

"Dorling's optimism is infectious." VICKY PRYCE

**danny  
dorling**  
**slow  
down**

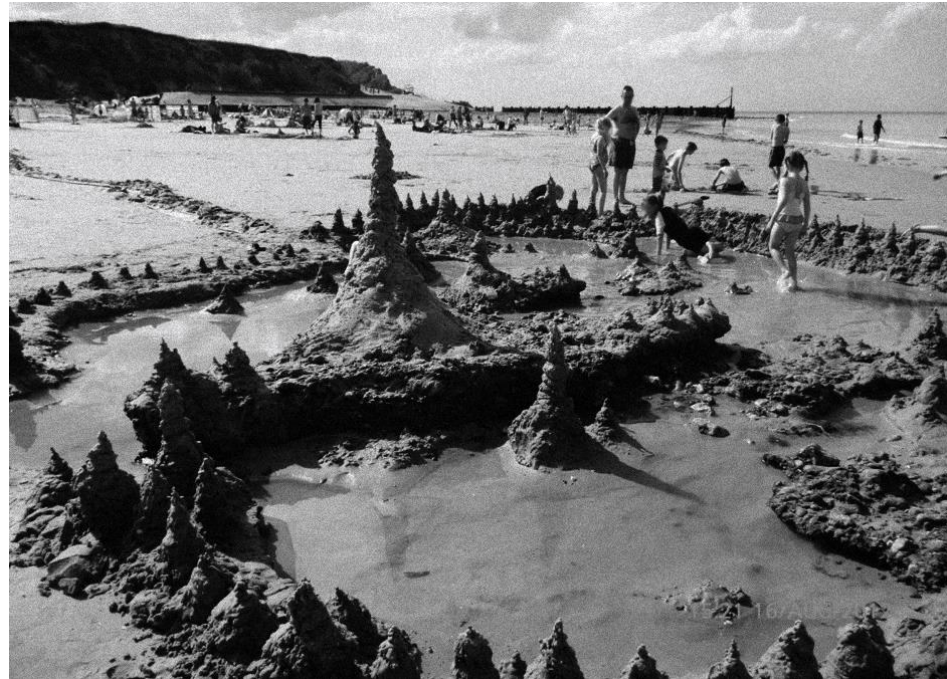
The End of the  
Great Acceleration —  
and Why It's a Good Thing

"Is the world spinning out of control?  
I thought so until I read *Slowdown*."  
WILLIAM POWERS

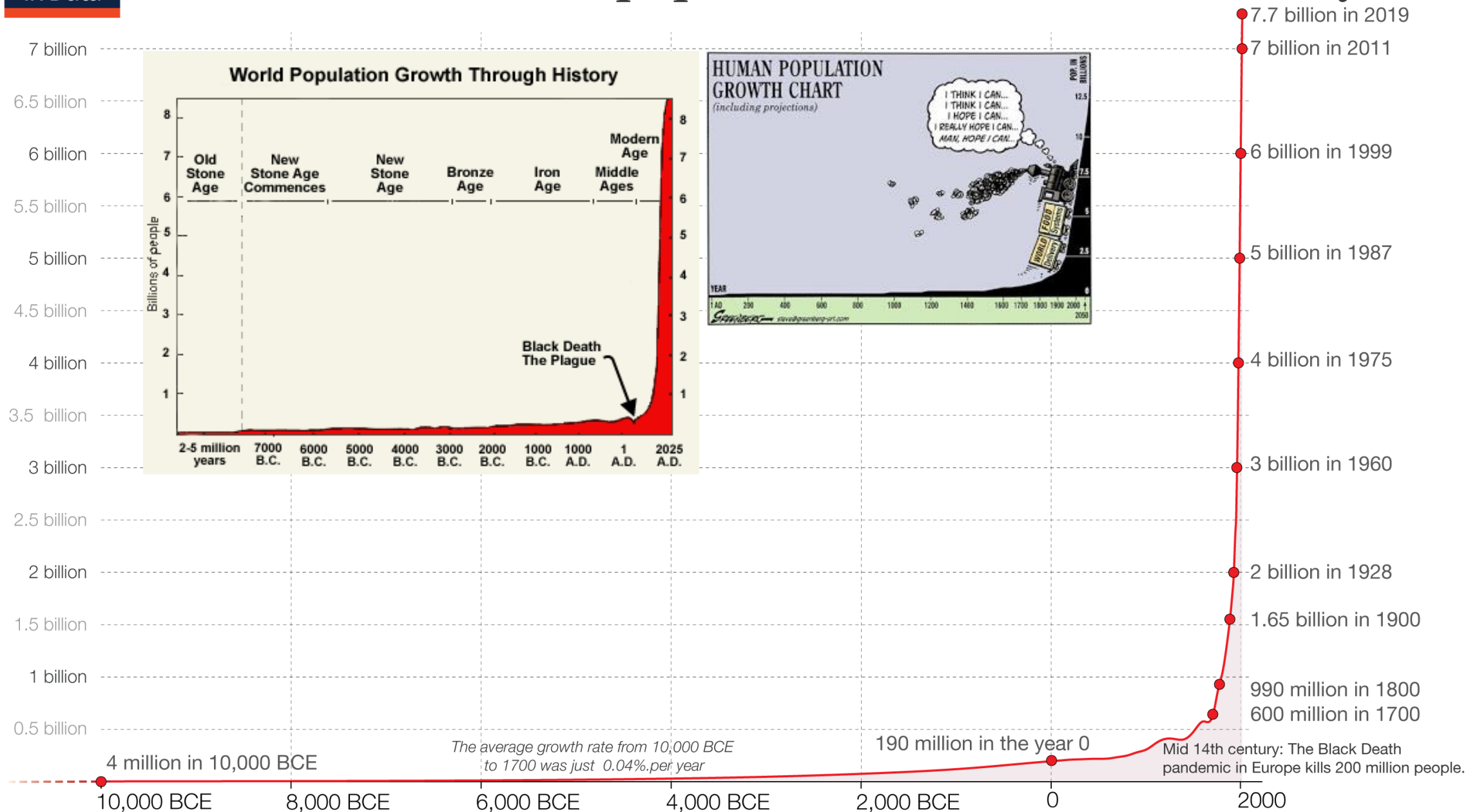
To what extent is the human species  
slowing down?

Danny Dorling

Thursday 20 January 2022



# The size of the world population over the last 12,000 years



Based on estimates by the *History Database of the Global Environment (HYDE)* and the United Nations. On [OurWorldinData.org](https://ourworldindata.org) you can download the annual data.

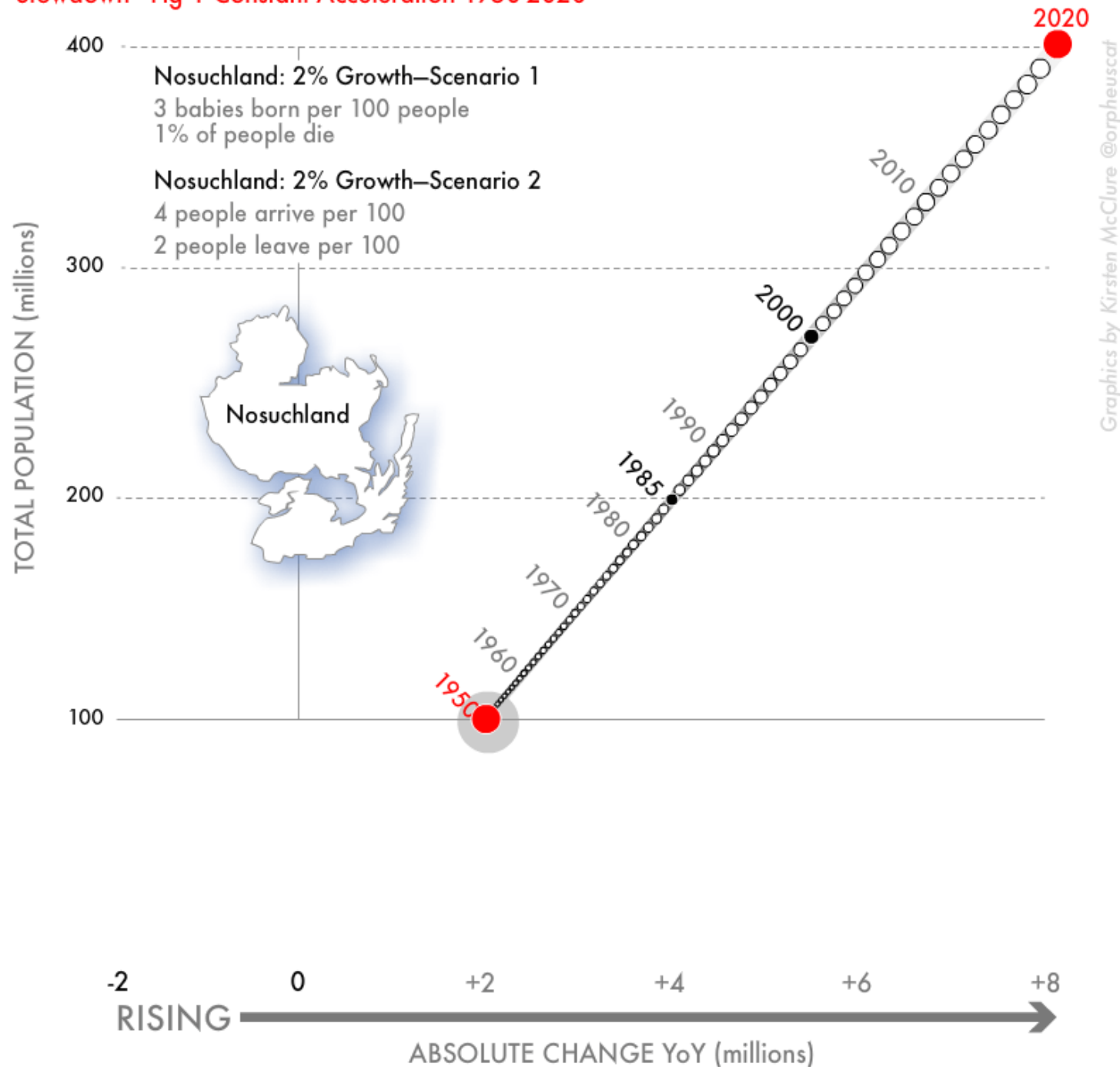
This is a visualization from [OurWorldinData.org](https://ourworldindata.org), where you find data and research on how the world is changing.

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“The world’s population is now 6.7bn, roughly double what it was when I was born. If I live to be in my mid-eighties, then it will have trebled in my lifetime... I simply cannot understand why no one discusses this impending calamity, and why no world statesmen have the guts to treat the issue with the seriousness it deserves... We seem to have given up on population control.” – **Boris Johnson**, *Daily Telegraph*, 25 October 2007

“Slowdown” Fig 1 Constant Acceleration 1950-2020



In the ‘Origin of Species’, Charles Darwin described how a population explosion occurs and called the time of population explosion “favourable seasons”.

Charles was not to know it, but such circumstances arose for his own species at around the time of his own birth.

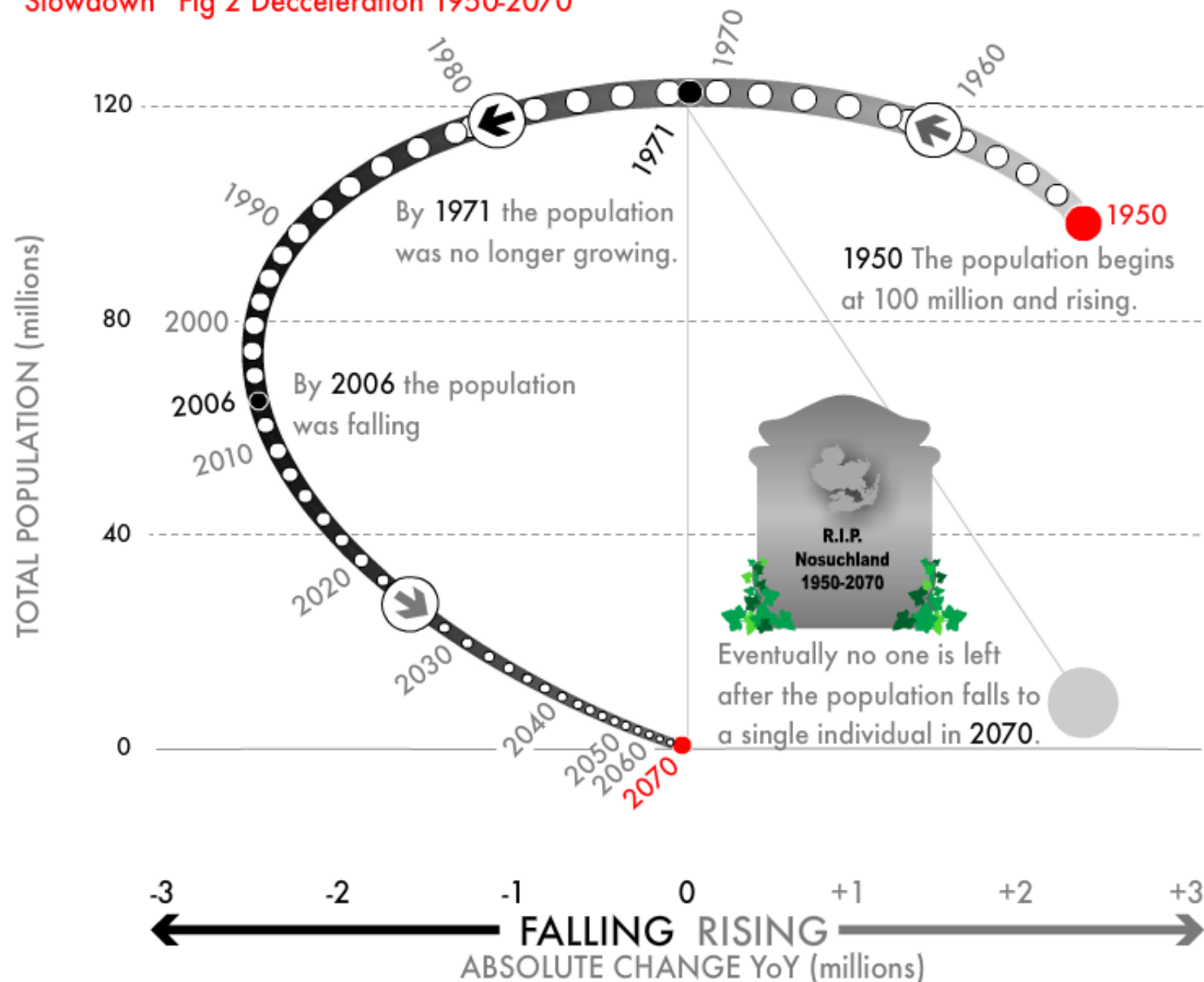
However, the favourable seasons for human population growth were not experienced favourably, with times of great social dislocation from small scale enclosure to global colonisation.

