

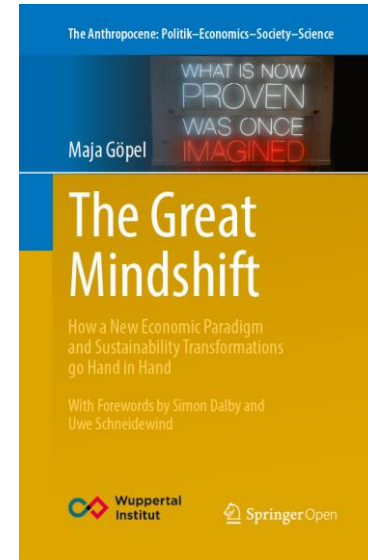
Wuppertal, 9 Sept. 2016

Dual Book Launch

**Hans Günter Brauch, Úrsula Oswald
Spring, John Grin, Jürgen Scheffran
(Eds.): *Handbook on Sustainability
Transitions and Sustainable Peace***

**Maja Göpel: *The Great Mindshift:
How a New Economic Paradigm and
Sustainability Transformations go
Hand in Hand***

IST 2016
**International
Sustainability
Transitions
Conference**



Hans Günter Brauch

Adj. Prof. (PD), Free University Berlin, Otto-Suhr-Institute (Ret.)

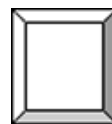
Chair, Peace Research and European Security Studies (AFES-PRESS)

Editor, Hexagon-Book Series on Human, Environmental Security and Peace

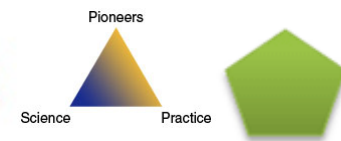
Editor, *The Anthropocene: Politik, Economics, Society, Science (APESS)*

Editor, SpringerBriefs in Environment, Security, Development and Peace

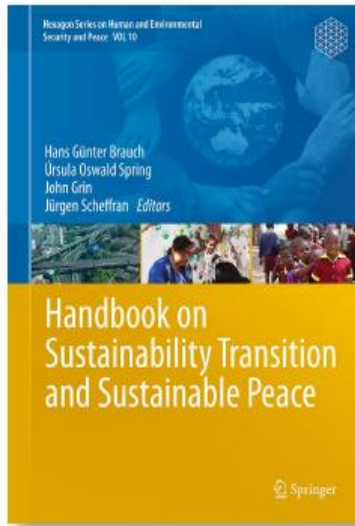
Editor, two book series on Pioneers in Science & Practice (PSP & PAHSEP)



SPRINGER NATURE

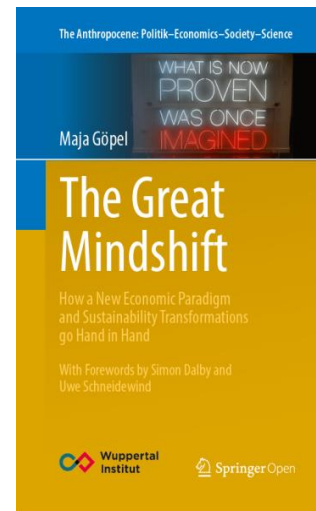


0. Welcome to the dual book launch



Hans Günter Brauch, Úrsula Oswald Spring, John Grin, Jürgen Scheffran (Eds.):
Handbook on Sustainability Transitions and Sustainable Peace

Hexagon Series on Human and Environmental Security and Peace, vol. 10



Maja Göpel: *The Great Mindshift: How a New Economic Paradigm and Sustainability Transformations go Hand in Hand*

The Anthropocene; Politik – Economics – Society – Science, vol. 2

Speakers: up to 15 minutes each

- Prof. Dr. Uwe Schneidewind, Wuppertal Institut, President
- Dr. Maja Göpel, Wuppertal Institut, Head, Berlin Office
- Prof. Dr. Jürgen Scheffran, Hamburg University, CLISEC
- PD Dr. Hans Günter Brauch, FU Berlin & AFES-PRESS, Editor & moderator of book launch
- Prof. Dr. Derk Loorbach, Erasmus University Rotterdam, DRIFT, Discussant

Discussion from the floor: Questions up to 1 minute each

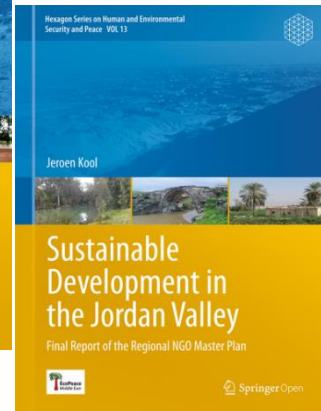
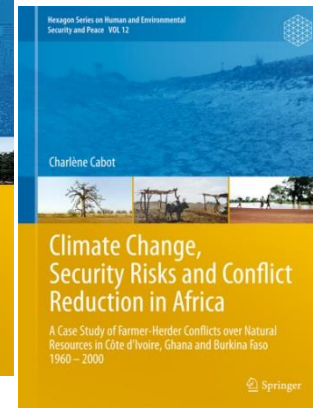
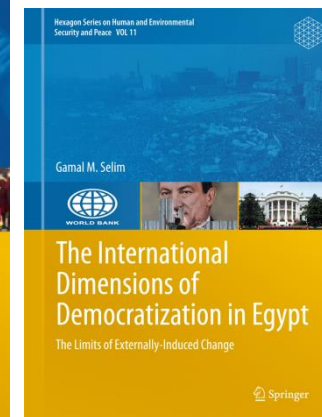
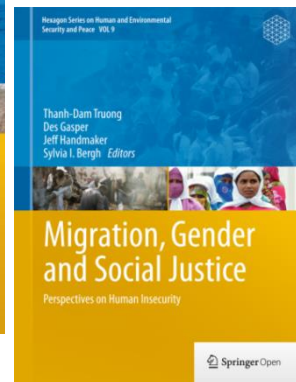
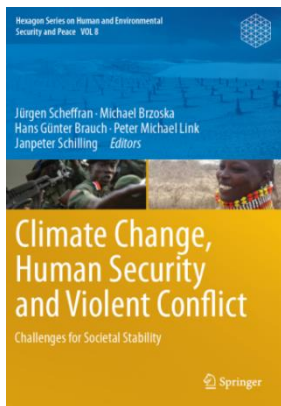
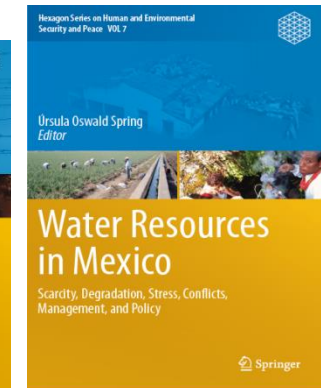
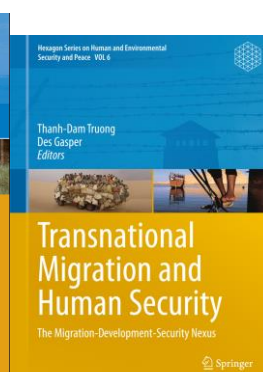
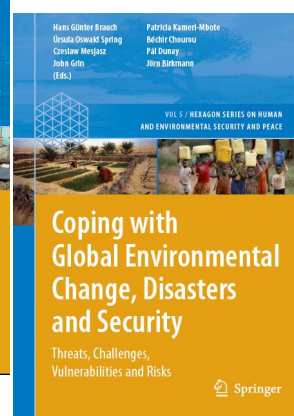
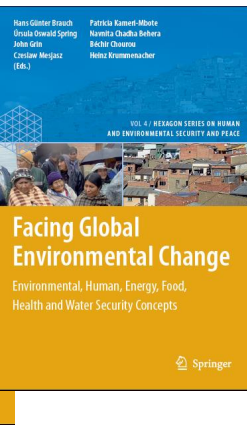
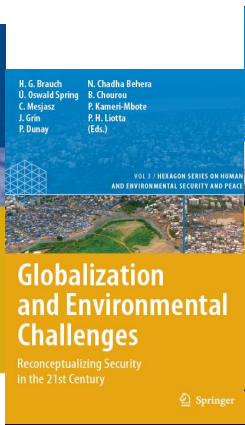
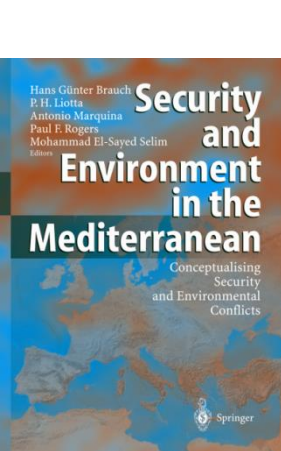
Contents

