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Reconceptualising Security:
**Survival Dilemma and Alternative Security Strategies
[EU Network of Excellence GMOSS]
Joint Session of the Commissions on Environment,
Security and Global Political Economy**
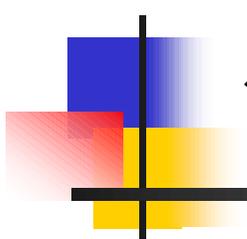
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# From a Hobbesian Security to a Grotian Survival Dilemma

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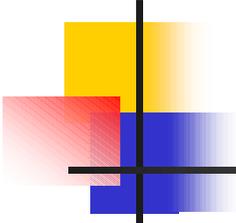
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From a Hobbesian Security to a Grotian Survival Dilemma

Outline of the Talk

- Basic definitions and research questions
- Conceptual quartet: Security, peace, environment, development
- Conceptual pillar: security dilemma
- Conceptual pillar: survival dilemma
- Sustainable development & sustainable peace
- Model: Global environmental change, stress & fatal outcomes
- Goals of 4th phase of research on human & environmental security and peace
- Conclusions

1. Basic Definitions and Research Questions
1.1. What is a dilemma?

- "Dilemma" (Greek) "means two or double (*di*) assumptions or propositions (*lemma*)". A "dilemma is created where there are two propositions and the existence of ambiguity or uncertainty over which proposition is the best".
- "dilemma" refers to "an argument which presents two or more alternati-ves; *di-*, two, and *lemma*, a proposition or assumption,
- 1. in logic. An argument which presents an antagonist with a choice be-tween equally unfavourable or disagreeable alternatives.
- 2. any situation necessitating a choice between unpleasant alternatives;
- 3. perplexing or awkward situation".
- *The New Encyclopaedia Britannica* offered this explanation of a dilemma:
- in syllogistic, or traditional, logic any of several forms of inference in which there are two major premises or hypothetical form and a disjunctive ('either ..or') minor premise. ... In logic ⅂ signifies 'if ...then'; ⅂ signifies 'either ...or'. Symbolically, therefore, a dilemma is an argument of the form A ⅂ C, B ⅂ C, A ⅂ B, therefore C. It is not necessary that a dilemma should have an unwelcome conclusion; but from its use in rhetoric the word has come to mean a situation in which each of the alternative courses of action (only ones open) leads to some unsatisfactory consequences. ... Some-times, two unwelcome results are presented

1. Basic Definitions and Research Questions
1.2. Security vs. Survival?
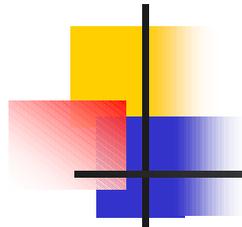
Security

- **Security** (lat.: **securus, se cura**; it. *Sicurezza*, fr.: *sécurité*, sp.: *seguridad*, p.: *segurança*, g: *Sicherheit*)

- **Cicero & Lukrez** referred to a philosophical & psycholog.status of mind.

- Security was used since 1st cent. as a **polit. concept** in context of **'Pax Romana'**.

- **'Security'** is associated in dictionaries with many different meanings that refer to frameworks & dimensions, apply to individuals, issue areas, societal conventions & changing historical conditions & circumst..

- **Security** as an **individual or societal pol. value** has no independent meaning & is always **related to specific individual or societal value systems** and their realisation.

Survival

1. **state of continuing to live or exist**: ... *Our disregard for the environment threatens the long-term survival of the planet.*

2. **survival of the fittest**: a situation in which only the strongest & most successful people or things continue to exist.

3. **a survival from: something that has continued to exist from a much earlier period**, especially when similar things have disap-peared; relic".

The New Encyclopaedia Britannica: 2 concepts of "**survival" in cult. anthropology** "a cultural phenomenon that originates under one set of conditions & persists in a period when those cond. no longer obtain",

"**survival training" as "teaching people to survive in the wilderness, using essentially Stone Age skills".**

1. Basic Definitions and Research Questions
1.3. Security vs. Survival dilemma?

Security dilemma

- A security dil. exists "where the policy pursued by a state to achieve security proves to be an unsatisfactory one" or where due to such a dilemma security cannot be achieved and states were confronted "with a choice between two equal and undesirable alternatives".
- Collins (`95): 5 def. of this dilemma
- decrease in the security of others;
- decrease in the security of all;
- uncertainty of intention;
- no appropriate policies;
- required insecurity.
- The first four relate to one another & form a coherent explanation of a traditional security dilemma.

Survival dilemma

- What is the *dilemma* about & what are choices for whom?
- Whose *survival* is at stake: humankind, state, own ethnic group, family or individual?
- What is the *referent* of such a "survival dilemma": international anarchy, nation state, society, the own ethnic or religious group, clan, village, family or the individual?
- What are the *reasons* that necessitate a choice between leaving the home or *fighting* (decline, disintegration)?
- Is this Surv. D. socially or environmentally driven or both?

1. Basic Definitions and Research Questions

1.4. Did the Contextual Change also lead to Fundamental Changes in Concepts?

- **4 Major changes of international order since 1789**
  - **French Revolution and order of Vienna (1815-1914)**
  - **Versailes Peace Treaty: Wilsonian & Hobbesian Compromise**
  - **Order of Yalta & San Francisco: Collective Self-Defence**
  - **9 November 1989: Fall of the Berlin Wall – not 11 Sept. 2001**
- **1989: Global peaceful change: Reunification of Europe**
- **Since 1989: collective self-defence vs. collective security**
- **Concept of security:**
  - **Widening: 5 dimensions: mil., political, econ., societal, envir.**
  - **Shrinking: to the narrow Hobbesian military security concept**
  - **Deepening: global, regional, national, societal, individual**
  - **Changes in the referents of security: state to the individual**
  - **Sectorialisation of security: energy, food, health, water**
- **Did the contextual change lead to a reconceptualisation of the concept of the security dilemma since 1990?**

1. Basic Definitions and Research Questions
1.5. Classical definition of security

Arnold Wolfers (1962) distinguished objective vs. subjective security

„Security, in an *objective sense*, measures the *absence of threats* to acquired values, in a *subjective sense*, the *absence of fear* that such values will be attacked."

