



SciencesPo.

THE MASTER OF PUBLIC AFFAIRS

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Shahrbanou Tadjbakhsh and Hitomi Kubo
Human Security Concentration Overview Course
Wednesday, 31 March 2010, 10.15 – 12.15
Part 1: Environmental Security

© Hans Günter Brauch

Adj. Professor, Free University of Berlin, Otto-Suhr Institute, Berlin
Chairman, Peace Research and European Security Studies
Editor, Hexagon Series on Human, Environmental Security & Peace
Senior Fellow, Institute on Environment and Human Security of United Nations University (UNU-EHS), Bonn



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Institute for Environment
and Human Security

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Plan for Presentation on 31 March 2010

10.15-12.15: Four Phases of Environmental Security

- 10.15-10.20: Overview of Joint Programme for 31 March, 1-2 April 2010
- 10.20-10.30: Student presentations of texts
- 10.30-11.15: Brauch Lecture: Phases of Environmental Security Debate
- 11.15-11.30: Question and answers and general discussion
- 11.30-12.00: Brauch Lecture: Proposals for the Fourth Phase
- 12.00-12.15: Question and answers and general discussion

12.30-14.30: Securitization of Global Environmental Change

- 12.30-13.00: Brauch Lecture: Securitizing Global Environmental Change
 - 13.00-13.30: Discussion on the Securitization of Climate Change
 - 13.30-14.00: Brauch Lecture: The Soil Security Concept
 - 14.00-14.15: Discussion on Soil Security
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Texts for Reading (Part 1)

Hans Günter Brauch: Evolution & 4 Phases of Environmental Security (31 March 2010)

1. Simon Dalby, Hans Günter Brauch, Úrsula Oswald Spring, 2009: "Environmental Security Concepts Revisited During the First Three Phases (1983-2006)", in: Hans Günter Brauch, Úrsula Oswald Spring, John Grin, Czesław Mesjasz, Patricia Kameri-Mbote, Navnita Chadha Behera, Béehir Chou-rou, Heinz Krummenacher (Eds.): *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts* (Berlin – Heidelberg – New York: Springer-Verlag); Chapter 59, pp. 781-790.
2. Úrsula Oswald Spring, Hans Günter Brauch and Simon Dalby, 2009: "Linking Anthropocene, HUGE and HESP: Fourth Phase of Environmental Security Research, ", in: Hans Günter Brauch, Úrsula Oswald Spring, John Grin, Czesław Mesjasz, Patricia Kameri-Mbote, Navnita Chadha Behera, Béehir Chou-rou, Heinz Krummenacher (Eds.): *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts* (Berlin – Heidelberg – New York: Springer-Verlag); Chapter 67, pp. 873-884.
3. David Newman, 2009: "In the Name of Security: In the Name of Peace – Environmental Schizophrenia and the Security Discourse in Israel / Palestine", in: Hans Günter Brauch, Úrsula Oswald Spring, John Grin, Czesław Mesjasz, Patricia Kameri-Mbote, Navnita Chadha Behera, Béehir Chou-rou, Heinz Krummenacher (Eds.): *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts* (Berlin – Heidelberg – New York: Springer-Verlag); Chapter 65, pp. 855-864.
4. Mohammed S. Dajani Daoudi, 2009: "Conceptualization and Debate on Environmental and Human Security in Palestine", in: in: Hans Günter Brauch, Úrsula Oswald Spring, John Grin, Czesław Mesjasz, Patricia Kameri-Mbote, Navnita Chadha Behera, Béehir Chou-rou, Heinz Krummenacher (Eds.): *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts* (Berlin – Heidelberg – New York: Springer-Verlag); Chapter 67, pp. 873-883.

Part A: Three Phases of Debate on Environmental Security: Overview

- 1. Introduction: Object of Analysis: Security**
- 2. Contextual Change and Conceptual Innovation**
- 3. Security: Widening, Deepening & Sectorialization**
 - **Deepening: Inter(national) vs. Human Security**
 - **Widening: Environment & Security Linkages**
 - **Sectorialization: Water, Food and Health Security**
- 4. Phases of Environmental Security: 1983-2000**
 - 4.1. First Phase: Agenda-Setting in USA**
 - 4.2. Second Phase: Empirical Research**
 - 4.3. Third Phase:**
- 5. Since 2000: New Developments: Focus & Approaches**

1. Introduction: Object of Analysis

- **Security is an ambiguous and highly contested political and scientific concept.**
 - Security is a value, a goal and a legitimizer of policies
 - What are the reasons for the global reconceptualization?
- **Reconceptualization of security occurs due**
 - a) End of Cold War: Change of international order
 - b) Globalization: Non-state actors & processes beyond sovereignty
 - **c) Global environmental and climate change (Anthropocene)**
- **Since 1994: major shift from state-centred inter(national) to human security concepts!**
- **Since 2000: Securitization of issues of global environmental change: climate, water & soil**

1.1. Defining security as a term, concept, value, goal and means?

- A term: **Security** (lat.: *securus* & *secura*; *sécurité*, *seguridad*, *segurança*, *Sicherheit*)
- Security introduced by **Cicero & Lucretius** referring to a **philosophical & psychological state of mind**.
- **Political concept** for ‘**Pax Romana**’.
- ‘Security’ as a **political value** has no independent meaning & is related to **individual/societal value systems**
- **UN Charter (1945): 2 referents:**
 - Preamble: “we the peoples of UN”
 - Art. 1: purpose: “maintain international peace and security”.
 - **Human vs. international security**

Scientific concept

- As a **social science concept**, *security* is ambiguous & elastic in its meaning (Art 1993)
- ‘**Security**’: refers to frameworks, dimensions, issue areas, societal conventions & changing historical conditions & circumstances.