1. Introduction: My Triple Function
2. A Context (We are in the Anthropocene), process (sustainability transition) a goal (sustainable peace), and a need (for a transformative science)
3. Context: We are in the Anthropocene: A silent revolutionary change in earth and human history: From a Niche (STRN) to the Mainstream?
4. Clark, Schellnhuber, Crutzen (2003): We need a new Copernican Scientific Revolution towards Sustainable Development
5. In the Anthropocene we need a transformative science: Moving from disciplinary to inter-, transdisciplinary and transformative science and practice
6. Transformative science requires bridge building between disciplines and research programmes
7. Two examples: Towards a political geocology and peace ecology in the Anthropocene
8. “Politik” (policy, politics, polity) and Science in the Anthropocene
9. Goal & Structure of the Handbook on Sustainability Transition & Sustainable Peace
10. Post retirement transformation: from author to editor as well as developer and promoter of scientific themes

1. Introduction: My Triple Function

- 1. Book Series Editor of five English language book series:**
 - Invitation, Advice,**
 - Organizer of the double blind review process**
- 2. Final decisionmaker (in consultation with my Springer colleague) on which themes/books to develop & publish**
- 3. Producer of the book: first formal copyediting between Heidelberg (editorial office) & Chennai (production)**
- 4. Lead editor of five handbooks in Hexagon book series**
 - I will briefly present the goals & structure of the handbook**
 - and ask Jürgen Scheffran to present the key messages of our handbook (Hexagon X volume).**

1.1 Hexagon Series: Volumes I-XIII



1.2. Global Environmental and Human Security Handbook for the Anthropocene

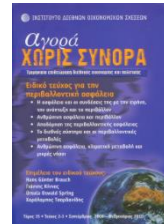
<http://www.afes-press-books.de/html/hexagon.htm>

Vol. 3 (1): Globalization and Environmental Challenges: 92 authors, 36 countries, 16 disciplines, (2008)

Vol. 4 (2): Facing Global Environmental Change: 132 authors, 49 countries on global debate and problems of environmental, human, energy, food, health, water security (2009)

→ Vol. 5 (3): Coping with Global Environmental Change: Disasters and Security – Threats, Challenges, Vulnerabilities and Risks 164 authors, 48 countries (2011).

Reconceptualizar la seguridad en el siglo XXI



H. G. Brauch
 Ü. Oswald Spring
 C. Mesjasz
 J. Grin
 P. Dunay

N. Chadha Behera
 B. Chourou
 P. Kameri-Mbote
 P. H. Liotta
 (Eds.)

VOL 3 / HEXAGON SERIES ON HUMAN AND ENVIRONMENTAL SECURITY AND PEACE

Globalization and Environmental Challenges

Reconceptualizing Security in the 21st Century



Hans Günter Brauch
 Ursula Oswald Spring
 John Grin
 Czeslaw Mesjasz
 (Eds.)

Patricia Kameri-Mbote
 Navnita Chadha Behera
 Béchir Chourou
 Heinz Krumpal
 (Eds.)

VOL 4 / HEXAGON SERIES ON HUMAN AND ENVIRONMENTAL SECURITY AND PEACE

Facing Global Environmental Change

Environmental, Human, Energy, Food, Health and Water Security Concepts



Hans Günter Brauch
 Ursula Oswald Spring
 Czeslaw Mesjasz
 John Grin
 (Eds.)

Patricia Kameri-Mbote
 Béchir Chourou
 Pál Dunay
 Jörn Birkmann
 (Eds.)

VOL 5 / HEXAGON SERIES ON HUMAN AND ENVIRONMENTAL SECURITY AND PEACE

Coping with Global Environmental Change, Disasters and Security

Threats, Challenges, Vulnerabilities and Risks





1.3 The Anthropocene Series: Politik – Economics – Society – Science (2016)

No	Author/editor	Title
1	Crutzen, Benner, Lax, Brauch (Eds.)	Paul J. Crutzen: The Anthropocene—A New Phase of Earth History: Impacts for Science and Politics
>2	Maja Göpel	<u>The Great Mindshift: How a New Economic Paradigm and Sustainability Transformations go Hand in Hand</u>
3	Audley Genus (Ed.)	Sustainable Consumption: Design, Innovation and Practice
4	Brauch, Oswald Spring, Bennett, Serrano Oswald (Eds.)	Addressing Global Environmental Challenges from a Peace Ecology Perspective
5	Oswald Spring, Brauch, Serrano Oswald, Bennett (Eds.)	Regional Ecological Challenges for Peace in Africa, the Middle East, Latin America and Asia Pacific
6	M. Laura Vazquez Maggio	Mobility Patterns and Experiences of the Middle Classes in a Globalizing Age: The Case of Mexican Migrants in Australia
7	Tamer M. Qarmout	Delivering Aid Without Government: International Aid and Civil Society Engagement in the Recovery and Reconstruction of the Gaza Strip
8	David Curran	More than Fighting for Peace? The Role of Conflict Resolution in Training Programmes for Military Peacekeepers
9	Heather Devere - Kelli Te Maihāroa - John Synott (Eds.)	Peacebuilding and the Rights of Indigenous Peoples Experiences and Strategies for the 21 st Century



1.4 The Anthropocene Series: Politik – Economics – Society –Science (2016)

No.	Author/editor	Title
10	Michael Thomas	The Securitization of Climate Change: Australian and United States' Military Responses (2003 - 2013)
11	Zerin Savasan	Paris Climate Agreement: A Deal For Better Compliance? Lessons Learned from the Compliance Mechanisms of the Kyoto and Montreal Protocols
12	Lydia Gitau	Trauma-sensitivity and Peacebuilding: Considering South Sudanese Refugees in Kakuma Refugee Camp in Kenya
13	Eleonore Emkic	From Segregation to Positive Sustainable Peace: Reconciliation and Education in Bosnia and Herzegovina
14	Erşahin-Kapur-Akça-Namlı-Erdoğan (Eds.)	Carbon Management, Technologies, and Trends in Mediterranean Ecosystems
15	Mohan Jyoti Dutta	Imagining India in Discourse: Meaning, Power, Structure
16	Imtiaz Ahmed	People of Many Rivers – Tales From the Riverbanks



2. A Context, Process, Goal, a Need, and an Audience

- **Context:** We are in the Anthropocene! Paul J. Crutzen claimed in 2000 in Cuernavaca and in Capetown Int. Geological Conference accepted a report last week
- **A Dual Political & Normative Goal:**
 - Political: **Sustainable Development** (Brundtland Report 1987)
 - Normative: **Sustainable Peace** (ahimsa, peace with nature, peace as a goal of transition towards sustainability and a transformation requires a **Global Mindshift**)
- **A Dual Process:**
 - **STRN, IST 2016:** Institutional Context: **Sustainability Transition**
 - Polanyi: **Great Transition** (1944) Göpel: **Great Mindshift** (2016)
 - Sustainable Peace: from a **negative** towards a **positive** peace
 - **Negative peace:** transition **without violent conflict and war:** avoiding resource and climate conflicts
 - **Positive peace:** transition towards a global presently utopian context of **peace with nature**
- **A Dual Audience:**
 - Narrow audience: Purely scientific community
 - Wider audience of Politik, Economics, Society and Science (4 pillars)
- **Means to reach an Audience:**
 - **Scientific Journals:** to scientists only (important for the career)
 - **Scientific Books** with one of the 3 largest scientific publishers
 - **With our Security Handbook (Hexagon vol. III, IV, V):** we reached since Fall of 2012 - August 2016 more than 530.000 chapter downloads

3. Context: We are in the Anthropocene:

A silent revolutionary change in earth and human history

- Arrhenius (1896): hypothesis linking burning of hydrocarbons with CO2 accumulation in atmosphere, since 1970s: **scientization** of global & climate change
- **Politicization** (1988, 1992 (UNFCCC), 1997 (Kyoto P.), 2015 (Paris Agreement))
- Since 2000: **Securitization** of Climate Change

• Six historical times:

- Cosmic (astronomy, beyond human influence)
- **Geological (Paul J. Crutzen; from Holocene to the Anthropocene)**
- **Technological (agricultural, industrial) Revolution: geological time change**
- Structural (F. Braudel: history of long duration, e.g. international order)
- Conjunctural (F. Braudel: e.g. presidency, business cycle)
- Events (F. Braudel: short time)