Buzan/Waever/de Wilde: On Security (1998): narrowers vs. wideners

Table: Dimensions (Sectors) & Levels of a Wide Security Concept

Security dimension? ? Level of interaction	Mili- tary	Political	Economic	Environ- mental ?	Societal
Human individual ?				victim	
Societal/Community				✍ ✍	
National (State)	Security dilemma			Survival d.	
Internat./Regional				✍ ✍	
Global/Planetary ?				GEC	

1. Basic Definitions and Research Questions
1.6. English School: Hobbes, Grotius & Kant
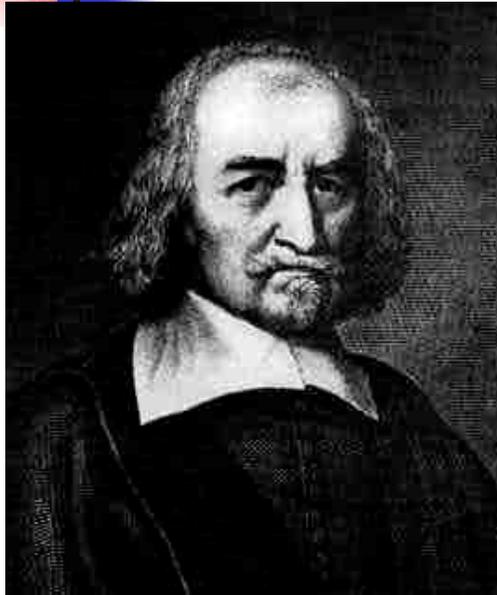
Hobbes (1588-1679)   **Grotius (1583-1645)**   **Kant (1724-1804)**

Security perceptions depend on worldviews or traditions

- **Hobbesian pessimist:** *power* **is the key category (narrow concept)**
- **Grotian pragmatist:** *cooperation* **is vital (wide security concept)**
- **Kantian optimist:** *international law* **and** *human rights* **are crucial**

1.Basic Definitions and Research Questions

1.7. Soft Security Challenges: Environmental and Human Security
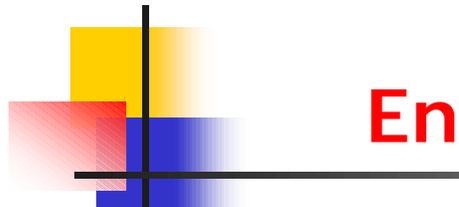
Label	Reference object	Value at risk	Source(s) of threat
National security	**The State**	**Territ. integrity**	**State, substate actors**
Societal security	**Societal groups**	**Nation. identity**	**Nations, migrants**
Human security	**Individ., mankind**	**Survival**	**Nature, state, global.**
Environmental sec.	**Ecosystem**	**Sustainability**	**Mankind**

Source: B. Møller: in Brauch et al. (2003): Sec. & Env. in Mediterranean, 277-288.

Env. Security: Referent: Ecosystem; Value at risk is *sustainability*.
? **Major challenges**: *global environmental change* & *humankind*,
? **Focus**: Interactions between ecosystem & humankind,
Human security: Referent: individuals and humankind.
? **Values at risk: survival of human beings and their quality of life.**
? **Major source of threat: nature (*global environmental change*), globalisation, nation state with its ability to cope with dual challenge.**

1. Basic Definitions and Research Questions

1.8. Thesis: Increasing heterogeneity of security: due to mindsets, worldviews and referents

- Today we have several parallel debates on security!
- We have a coexistence: of premodern, modern and postmordern views on national sovereignty & security.
- Disputed: Basic global change was 1989 and not 2001!
- But on 30.1.2001: Basic shift in mindset & worldview : Return of a Cold War mindset & Hobbesian worldview & shrinking to a narrow national military, political concept
- Continuation of a widened security agenda in Europe & a coexistence of 3 worldviews of Hobbes, Grotius & Kant
- UN system: continuation of a sectorialisation of security.
- North-South (ruler vs. ruled): shift in referent: „nation state" to a „human-centred perspective".
- Debate within Western hemisphere: US & Canada

1. Basic Definitions and Research Questions
1.9. Security Dilemma vs. Survival Dilemma
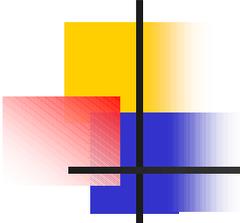
- **Hobbesian security dilemma**: concept for explain-ing arms races during Cold War, focus on classic peace & security linkages (UN Charter of 1945).

- **Security dilemma**: referent is **nation state**; it has been used primarily in national security discourses.

- **My first thesis**: Grotian survival dilemma a concept for explaining: environment & security linkages.

- Survival dilemma:referents are individuals & mankind

- **My second thesis**: Grotian survival dilemma could be conceptualised in framework of human security.

2. Conceptual Quartet: Security, Peace, Environment and Development (SPED)
2.1. Linkages within the Quartet

- Four concepts stand for 4 IR Research areas: peace & security, environmental & developmental studies
- Each concept has a complex history, different value orientation in different cultures and religions.
- My scientific goal is: contribute to 4th phase of research on human & environmental security & peace (HESP).
    - This requires conceptual clarity on four basic concepts & on linkages:
    - peace with security (security dilemma), development & environment;
    - development with peace, security & environment;
    - security and environment (survival dilemma) with a brief survey of the first three phases of research on environmental security;
    - prolegomena for a fourth phase of research on human and environ-mental security and peace (HESP).
- Survival dilemma: a new concept for the new linkage between environment and (envir. & human) security.

