Klaus Nürnberger

Faith and the looming economic and ecological disaster
The aim of this presentation

We first get an impression of the immensity and urgency of the problem,

Then we ask whether and how faith and theology could possibly respond.
Overview

Discrepancies in power and life chances

The ecological time bomb

Can the process be turned around?

Ideological constraints

The response of faith
Power discrepancies in economics
Economic power depends on endowments with economically relevant ‘factors’ such as:

- Initiative and determination
- Expertise (education, training)
- Connections and communication
- Capital (credit)
- Natural resources
- Energy
- Infrastructure
- Access to markets
- Transport facilities
- Political power
- Lobbying power
- Advertising power

Historical, political, and cultural advantages and disadvantages operate at all levels.
Ruthless competition between economically stronger and weaker partners leads to increasing discrepancies in productive power, life chances and sustainability.

Economic power can be used and abused to further individual and collective interests at the expense of the less powerful and nature.
The centre-periphery model
GROWTH OF DISCREPANCIES
IN GEOGRAPHICAL TERMS
IN TERMS OF INCOME

AFFLUENCE

POVERTY

NEEDS

MEANS

PERIPHERY

CENTRE

PERIPHERY
World income distribution
The imbalance grows rapidly:

The share of the richest 1% in global wealth increased from 44% in 2009 to more than 50% in 2016.

The lowest 80% share just 5.5%. Their average wealth is \(\frac{1}{700}\)th of the average wealth of the top 1 percent.'
# In South Africa and the USA

<table>
<thead>
<tr>
<th></th>
<th>South Africa</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top decile (10th)</strong></td>
<td>74.9%</td>
<td>75.4%</td>
</tr>
<tr>
<td>9th decile</td>
<td>11.4%</td>
<td>11.8%</td>
</tr>
<tr>
<td>8th decile</td>
<td>5.8%</td>
<td>6.1%</td>
</tr>
<tr>
<td>6th and 7th decile</td>
<td>5.5%</td>
<td>5.8%</td>
</tr>
<tr>
<td><strong>Bottom half</strong></td>
<td>2.4%</td>
<td>1.1%</td>
</tr>
</tbody>
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The US lies in the centre, while the RSA lies in the semi-periphery, therefore **the poor in the US are better off than in SA**.

Whites are predominantly located in the centre, although their average income is inflated by super-rich individuals.

Note that white incomes have risen dramatically compared with others!
The **black middle class** is rapidly catching up.

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Whites</td>
<td>R 235 bn</td>
</tr>
<tr>
<td>Black middle class</td>
<td>R 180 bn</td>
</tr>
<tr>
<td>Blacks total</td>
<td>R 335 bn</td>
</tr>
</tbody>
</table>

12% of South Africa's black population account for over half (54%) of all black buying power.

(2007 estimates)
Population growth in the periphery
GROWTH OF PRODUCTIVE POWER

GROWTH OF POPULATION

GROWTH OF ECOLOGICAL IMPACT
Seen in the long term, humans posed no threat to nature until the **tilling** of the soil and the formation of **empires** led to **power** concentrations, **technological advance and population growth**.
The world population grew exponentially since the onset of the modern economy.

1 billion in 1804
2 billion in 1927 (123 years later)
3 billion in 1960 (33 years later)
4 billion in 1974 (14 years later)
5 billion in 1987 (13 years later)
6 billion in 1999 (12 years later)
7 billion in 2013

Population growth

is a consequence of the modern economy and began in Europe!

Between 1700 and 1900 Europe’s population grew from 100 million to 400 million.

On top of that large sections of the population migrated to the colonies.
### United Kingdom

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1700</td>
<td>5 000 000</td>
</tr>
<tr>
<td>1800</td>
<td>7 750 000</td>
</tr>
<tr>
<td>1900</td>
<td>30 000 000</td>
</tr>
<tr>
<td>2000</td>
<td>49 000 000</td>
</tr>
</tbody>
</table>

### Germany

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1700</td>
<td>19 600 000</td>
</tr>
<tr>
<td>1800</td>
<td>21 700 000</td>
</tr>
<tr>
<td>1900</td>
<td>56 400 000</td>
</tr>
<tr>
<td>2000</td>
<td>82 000 000</td>
</tr>
</tbody>
</table>