• Silent transition from the Holocene to the Anthropocene

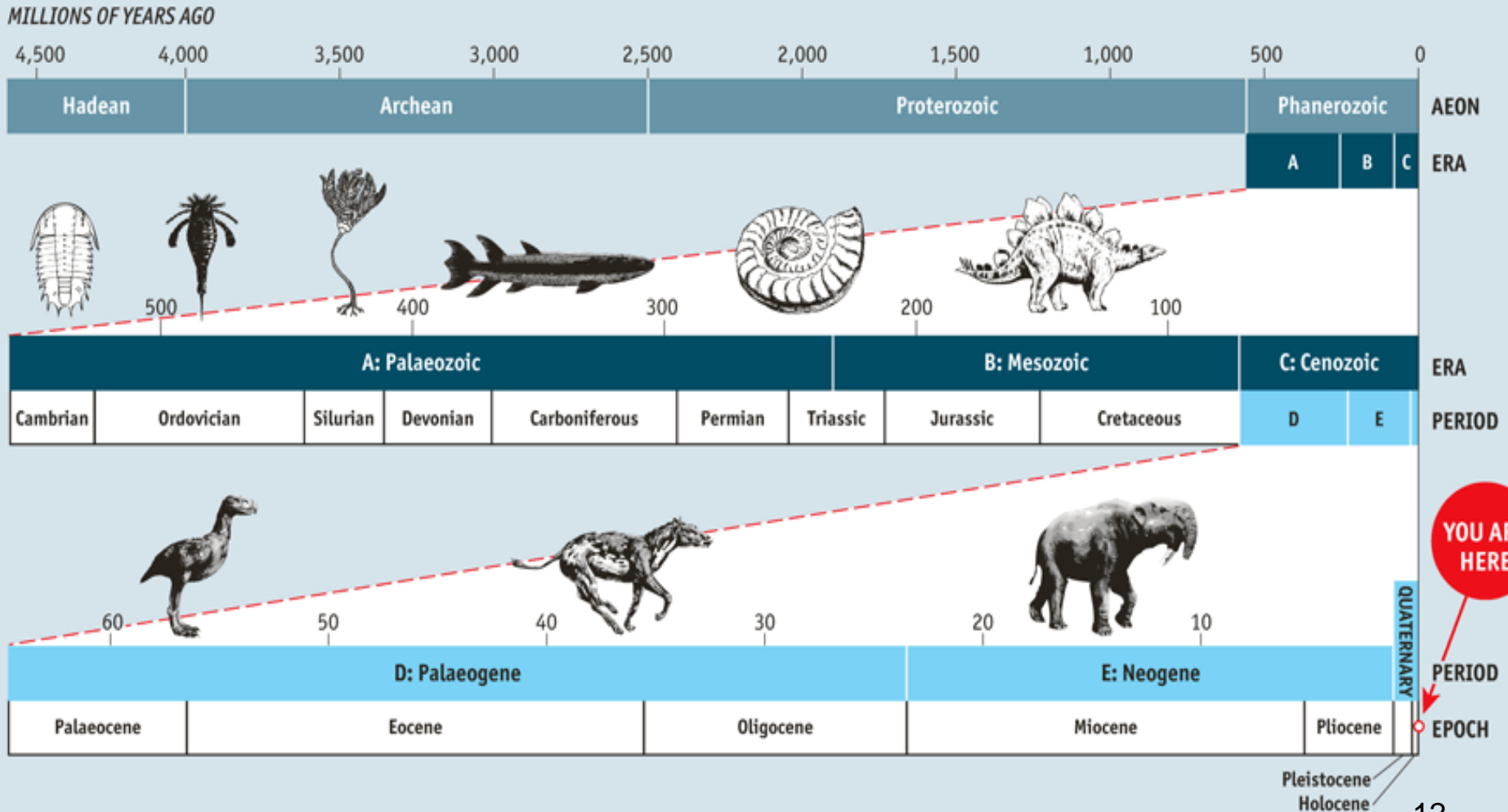
- February 2000 in Cuernavaca: Nobel Laureate Paul J. Crutzen: **We are in the Anthropocene!**, joint article: Stoermer/Crutzen (2000)
- Int. Geological Conference, Capetown (27.8.-4.9.2016), acceptance of report of the AWG [Anthropocene WG]

3.1 AWG Report, Capetown 2016

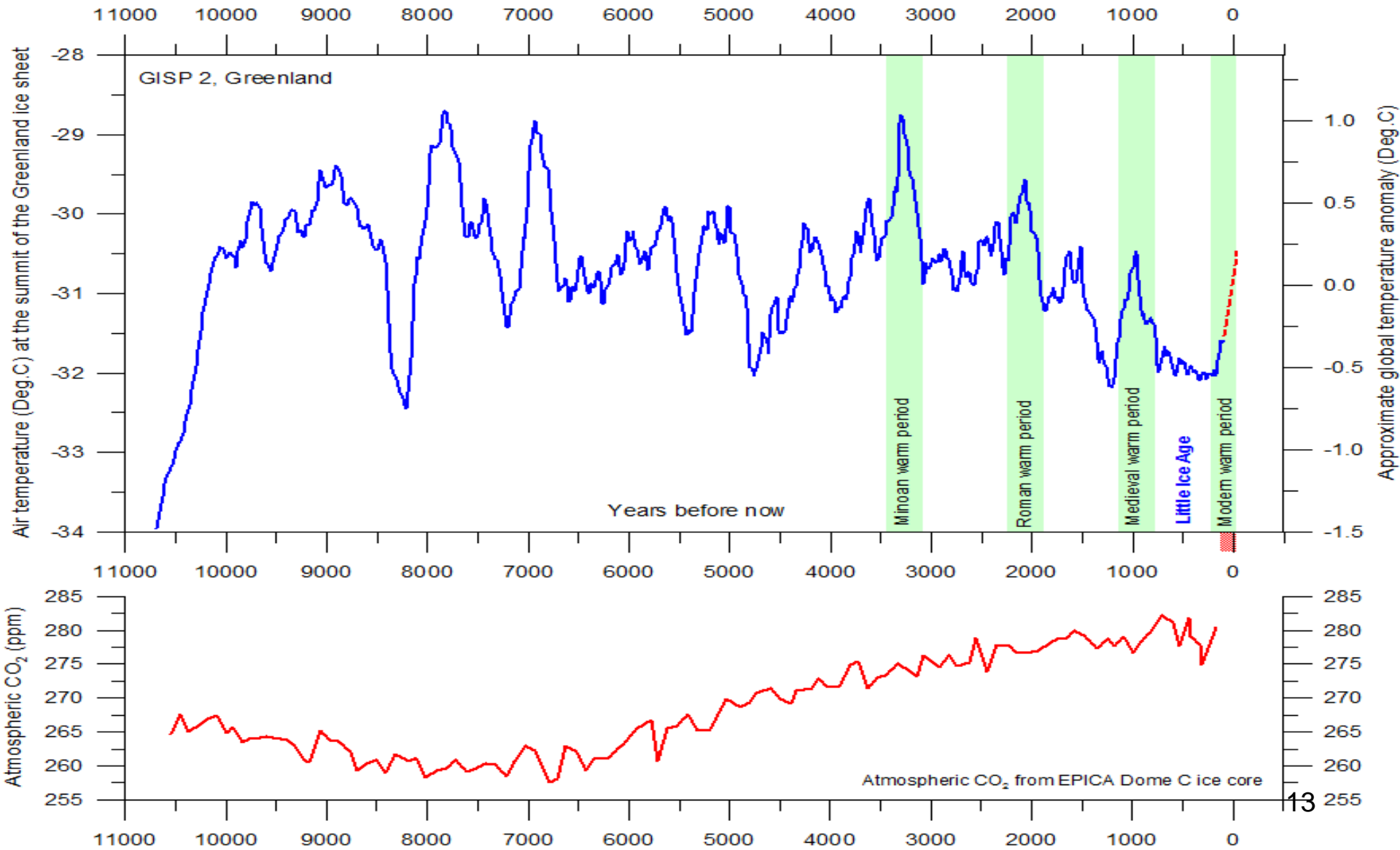
Majority current opinion on **Anthropocene working group** indicates the following:

- **The Anthropocene concept, as articulated by Paul Crutzen and Eugene Stoermer in 2000, is geologically real.** The phenomenon is of sufficient scale to be considered as part of the International Chronostratigraphic Chart, more commonly known as the Geological Time Scale.
- **Majority AWG opinion is for assignation as an Epoch/Series.** This option is preferred over either a lower rank (e.g. Age/Stage, i.e. as a subdivision of the Holocene) or a higher rank such as a Period or Era. In such a step, and in common with all other geological time units, the **Anthropocene would comprise both a 'pure time' unit (an Anthropocene Epoch) and an equivalent unit of strata (an Anthropocene Series).**
- **If the Anthropocene is adopted as an Epoch, this would mean that the Holocene has terminated,** but that we remain in the Quaternary Period
- **Human impact has left discernible traces on the stratigraphic record for thousands of years – indeed, since before the beginning of the Holocene.** However, substantial and approximately globally synchronous changes to the Earth System most clearly intensified in the 'Great Acceleration of the mid-20th century. The mid-20th century also coincides with the clearest and most distinctive array of signals imprinted upon recently deposited strata.
- Hence, the mid-20th century represents the **optimal beginning of a potential Anthropocene Epoch** (base of the Anthropocene Series).
- **Changes to the Earth System** that characterize the potential Anthropocene Epoch include **marked acceleration to rates of erosion and sedimentation, large-scale chemical perturbations to the cycles of carbon, nitrogen, phosphorus and other elements,** the inception of significant change **to global climate and sea level, and biotic changes such as unprecedented levels of species invasions across the Earth.** Many of these changes are geologically long-lasting, and some are effectively irreversible.
- **These and related processes have left an array of signals in recent strata,** including plastic, aluminium and concrete particles, artificial radionuclides, changes to carbon and nitrogen isotope patterns, fly ash particles, and a variety of fossilizable biological remains. Many of these signals will leave a permanent record in the Earth's strata.
- **The Anthropocene beginning might conceivably be defined by a Global Standard Stratigraphic Age (GSSA), i.e. a numerical age that can be expressed as a calendar date such as 1945.** Or more, conventionally it could be defined by a Global boundary Stratotype Section and Point (GSSP), which is more colloquially a 'golden spike', and is a physical reference point in strata at one carefully selected place. Majority opinion on the AWG is to seek and choose a candidate GSSP, as this is the most familiar and widely accepted method of defining geological time units.
- **The AWG has already begun the process of identification of potential GSSPs, by initial analysis of the general environments in which the best combinations of stratigraphic signals may be found (e.g. undisturbed lake or marine sediments, annually banded coral skeletons, polar snow/ice layers, speleothems etc..**
- This will lead to selection of sites **for sampling and further analysis, to provide full descriptions of relevant signals in the strata, a process that we hope will lead to the identification of one or more suitable candidate sites for a GSSP. We would hope to complete this process over the next 2-3 years.**
- This would then form the basis for the preparation of a formal proposal, to our immediate parent body, the **Subcommission on Quaternary Stratigraphy (SQS),** on defining a formal Anthropocene unit. If the SQS recommends this by supermajority vote, **the proposal will go on to its parent body, the International Commission on Stratigraphy (ICS) to be voted on, with any vote in favour still needing to be ratified by the Executive Committee of the International Union of Geological Sciences (IUGS).**
- **If all of these conditions can be fulfilled, then the Anthropocene would become a formal part of the Geological Time Scale**

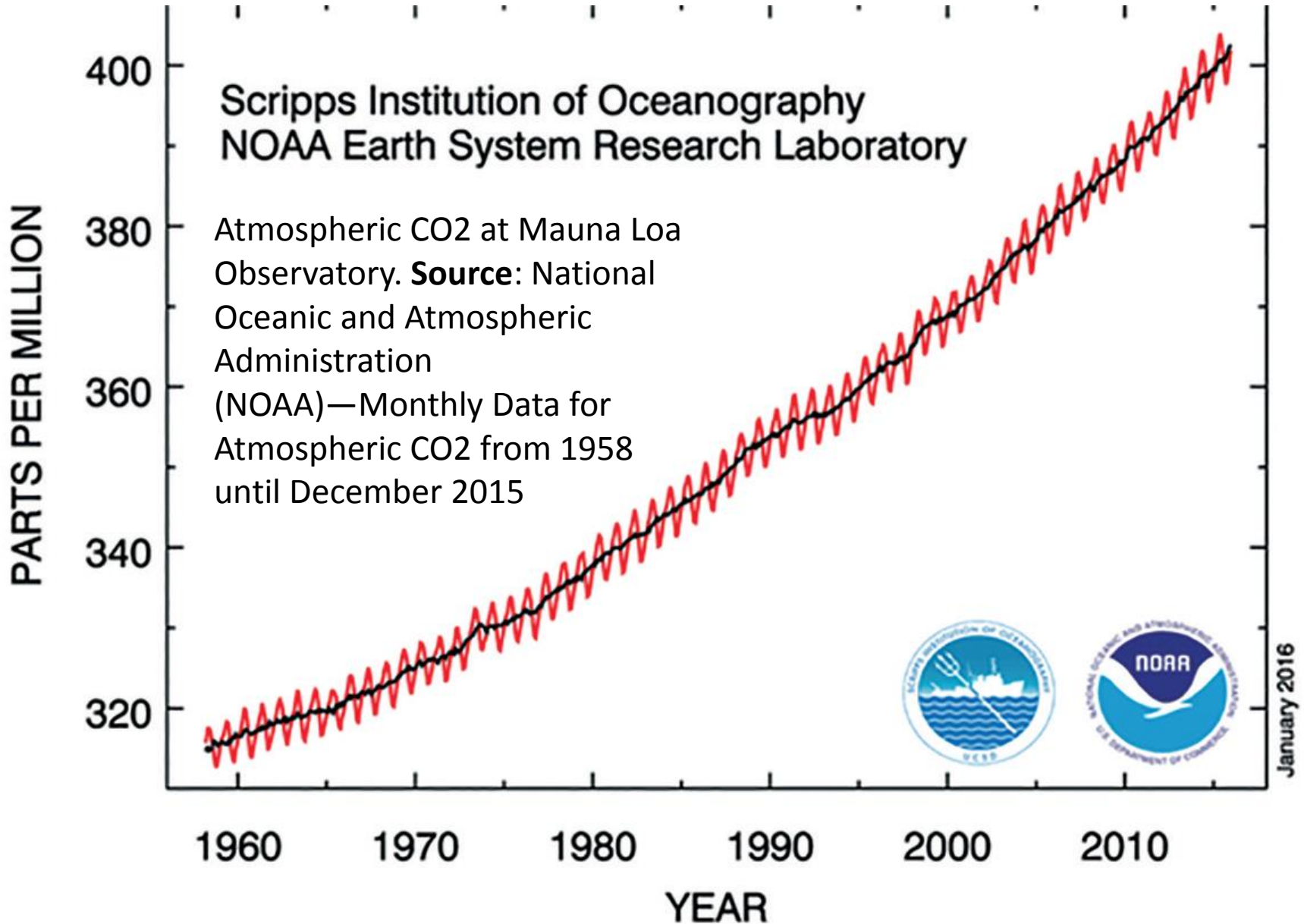
3.2 Geological Time: Earth History



3.3 The Holocene (11600 BP-now)



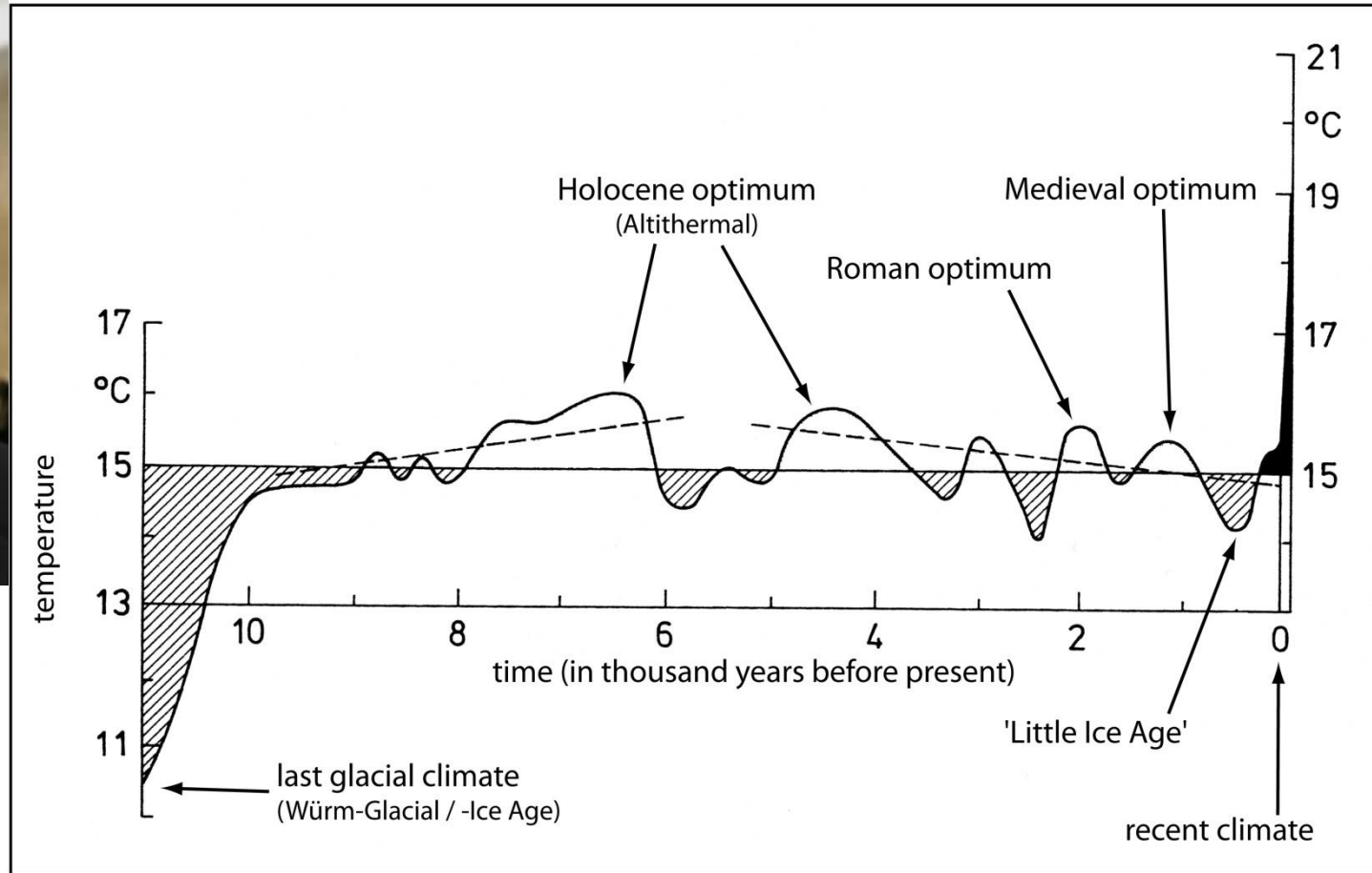
3.4 Concentration of CO₂ (1958-2015)