2. Conceptual Quartet: S-P-E-D
2.2. Concepts of peace in relation with security, environment and development

? **Pillars & linkage concepts within the quartet**

IR research programs	Conceptual Quartet	Conceptual Linkages
? Peace Research ? Security Studies ? Development Studies ? Environment Studies **4 conceptual pillars** ? I: *Security dilemma* ? II: *Survival dilemma* ? III: *Sust. developm.* ? IV: *Sustain. peace*	Peace ⟷ Security · I: *Security dilemma* · V · · · I · Developm. ⟷ Environm. *III: Sustainable development*	· Policy use of concepts & Theoretical debates on six dyadic linkages · L1: Peace & security · L 2: Peace & development · L 3: Peace & environment · L 4: Devel. & security · L 5: Devel. & environment · L 6: Security & environm. [six chapters reviewing & assessing the debates]
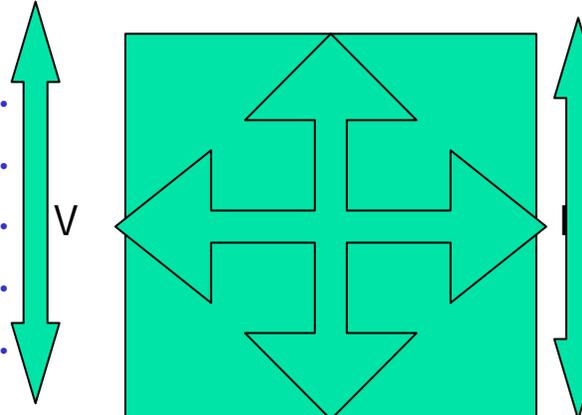
3. First Conceptual Pillar: Security Dilemma on classical peace – security linkage

3.1. Concept established by Immanuel Kant (1795)

Immanuel Kant: Eternal Peace (1795): outlined a philosophy with a cosmopolitical intention. He combined human egotism with state order going beyond the classical concept of a limited peace between wars by integrating existing traditions in his philosophical sketch for an enduring and permanent peace. Its structure follows the model of many existing peace treaties: with a preamble, six preliminary articles, three definitive articles, a secret article and an appendix. In the third preliminary article he wrote:

„Standing armies (*miles perpetuus*) shall be gradually abolished: For they constantly threaten other nations with war by giving the appearance that they are prepared for which goads nations into competing with one an other in the number of men under arms, and this practice knows no bounds.
And since the costs related to maintaining peace will in this way finally become greater than those of a short war, standing armies are the cause of wars of aggression that are intended to end burdensome expenditures.“

This is the reference to a „Hobbesian fear“ that became a: „Security dilemma“

3. Conceptual Pillar: Security Dilemma
3.2. Lewis Fry Richardson's arms race model

- **Lewis Fry Richardson ((1881-1953)** in **1935** developed a simple model of coupled differential equations which showed how the expenditure on armaments of the antagonistic nations had grown exponentially before the first and second world wars.

- **Richardson developed the theorem of an action-reaction process of arms where fear was referred to as a major motivating force for military build-up.**

- **He conjectured that arms races were often preludes to war. If nations were increasing their expenditures on defense budgets then a small spark could start a major conflagration. If 2 nations were decreasing their defense budgets, then a small incident might not trigger a war.** He wanted to build a model to examine certain conditions to predict whether an arms race was "stable" or "unstable

- **Richardson received very little recognition for his work on conflict research**; his two main works were not published until well after his death.

- **Richardson Institute for Conflict and Peace Research** at the **Univ. of Lancaster**

- **Lewis F. Richardson, 1960:** *Arms and Insecurity* and *Statistics of Deadly Quarrels* (Pittsburgh: Boxwood).

- **This mathematical formulation of the security dilemma explains an arms race.**

3. Conceptual Pillar: Security Dilemma
3.3. Hobbesian Fear: a Cold War Concept?

- For **Herbert Butterfield (1950)** referred to "security dilemma" as a "**predicament of Hobbesian fear**" or as the "**Hobbesian**" **dilemma.**

- **John Herz (1950) disagreed that mutual suspicion & the security dilemma have resulted in a permanent race for power and armaments resulting in unending wars. Herz (1950, 1959, 1966: 231) defined:**

- **'security dilemma'** **as a social constellation in which units of power (states or nations in international relations) find themselves whenever they exist side by side without higher authority that might impose standards of behaviour upon them and thus protect them from attacking each other. In such a condition, a feeling of insecurity, deriving from mutual suspicion and mutual fear, compels these units to compete for ever more power in order to find more security, an effort which proves self-defeating because complete security remains ultimately unobtainable.**"

- Herz' SD concept refers to the subjective level of security, to fears & concerns about encirclement, imperialism, world conquest that often had tragic implications "**that mutual fear of what initially may never have existed may subsequently bring about exactly that which is feared most: actual 'encirclement'.** Thus bipolarity has given the security dilemma its utmost poignancy.

3. Conceptual Pillar: Security Dilemma
3.4. Still a Post Cold War Concept?

- Reviewing the security dilemma concept Bruce Russett (1993: 822) states:

- The security dilemma operate only under particular conditions of IR. It stems primarily from leaders' perceptions of the military circumstances, specifically whether the offense has substantial advantages over the defense and whether defensive capabilities can be distinguished from offensive ones. ... Neither threats nor concessions are likely to ease a security dilemma. Threats will enhance the adversary's sense of insecurity; concessions will probably enhance one's own. Changes of strategic postures & weapons procurement in favor of the defense can help, as can better means to monitor the adversary's intentions and capabilities – if the adversary likewise has largely defensive aims.