### United States (distorted because of heavy immigration)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1700</td>
<td>250 000 (Whites only)</td>
</tr>
<tr>
<td>1800</td>
<td>5 300 000</td>
</tr>
<tr>
<td>1900</td>
<td>76 200 000</td>
</tr>
<tr>
<td>2010</td>
<td>310 000 000</td>
</tr>
</tbody>
</table>
South African population growth
1900 – 2000 a tenfold increase!
Population groups **under stress** are growing fast; prosperous population groups are **decreasing** in number.

https://en.wikipedia.org/wiki/Demographics_of_South_Africa
Growth rates of racial groups in South Africa

2014 estimates

<table>
<thead>
<tr>
<th>Race</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>1.86</td>
</tr>
<tr>
<td>Coloured</td>
<td>1.11</td>
</tr>
<tr>
<td>Asian</td>
<td>1.4</td>
</tr>
<tr>
<td>White</td>
<td>-0.24</td>
</tr>
</tbody>
</table>

The black population is still growing strongly, while the white population is shrinking (as centre populations do worldwide).

The number of Blacks aged 0-5 years has already surpassed the total number of Whites.
Growth of productive power in the centre
As a factor of production, labour can no longer compete with technology and energy gained from fossil fuels.

Machines and computers are cheaper, more efficient, do not get tired, do not go on strike, can easily be replaced, and are often subsidised.
The modern economy needs a diminishing number of highly trained workers. They are scarce, overworked, and highly paid.
This is a bakery – where are the bakers?
How many people are working here?
Where are all the workers?
Differential Productivity
Productivity per worker depends on the endowment of each worker with factors of production such as resources, technology, and expertise.

The fewer workers are involved and the greater their endowment with factors of production, the greater the productivity of the system.
Productivity reflected by *agricultural value added per worker*

<table>
<thead>
<tr>
<th>Period</th>
<th>High Income Countries</th>
<th>Low income countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-1980</td>
<td>7,807</td>
<td>209</td>
</tr>
<tr>
<td>1980-1990</td>
<td>11,817 51%</td>
<td>235 12%</td>
</tr>
<tr>
<td>1990-2000</td>
<td>17,776 50%</td>
<td>276 17%</td>
</tr>
<tr>
<td>2005</td>
<td><strong>28,573</strong> 61%</td>
<td><strong>276</strong> 17%</td>
</tr>
</tbody>
</table>

Productivity in low income countries of that in high income 0.97%
Labour shifts from *agriculture* to construction and *manufacturing*, and on to *services*

- that is, *out of* the productive process.

In the services it is now being replaced by *information technology*.
US jobs 2000-2010

SERVICES

COMPUTER TAKE OVER

CONSTRUCTION AND MANUFACTURING

AGRICULTURE
Marginalisation
The unemployed are pushed to the **margins**, and may become **redundant** altogether.

A seriously skewed economy cannot accommodate the **total population** – which is a typical phenomenon in semi-peripheral countries such as South Africa.

The ‘surplus’ has to be accommodated in the ‘**informal sector**’ or kept alive through social grants.
INSIDERS ARE ECONOMICALLY RELEVANT

OUTSIDERS ARE ECONOMICALLY REDUNDANT

THE FORMAL ECONOMY CANNOT ACCOMMODATE THE TOTAL POPULATION
Unemployment in South Africa

Official figures in SA say 25% (actively looking for work) to 35% (including those who are discouraged). The real figure may be 45%.

The official figures do not tell the story, because many of those who work are vastly underemployed, working perhaps once a week or a fortnight.

http://mg.co.za/article/2015-10-01-a-permanent-job-is-hard-to-find
Marginalisation as reflected by poverty levels in South Africa:

<table>
<thead>
<tr>
<th>PROVINCE</th>
<th>NUMBER OF POOR in millions</th>
<th>% OF POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAUTENG (C)</td>
<td>3.7</td>
<td>42%</td>
</tr>
<tr>
<td>LIMPOPO (P)</td>
<td>4.1</td>
<td>77%</td>
</tr>
<tr>
<td>WESTERN CAPE (C)</td>
<td>1.4</td>
<td>32%</td>
</tr>
<tr>
<td>EASTERN CAPE (P)</td>
<td>4.6</td>
<td>72%</td>
</tr>
<tr>
<td>KWA-ZULU-NATAL (P)</td>
<td>5.7</td>
<td>61%</td>
</tr>
<tr>
<td>SOUTH AFRICA</td>
<td>25.7</td>
<td>57%</td>
</tr>
</tbody>
</table>
Youth unemployment is about 63% or more.