## "Slowdown" Fig 2 Deceleration 1950-2070

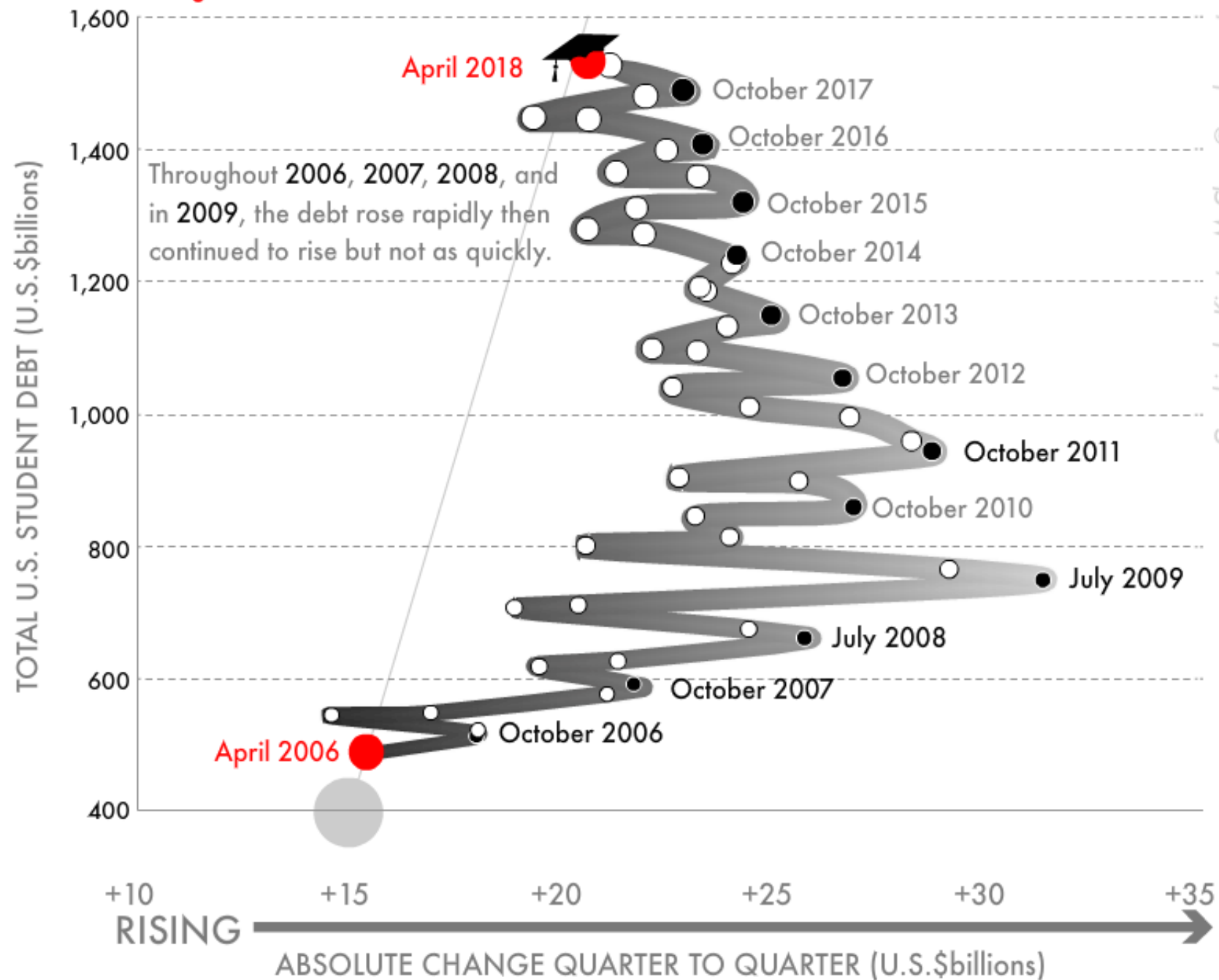
Now those seasons are over, we have experienced the first ever sustained slowdown in the rate of global human population growth.

This has been the case for at least one human generation.

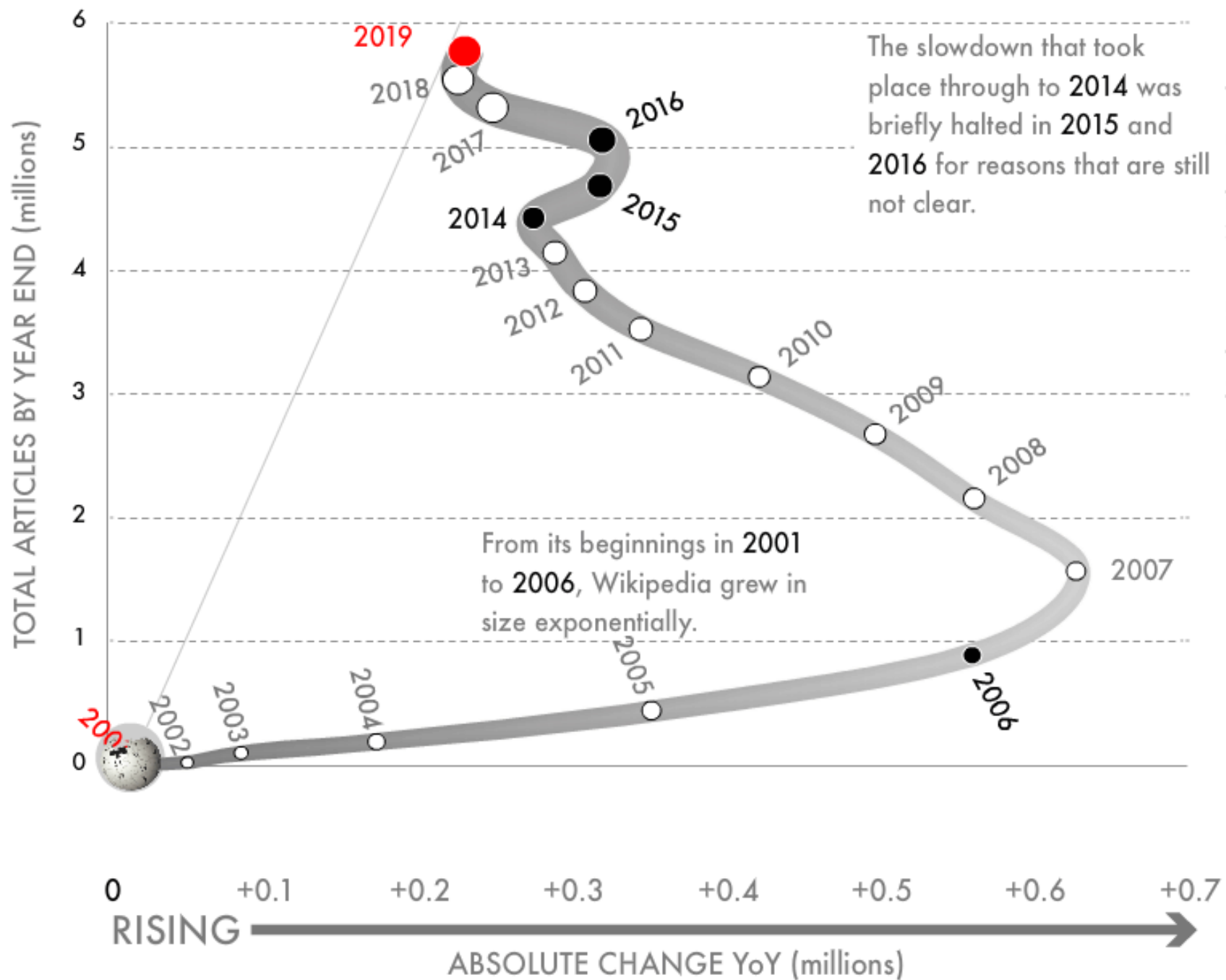
However, we are not just slowing down in terms of how many children we have, but in almost everything else we do other than in the rise in global temperatures that we are recording and that we have to live with.