3.5 From the **Holocene** (12.000 years b.p.) to the **Anthropocene** (1784 AD or by 1950)



**Paul Crutzen,
Nobel Laureate for
Chemistry (1995)**



In Geology/geography: **Holocene** era of earth history since end of glacial period (10-12.000 years ago, **Anthropocene**, since industrial revolution: anthropogenic climate change: burning of coal, oil, gas → GHG increase

4. We need a New Copernican Scientific Revolution towards Sustainability

- Hans Joachim Schellnhuber (1999) called for a ‘**Second Copernican revolution**’ and William C. Clark contributed to the NRC Study (1999) ***Our Common Journey. A Transition towards Sustainability***
- Natural scientists (Clark/Crutzen/Schellnhuber 2004) have called for a ‘**second Copernican revolution in science**’ (Kuhn 1962) and development of a **new scientific world view** and a **new sustainability paradigm**.
- They called for a **new Copernican revolution, a new paradigm for sustainability and a new ‘social contract’** between science and society for **planetary stewardship** (Clark/Crutzen/Schellnhuber 2004)
- Such a **Copernican Revolution** requires a fundamental change in the **mindset** of policymakers and a **worldview** of scientists and society and a **Global Mindshift in the political and economic thinking**.
- **Combine and broaden two separate debates on Sustainability Transition**
 - **US debate (Tellus Institute, 1976ff., NRC, 1999)**
 - **Dutch and European Debate (STRN, IST conferences, Amsterdam, 2009 – today)**

5. In the Anthropocene we need a Transformative Science

- In chap. 5, “**Transformative Science for Sustainability Transitions**”, *Schneidewind, Singer-Brodowski, and Augenstein (Germany)* reviewed the need for and definition of ‘transformative science’, the methodological challenges of transformative research given the status quo of transdisciplinary science.
- The concept of ‘**transformative research**’ or ‘**science**’ has been used since the 2000s for a new approach that **cuts across the dominant scientific paradigms**.
- **US National Science Board (2007) adopted this definition of ‘transformative research’**:
 - “[it] involves ideas, discoveries, or tools that radically change our understanding of an important existing scientific or engineering concept or educational practice or leads to the creation of a new paradigm or field of science, engineering, or education. Such research challenges current understanding or provides pathways to new frontiers”.
- The **International Social Science Council (ISSC 2012) in its report on *Transformative Cornerstones of Social Science Research for Global Change*** identified 6 cornerstones:
 - 1) historical and contextual complexities; 2) consequences; 3) conditions and visions for change; 4) interpretation and subjective sense-making; 5) responsibilities; and 6) governance and decision-making.
- **The policy dimension should be included in the research design**, by moving from knowledge creation to action, to policy initiatives, development and implementation.

6. Transformative Science Requires Bridge-building Between Disciplines and Programmes

- **Opposing trends:**
 - **Overspecilization of science** (know more & more on less, communicated in highly specialized journals with very few readers)
 - **Overspecialized scientific results** can hardly be translated for a wider societal, economic, political and scientific audience
 - **Impacts of climate skepticism on political ideologues** and populists in North America (D. Trump) and in Europe (Le Pen, AFD etc.)
- **Need for scientific *bridgebildung* & responsibility**
 - **Max Weber to Hans Jonas: *Ethics of Responsibility***
 - **E.O. Wilson** referred to **Consilience (1988)** as an
 - (interlocking of causal explanations across disciplines) in which the “interfaces between disciplines become as important as the disciplines themselves”
 - that would “touch the borders of the social sciences and humanities.”

7. Two examples: Towards a Political Geoecology and Peace Ecology in the Anthropocene

- **Political geoecology for the Anthropocene** (Brauch 2003; Brauch/Dalby/Oswald Spring, 2011):
 - **Physical geography:** Huggett: **geoecology** (detached from the social sciences): has resulted in a **research** and **degree programme** in a few universities
 - **Bringing politics in:** Moving from **ecological geopolitics** (Dalby) to **political geoecology for the Anthropocene**
 - **Searching for research/teaching programmes** linking natural & social sciences
- **Peace Ecology** (Oswald Spring/Brauch/Tidballs, 2014).
 - **Bridgebuilding among two distant programmes in the social sciences (since 1960s Kenneth Boulding)** of the
 - **Environmental or (sustainability) programmes**
 - **Peace programmes**
 - **Peace Ecology concept** (Kyrou 2007, Amster 2014, Brauch 2016, Brauch et al. 2017), e.g. environmental peacemaking (2004).

7.1 Peace Ecology

- Thus, peace ecology is here being conceived primarily as a **'political concept' within an 'action perspective,'** and not as a scientific concept and research paradigm or programme.
- **'Peace ecology in the Anthropocene'** refers to the goal of **'peace'** (in its multiple dimensions as positive, negative, cultural, engendered and sustainable peace) **from the perspective of 'ecology'.**
- **Ecology** has expanded its meaning from the biophysical sciences after World War II, to include the social sciences and humanities.
- **Peace ecology in the Anthropocene** aims to address human-induced changes in the earth system, and lead them toward **peaceful alternatives** (Oswald Spring/Brauch/Tidball 2014a).
- **Dalby** (2013, 2013a, 2014, 2015) has discussed conceptual issues of security during the Anthropocene, **Brauch et al.** (2017) approaches the socio-political problems triggered during the Anthropocene from a **scientific perspective of peace ecology.**
- These prolegomena need both thorough conceptual theoretical reflections and empirical research in the years to come, from both the peace and the environmental research communities as part of a combined effort across disciplines.