A growing number of young people have never worked and may never get a chance to work.

Without adequate education and waning motivation, they become ‘unemployable’,

They have no outlet for their youthful energies, are pining after ‘the good life’, are sidelined in the social fabric, and harbour piled-up frustration and anger.

Throw a match into this heap of combustible energy and the sparks will fly!
We are not alone in this predicament
Another example is India

12 million workers enter the labour market annually.  
2.7 million jobs were created between 2005 – 2010.

93% of all workers are located in the informal sector.

47% of graduates are ‘unemployable’ in industry.

In Uttar Pradesh 368 office boy jobs were advertised –  
2.3 million work seekers applied. 
Among them 100,000 graduates and 250 with doctorates.
Life chances
Top executives and technicians carry vast responsibilities and are hugely overworked, while accumulating much greater resources than they can ever hope to utilise. Massive expenditure goes into status symbols and underutilised luxuries,
Trinity Yacht
Lady Sura

The price is not provided – is it irrelevant for the monied?

Probably US$ 40 000 000
= R 600 000 000

Porsche Spyder € 781,155
= R 10 000 000
Slight chance of finding a job to feed a family.
Rich societies spend exorbitant sums on research, armaments and other non-essentials.
US $ 2.5 billion
Russia 45,000 war heads
USA 32,000 war heads (8,000 deployed)
UK
France
China
India
Pakistan
North Korea

US cost of nuclear weapons in 1998
US $ 35,000,000,000

R 560,000,000,000

http://www.brookings.edu/about/projects/archive/nucweapons/50
The ecological impact
GROWTH OF PRODUCTIVE POWER

GROWTH OF POPULATION

GROWTH OF ECOLOGICAL IMPACT
Rising expectations
Poorer populations across the world, *aspire to the life styles* of the affluent, which they see daily on their screens.

Dissatisfaction and yearning are deliberately and successfully stoked by the *advertising* and *entertainment* industries.

If the great masses in Asia, Africa and Latin America were to reach the level of rich societies, planet earth *would not cope* – which renders affluence unethical.
GDP US$ / capita

- USA: 47,000
- Brazil / RSA: 11,000
- China: 7,500
- Congo: 320

150 x
Economic growth is based on fossil energy.
Now multiply

the growing **population** with
    growing **technological** power and with
    growing **expectations**

to get an idea of the impact of economic growth on
the natural world!
This is developing into a tsunami not of seawater but of humanity flooding the planet and destroying everything in its wake
Aspects of the crisis

It is not just **global warming**!

Armaments (nuclear and conventional)
Air, water, and land pollution
Fresh water resources
Fossil energy
Maritime resources
Eradication of species
Erosion of arable land
Violent conflict over dwindling resources
Loss of responsibility due to hardships and a culture of entitlement
We are living through the **sixth mass extinction in the earth’s history** – the first caused exclusively by humans!

Normal extinctions vary between 1 and 10 species per **decade**.
During the last century the rate was between 100 and 10 000 per **year**.

And this is **only the beginning**!
THE DELUGE HITS
NATURE AND THE POOREST
FIRST AND HARDEST
Can the process be turned around?
Back to basics!

The Vikings reached America, the Titanic did not!
Current economic priorities

**Scientific** insight must grow.
**Technological** innovation must grow.

**Capital** investment must grow.
Economic **output** must grow.

**Energy** supply must grow.
The **population** must grow.

**Income** must grow.
**Consumption** must grow.

Human **life time** must grow.
Responsible economic theory, policy and behaviour would be guided by the following priorities:

1. The preservation of the resource base of the planet.
2. A modest but healthy livelihood for all.
4. Equity in the distribution of efforts and rewards.
5. Concern for the weak and vulnerable.
6. Balanced (material, social, spiritual) need satisfaction.
Balance out consumer income = Balance out productive capacity

Remain within sustainable levels
UNDERLYING MOTIVATIONS
A solution is possible but sabotaged by *selfish motivations*.