Political concept

- **Tool to legitimate** public funding for an accepted purpose: safety, protection (military & police),
- **Political acceptability** (support) **gaining and regaining power.**

1.2. Wolfers' Classical Definition of Security

- **Arnold Wolfers (1962): two sides of 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”.
- **Objective (In)security:** Absence of “threats”: interest of policy-makers;
- **Subjective (In)security:** Absence of “fears”: interest of social scientists (of whom, of what and by whom?)
- **Intersubjective Insecurity:** Constructivists: “Reality is socially constructed” – “Security is what actors make of it”

1.3. Three Reasons for Reconceptualizing of Security Since 1990

- **End of the Cold War:** Fall of Berlin Wall (9 Nov. 1989)
 - **Globalization: Non-state Actors and Processes**
 - **Terrorism and organized crime:** weapons, drugs, human trafficking (children, women, organs etc.)
 - **Uncontrolled financial transfer and speculation:** worst global economic crisis since 1929
 - **Global Anthropogenic Environmental Change**
 - **Nobel Laureate Paul Crutzen coined the concept of the Anthropocene:** phase of Earth history since industrial revolution
 - **Our Goal:** Conceptual Foundation and Long-term Thinking on a new **Security and Peace Policy for the Phase of the Anthropocene**, that combines **sustainable development with sustainable peace.**
-

2. Contextual Change (History) & Conceptual Innovation (Science, Theories)

- **1989-1991: End of the Cold War (East-West-Conflict): 9 November 1989: Fall of Berlin Wall**
 - Widening (issue area): from 2 to 5 security dimensions of security
 - Deepening (of referent objects): from national to human security
 - Sectorialization: energy, food, health, water, climate security
- **11 September 2001: Increased Vulnerability of U.S.**
 - G.W. Bush: Shrinking on weapons of mass destruction, terrorists
 - Transatlantic dispute on goals: Terrorism vs. Climate Change
 - B. Obama: Widening: multilateralism, hard & soft security issues
- **2008: Econ. crises: econ. & social vulnerability**
 - Crises, Globalization: high economic & social vulnerability
 - Economic & financial insecurity: increase in food insecurity, poverty: food price protests, hunger riots

2.1. Global Contextual Changes

9 November 1989 or 11 September 2001

- End of the Cold War?



- Reunification of Germany
- Enlargement of the EU

- New threats, challenges, vulnerabilities and risks?



2.2. Two New Security Challenges: Terrorism & Climate Change



- 11 Sept. 2001
- Terrorist aggression
- Death toll (Oct. 2003): 2752
- Surpassed Pearl Harbor (1941)
- Response: war on terror: Iraq
- Intervention into Afghanistan
- Securitization as military/political national security
- Deliberate disaster



- 29 August 2005: Impact of Hurricane Katrina
- 1838 deaths (official)
- \$80 - 125 billion economic damage
- Policy Response: ??
- Climate Policy: ???
- No securitization by policy-makers
- Natural hazard & societal disaster

2.3. Globalization & Global Environmental Change: Terrorism & Global Financial Crisis

■ **Globalization: new actors and processes**

- ❑ Non-state actors: terrorists, organized crime (trafficking of drugs, weapons, humans, women, children, organs)
- ❑ Uncontrolled financial flows and speculation:
- ❑ 2008/2009: Global Financial and Economic Crisis
- ❑ Shrinking and penetration of national sovereignty

■ **Global Environmental Change:** global climate change, transformation of the cause of security dangers: **We are the threat and the victim but both are not equal! Challenge for global equity!**

2.4. Conceptual Innovations:

Social Constructivism & Theory of Securitization

- From a social constructivist approach in international relations 'security' is the outcome of a process of social & political interaction where social values & norms, collective identities & cultural traditions are essential.
 - ❑ Security is *intersubjective* or “what actors make of it”.
- **Two major theoretical innovations:**
 - ❑ Theory of Securitization by Ole Waever (Copenhagen), 1995, 1998
 - ❑ Theory of (international) Risk Society of Ulrich Beck (1988-2007)
- **Three schools** of conceptual innovation in security studies:
 - ❑ **Copenhagen School** (Buzan, Waever, de Wilde: *On Security* (1998))
 - ❑ **Aberystwyth**: Critical Security Studies (Booth et al.)
 - ❑ **Paris School**: of D. Bigo: Merger of internal & international security

2.5. Theory of Securitization

Ole Wæver's Securitization Theory (1995)

- Security as a **“speech act”**, “where a securitizing actor designates a threat to a specified reference object and declares an existential threat implying a right to use extraordinary means to fend it off”.
- Such a process of **“securitization”** is successful when the construction of an “existential threat” by a policy maker is socially accepted and where “survival” against existential threats is crucial.
- Focus on securitization & de-securitization of dangers
- ~~Key book: Buzan/Wæver/de Wilde: On security (1998)~~

2.6. Copenhagen School: Securitization Theory

- **Securitization**: discursive & political process through which an intersubjective understanding is constructed within a political community to treat something as an existential threat to a valued referent object, and to enable a call for urgent and exceptional measures to deal with the threat.
- **‘Referent object’** (that is threatened and holds a general claim on ‘having to survive’, e.g. **state, environment or liberal values**),
- **‘Securitizing actor’** (who makes the claim – speech act – of pointing to an existential threat to referent object thereby legitimizing extraordinary measures, often but not necessarily to be carried out by the actor), and
- **‘Audience’** (have to be convinced in order for the speech act to be successful in the sense of opening the door to extraordinary measures).
- **It is not up to analysts to settle the ‘what is security?’** question – widening or narrowing– but more usefully one can study this as an open, empirical, political and historical question.
- **Who manages to securitize what under what conditions & how?**
- **What are the effects of this?** How does the politics of a given issue change when it shifts from being a normal political issue to becoming ascribed the urgency, priority and drama of **‘a matter of security’**.

2.7. Subjective Security: Concerns & Perceptions: Worldviews and Mind-sets

- Perceptions of objective security dangers (subjective concerns) depend on worldviews of analyst & mind-set of policy-maker.
- **3 worldviews** (macro theories) are distinguished by the English school:
 - ❖ *Hobbesian* pessimism (realism): power
 - ❖ *Kantian* optimism (idealism) *international law & human rights*
 - ❖ *Grotian* pragmatism: multilateralism, *cooperation* is vital.
- **3 ideal type perspectives in other cultures & traditions:**
 - Power matters: Sunzi, Thukydides, Machiavelli, Hobbes,
 - Ideas matter: Kant, W. Wilson
 - Cooperation matters: Confucius, Grotius
- **Mind-set (Ken Booth):** have often distorted perception of new challenges: include ethnocentrism, realism, ideological fundamentalism, strategic reductionism
 - **Booth:** Mind-sets freeze international relations into crude images, portray its processes as mechanistic responses of power and characterize other nations as stereotypes.
 - ~~Old Cold War mind-sets have survived global turn of 1989/1990~~

3. Buzan: Widening, Deepening and Sectorialization of Security Threats, Challenges, Vulnerabilities & Risks

Security dimension ► Level of interaction ▼	Military	Political	Economic	Environmental ▼	Societal
Human ►			Securing soil, water, food, health, livelihood and energy for human beings combining all levels of analysis & interaction		
Village/Community/Society			▼ ▲		
National	Security dilemma of states		Social, energy, food, health, livelihood and soil threats may pose a survival dilemma in areas with high vulnerability		
	Security of the territory				
International/Regional/Global			▼ ▲		