- Jervis (1979): "the unintended and undesired consequences of actions meant to be defensive constitutes the 'security dilemma'" while Booth & Wheeler (1992) labelled them a "security paradox" and they considered "insecurity as the cen-tral characteristic of the security dilemma". For Jervis (1982) "the security di-lemma cannot be abolished, it can only be ameliorated", while Wheeler & Booth (1992) claim that "the theory of security communities and the practice of interna-tional politics among liberal-democratic states suggests that the security dilem-ma can be escaped, even in a setting of sovereign states".

3. Conceptual Pillar: Security Dilemma
3.5. Relevance as a Post Cold War Concept

A. Collins (1997) summarised 3 features of the SD concept:

- ✎ "the participants must have benign intent [where] neither actually intends to initiate an attack",

- ✎ "the unresolvable uncertainty that statesmen face when trying to determine the intentions of other states"; and

- ✎ "the options available to the statesmen while in the SD".

- ✎ "four characteristics of a SD: uncertainty of intentions, no appropriate policies, decrease in security of others, de-crease on security of all".

- ✎ Thus, "the SD should be seen as representing a process in which state actions, far from increasing security, actually fuel their own insecurity".

- ✎ For Collins (1997) "the SD arises when states inadvertently create in-security in one another as they seek to gain security". He further argues that the security dilemma is "part of the action-reaction explana-tion of an arms race" but that both concepts are not synonymous. Collins argued that the SD has not disappeared with the end of Cold War.

3. Conceptual pillar: Security Dilemma
3.6. Post Cold War Concept Redefinitions
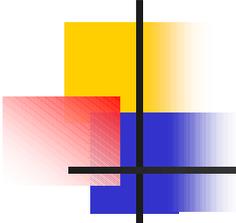
- In **Collins'** interpretation, a SD does not occur "where malign intent exists" and he further concludes that "**in addition to the anarchical system creating the SD, a SD can also arise from state action**".

- **Alexander Wendt** (1995) "SD are not acts of God: they are effects of practice. This does not mean that once created they can necessarily be escaped ('dilemmas'), but it puts the causal locus in the right place".

- **E.O.Czempiel** redefined the concept as the product of domestic politics

- **J.G. Ralph** argued that it should focus on the societal or human level.

- Their argument reflects the horizontal & vertical widening of the security concept that has occurred since 1989/1990..

4. New Conceptual Pillar: „Survival Dilemma"

4.1. Steps towards a new Grotian concept

Concept Evolution on Environment – Security Linkages

- ? **New concept for security & environment linkages** caused by human- & nature-induced factors of **global environmental change (GEC as a cause of insecurity**)

- ? **Grotian concept** on disappearance of bipolarity and **overcoming of Hobbesian fear** with the end of the Cold War and **widening security concept** with **increase of non-military soft security challenges, vulnerability and risks** that require prima-rily non-**military, economic, societal and environmental mitigation strategies**.

- ? Since 1996 I argued that **root causes of GEC** could become "severe challenges for the survival of governments", and stated that **environmental conditions** for human life may be fundamentally challenged as a result of a complex process of incre-mental change caused by **soil erosion and desertification** leading to more frequent and intensive **droughts and water scarcity** and lack of food (**famine**) that will **force people to migrate** what sometimes may lead to **violent conflicts**.

- ? **Severe droughts in the Sahel zone** in the 1960's and 1980's put the **survivabi-lity of this region** at risk and have contributed to several failed states (e.g. So-malia). **A complex interaction among environmental, societal and political factors occurred that resulted in several Sahel countries in violent conflicts**.

4. New Conceptual Pillar:„Survival Dilemma"
4.2. Grotian perspective on international order

- **Brauch** (1996, 2000, 2003) argued that three global orders (1815-1989) were based on power categories legitimised in terms of a *security dilemma*.

- **Emerging new global challenges of the 21st century** may require an internat. order that may necessitate additional multilateral cooperation in internat. security (arms control, terrorism) & environmental regimes (climate, desertification, water), in international & supranational organisations.

- **Zero-sum games** of many realist approaches in the **Hobbesian tradition** of the 19th & 20th century must be replaced – from a Grotian or Kantian perspective – by **non-zero-sum games** where all major players should aim at creation of **conditions for the survival of humankind** (**Axelrod 1984**).

- What do the **security** and **survival dilemmas** mean for sub-state national & transnational societal & economic actors & what do they imply for sectoral security concepts, e.g. economic, societal or environmental security?

4. New Conceptual Pillar: „Survival Dilemma"
4.3. Causes & Referents of a survival dilemma

From an anecdotal towards a scientific concept

What are the causes of this „survival dilemma"?

- Global Environmental Change: nature & human induced factors
- Complex interaction between natural processes & human activity

Who will be affected? Who is the referent of this dilemma?

- Individual human being, family, village, clan, tribe, ethnic group (not: the State)
- Humankind: the human species (e.g. of climate change, desertification)
- Impact is the highest where environmental & societal vulnerability is high.

What does a survival dilemma imply for the referent?

- Dilemma: to leave home or to fight over scarce resources (soil, water, food).
- Environmentally-induced migrations, crises and conflicts may be an outcome!

How can survival be achieved by mitigating the fatal outcomes of GEC?

- Of the individual: by reducing societal (poverty) and environm. vulnerability.
- Of humankind: by active environmental mitigation & adaptation strategies.

4. New Conceptual Pillar: „Survival Dilemma"
4.4. Human security perspective on survival issues

- **Japanese PM Obuchi Keizo (1999):** described „human security" as: „the key-word to comprehensively seizing all the menaces that threaten the **survival, daily life, and dignity of human beings** and to strengthening the efforts to con-front these threats."