“Slowdown” Fig 6 US Student Debt 2006-2018

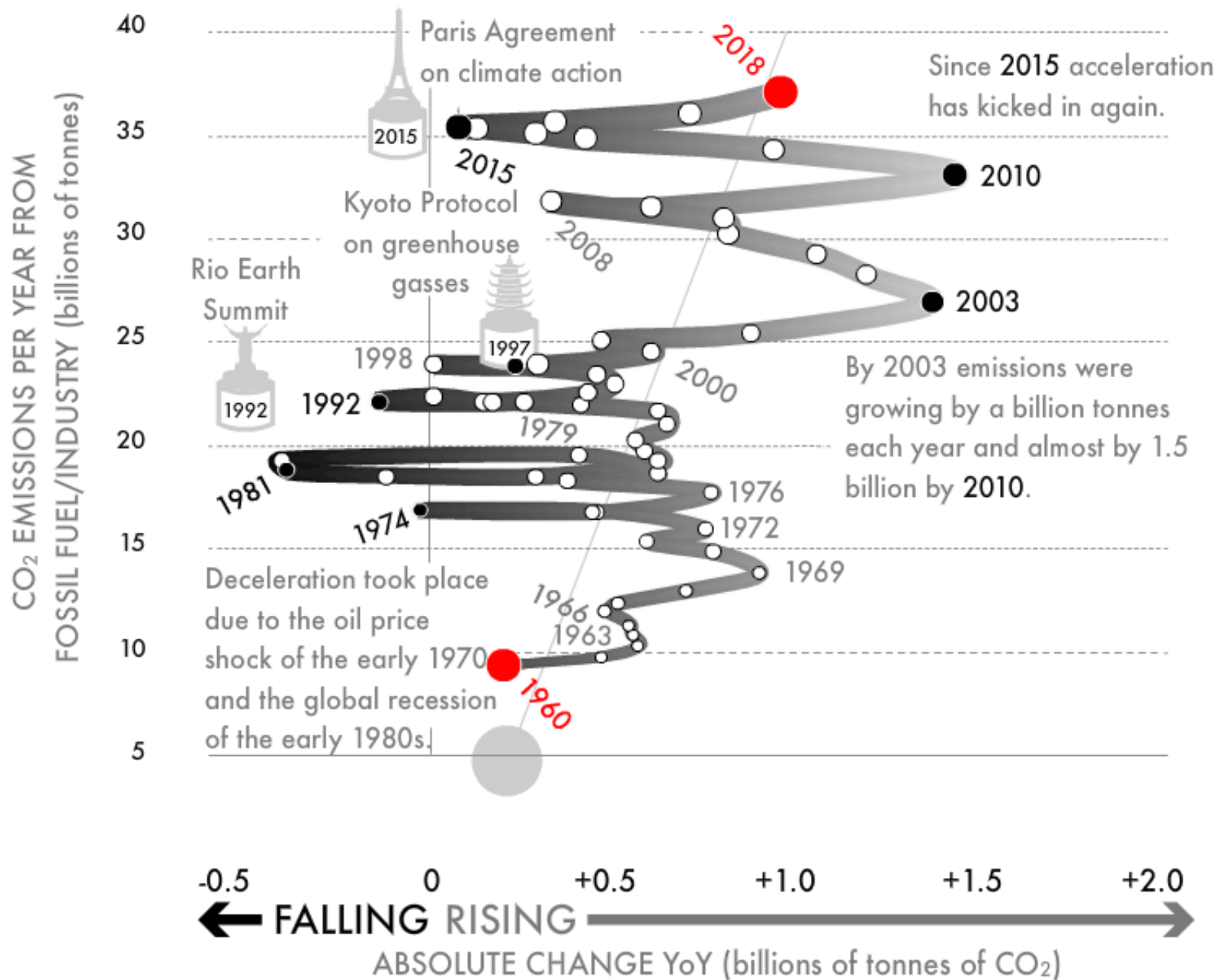


“Slowdown” Fig 10 Wikipedia 2001-2019





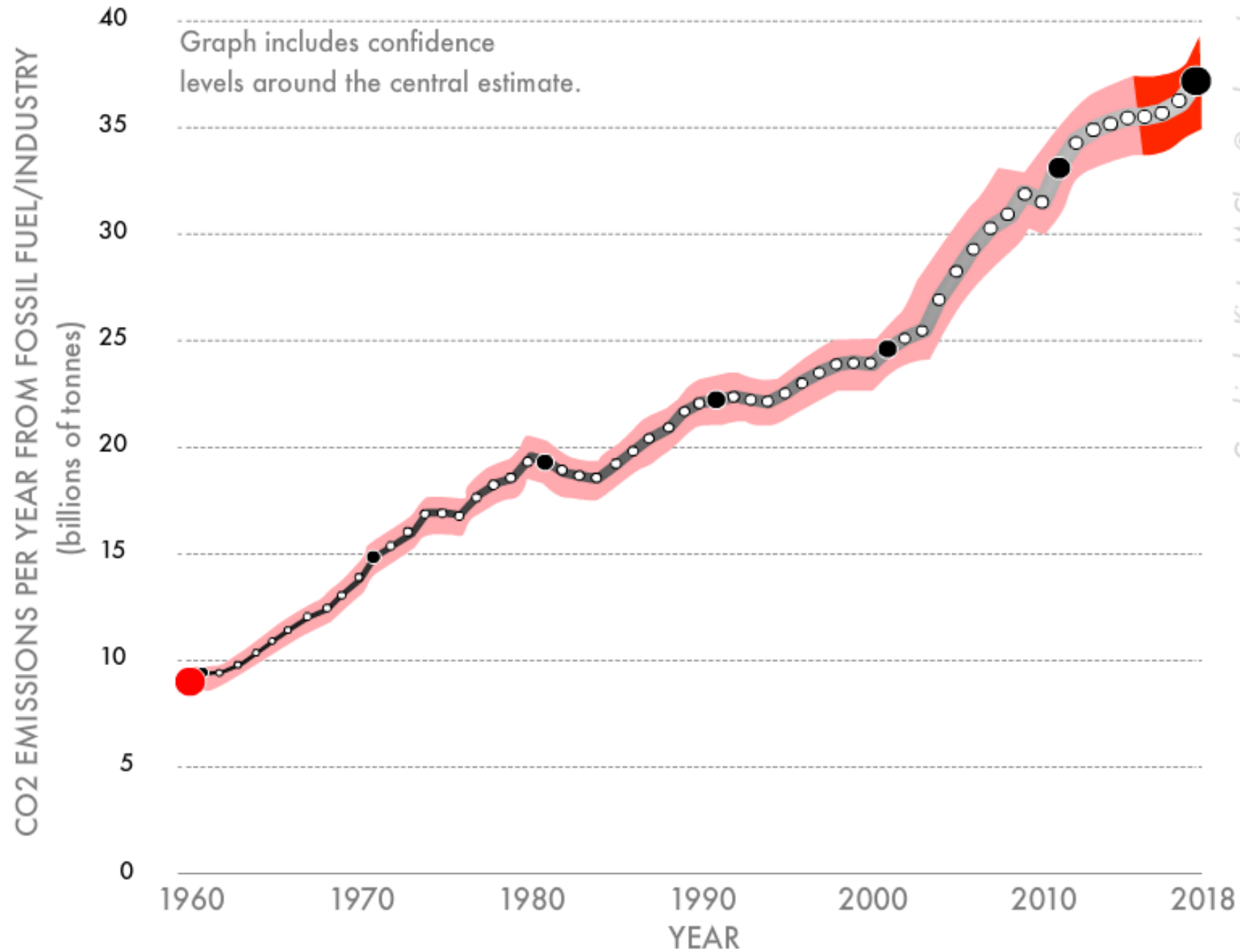
“Slowdown” Fig 16 Emissions 1960-2018



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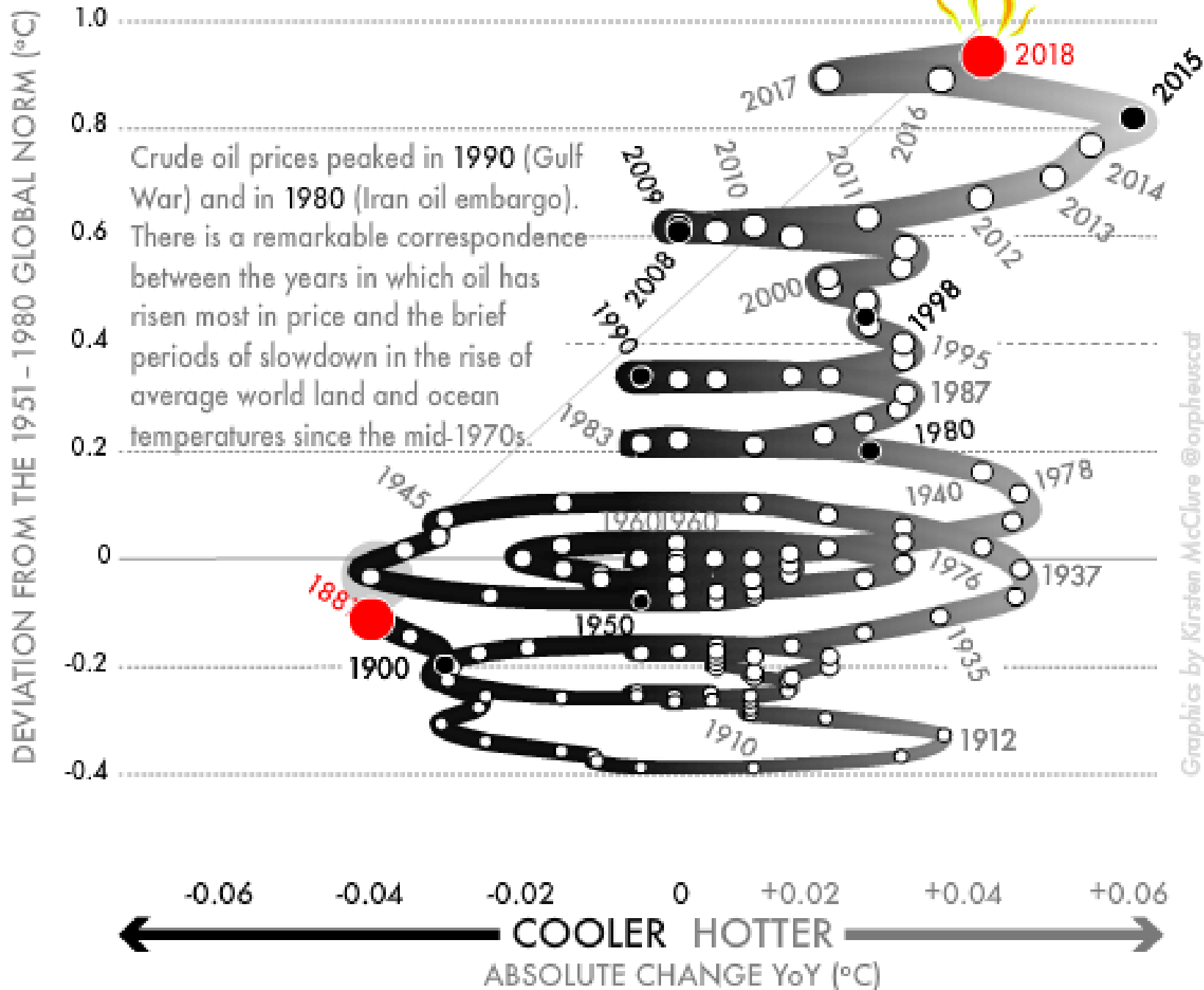


"Slowdown" Fig 15 Emissions 1960-2018

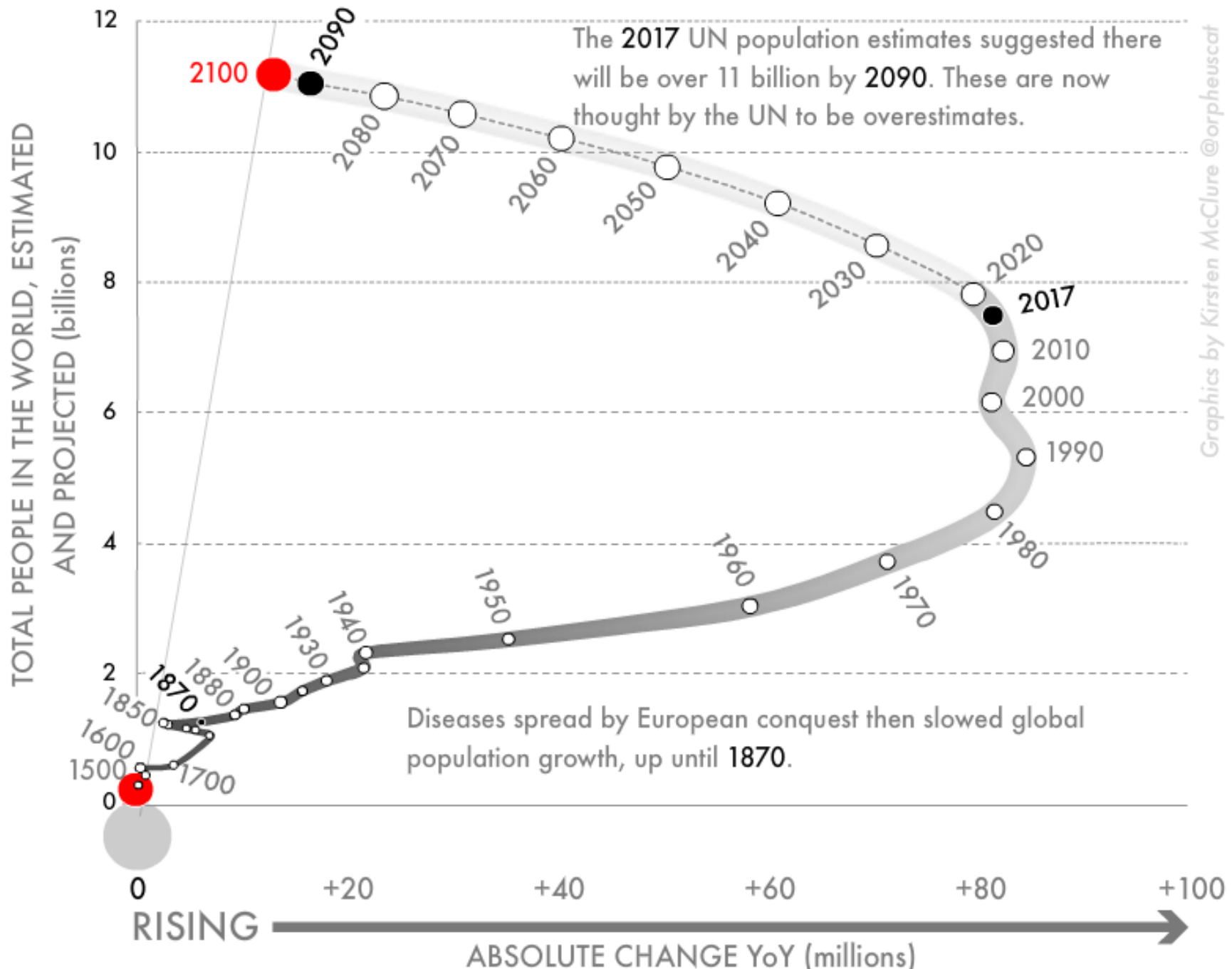


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"Slowdown" Fig 17 Nasa Temperature 1880-2018