3.1. Environmental & 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	National identity	Nations, migrants
Human security	Individual, mankind	Survival	Nature, state, globalization
Environmental security	Ecosystem	Sustainability	Humankind
Gender security (Oswald Spring)	Gender relations, indigenous people, minorities	Equality, identity, solidarity	Patriarchy, totalitarian institutions (governments, churches, elites) intolerance

3.2. From International & National to Environmental and Human Security

- ❑ **International Peace & Security:** League of Nations (1919): “high contracting parties”; UN Charter (1945): “*We the peoples of the United Nations*”
- ❑ **National Security:** new U.S. concept World War II, post WW II: National Security Act (1947), before: goal defence, means: Army (War Dep.), & Navy Dept.
- ❑ **Alliance Security:** NATO (1949-), WP (1955-2001)
- ❑ **Common Security** (Palme Report 1982)
- ❑ **Environmental Security** (Brundtland 1987, Gorbachev 1988)
 - 1989/1990: Widening, Deepening, Sectorialization
 - 2001: G.W. Bush: Shrinking: U.S. nat. security agenda
 - 2010: B. Obama: QDR 2010: Climate change as a security threat
- ❑ **Cooperative Security:** Brookings Institution (1990's)
- ❑ **Human Security:** UNDP (1994): 4 pillars of Human Security

3.3. Deepening: State-centred vs. People-centred Human Security

1. United Nations Development Programme (1994):

Security ... means safety from the constant threat of hunger, disease, crime and repression. It also means protection from sudden and hurtful disruption in the pattern of our daily lives – whether in our homes, in our jobs, in our communities or in our environment.

2. UNESCO: Decade for a Culture of Peace: Global promotion of the human security concept (1996-2008): publications

3. Commission on Human Security: Human Security Now (03)

It seeks to **protect** people against a broad range of threats to individuals and communities and, further, to **empower** them to act on their own behalf.

to protect the vital core of all human lives in ways that enhance human freedoms and human fulfilment

4. Kofi Annan's Report: In Larger Freedom (2005)

5. UN, GA, *World Summit Outcome*, 24 October 2005:

143. We stress the right of people to live in freedom and dignity, free from poverty and despair. We recognize that all individuals, in particular vulnerable people, are entitled to freedom from fear and freedom from want, with an equal opportunity to enjoy all their rights and fully develop their human potential.

To this end, we commit ourselves to discussing and defining the notion of human security in the General Assembly.

3.4. Four Pillars of Human Security

- **“Freedom from fear”**: humanitarian agenda: violence, conflicts, weapons (Canada, Norway, Human Security Network) (UNESCO, HSN), **Canadian approach**: Human Security Rep.(2005)
- **Freedom from want”** human development agenda: poverty (stimulated by Asian economic crisis of 1990s) by reducing social vulnerability through poverty eradication programmes (UNDP 1994; CHS: Ogata/Sen: Human Security Now, 2003, Human Security Trust Fund, HSU of OCHA), **Japanese approach**;
- **“Freedom to live in dignity”**: agenda: rule of law, human rights, democratic governance (Kofi Annan: *In Larger Free-dom* (March 2005)
- **“Freedom from hazard impact”**: environmental (GEC) & natural hazard agenda: Bogardi/Brauch vision, goal: securitize: “environment” (GEC as pressure) and “natural hazards” as impact by reducing environmental & social vulnerability & enhancing coping capabilities of societies confronted with natural & human-induced hazards (Bogardi/Brauch 2005; Brauch 2005a, 2005b): Greek Presidency of HSN.
- **Since 1999: Human Security Network**, since 2006 & 2008 wider view
- **Japan-Mexico: Friends of Human Security**: 2009: climate change

3.5. Widening: New Security Dimension Environment and Security Linkages

- ***Encyclopaedia Britannica*** (1998) defined ‘environment’:
“the complex of physical, chemical, and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival”.
 - **Neo-Malthusian**: Resource scarcity (L. Brown, N. Myers)
 - **Cornucopian**: Abundance (B. Lomborg)
 - **Pragmatic multilateralist**: cooperation in international organizations matters
- **Subjective security perception depends on worldviews, mindsets or traditions:**
 - ❖ **Hobbessian** pessimist: **power** is the key category (narrow concept)
 - ❖ **Kantian** optimist: **international law** and **human rights** are crucial
 - ❖ **Grotian** pragmatist: **co-operation** is vital (wide security concept)

3.6. Ideal Type Worldviews on Security and Standpoints on Environment

Worldview/Tradition on security (→) Standpoints on environmental issues (↓)	Machiavelli, Hobbes, Morgenthau, Waltz (pessimist, realist school)	Grotius, pragmatist <i>Cooperation is needed, matters</i>	Kant, neoliberal institutionalist (optimist) <i>International law matters and prevails (Democratic peace)</i>
Neomalthusian <i>Resource scarcity</i> (pessimist)	I George W. Bush-Administration ?	II ←	III ↙
Reformer, <i>Multilateral cooperation solves challenges</i> (pragmatist)	IV	V UN system most EU states (my position)	VI
Cornucopian <i>Technological ingenuity solves issues</i> (neoliberal optimist)	VII George W. Bush-Administration ?	VIII Bill J. Clinton Administration ?	IX Wilsonian liberal optimism

3.7. Sectorialization of Security

Concepts have been used by international organizations by upgrading the political urgency and requiring extraordinary policy responses for coping with these challenges.

Energy security: since oil shocks of 1973: Creation of International Energy Agency (IEA): supply security (for consumers) but also demand security (for producers)

- ❑ **Food Security:** since 1970s developed by FAO (Rome): right to the access of sufficient and healthy food (supply security) but also **food sovereignty (by social movements, Via Campesina)**
- ❑ **Water Security:** Hague Declaration on Water Security (2000)
- ❑ **Health Security:** by WHO (with regard to pandemics): SARS, Swine Flu etc. with different referent objects (international, national and human security)

Soil Security: UNCCD (Brauch/Oswald Spring 2009)

4. Three Stages of Research on Environmental Security (1983 - 2006)

- ❖ **First conceptual phase (1983-1990):**
 - ❖ Impacts of wars on environment (Westing), 2001: UNEP-PCAU
 - ❖ debate on environmental security as a national security issue (Ullman, 1983; Mathews, 1989, N. Myers, 1989)
- ❖ **Second empirical phase (1991-2000):** case studies on environmental scarcity, degradation as causes of environmental stress & conflicts and environmental cooperation
 - ❖ Canadian (Th. Homer-Dixon)
 - ❖ Swiss (ENCOP, Bächler): (ENCOP)
- ❖ **Third Phase:** methodological diversity (1995-?): many directions, little synthesis
 - ❖ GECHS, state failure project,
 - ❖ Swiss project: mitigating syndroms of global change
 - ❖ Collier, Bannon, World Bank studies: abundance as conflict cause
 - ❖ PRIO: Civil War research

4.1. First Research Stage: Policy Agenda Setting: Threat to (inter)national security

- **International security:** Brundtland Report (1987)
 - ❑ New threats: environmental pollution, scarcity & degradation of resources: water, soil and food
 - ❑ Less climate change (evolving issue on policy agenda)
- **US national security:** discourse
 - ❑ New policy focus and allocation of financial resources
 - ❑ New military tasks and missions (during the Clinton Administration) Under Secretary of Defense for ES
- **State-centred:** State and international organizations as key referent and actor to respond!