- **On 28 July 2000; at a Human Security Symp. in Tokyo Prof. Amartya Sen:**
    - Prospects of survival less favourable: public health, AIDs, malaria, TB;
    - Survival of civilians in civil wars, killings, sectarian genocide, refugees;

Prof. Amartya Sen summarised the results of the Tokyo conference

- (1) **Human security is an important concept that encompasses all issues.**
- (2) **use the UN Millennium Summit** as a forum for **responding to need for human security**.
- (3) **Human security by alleviating & eliminating the lack of security in most extreme forms. Human security perspective offers an effective approach to conflict & developm**.
- (4) **Human security is an action-oriented approach that focuses on the individual, protect people from danger,** complements perspectives of **human development & human rights.**
- (5) What is needed now is the **will to** explore **these issues** further & **promote human security**

Results of this Tokyo conference led to the Human Security Commission (2001-3)

4. New Conceptual Pillar: „Survival Dilemma"
4.5. A. Sen's call for: Protection & Empowerment Human Security: freedom from fear & want
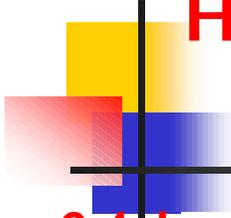
- 2-4 Jan. 2002, Kolkata: Amartya Sen: Basic Education and Human Security:

- It can be agued that the "underpinning" of the concept of human security must include at least the following distinct elements:

- a clear focus on **individual human lives** (contrast with technocratic notion of "**national security**" ("**security" in the military context**);

- an appreciation of the **role of society and of social arrangements** in making human lives more secure in a constructive way (avoiding a socially detached view of individual human predicament & redemption, in some religious contexts);

- a **reasoned concentration on the downside risks of human lives**, rather than on the overall expansion of effective freedom in general (contrasting with the broader objective of the promotion of "human development"); and

- a chosen focus, again, on the **"downside" in emphasizing the more elementary human rights** (rather than the entire range of human rights).

Amartya Sen: **Women's empowerment** appears to have a strong influence in reducing the much-observed **gender-bias in survival**. ... The removal of **survival disadvantages** of women, and young girls in particular), the **reduction of child mortality**, and moderating influences on fertility rates are all among the basic issues involved in removing the "downside risks" that threaten life and dignity.

4. New Conceptual Pillar:„Survival Dilemma"

4.6. Human Security Now: freedom from fear & want

Global Change and Human Security
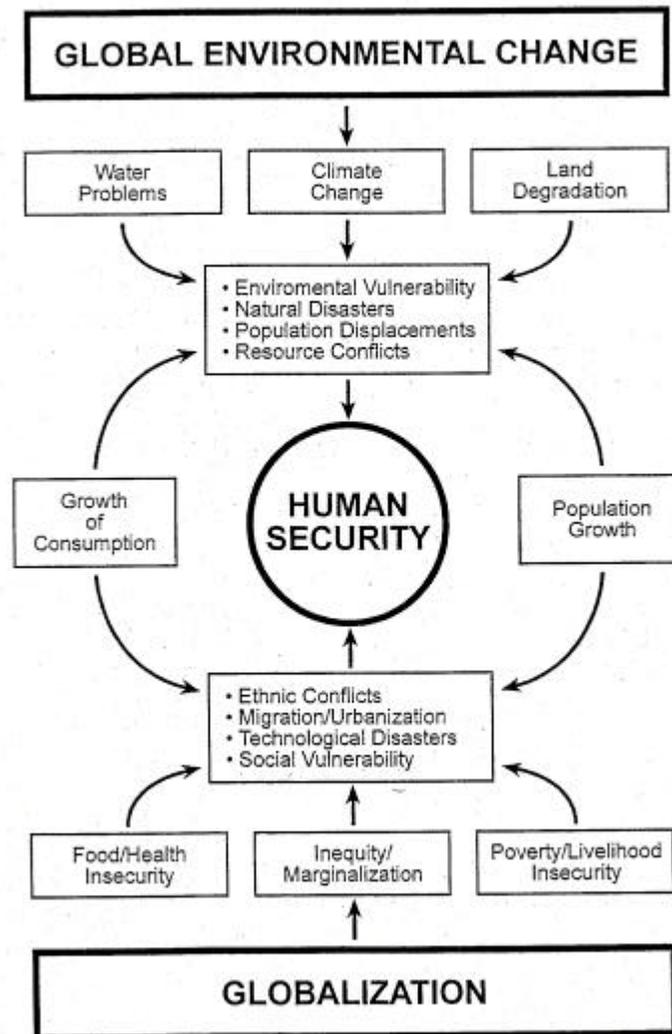
- Enhance coping with survival dilemma by achieving human security.
- Human Security Commission: in its report: Human Security Now (2003)

Human Security complements state security in four respects:

- Focus on: Individual & community
- Menace to people's security includes threats & menaces not to state
- More actors than state alone
- Achieve human security: protect and empower people to fend for themselves.
- Without human security no state security. Human security requires strong & stable institutions.

5. Two Established Conceptual Pillars:
5.1. Sustainable development

Pillar IV: Concept on North-South agenda for development & environmental linkages: „sustainable development"

? **Brundtland Report of 1987**: defined sustainability "**to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs**".

? **Sustainable development** was understood as "**a process of change in which the exploitation of resources, the direction of investments, the orientation of tech-no-logical development, and institutional change are made consistent with future as well as present needs**" (1987: 9). The notion sustainable development contains two key concepts:

? The **concept of needs**, in particular the essential needs of the world's poor, to which overriding priority should be given; and

? The **idea of limitation** imposed by the state of technology and social or-

5. Two Established conceptual pillars:
5.2. New conceptual pillar: „sustainable peace"
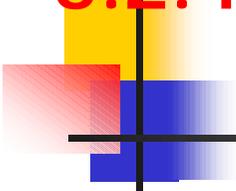
? **Pillar III: New on UN agenda: „sustainable peace"**

? *Sustainable peace* **that has been used as a semantic construct in UN context & by action-oriented researchers combining peace & sustainable development**

? **Goals of a** *sustainable peace* **rely** on sustainable development strategies based on **freedom from** *poverty* **and** *fear* **as well as equity** are crucial.