There is **no political will** to effect the necessary changes.
The current motivational dynamic

**Modernity** is driven by emancipation: the human being is deemed master, owner and sole beneficiary of reality

One’s own body, others, society and nature become a **quarry to be mined** for profit and pleasure.

Politicians, entrepreneurs and unions **all share** this common mentality.

Even work seekers tend to seek **positions**, rather than productive work. (Compare the work ethic in China!)
The modern spirit of mastery and entitlement has entrenched itself in a global network of institutions and processes:

- **Mental** conditioning (hardwiring)
- **Social** dynamics
- **Political** power plays
- **Economic** ‘necessities’
- **Scientific** focus
- **Technological** acceleration

It has developed its own dynamic, like a heavy truck over which the driver has lost control.
Ideological legitimations
The globally **dominant forces** of

(neo-classical) economics,

business practice,

union action

c consumer culture and

c policies of the state

are all engaged in the ideological legitimization of the pursuit of **private and collective interests** at the expense of weaker groups and the natural world.

**Ideology** discounts or distorts the facts. Perceptive analyses are ignored, ridiculed or ‘disproved’
Ideological preferences depend on a group’s **location** in the system.

*Work harder! Stop procreating!*  
*Share more! Stop exploiting!*
Dominant economic wisdom says:

1. ‘Economic man’ (*homo oeconomicus*) is a profit and pleasure maximiser – and this is *rational* behaviour.

2. The free market leads to *economic equilibrium* (which is only true for supply and demand, but not for productive capacity and income).

3. The free-market system will *grow or collapse*. Frugality is counterproductive.

Because they have the money, the *rich must spend more* to keep the economy going. Poor consumers do not constitute sufficient market demand.
4. After the collapse of Marxism-Leninism there is no viable alternative! Any move in the direction of state intervention will backfire.

Granted: bureaucracies are notoriously inefficient, wasteful and corrupt. State run economies have failed across the board. Private initiative seems indispensable.
However, workable alternatives could be found if motivations changed!

Social democracy (social market economy) was remarkably successful in Central and Northern Europe.

It practically eradicated poverty and yet was as competitive as its liberal-capitalist alternative.

It also fostered a healthy awareness of the ecological stresses on the system.
Even here

1. Avarice and entitlement began to destroy the spirit of responsibility and solidarity,
2. Growing affluence led to overconsumption and wastage in these countries.
3. The model of social equity was never applied internationally, where liberal principles rule supreme.
4. Peripheral economies lack the financial and administrative means to apply the system without crippling themselves.
The response of faith
Believers and theologians too are dancing and dining on a Titanic that is about to hit the ice-berg!
Face the facts!

Seemingly the economic-ecological crisis can no longer be averted. Millions can be expected to perish in the medium to long term. It is already happening!

In view of our congregational composition, spiritual preoccupations and theological priorities, it is highly unlikely that Christians will make a decisive difference.

This forces us to reconceptualise our theological certainties and priorities.
As biblical history demonstrates, the ‘Word of God’ is God’s creative and redemptive response to prevailing human predicaments and depravities.

In our times the looming economic-ecological disaster should receive top priority on the theological agenda, rather than being pushed to the margins.
Great **shifts in collective consciousness** occur ever more frequently, and encompass ever greater sections of humanity.

When a new paradigm engulfs a ‘**critical mass**’, change becomes possible and likely. Every **single initiative** contributes to its formation.
Expect great things from the future!

Creative processes emerge precisely at times of crisis. The debris of the old is material for the new. Dying plants yield compost for new growth.

While catastrophe approaches, we must develop working alternatives – however insignificant they may seem at present. When the crisis hits, somebody must know how to move forward.

Example: changes in Germany 1918; 1945; 1989.
Excellent **NGOs** – secular and religious, such as 350.org and Gift of the Givers – as well as countless individual and congregational initiatives are engaged in that.

These initiatives are **critically important**. They must gain analytical competence, growing support and dogged persistence.

The seed that grows into a tree (Jesus)
A tiny seed can grow into a massive tree.

Christ died a lonely death on the cross. Luther nailed a few theses on a church door.

And look what became of that!
The power of the powerless is a defiant, committed, sacrificial leap of faith in the face of death and disaster towards a vision of comprehensive optimal well-being in the authority of a loving God.