"Slowdown" Fig 21 World Population 1-2100

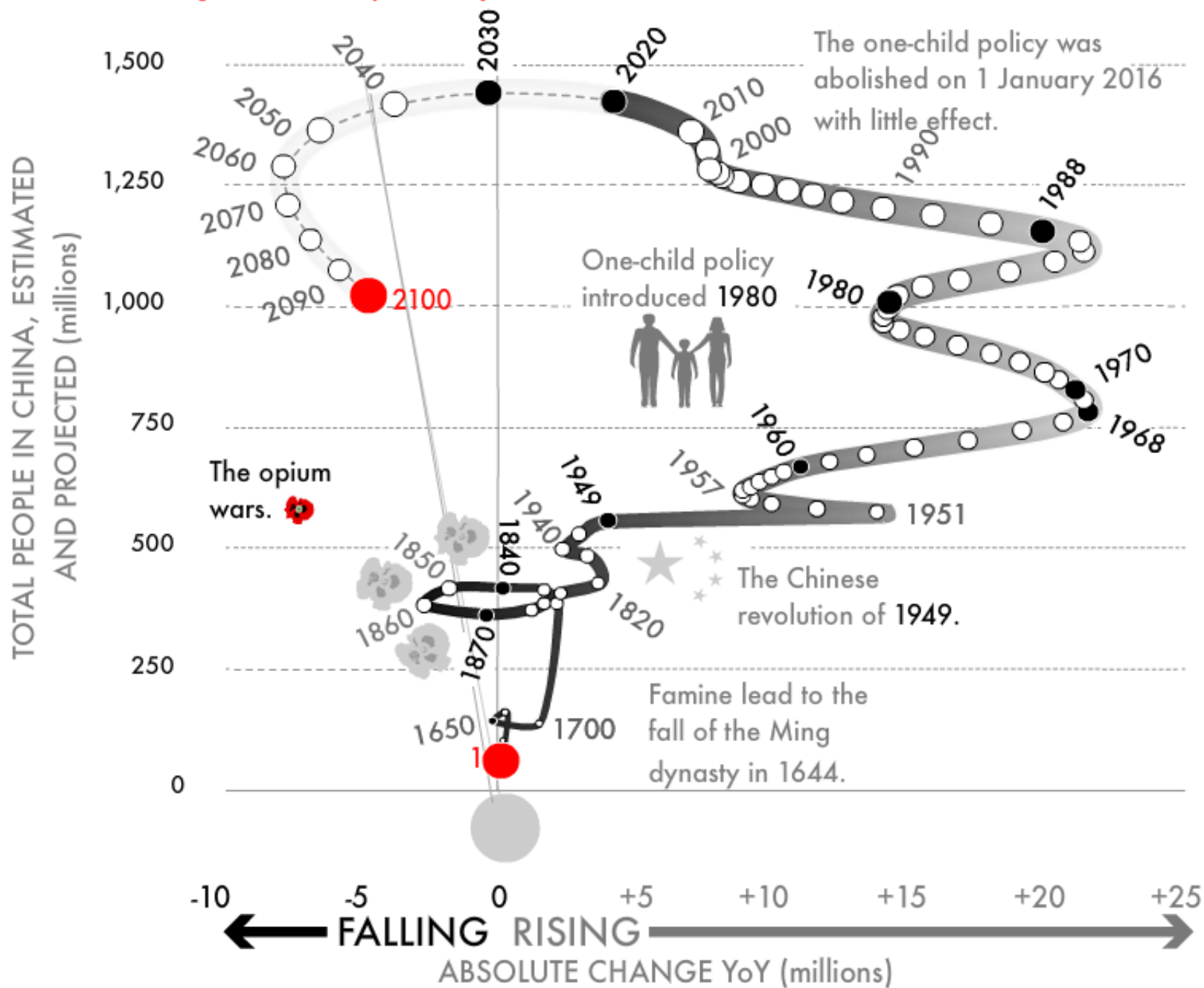


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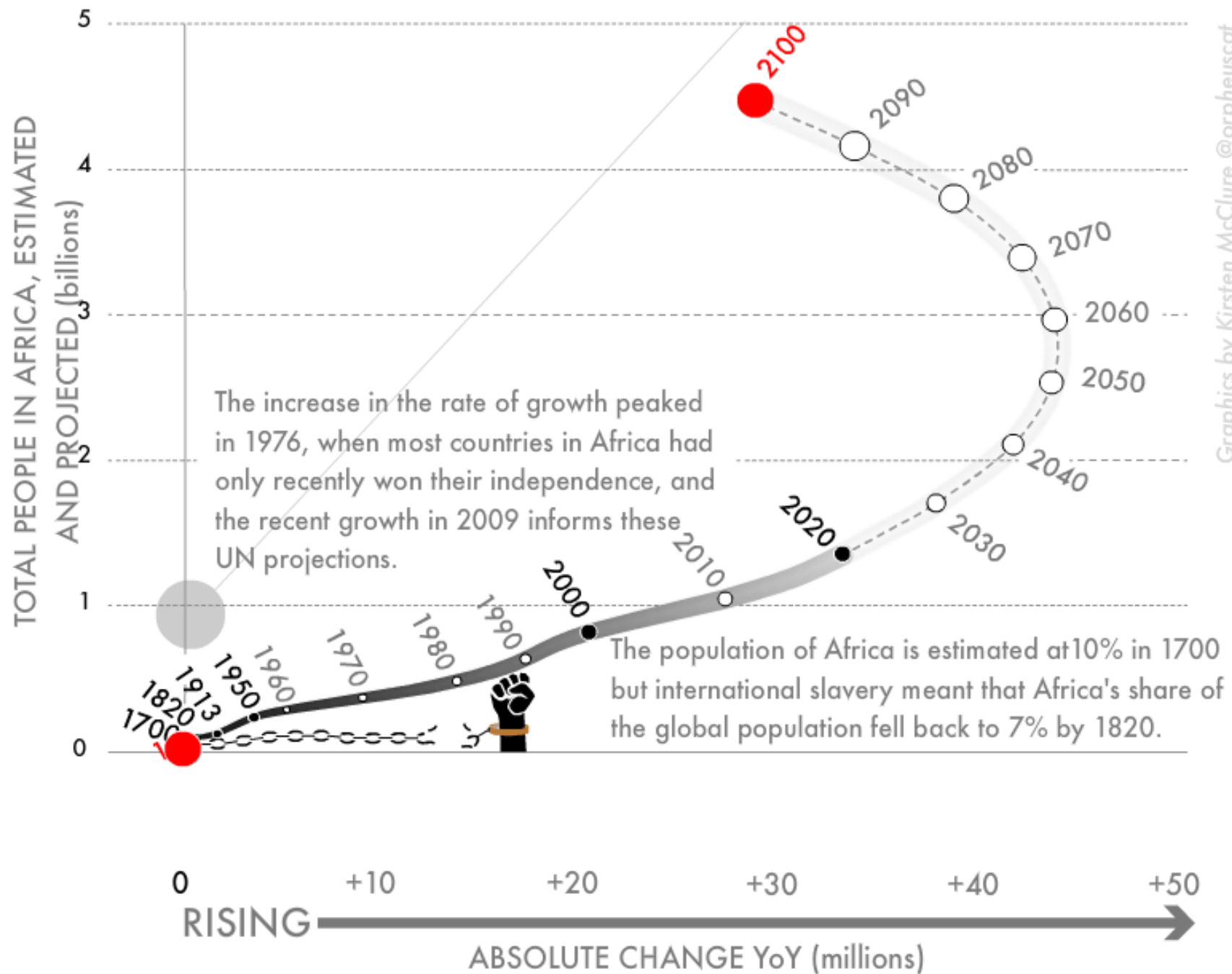


“Slowdown” Fig 24 China Population year 1-2100

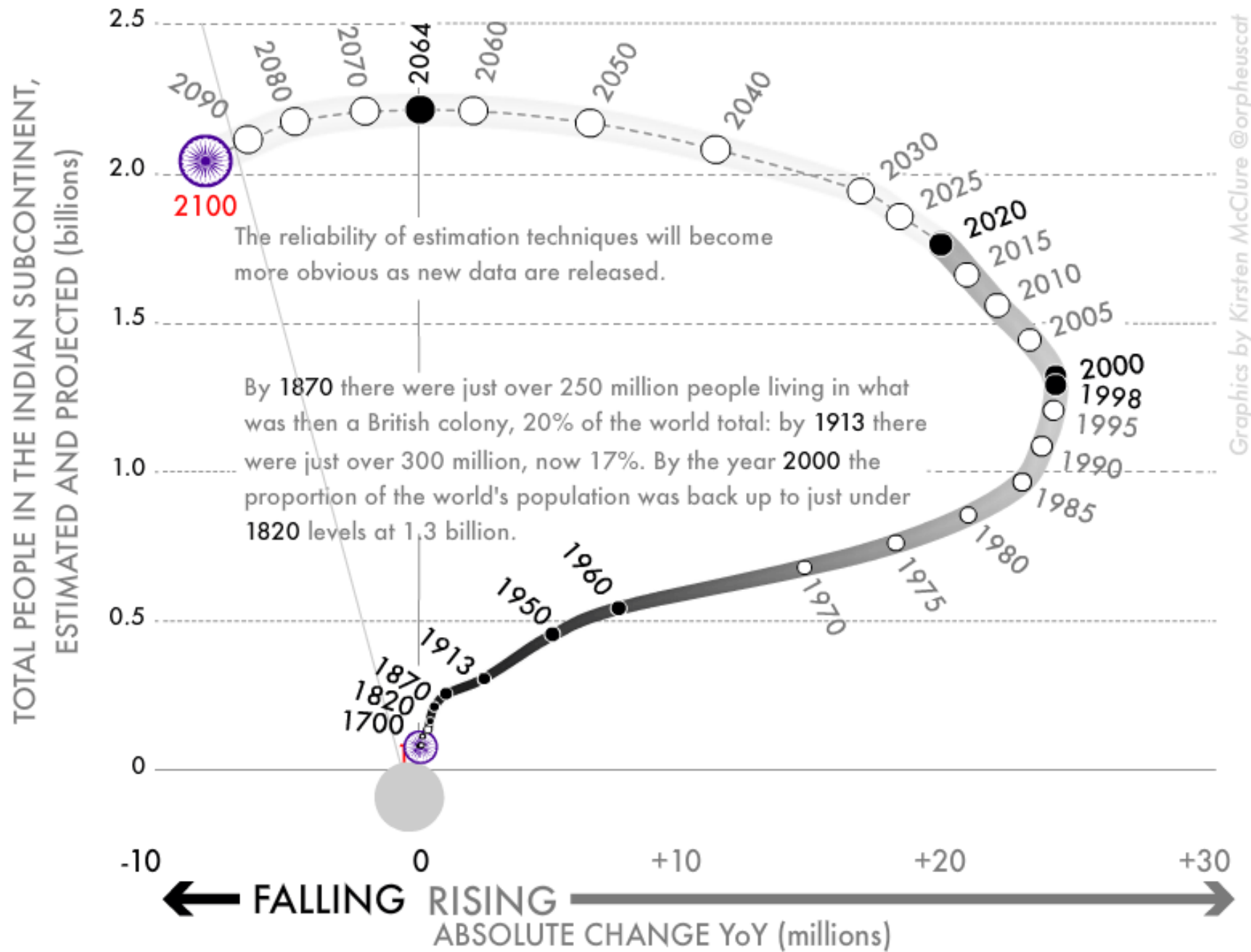


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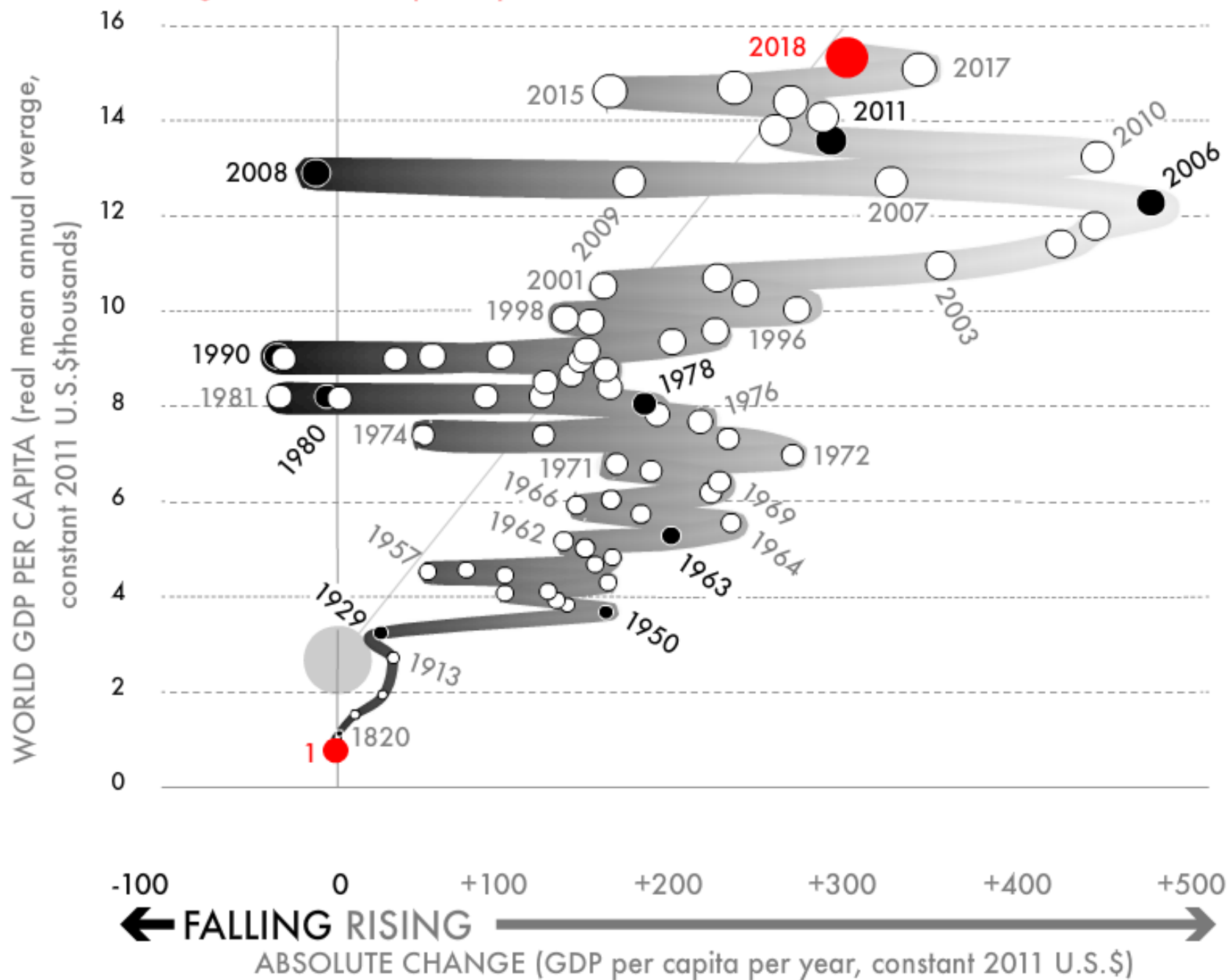
"Slowdown" Fig 25 Africa Population year 1 to 2100