? **Second focus is on contributing to disaster risk reduction and management strategies** to **reduce exposure to hazards and to cope with disasters.**

? The **Environment, Development and Sustainable Peace Initiative (EDSP**) is an international effort to bridge the gap between Northern and Southern perspectives on **environment, development, population, poverty, conflict, and peace linkages.**

? **Current efforts to translate the environment, population, and conflict debates** into a **positive, practical policy framework for environmental co-operation and sustainable peace** have not been successful. More importantly, these efforts have failed to engage a broad community of stakeholders, particularly in the global South.

? **Fostering new efforts to bridge both the knowledge and policy gaps between South and North is a critical step in the path to a sustaining environment and sustaining peace. [http://www.sustainable-peace.org/content/fr_ini.html]**

6. Model: Global Environmental Change, Environmental Stress and Fatal Outcomes
6.1. Coping with the survival dilemma

Causes (Hexagon)	Effect (Interaction)	Environmen- tal Stress	Probable Outcomes
↗ → → → → Extreme Weather Events → → → ↘			
Climate change	environmental ➜ degradation (soil, water) ↓ ↑ → ➜ scarcity (water, food, housing)	global cond. ↓ Environ- mental stress ↑ nation. cond.	disaster conflict avoidance ↗ ↗ ➜ Crisis ↘ ↘ migration conflict

Climate change
climate change (natural induced)

soil erosion (deforestation desertification)

hydrological cycle (water scarcity water management)

agriculture (food security biodiversity)

urbanisation (human settlement human health pollution)

population growth (human-induced)

— direct impact of nature-induced „root cause": climate change on five factors
— direct impact of human-induced „root cause": population on four factors
--- complex interaction among four structural factors: urbanisation, water scarci-ty, soil erosion and desertification and food scarcity and agricultural policy

6. Model: Global Environmental Change
6.2. Environmental Challenges in the 21st Century: Survival Hexagon

Survival Hexagon: 6 factors
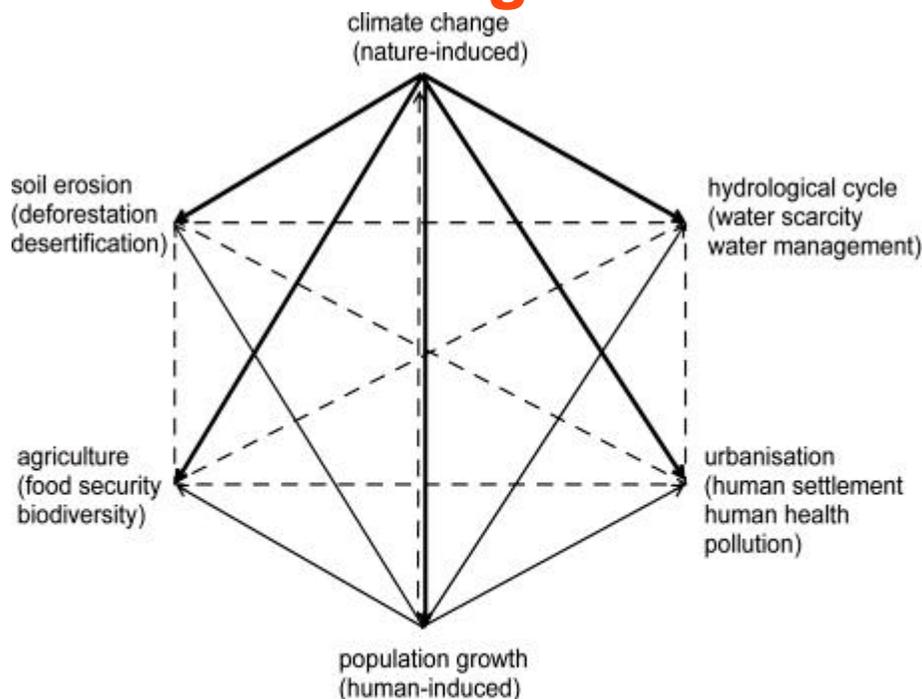
climate change
(nature-induced)

soil erosion
(deforestation
desertification)

hydrological cycle
(water scarcity
water management)

agriculture
(food security
biodiversity)

urbanisation
(human settlement
human health
pollution)

population growth
(human-induced)

⟶ direct impact of nature-induced „root cause": climate change on five factors

⟶ direct impact of human-induced „root cause": population on four factors

- – → complex interaction among four structural factors: urbanisation, water scarci-
ty, soil erosion and desertification and food scarcity and agricultural policy

Causes of „survival dilemma"