4.2. Second Research Stage:

Empirical Case Studies: Toronto & Zuerich

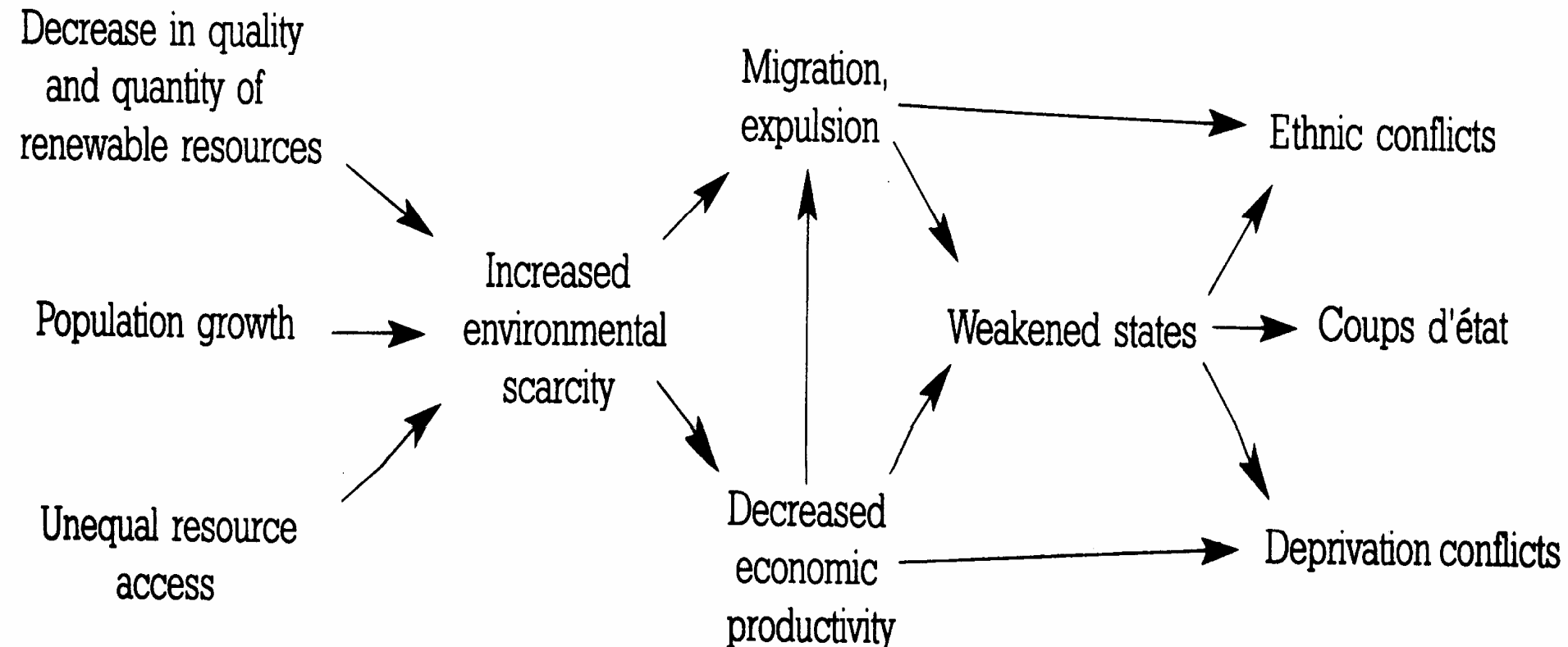
- Toronto group: Homer-Dixon: 3 projects of case studies: linkage between environmental scarcity, stress and conflict (Homer-Dixon 1991, 1994, 1996, 1999, 2000; Homer-Dixon/Blitt 1999).
- Swiss group: Bächler & Spillmann: environmental scarcity & degradation as causes of environmental conflict & of conflict resolution outcomes (Bächler 1990, 1995, 1999a, 1999b, 1999c; Bächler/Spillmann 1996a, 1996b; Bächler/Böge/Klötzli/Libiszewski/Spillmann 1996).
- Inductive & deductive studies: complex interaction among environmental inputs, environmental-societal linkages and extreme outcomes

4.3. Second Research Stage: Homer-Dixon

Sources and Consequences of Environmental Security (1994: 31)

