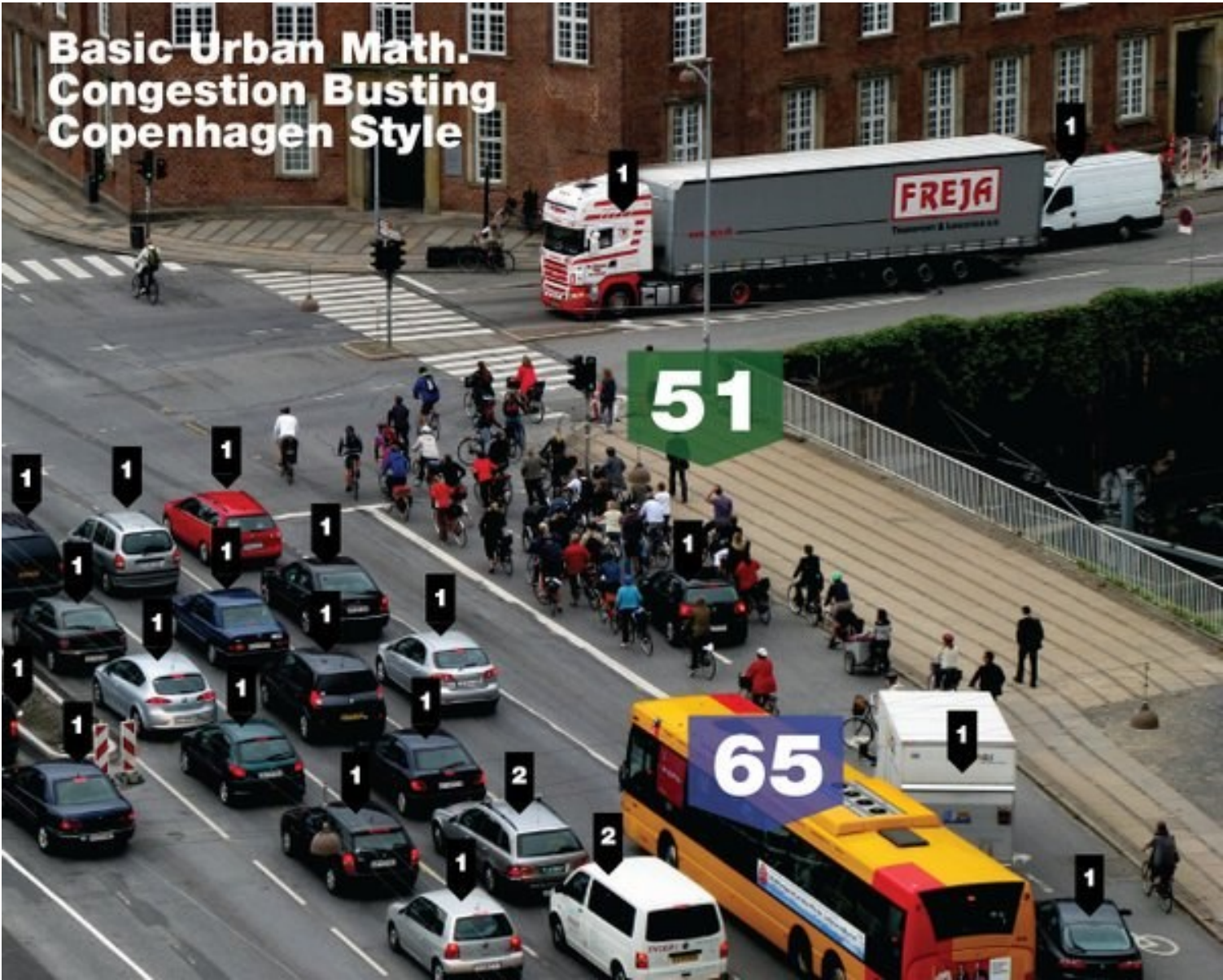
IPCC reports underestimate rate and severity of climate change!

- IPCC 2018 states that we have 11 years to gain control of and significantly reduce emissions to avoid devastating climate change effects.
- This is real
- This is dangerous
- THIS IS A CRISIS!



**Basic Urban Math.
Congestion Busting
Copenhagen Style**

This aerial view of a busy Copenhagen street intersection illustrates traffic flow and congestion metrics. The image shows a multi-lane road with a large number of vehicles, including cars, a truck, a bus, and a van. A large green arrow labeled '51' points towards the intersection, indicating a high volume of traffic. A large blue arrow labeled '65' points away from the intersection, indicating a high volume of traffic leaving. The text 'Basic Urban Math. Congestion Busting Copenhagen Style' is overlaid on the top left of the image.



Federal and provincial governments are not
awake!

- It is up to us and you, our municipal
representatives.

Apply the CO₂ reduction lens to decisions.



Reduce CO₂ emissions like our future depends on it

It does!