Nature & human-induced

✍ **Air:** **Global climate change**

✍ **Soil degrad., desertification**

✍ **Water scarcity, hydrologi-cal cycle**

Human-induced factors

✍ **Population growth**

✍ **Urbanisation**

✍ **Food & Agriculture**

6. Model: Fatal Outcomes: Linking Natural Disasters with Societal Consequences:
6.3. Posing a „Survival Dilemma"
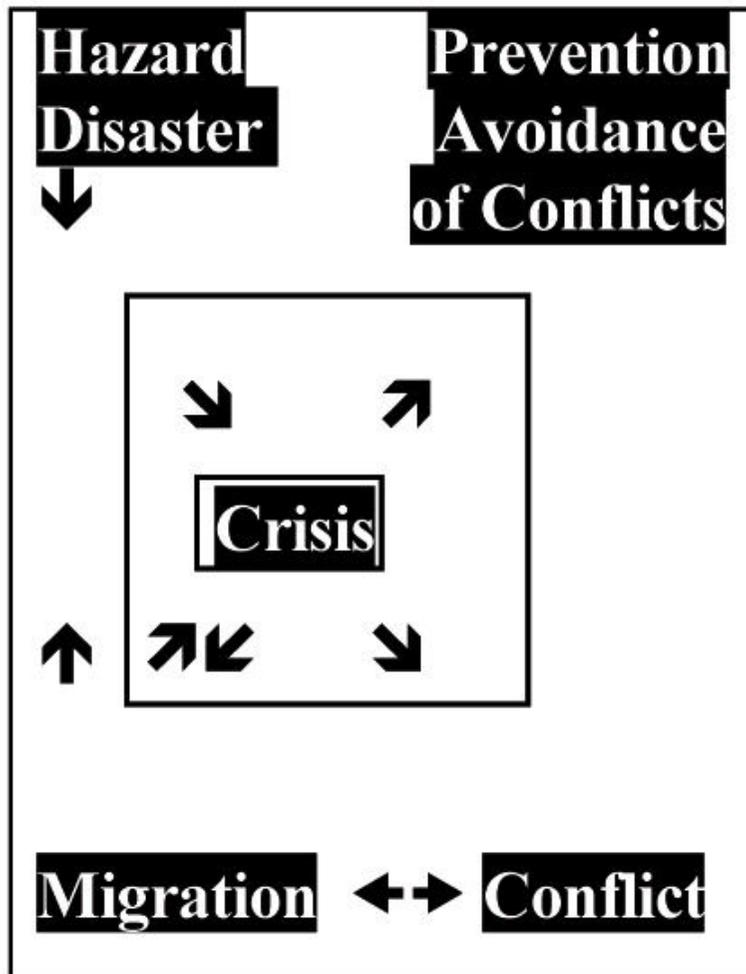
GEC & environm. stress result in hazards, migration, conflicts

Affect: individual & humankind

Pose a „survival dilemma" for highly vulnerable humans:
- ✍ To stay at home, starve & die
- ✍ To move & clash over water & food

Vulnerable: women & children

Abrupt climate change may pose a „survival dilemma" for affected regions (North Atl.)

Need for coping strategies to reduce societal & environ-mental vulnerability.

6. Model: Dealing with Fatal Outcomes
6.4. Policy Strategies for Coping with a „Survival Dilemma"
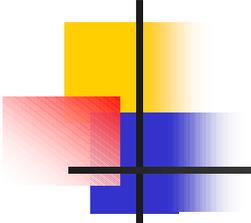
- **Address the Causes of the „survival hexagon":**
- **Air:** Climate change: reduce GHG emissions & improve adaptation and mitigation strategies
- **Soil:** Deforestation & Desertification: combat processes
- **Water:** improve water harvesting & management
- **Address the outcomes:** disasters & migration
- **Reduce vulnerability:** societal & environmental
- **Develop strategy of environmental conflict avoidance that address the structural causes:** complex combination of measures that link causes, fatal outcomes, vulnerabilities
- **What can and should peace research contribute to this task?** Scientific & political agenda setting, integrated learning.

7. Fourth Phase of Research on Human & Environmental Security & Peace (HESP)

7.1. Three Stages of Research on Environmental Security

- **First conceptual phase (1983-1990)**: Impacts of wars on environment (Westing), since 2001: UNEP-PCAU debate on env. security as a national security issue (Ullman, 1983; Mathews, 1989, N. Myers, 1989)

- **Second empirical phase (1991-2000)**: Canadian (Th. Homer-Dixon) & Swiss (ENCOP, Bächler): case studies on env. scarcity, degradation as causes of environmental stress & conflicts and env. cooperation (ENCOP)

- **Third Phase**: methodological diversity (since ca. 1995: e.g. GECHS, state failure project, Swiss project: mitigating syndroms of global change, PRIO: Civil War research: ongoing, many directions, little synthesis)

7. Fourth phase of research on HESP

7.2. Three Key Goals

4th phase of research on HESP should aim at:

- A **"people-centred" human security perspective** from the individual to the global level to develop **strategies for adaptation and mitigation to reduce both the likelihood and the impact of and the vulnerability** to these outcomes by strengthening resilience.

- The **normative orientation** at the dual policy goals of **sustainable development and sustainable peace** requires the scientific development of complex knowledge, a **societal and political problem awareness, anticipatory learning** and "ingenuity" in the framework of a **"culture of prevention"**.

- **Practical purpose & policy relevance** of a 4th phase of research is to recognise **early-warning indicators**, to **examine both the environmental consequences of wars and the existing conflicts over scarce resources** that may lead to **environmental stress** to prevent that they escalate into violence and, to **develop longer-term priorities for European countries**, as well as for **international organisations to avoid fatal environmental outcomes** from occurring, and to contribute to regional environmental **good governance**.

7. Fourth phase of research on HESP
7.3. Normative Context: HESP Essentials

A 4th phase of research on human and environmental security and peace (HESP) may aim at ten conceptual and policy goals:

- ✎ *Orientation:* Analyst is influenced by worldviews & ecological standpoints. An ***equity-oriented pragmatic Grotian* perspective** may be best suited to support multilateral environmental efforts in the framework of international organisations & regimes with the **goal to avoid harmful and conflictual outcomes**.

- ✎ *Causes:* Research should broaden scope & include both **environmental degradation & scarcity** & their impact on environmental stress. This requires a close interaction between social & natural sciences, a multi- & interdisciplinary approach.

- ✎ *Policy Process:* Case studies should include respective policy processes, how the state & society have responded to challenges & outcomes, they should emphasise the role the knowledge factor (learning, capacity building) has played in developing adaptive & mitigation strategies to reduce vulnerability & strengthen resilience.