"Slowdown" Fig 27 Indian Subcontinent Population 1-2100



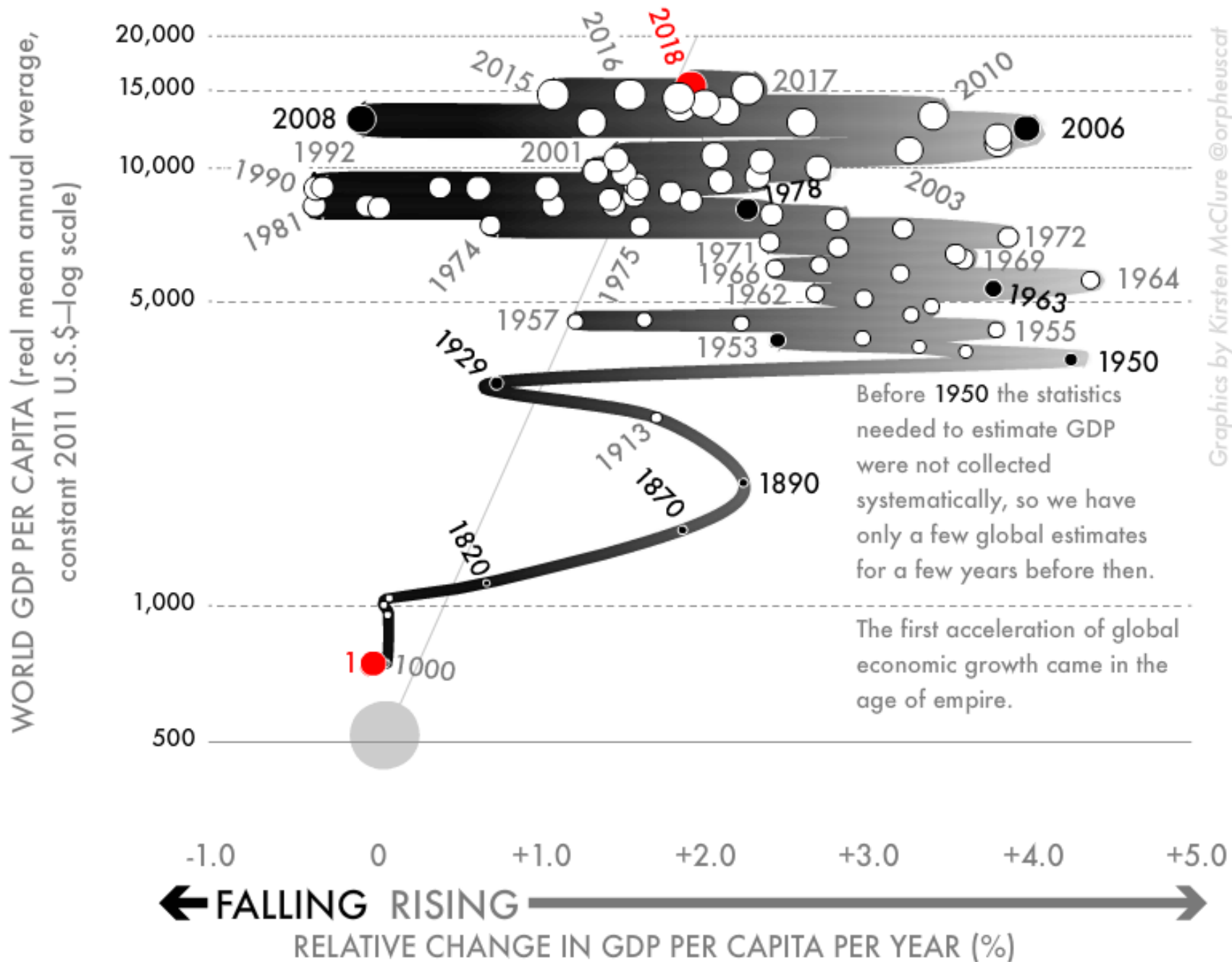
"Slowdown" Fig 47 World GDP per Capita 1-2019



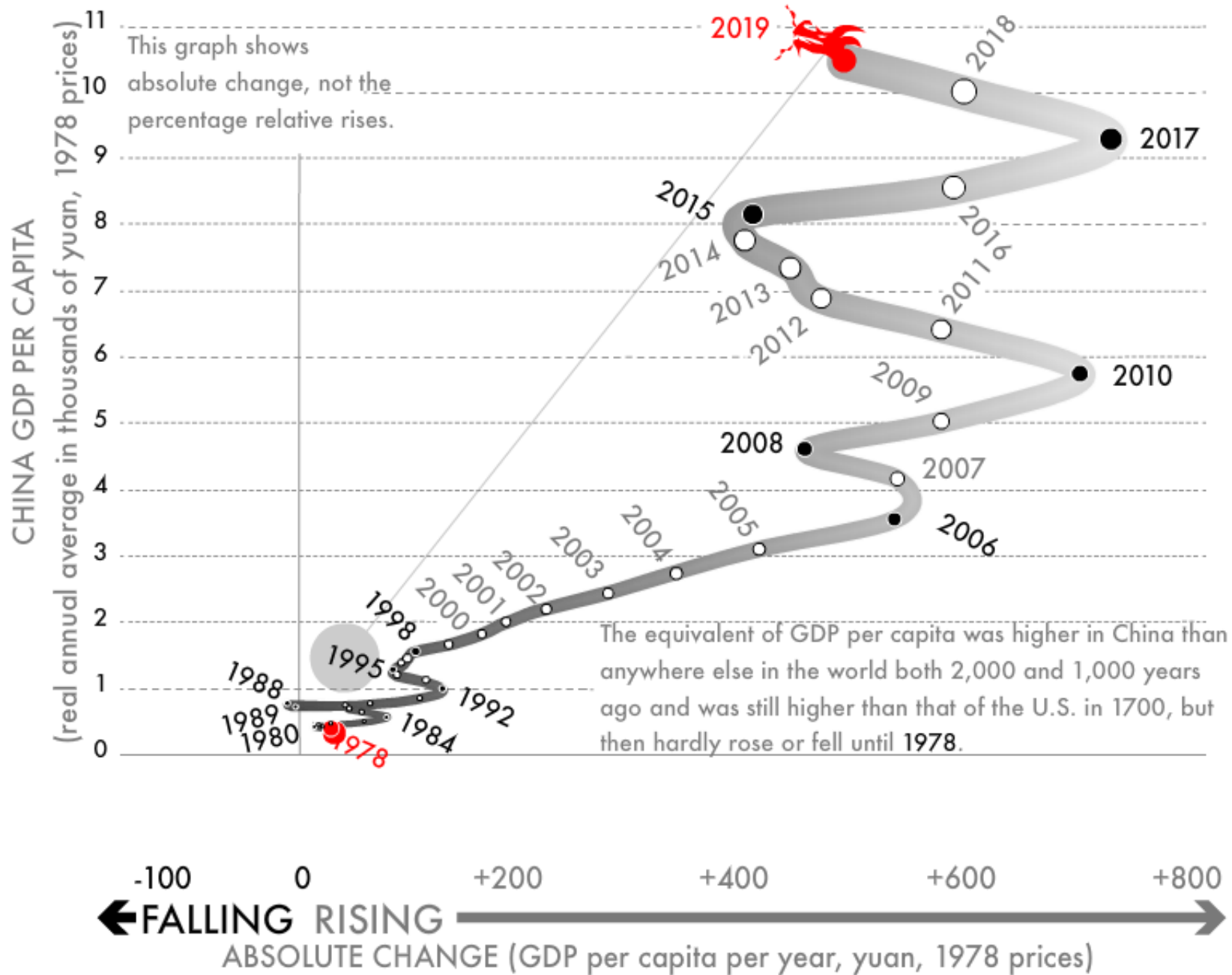
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“Slowdown” Fig 60 World GDP per Capita (vertical log scale) year 1-2018