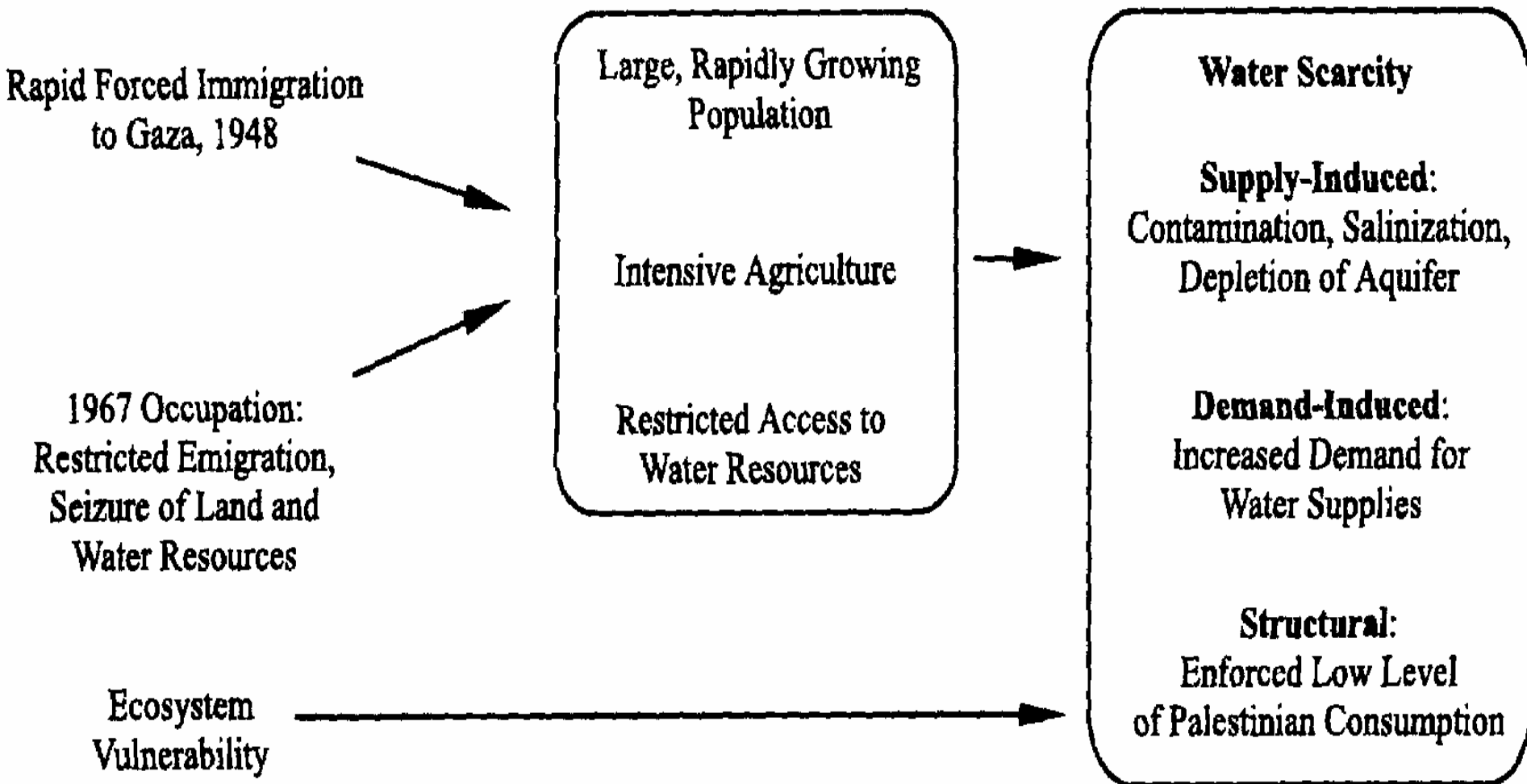
Sources of environmental scarcity

Social Effects



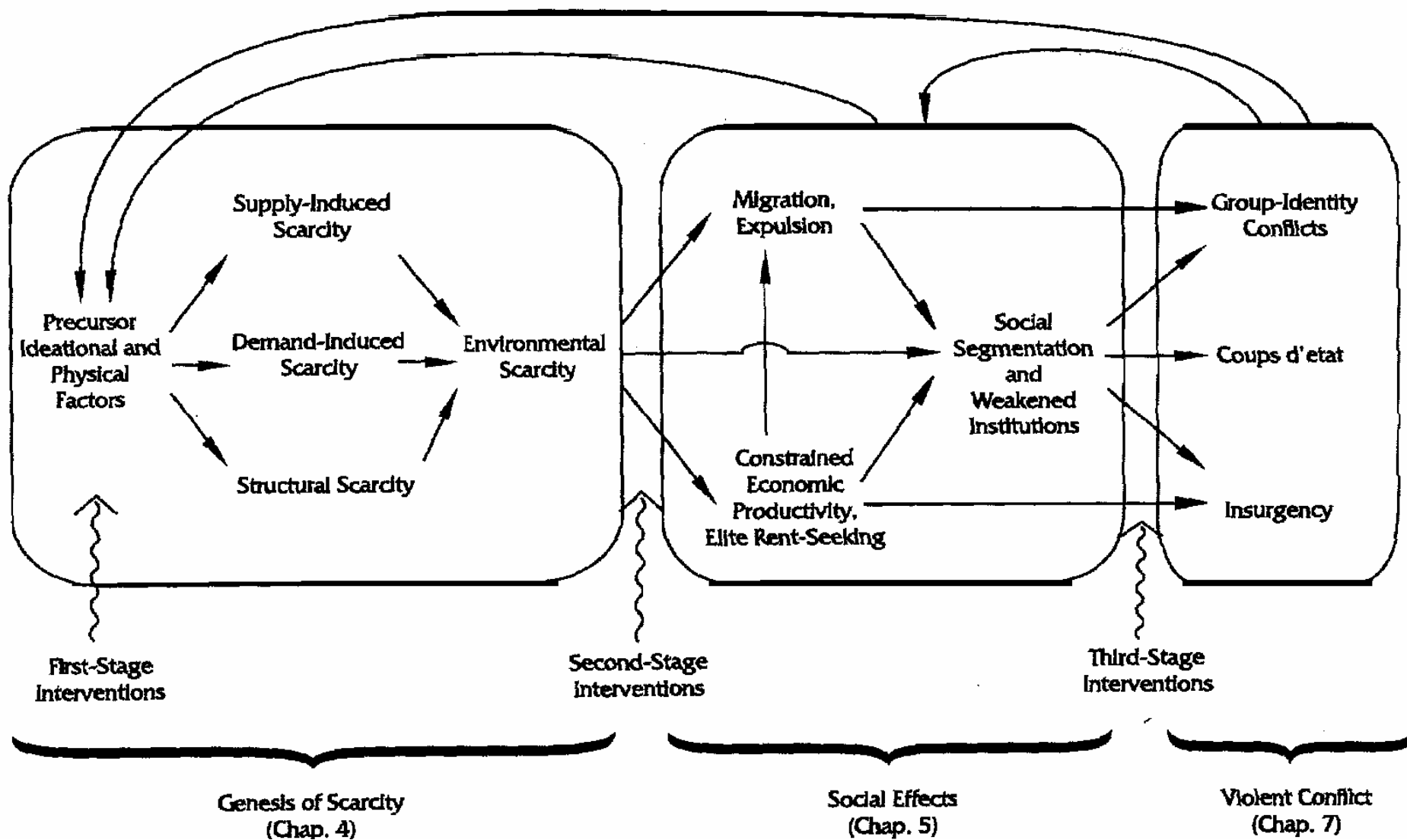
4.4. Second Research Stage: Homer-Dixon

Water Scarcity in Gaza (Kelly/Homer-Dixon 1998: 74)



4.5. Second Research Stage: Homer-Dixon

Core model of causal links environmental scarcity and violence (1999: 134)



4.6. Second Research Stage: ENCOP

- “Environmental conflicts manifest themselves as political, social, economic, ethnic, religious or territorial conflicts over resources or national interests, or any other type of conflict.
- Traditional conflicts *induced by environmental degradation*. Environmental conflicts are characterized by principal importance of degradation in one or more of the following fields:
 - ❑ overuse of renewable resources;
 - ❑ overstrain of environment's sink capacity (pollution);
 - ❑ improvement of the space of living (Bächler 1998: 24)