8. Goals of the APSS Book Series

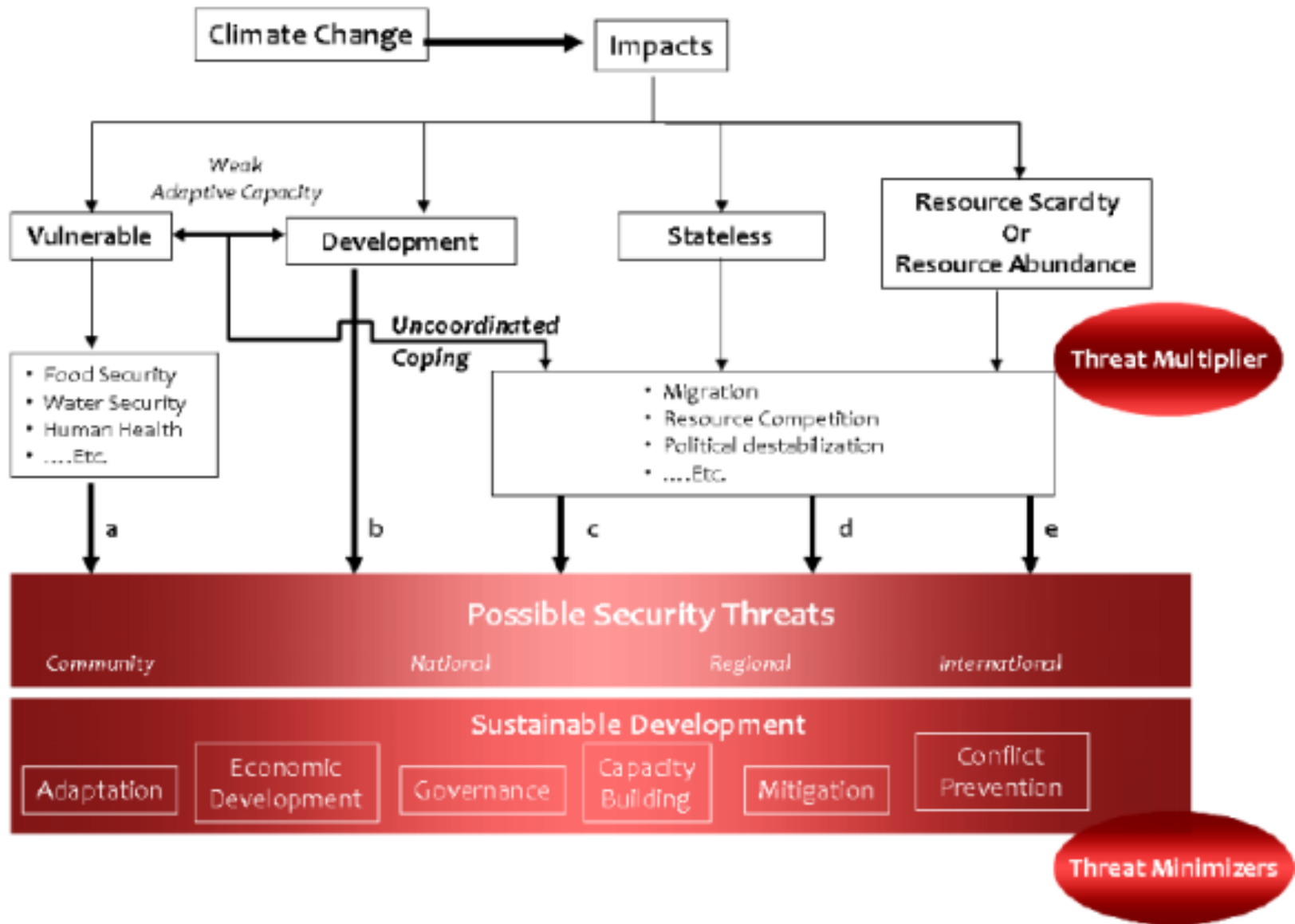
“Politik” (policy, politics, polity)

- This **programmatic peer-reviewed scientific book series** will address the very **long-term & severe transition process**, where the cause of the change and its potential violent societal consequences are no longer the ‘*other*’ nation, ethnic, religious or political group,
- **but ‘we’: “we are the threat”, only we as part of humankind can offer a remedy by containing causes and addressing, facing and coping with the consequences.**
- **Handbook** reviews and analyse **selective societal consequences of fundamental change in earth history** and political, economic, societal and scientific discourses and **policy-oriented societal debates** on
 - i) achieving the goal of ‘sustainable development’,
 - ii) creating processes of ‘sustainability transition’,
 - iii) the need for ‘a new contract for sustainability’,
 - iv) the need for a paradigmatic change in worldview (scientific revolution) towards sustainability
 - v) the need for a ‘sustainability revolution’.
- **The key actors (pillars) for bringing about such a change are:**
 - 1) **Politik** in its three distinct meanings of
 - ‘**politics**’ (process),
 - ‘**policy**’ (field, area) and
 - ‘**polity**’ (legal and institutional framework);
 - 2) **Economics** (as the field, actor and process),
 - 3) **Society** (as the innovative groups and processes), and
 - 4) **Science** as the source of technical innovation & societal and philosophical reflection.

9. Goal & Structure of the Handbook on Sustainability Transition & Sustainable Peace

- Build on success of security handbook with 3 vol. 270 chap., in 4 years about 530.000 chapter downloads
- Modern technology: digital printing
 - Publication on demand
 - Digital printing allows coloured illustrations in printed books.
- 2 tools for rapid and wide global scientific distribution:
 - Ebook chapters may be **downloaded free of charge** by faculty & students in universities in more than 4000 universities globally that subscribe to the relevant Springer Nature book package (Handbook)
 - Printed versions of the Ebook: Mycopy for 25 \$/€ in these universities
 - **Open access books (Maja Göpel)**
 - **Bookmetric data are updated monthly and are publicly accessible**
 - Free access in selective African countries after a year: e.g. on a book on Burkina Faso, Ivory Coast and Ghana: in these three countries.

9.1 Dual focus: from threat multiplier to threat minimizer

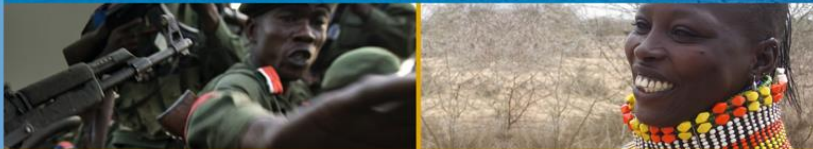


9.2 Two Handbooks (2012, 2016)

Hexagon Series on Human and Environmental
Security and Peace VOL 8



Jürgen Scheffran · Michael Brzoska
Hans Günter Brauch · Peter Michael Link
Janpeter Schilling *Editors*



Climate Change, Human Security and Violent Conflict

Challenges for Societal Stability

Springer

Hexagon Series on Human and Environmental
Security and Peace VOL 10



Hans Günter Brauch
Úrsula Oswald Spring
John Grin
Jürgen Scheffran *Editors*



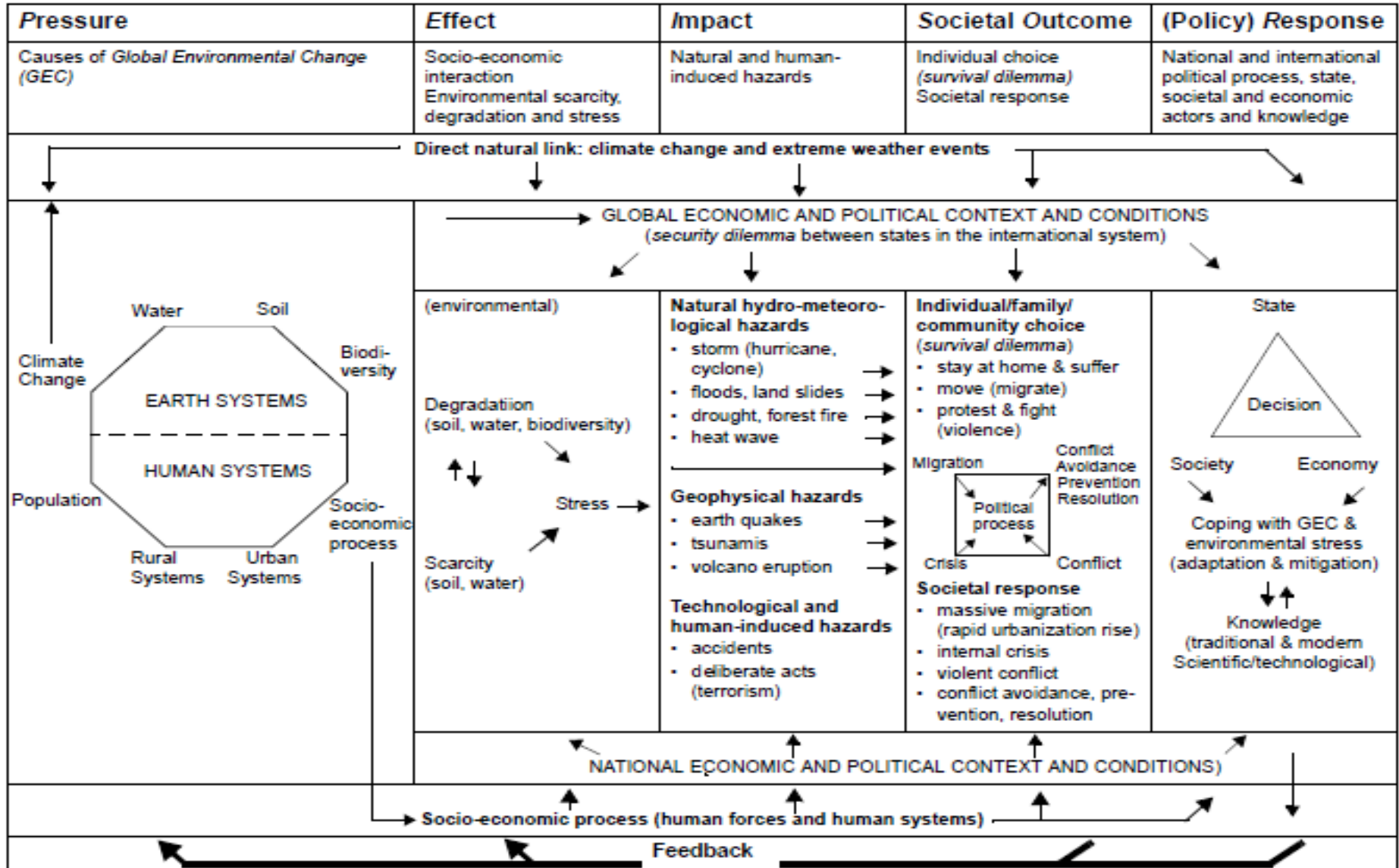
Handbook on Sustainability Transition and Sustainable Peace