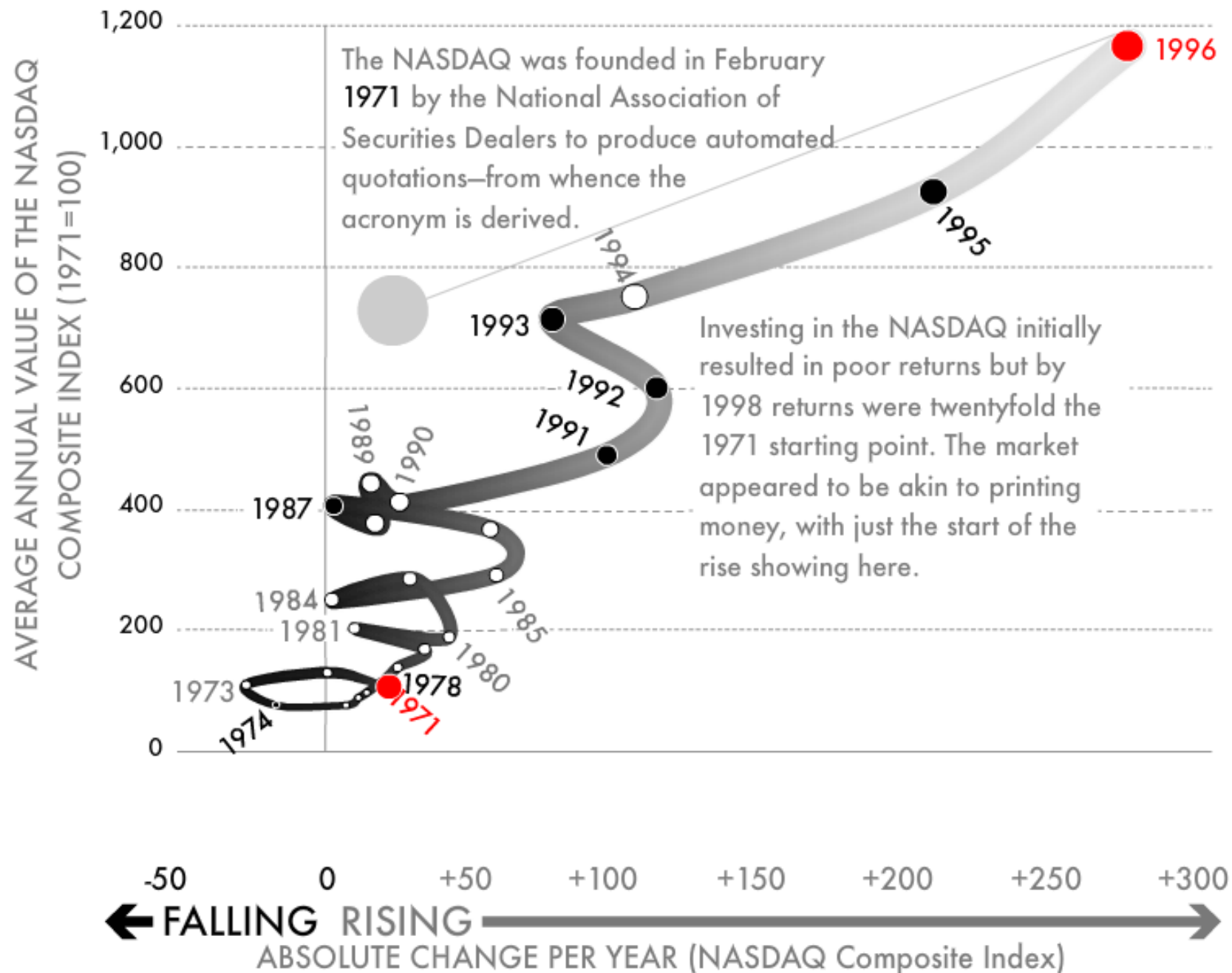


"Slowdown" Fig 49 China GDP 1978-2019

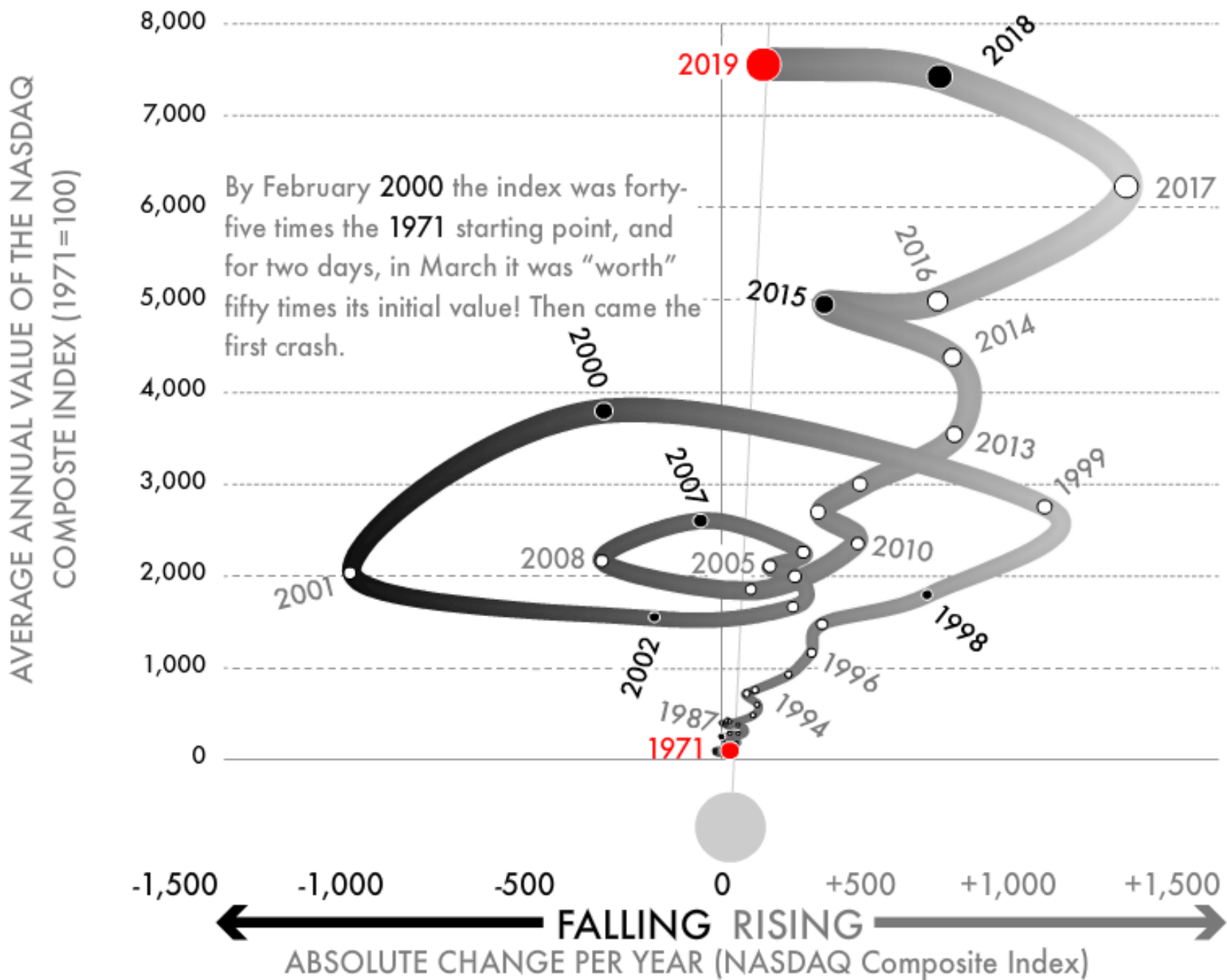


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“Slowdown” Fig 53 NASDAQ Stock Price 1971-1996



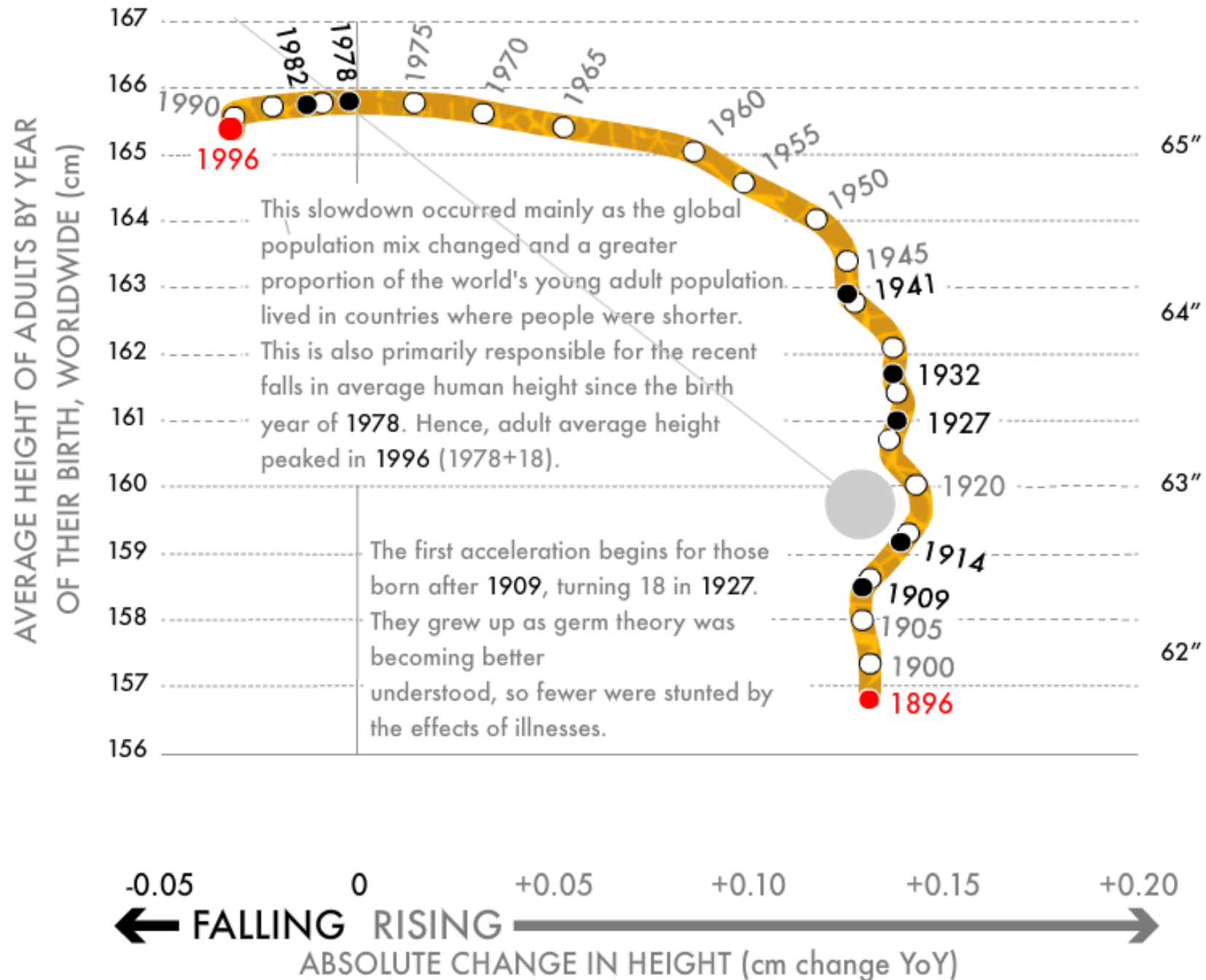
“Slowdown” Fig 54 NASDAQ Stock Price 1971-2019



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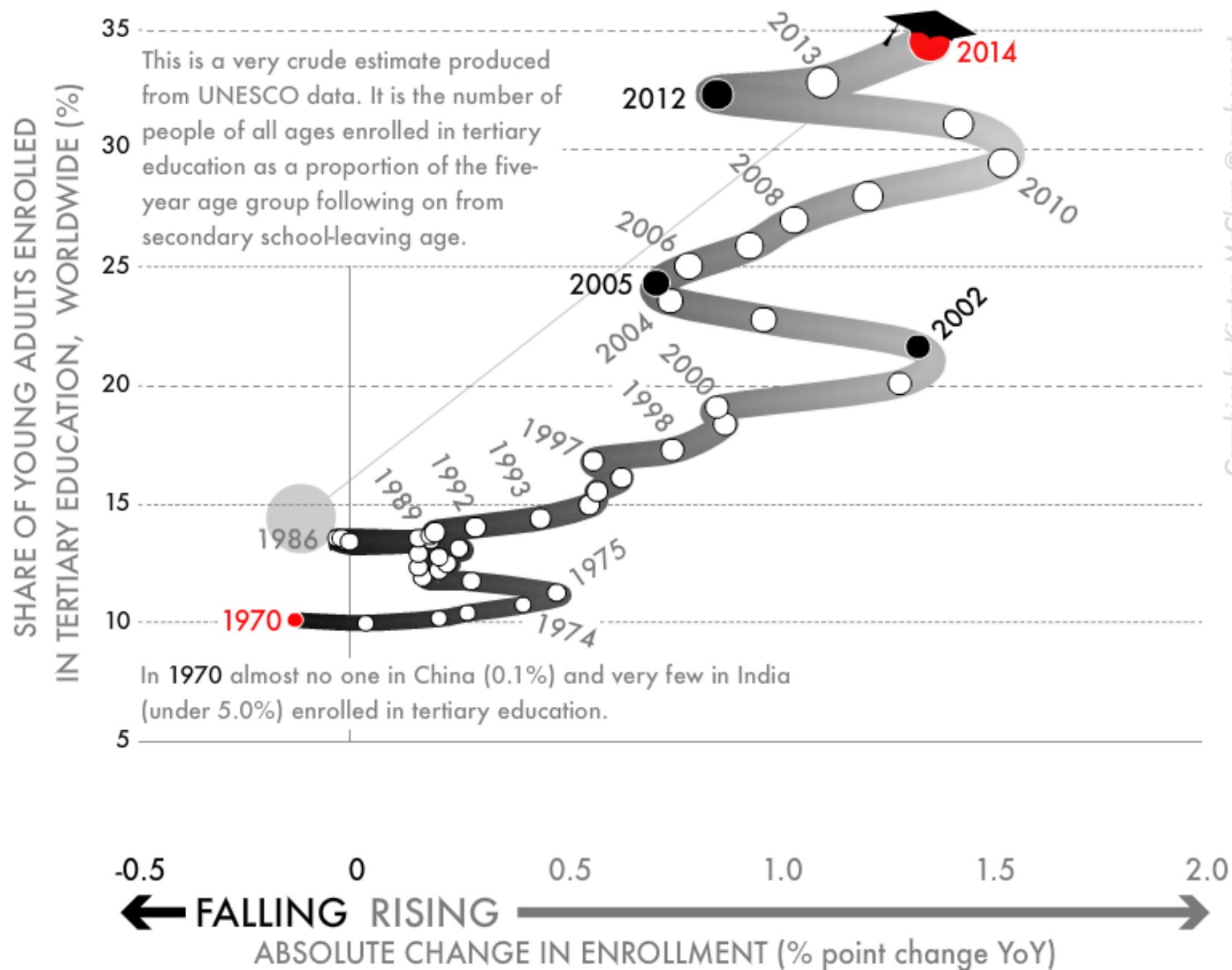