4.7. Second Research Stage: ENCOP

- ENCOP's analytical framework: analysis of environmental conflict followed four steps:
 - ❑ to describe the environmental situation on the background of human activities;
 - ❑ to deduce the social and economic effects of environmental transformation and degradation;
 - ❑ to analyse the political implications of these socio-economic effects and conflicts arising from them; and
 - ❑ to evaluate approaches to peaceful management and resolution on different levels of analysis.
 - ENCOP concluded that besides resource degradation other contextual factors were decisive for conflicts.
-

4.8. Second Research Stage: ENCOP

Bächler (1998: 24) concluded

- Neither apocalyptic scenarios of env. catastrophes nor alarmist prognoses of world environmental wars tenable.
- Environmentally-caused conflicts escalate across the violence threshold only under certain conditions.
- Human-induced environmental change can be either a contributing or a necessary factor for both the emergence and/or the intensification of violent conflicts.
 - Violent conflicts triggered by environmental disruption are due in part to socio-economic and political developments.
 - Social and political maldevelopment, due in part to degradation of natural resources, is an international peace and security challenge.
- *Development and security dilemmas* are connected to a syndrome of problems which produces environmental conflicts of varying intensity and nature.

4.9. Third Research Stage: 1990s

- 2nd & 3rd phase: open: dependent variable - conflict vs. cooperation.
- Many research projects: some addressed scarcity problems, such as:
 - The **Global Environmental Change and Human Security (GECHS 1999-2009)** project within IHDP: a framework for research cooperation and coordination.
 - **ECOMAN, ECONILE and Environmental Change and Conflict Transformation** in Zürich and Bern continue case study approach, focus on peaceful & cooperative management of renewable resource use in the Horn of Africa, the Nile region
 - Part of Swiss project: '*Research Partnerships for Mitigating Syndromes of Global Change*'.
 - **Scientific Advisory Council on Global Environment Issues of the German government** focuses on the patterned interaction of symptoms of global change with socio-economic processes (WBGU 1996, 1997; Biermann/Petschel-Held/Rohloff 1999).
 - **The Transboundary Freshwater Dispute Database** at the Oregon State University
 - **Global Assessment of Environment and Security (GLASS)** at Kassel University.
 - Others (Peluso/Watts 2001) have analyzed causes and intensity of violent conflicts, but only few have focused on environment and conflict linkages.
- Debate was picked up by global peace research, security studies, environmental and development research communities.
- By geographers (Dalby, Bohle), social anthropologists (Elwert) and hydrologists (Biswas, Bogardi/Castelein) et al.

4.10. Results of Environmental Security Research

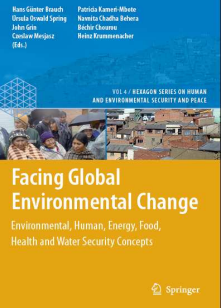
- Recognition that environmental change and resource scarcity and degradation was **less likely to lead to international war** than had been supposed in the first phase.
- While **national security** is important, and there are plausible arguments concerning threats of state collapse and internal conflict caused, triggered or intensified at least in part by environmental factors, the **focus is more on state capacity and the policy dilemmas of social and environmental change**.
- Research focused on **insecurity in many places** looking for policy initiatives that can **mitigate disruptions caused by environmental change**.
- The hazard community identified environmental & social vulnerabilities from natural hazards, storms and droughts. But only few studies discussed linkages between hazards, disasters and conflicts that occur in complex emergencies.

4.5. Critiques of Environmental Security

- **Diehl/Gleditsch (2001)** pointed to limitations & gaps in environmental security including insights without evidence (empirical and theoretical short-comings), and on primary focus on environmental conflicts rather than cooperation.
- **Conca (2001)**: environmental cooperation may have benefits but does not “prevent or mitigate violent conflict” & more conflict management may be needed.
- Environmental scarcity was challenged from Cornucopian perspective (**Deudney 1991; Lomborg 2001**): human inventiveness, trade, substitution of raw materials, price increases encouraging technological change: answers.
- **Resource abundance** is more likely to lead to conflict while scarcity fosters cooperation (World Bank studies).
- **Peluso/Watts (2001)** rejected “automatic, simplistic linkages between ‘increased environmental scarcity’, ‘decreased economic activity’, and ‘migration’ that purportedly ‘weaken states’ and cause ‘conflicts and violence’”.
- They focus on “ways that **resource environments** (tropical forests) & **environmental processes** (deforestation, conservation, or resource amelioration) are constituted by, & constitute, the **political economy of access** to & control over resources.” They claim that both shortage and abundance and processes of environmental rehabilitation and amelioration are often associated with violence.
- **Conca/Dabelko (2002) suggested shifting focus of research & policy debate from ‘ecological security’ or from ‘violent outcomes’ of environmental stress to environmental peacemaking**

4.6. New Areas for Multilateral Cooperation: Environmental Conflict Prevention & Peacemaking

- **UNEP** (2004): “scientific assessments of link between environ-ment & conflict to promote conflict prevention/peace building”
 - **UNEP Div. of Early Warning and Assessment (DEWA)** laun-ched an *Environment and Conflict Prevention* initiative
 - Environmental security issues were put on policy agenda of many international organizations: **ASEAN, NAFTA, OAS, and African Union**
 - **OSCE**: security risks from environmental stress in Central, Ea-ster-n, South-Eastern Europe, Caucasus, Central Asia from pollution, shortage of drinking water, disposal of radioactive waste, reduction of human losses in disasters & natural cata-strophes (**ENVSEC initiative** of OSCE, UNEP, UNDP, NATO)
 - **Madrid Declaration on Environmental Security** (Nov. 2007)
 - **European Union**: two strategies for ‘environmental security’:
 - integrating environmental goals into all sectoral policies (**Cardiff process**),
 - stressing conflict prevention and management in its activities in interna-tional organizations (UN, OSCE) and for specific regions.
 - **Barcelona European Council in March 2002**, a sustainable developm. strategy emphasized of environmental concerns into sectoral policies.
 - **European Council meeting in Thessaloniki** (2003) approved a ‘green strategy’
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4.7. Environmental Security

Concepts and Debates (15 chapters)