Springer

9.3 Goal of the Handbook

- **Oswald Spring and Brauch (2011)** argued that in the Anthropocene humankind faces two alternative visions and policy strategies:
 - **Business-as-usual (BAU) in a Hobbesian world.** Here economic and strategic interests and actions dominate and may lead to a major crisis for humankind, inter-state relations and nature.
 - The need for a **transformation in cultural, environmental, economic and political relations**
- **Scheffran, Brzoska, Brauch et al. (2012)** examined possible consequences of the **first alternative** and showed, by addressing climate change as a ‘**threat multiplier**’, that in the case of no action it might lead to “**dangerous climate change**” (UNFCCC 1992).
- This volume deals ‘**sustainability transition**’ that may serve as a **sustainable alternative and avoid the negative consequences of climate change for human, national and international security.**
- Both visions address different coping strategies for this century for *global environmental change* (GEC) and climate change:
 - **In first vision, cornucopian perspectives or business-as-usual** suggest technical fixes and defence of economic, strategic & national interests, with the adaptation and mitigation strategies that are affordable for industrialized countries.
 - In the **alternative vision of a comprehensive transformation of the global economy, Politik, society and culture, a sustainable perspective** requires effective new strategies and policies.
 - **Their goal should be decarbonization, dematerialization, reduction of the water and environmental footprint, and global cooperation and solidarity. These would contribute to a sustainable peace with more global equity and social justice.**
- **The consequences of both scientific visions and policy perspectives are:**
 - The **first vision**—with minimal reactive adaptation and mitigation strategies—would increase the probability of dangerous global changes in the environment, water, food and climate, and there would be linear and chaotic changes in the earth system.
 - The **sustainability perspective requires** a change in **culture** (thinking on the human–nature interface), **world views** (thinking on systems of rule, e.g. democracy vs autocracy, on domestic priorities and policies, and on inter-state relations in the world), **mindsets** (the strategic perspectives of policymakers), and new forms of national and global sustainable **governance.**

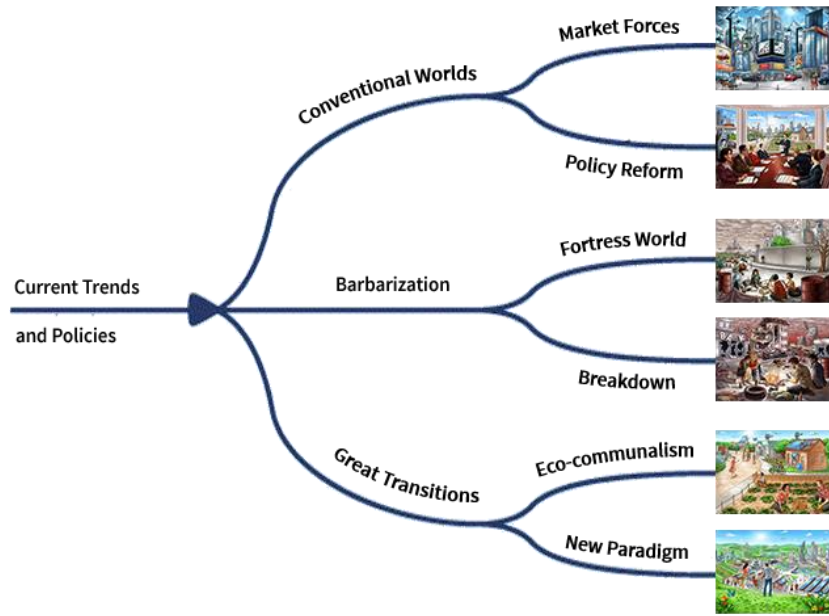
9.4 PEISOR Model: Linking Effects & Impacts of GEC with Societal Outcomes & Responses



9.5 Two alternative strategies

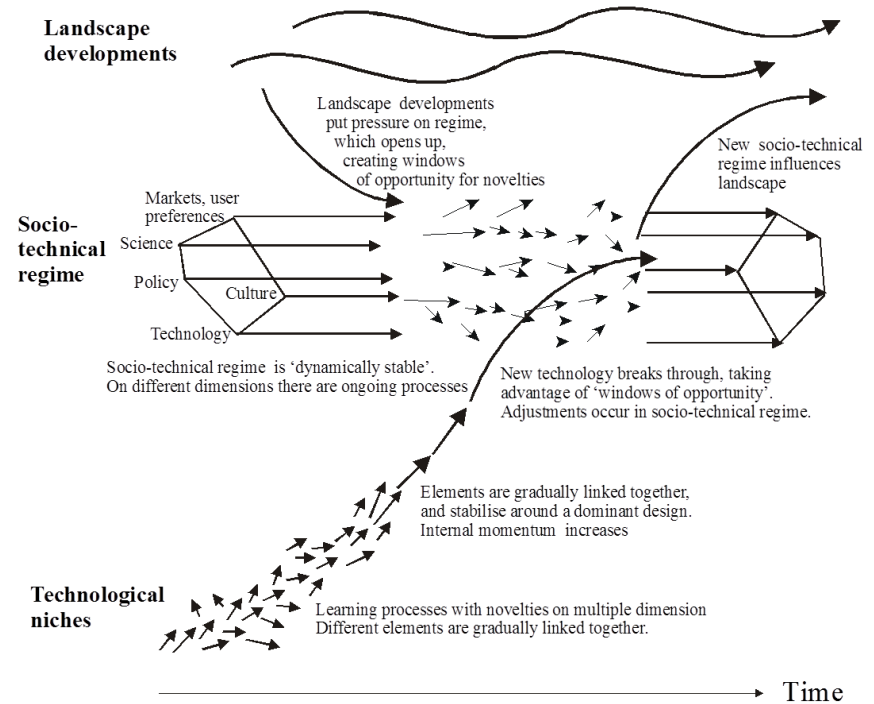
Diagnoses of Global Environmental and Climate Change (chapter 1)			Alternative Strategies: BAU (1) vs. Sustainability Transition (2)			
Drivers	Pressures and Interactions	Impacts (Outcomes)	Actors	Sectors (policies)	Social impacts	Security/peace
<div style="display: flex; justify-content: space-between; align-items: center;"> ↓↑ ↓↑ ↓↑ ↓↑ </div>						
<p>→ Capitalism industrial revolution, → Fossil energy</p> <p>↓</p> <p>→ Population growth</p> <p>→ biodiversity loss</p> <p>→ Food, soil, water</p> <p>→ Production</p> <p>→ Consumption</p> <p>→ Transportation</p> <p>→ Trade</p> <p>→ Housing</p> <p>→ Lack of urban, rural, environmental planning</p>	<p>2015</p>	<p>→ Environmental Scarcity</p> <p>Degradation</p> <p>Stress</p> <p>→ Temperature rise</p> <p>→ Precipitation change</p> <p><i>Climate-induced extreme weather events.</i></p> <ul style="list-style-type: none"> ▪ Storms, floods, landslides ▪ Drought, forest fire, heat waves <p>→ Glaciers melting</p> <p>→ Sea-level rise</p> <p>→ Health impacts</p>	<p>BAU mindset worldview →</p> <p>Economy (profit-driven, lobbies)</p> <p>Politics, polity (reactive)</p> <p>Society/media (consumerist lifestyle, waste)</p> <p>Science (disciplinary, conservative)</p>	<p>Energy (fossil energy growth, GHG)</p> <p>Transport (fossil energy: cars, trucks, planes, ships)</p> <p>production (fossil-driven)</p> <p>Habitat/Housing (urban sprawl)</p> <p>Agribusiness (energy intensive, agrichemicals)</p>	<p>Dominance of Western way of life & lifestyles (consumerist, abundance, waste)</p> <ul style="list-style-type: none"> - highways - suburbia - meat-based diet - high water footprint - greed <p>Land-use change (deforestation, desertification)</p>	<p>Climate change as a threat multiplier</p> <p>→ Resource scarcity and conflicts</p> <p>Climate-driven conflict constellations:</p> <p>→ water scarcity</p> <p>→ food scarcity/hunger</p> <p>→ migration</p> <p>→ climate hazards & disasters</p>
<p>Stimuli for sustainable development</p> <p>→ population stabilization</p> <p>→ waste reduction</p> <p>Sustainable</p> <p>→ production</p> <p>→ consumption</p> <p>→ transportation</p> <p>→ ecological recovery</p> <p>→ landscape planning</p> <p>→ zero energy housing</p>	<p>2025/2050/2100</p>	<p>→ recovery of ecosystem services</p> <p>→ water security</p> <p>→ soil recovery</p> <p>→ GHG reduction</p> <p>→ Stabilization of global average temperature (UNFCCC, Paris Agreement)</p> <p>→ Decline in number & intensity of climate-induced hazards & societal disasters</p> <p>→ decrease of the ozone layer</p> <p>→ climate change as threat minimizer</p>	<p>Mindset for sustainability transition →</p> <p>Politics, polity (proactive)</p> <p>Economy → (sustainable, innovative, energy efficient)</p> <p>Society/Media → (alternative lifestyles)</p> <p>Science → (transformative)</p>	<p>Energy (renewables, efficiency)</p> <p>Transport (public transportation)</p> <p>production (sustainability-driven)</p> <p>Habitat (parks)</p> <p>Housing (urban, rural protected areas)</p> <p>Agriculture/Food (organic, healthy)</p>	<ul style="list-style-type: none"> - Energy & resource efficiency in production & consumption - Sustainable cities & rural areas - Sustainable architecture - Vegetarian diet - New values, behaviour, lifestyles, ethics - Sustainable ethics - Reduction, reuse and recycling of waste 	<p>Sustainable peace</p> <ul style="list-style-type: none"> - International cooperation on SDGs - Reduction of poverty & inequity - Gender equity - Dignified jobs - Decline in dependence on oil/gas rich regions - Elimination of land grabbing
<div style="display: flex; justify-content: space-between; align-items: center;"> ↑----- (Strategies, policies, measures of decarbonization, dematerialization) ↓ ↓ ↓ ↓ </div>						