**"Slowdown" Fig 55 World Adult Heights of those born in 1896 to those born in 1996**

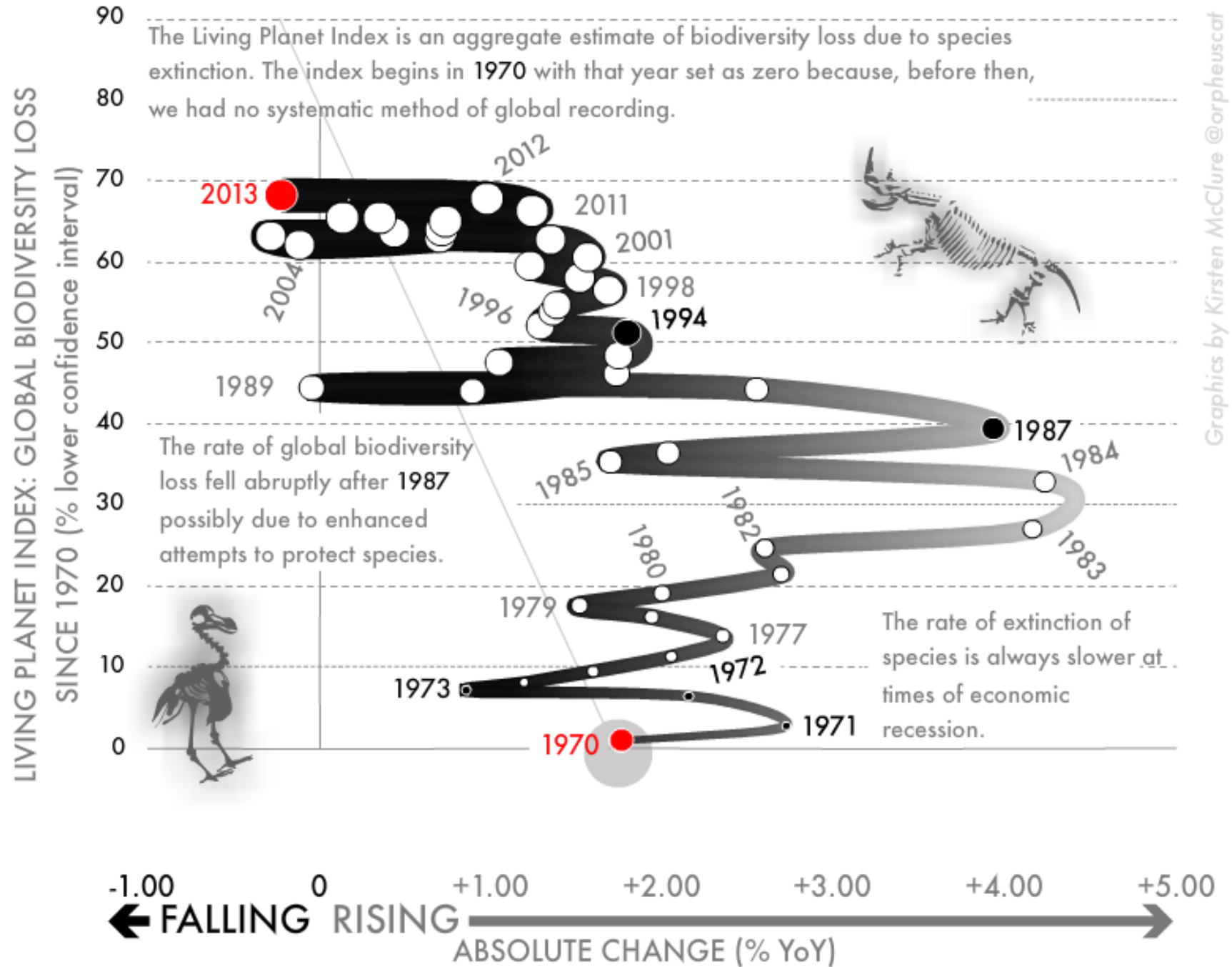


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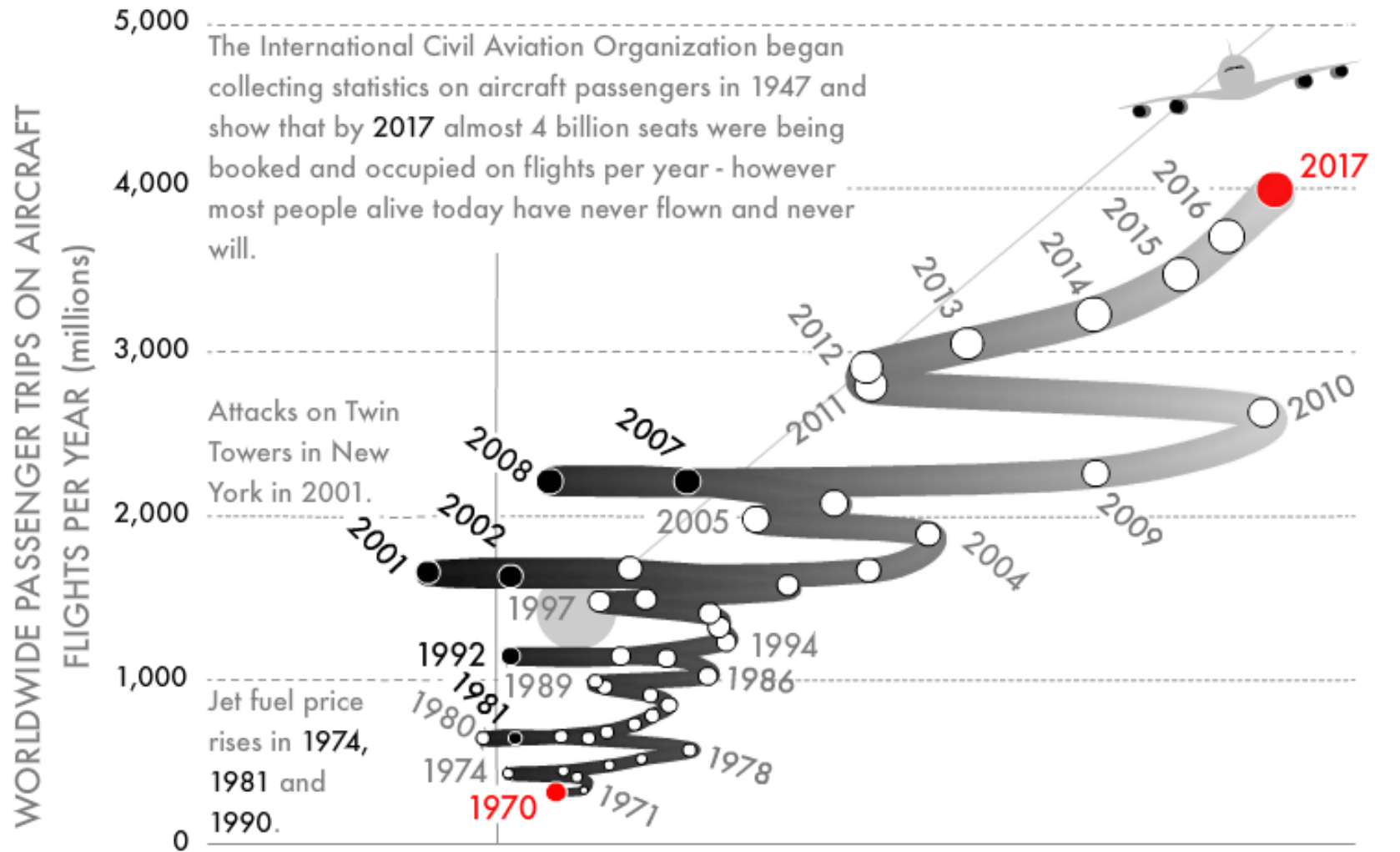
## "Slowdown" Fig 56 World Graduates Share 1970-2014



# "Slowdown" Fig 61 World Species 1970-2014



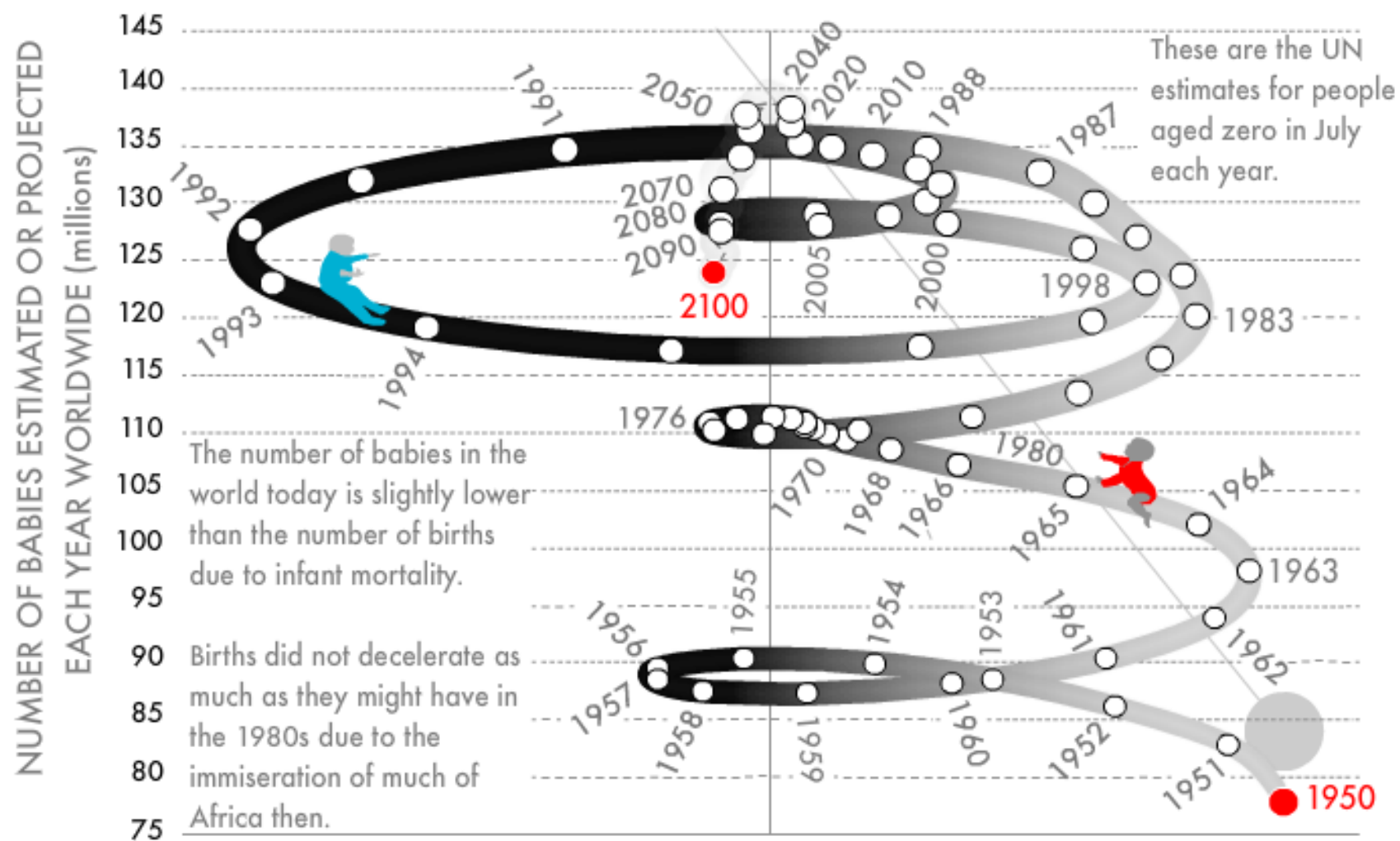
# "Slowdown" Fig 62 World Air Passengers 1970-2017



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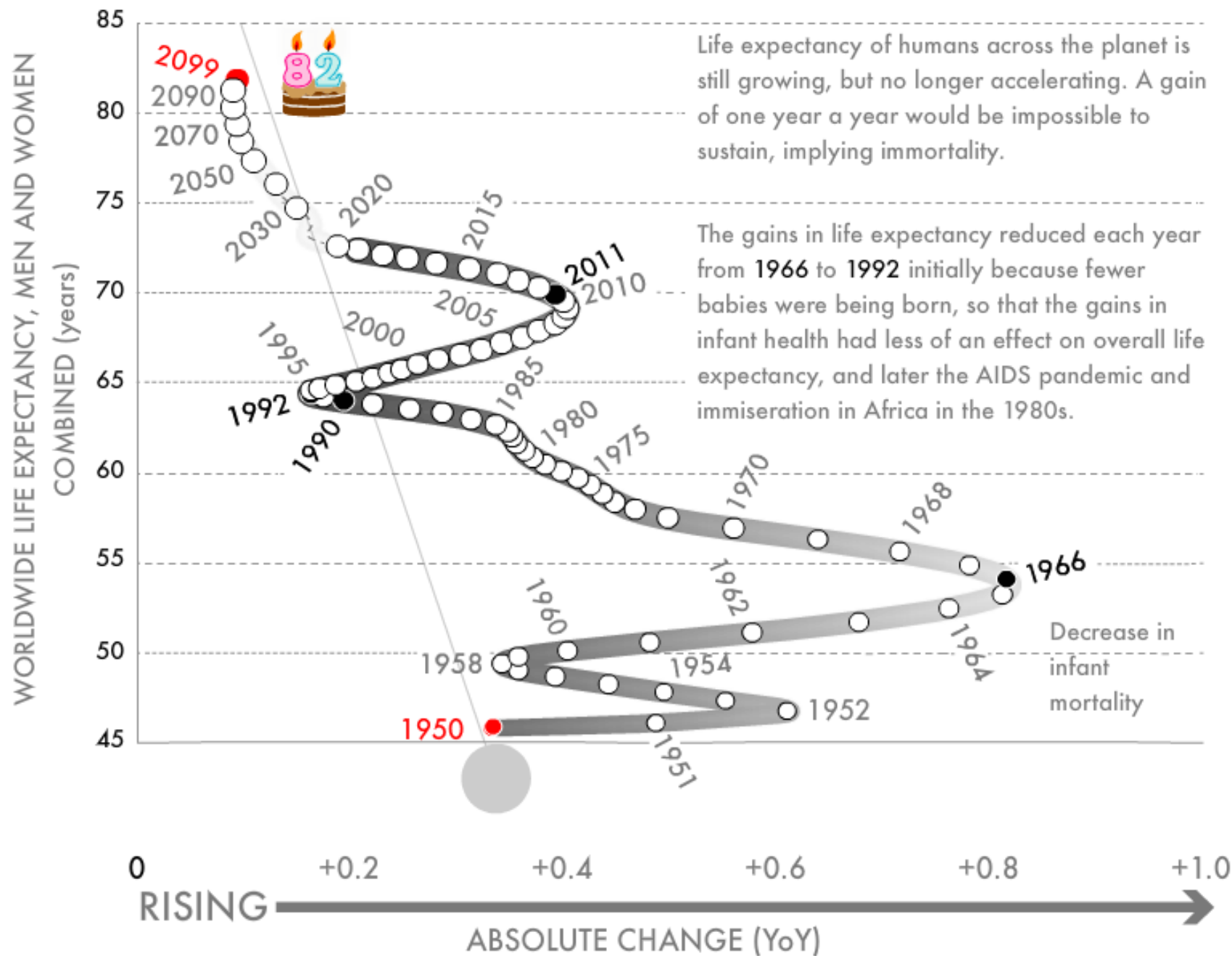
“Slowdown” Fig 63 World Babies 1950-2100