- 59 Environmental Security Concepts Revisited During the First Three Phases (1983-2006) by *Simon Dalby, Hans Günter Brauch, Ursula Oswald Spring*
- 60 Environmental Security: Academic and Policy Debates in North America by *Richard A. Matthew and Bryan McDonald*
- 61 The Debate on Ecological Security in Russia, Belarus and Ukraine by *Alexander Sergunin*
- 62 Linking Knowledge Systems for Socio-ecological Security by *P.S. Ramakrishnan*
- 63 Environmental Security in Northeast Asia by *Miranda A. Schreurs*
- 64 Environmental Security in the Arab World by *Mohammad El-Sayed Selim*
- 65 In the Name of Security: In the Name of Peace – Environmental Schizophrenia and the Security Discourse in Israel / Palestine by *David Newman***
- 66 Security and Environment and the Israel-Palestine Conflict by *Robin Twite*
- 67 Conceptualization and Debate on Environmental and Human Security in Palestine by *Mohammed S. Dajani Daoudi***
- 68 Environmental Scarcity, Insecurity and Conflict: The Cases of Uganda, Rwanda, Ethiopia and Burundi by *Mersie Ejigu*
- 69 Environmental Security in Sub-Sahara Africa: Global and Regional Environmental Security Concepts and Debates Revisited by *Sam Moyo*
- 70 The Brazilian Amazon in an Environmental Security and Social Conflict Framework by *Alexander López*
- 71 Politics of Environment in the Caucasus Conflict Zone: From Nationalizing Politics to Conflict Resolution by *Vicken Cheterian*
- 72 Environmental Security in the Asia-Pacific Region: Contrasting Problems, Places, and Prospects by *Jon Barnett*
- 73 Security at the Poles: The Arctic and Antarctic by *Gunhild Hoogensen*



4.8. Texts by David Newman & Mohammed Dajani

65 In the Name of Security: In the Name of Peace – Environmental Schizophrenia and the Security Discourse in Israel/Palestine by *D. Newman*

- *What is the theoretical approach?*
- *What is his key thesis?*
- *How is environmental security conceptualized in this chapter?*
- *What is the empirical focus?*
- *What is the relationship between hard and soft security?*

67 Conceptualization and Debate on Environmental & Human Security in Palestine by *Mohammed S. Dajani Daoudi*

- *What is the empirical focus?*
- *Which security concept is used?*
- *Is there a theoretical approach and if so how may it be described?*

Do both chapters agree or disagree on the importance of the use of the environmental security concept in both Israel & Palestine?

Part B: 5. Proposals for 4th Phase of Research on Environmental Security

- 5.1. Goals for Fourth Phase of ES Research**
 - 5.2. Tasks for 4th Phase of Research on Env. & Security**
 - 5.3. Broaden Research Stakeholders**
 - 5.4. Broaden Empirical Focus on Causes of Global Change**
 - 5.5. Focus on fatal outcomes (disaster, migration, crises, conflict) & efforts for resolution, prevention & avoidance**
 - 5.6. Increase in Human Disasters & Conflicts**
 - 5.7. Broaden Policy Constituency: Climate Change, Disaster & Early Warning & Conflict Prevention Community)**
 - 5.8. From Research to Action: Enhancing Environmental & Human Security: Towards Environmental Conflict Avoidance**
 - 5.9. Mainstreaming: Adaptation/Mitigation; Climate Change/Disaster**
 - 5.10. Env. Conflict Avoidance: Addressing Causes & Fatal Outcomes**
 - 5.11. Human & Environmental Security and Peace Project (HESP)**
 - 6. Oswald/Brauch/Dalby: Linking Anthropocene, HUGE and HESP: Fourth Phase of Environmental Security Research**
-

5.1 Goals for Fourth Phase of ES Research

- 3 chapters by three authors from three disciplines and countries
 - Hans Günter Brauch, political scientist (Germany)
 - Simon Dalby, geographer (Ireland, UK, Canada)
 - Ursula Oswald Spring, social anthropologist, ecologist (Mexico)
- ➔ **Dalby-Brauch-Oswald Spring: ch. 59 (IV)** environmental security concepts revisited during the first three phases (1983-2006)
- ➔ **Oswald Spring-Brauch-Dalby: Linking Anthropocene, HUGE & HESP: 4th phase of environmental security research (99, IV)**
- ➔ **Brauch-Dalby-Oswald Spring: Towards a “political geo-ecology”**
 - bringing the political and security dimension into earth systems science and into geocology (in physical geography)
 - introducing knowledge from the natural sciences (climatology, hydrology, soil science) into the geopolitical discourse (94,V)

5.2. Tasks for a Fourth Phase of Research on Environment & Security (2004)

My own proposal for a **Fourth Phase** of a **Human & Environmental Security and Peace (HESP)** project

1. **Broaden research stakeholders:** Bring together those working on human & environmental security issues with the peace research, development, environmental research communities.
2. **Broaden empirical focus:** on six causes of the Survival Hexagon & interactions (nat. sciences: simulation techniques, modelling).
3. **Focus on extreme, fatal outcomes & interactions:** disaster, migration, crises, conflict & efforts for resolution, prevention & avoidance.
4. **Broaden policy constituency:** climate change, disaster & early warning (disaster & conflict) & conflict prevention community.
5. **Support mainstreaming of policy initiatives:** early warning, adaptation & mitigation & conflict prevention,
6. **Make environmental security** challenges also a **human security** concern and introduce them into the human security discourse (HSN)

**Requires: Multidisciplinary & horizontal cooperation in
governments, ministries, between DGs, often suboptimal**

5.3. Broaden Research Stakeholders: Integrate Human & Environmental Security Concerns into a Peace Research Agenda

Environmental Security

- First phase: (Ullman, Matthew & Myers): make environmental security primarily as a **national security** concern.
- Fourth Phase: make **environmental security** challenges also a **human security** concern.