9.6 Two visions on sustainability transitions



Dutch Knowledge Network on Systems Innovation and Transition (KSI) combined “three perspectives on transitions to a sustainable society: complexity theory, innovation theory, and governance theory”.

Tellus Institute, since 1976 (Paul Raskin): *Great Transition Initiative (GTI)* coordinates a global network ... [and] spreads the message that a future of enriched lives, global solidarity, and a healthy planet is possible if the citizens of the world join in a vast cultural and political mobilization for change. ... It builds on the ground-breaking work of the international [Global Scenario Group](#).



Dutch Multilevel perspective on transitions.
Geels and Schot (2010: 25), Geels (2002: 1263)

9.7 Structure of the Handbook

Handbook on Sustainability Transition and Sustainable Peace examines in 10 parts:

1. moving towards **sustainability transition**;
2. aiming for **sustainable peace**;
3. meeting the **challenges of the twenty-first century**: demographic imbalances, temperature rise and the climate–conflict nexus;
4. initiating **research on global environmental change**, the limits to growth, and the decoupling of growth and resource needs;
5. developing **theoretical approaches to sustainability and transitions**;
6. analysing **national debates about sustainability in North America**;
7. preparing **transitions towards a sustainable economy and society, production and consumption and urbanization**;
8. **examining sustainability transitions in the water, food and health sectors** from Latin American and European perspectives;
9. preparing sustainability transitions in the **energy sector**; and
10. relying on **international, regional and national governance** for strategies and policies leading towards sustainability transition.

60 authors from 18 countries in 5 continents (40% women)

10. Post Retirement Transformation: From Author to Editor and Promoter of Scientific Themes

- My own role: Political Scientist with PhD and habilitation who taught as a PD at FU Berlin in English under the exploitative conditions as a part of the scientific elite is treated in Germany
- Edited two books on Climate and Energy Politik with Springer in 1996 and 1997 in German, only publisher that was offering a contract
- Since 2003: **Hexagon Series** (today 13 vol.): success story; vol. IV: **Facing with Global Environmental Change**: more than **200.000 chapter downloads in 4 years**.
- Since 2012 (early retirement): Springer Briefs (up to 55.000 words)
 - **ESDP**: Peer reviewed
 - **PSP**: Anthologies
- Since 2016: 2 new bigger Series (more than 55.000 words)
 - **APSS**: (extended ESDP)
 - **PAHSEP**: (extended PSP)

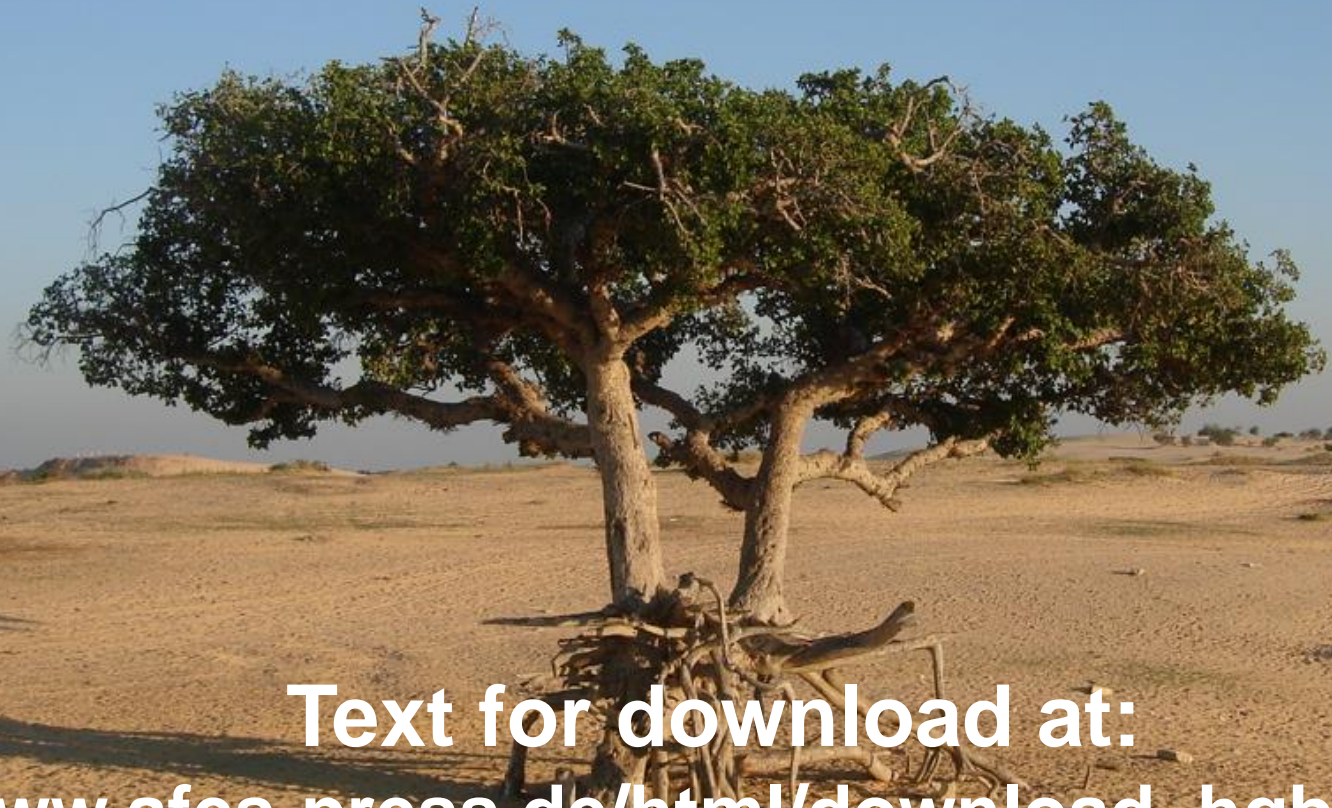
10.1 Thematic Agenda-Setting

- After the publication success of my books I accepted the invitations of Springer prior (2002) after my retirement (2012) as a political scientist to edit 5 English language book series:
- Three peer-reviewed book series:
 - Hexagon Book Series: big size, hardcover, handbooks
 - Springer Briefs on ESDP: softcover up to 130 pages (55.000 words)
 - The Anthropocene: Politik – Economics – Society –Science
- The anthologies honoring the lifelong achievements of eminent scientists and practitioners above 70
 - Springer Briefs on PSP: softcover up to 130 pages (55.000 words)
 - Pioneers in Arts, Humanities, Science, Engineering, Practice (PAHSEP): hardcover above to 130 pages (55.000 words)

Contact Details

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 - Email addresses: <brauch@afes-press.de>
- **Hexagon-Series:** <<http://www.afes-press-books.de/html/hexagon.htm>>
 - <<http://www.springer.com/series/8090?detailsPage=titles>>
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 - <<http://www.springer.com/series/10357?detailsPage=titles>>
- **PSP:** <http://www.afes-press-books.de/html/SpringerBriefs_PSP.htm>
 - <<http://www.springer.com/series/10970?detailsPage=titles>>
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**Thank you
for your attention
and patience.**



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