- ✎ *Outcomes:* **The research should focus not only on environmental conflict but it should include disasters, distress migration and environmental refugees and the complex interactions among these outcomes.**
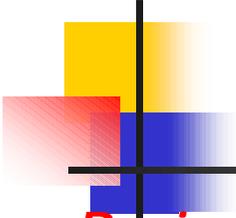
7. Fourth phase of research on HESP
7.4. Additional HESP Essentials

- *Regional Orientation*: A regional perspective both on causes, policy process & on outcomes is needed. This requires a regional resolution for natural science models & comparative social science case studies on the policy processes within the region.

- *Spatial Approach*. The analysis of environmental security issues on a regional level requires a spatial approach. As neither the approaches of *globalisation* & *geopolitics* have included environmental factors & problems of environmental security, a new approach of a **political geo-ecology** has been suggested.

- *Human Security Focus*: Referent for research & policy should be human beings, individual victims & communities of distress migration, disasters, crises & conflicts.

- *Policy Goals on individual level*: Environmental security studies should aim at contributing to strategies for reducing the *impact* of outcomes of environmental stress, decreasing *vulnerability* & strengthening the coping capacities & *resilience*.

- *Policy Goals on national & international level*: Strategies for coping with natio-nal & regional outcomes of env. stress by improving disaster response & integrating disaster reduction into national & local development planning. Resolution, prevention & avoidance of violent outcomes from env. stress should become a policy goal.

- *Sustainable Development & Sustainable Peace*: A human security perspective to analysis of environmental security issues may aim at "sustainable peace.

8. Conclusions
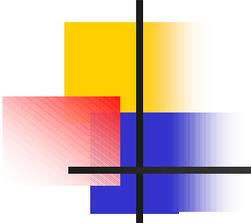
- **What is the *dilemma* about & what are choices for whom?** A dilemma poses two or more often unpleasant choices: survive, starve or die.

- **Whose *survival* is at stake? The survival of highly socially vulnerable (poor) people** in areas of **high environmental vulnerability** due to drought, floods, storms, volcano eruptions, earthquakes etc.

- **What is the *referent* of such a "survival dilemma"?** The referent is the **human being** not the state, thus the **human security approach** is useful.

- **What are the *reasons* that necessitate choices for survival between leaving home or *fighting* over scarce resources?** These are manifold: they may be triggered by **environmental hazards** & intensified by specific national, regional social, ethnic and political problems (lack of resources for adaptation and mitigation) but also by corruption and bad governance.

- **Is this survival dilemma socially or environmentally driven or both?** This requires case study research in the framework of 4th phase of HESP.

Sources

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Editors

Security and Environment in the Mediterranean

Conceptualising Security and Environmental Conflicts
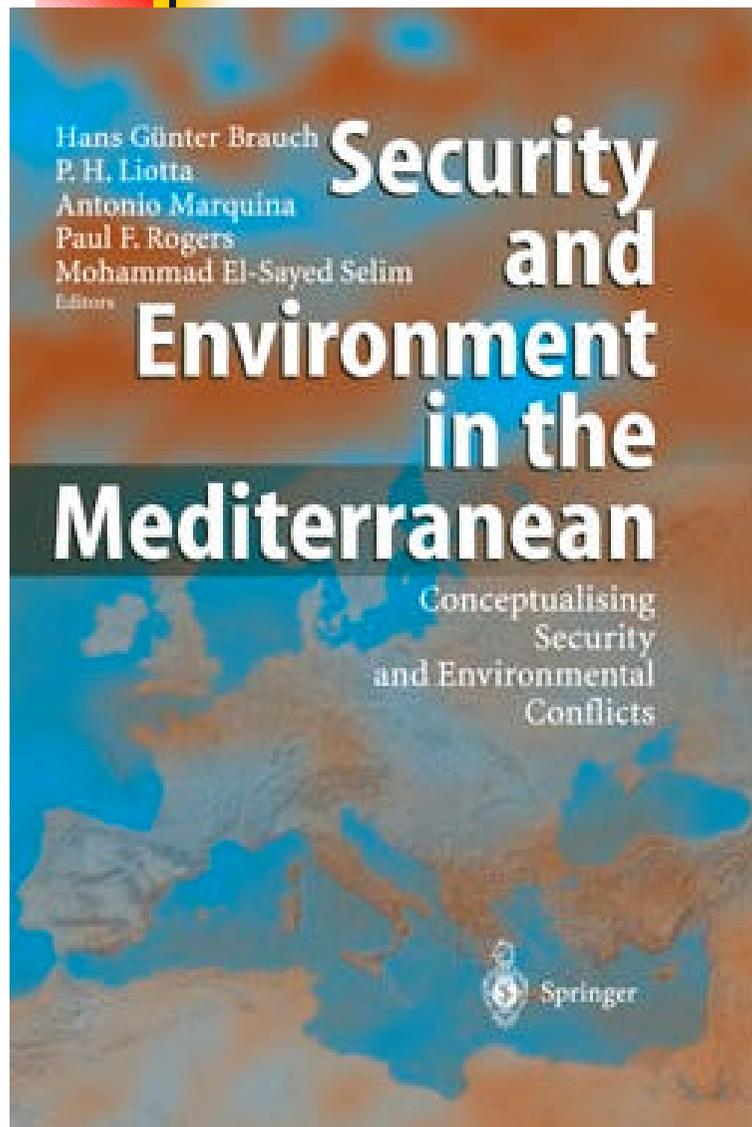
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- ✍ **Brauch:** *Climate Change and Conflics* **(Berlin: BMU 2002) (http://www.bmu.de/en/800/js/ download/b_climges/)**

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- ✍ **Next workshop: The Hague,9-11 Sept. 2004: Reconceptualising Security in an Era of Globalisation (5th Paneuro-pean Conference on Int. Relations)**

(http://www.afes-press.de/html/the_hague.html)