Graphics by Kirsten McClure @orpheuscat



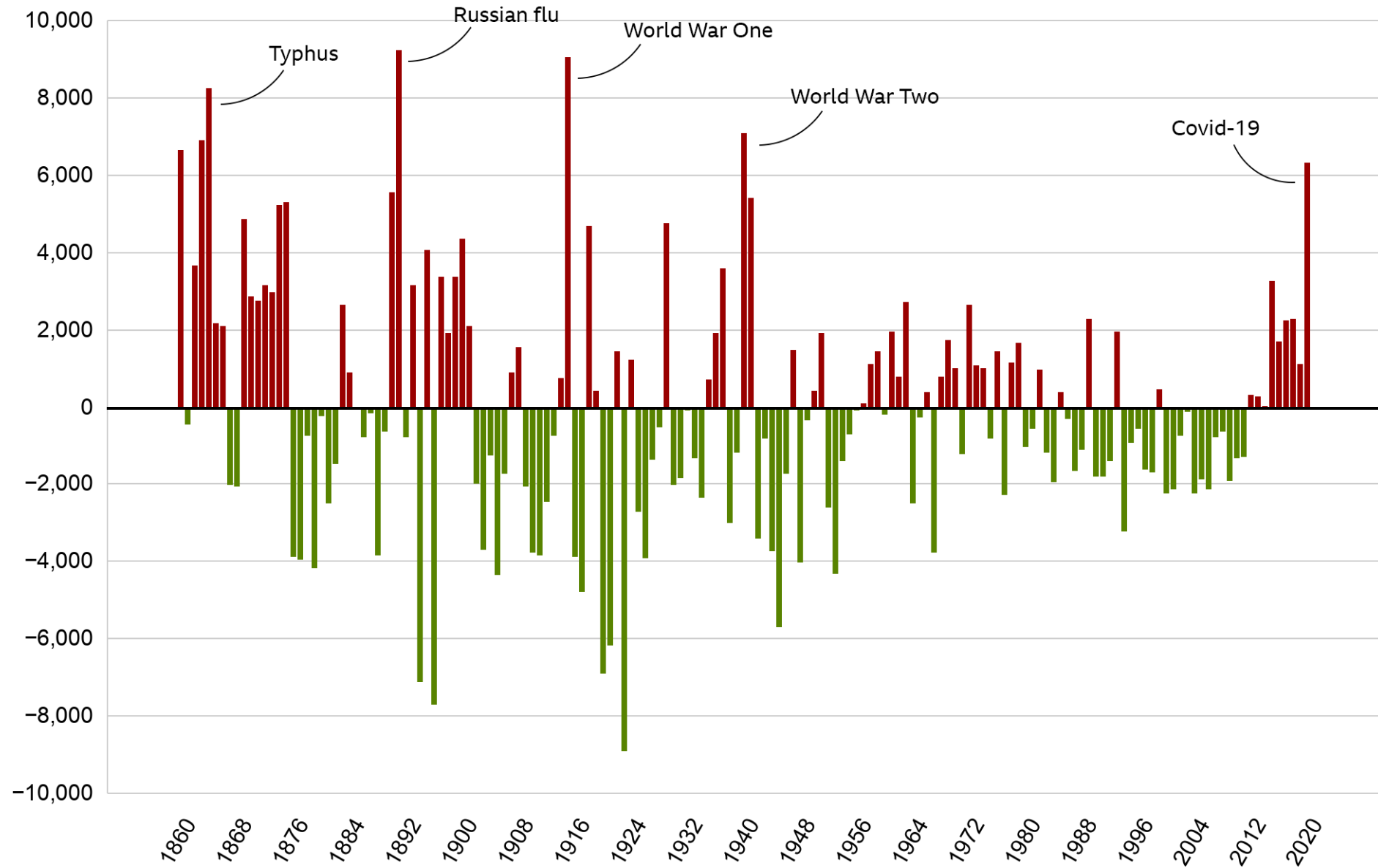
# "Slowdown" Fig 64 World Life Expectancy 1950-2099



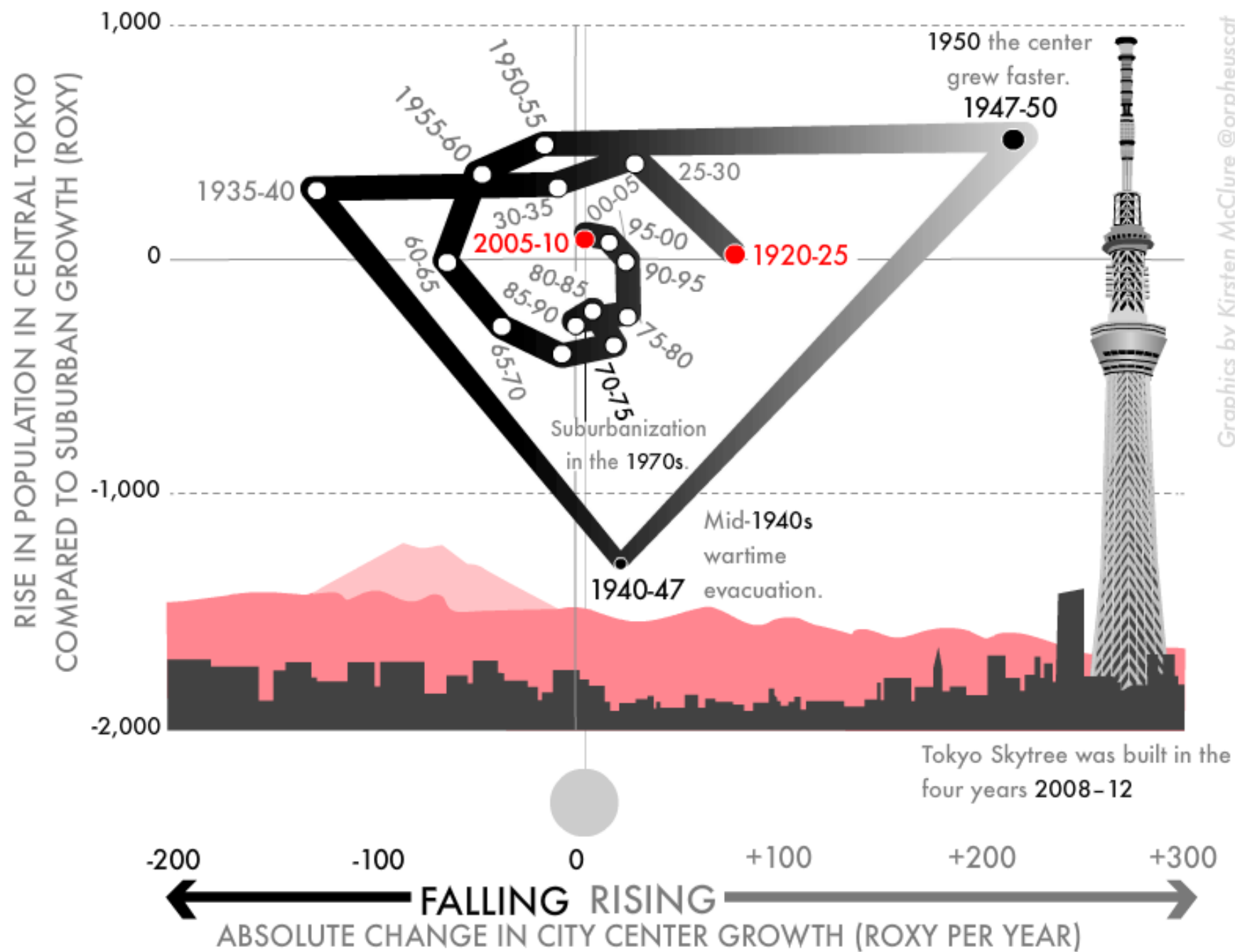
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# Excess deaths since 1860

Compared with five-year average



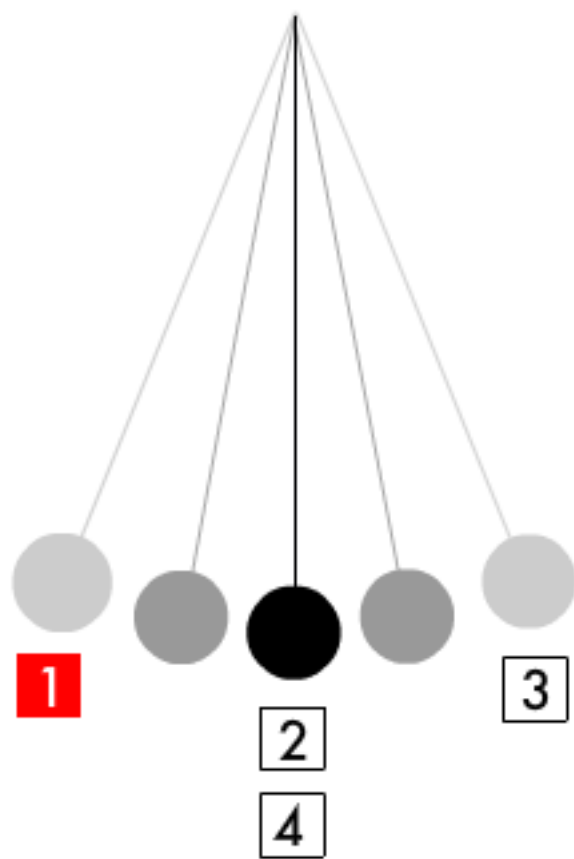
"Slowdown" Fig 65 Tokyo Population and Suburban Growth 1920-2010



Graphics by Kirsten McClure @orpheuscat

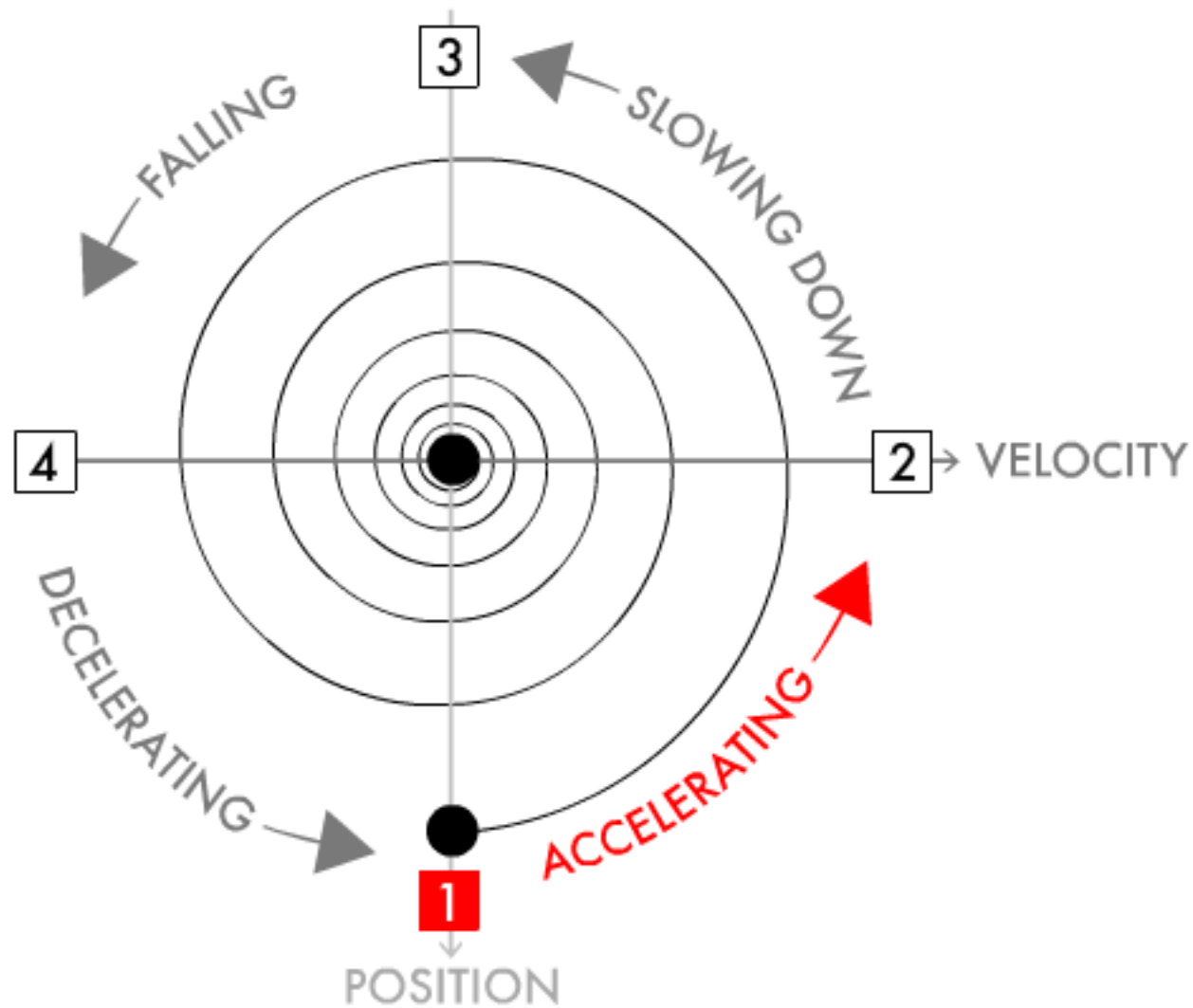
"Slowdown" Figure 67

## Pendulum



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## Phase portrait





## Conclusion - **Slowdown**: (The End of the Great Acceleration— and Why It's Good for the Planet, the Economy, and Our Lives)

Great economic inequalities will be hard to sustain during and following slowdown. As things change less, it will become much more difficult to make money out of a shrinking and aging population who may also become savvier and harder to fool with the allure of the “new”.

Slowdown means goods lasting longer; it means less waste. It means that many of the things that we currently think of as great social and environmental problems will not be problematic in future. We will, of course, have new problems—most of which we cannot even imagine right now.