Human Security

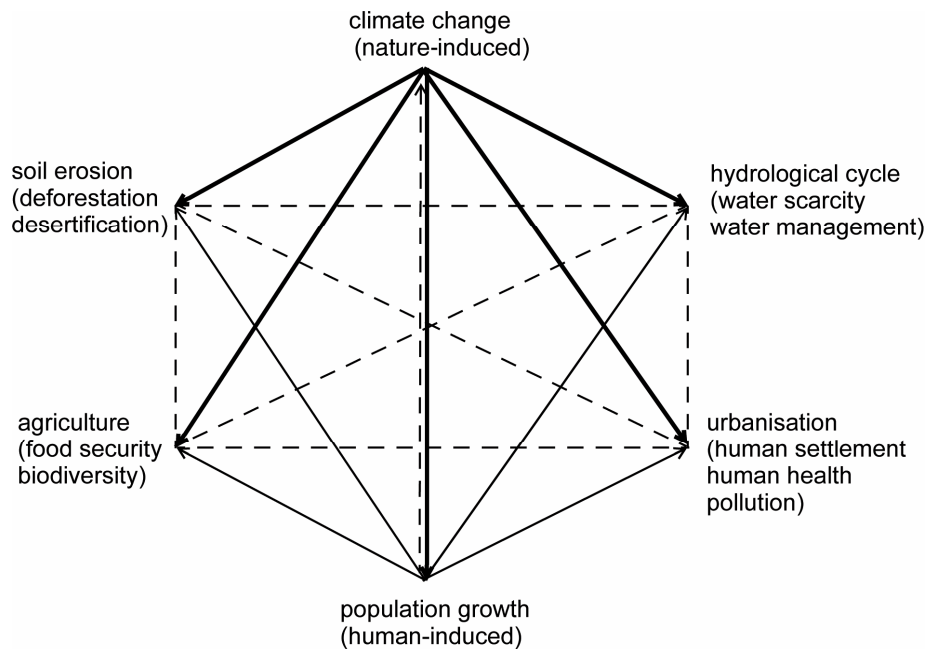
- Environmental security challenges were so far no human security concern (missing on agenda of **Human Security Network**, but also in HSC: **Human Security Now**).
- This changed HSN: Thai (2006) and Greek Presidency (2008)

Peace Research

- Authors from peace research have contributed to both debates and could rather build conceptual bridges than authors with an Hobbesian outlook from Inter(national) Security Studies.
-

5.4. Broaden Empirical Focus on Causes of Global Change: Survival Hexagon & Interactions

Survival Hexagon: 6 factors



- 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 scarcity, soil erosion and desertification and food scarcity and agricultural policy

Six key causes of GEC:

Nature & human-induced

- ❖ **Air:** Global climate change
- ❖ **Soil** degrad., desertificat.
- ❖ **Water** scarcity, hydrologic cycle

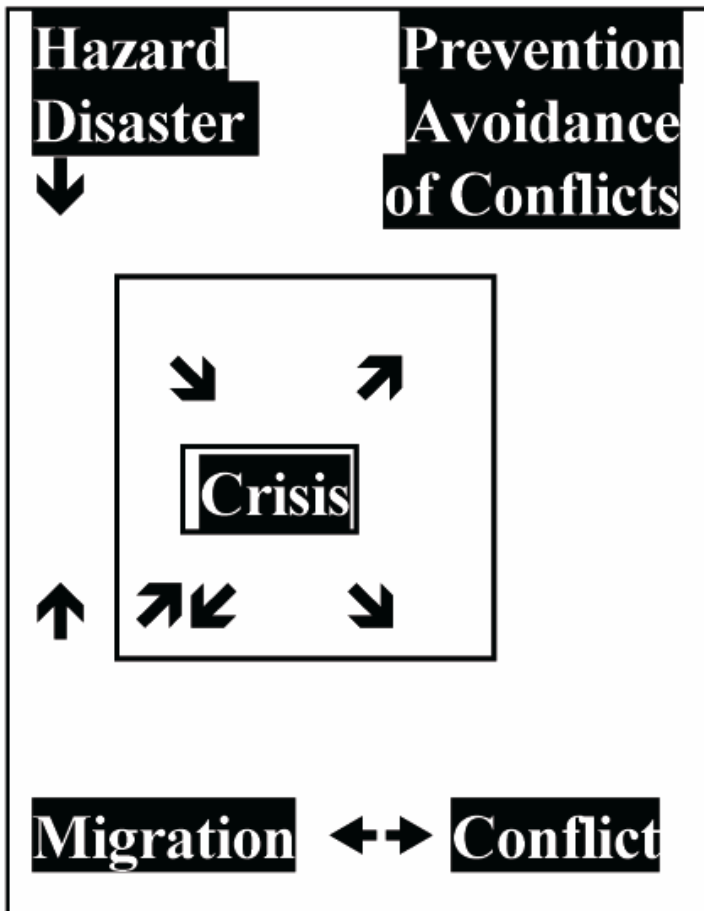
Human-induced factors

- ❖ **Population** growth
- ❖ **Urbanisation** (health, pollution)
- ❖ **Food** (Agriculture

Little knowledge on interaction of these 6 factors on the global, regional, national & local level.

Need for natural science research (modelling, simulation techniq.)

5.5. Focus on societal outcomes & interactions of disaster, migration, crises, conflict & efforts for resolution, prevention & avoidance



Lack of knowledge on linkages among **extreme or fatal outcomes**

- Disasters & disaster-ind. migration
- Famine & environm.-ind. migration
- Conflicts & conflict-induced migration

Lack of knowledge on **societal consequences: crises/conflicts**

- Domestic & internat. crises & conflicts
- Environmentally or war-induced migration as a cause or consequence of crises and conflicts

5.6. Increase in Human Disasters & Conflicts

Will these fatal outcomes of global environmental change (GEC) and climate change (CC) lead to conflicts?

Three Preliminary Working Hypotheses

- **Thesis 1:** Population growth, urbanisation & persistent high poverty will increase the societal vulnerability to hazards and disasters.
 - **Thesis 2:** Extreme weather events will very likely increase environmental vulnerability to hydro-meteorological hazards (droughts, flash floods and storms).
 - **Thesis 3:** Environmental stress and hazards may trigger distress migration and low level conflict potentials in societies and among states (with high vulnerability).
-

5.7. Broaden Policy Constituency: Climate Change, Disaster & Early Warning (disaster & conflict) & Conflict Prevention Community

Four constituencies without scientific & policy interaction

- ❖ **Early Warning communities (global, regional)**
 - of natural hazards and disasters (UNISDR, EWC)
 - of crises and conflicts
- ❖ **Adaptation and Mitigation efforts**
 - Against climate change (IPCC community)
 - Against natural hazards and disasters (UNISDR, GDIN, etc.)
 - 2 conferences in June 2002: by Dutch (Actor specific) & German (research specific) Foreign Ministries
- ❖ **Mainstreaming of these efforts is needed**
 - early warning of hazards, crises & conflicts (IPCC community)
 - Against natural hazards and disasters (UNISDR, GDIN, etc.)
- ❖ **Major Clients: EU-ECHO: funder & UN-OCHA: coordination**

5.8. From Research to Action: Enhancing Environmental & Human Security Towards Environmental Conflict Avoidance

- **Primary Goal:** address fatal outcomes of GEC: hazards and disasters, migration, crises & conflicts that may have been caused, triggered, induced, influenced by: environmental stress and extreme weather events,
- **Enhance Environmental Security:** Address human behaviour that contributes to GEC via climate change, soil degradation, water pollution & scarcity: sustainable strategies
- **Enhance Human Security:** address factors of GEC that challenge survival of individ., families, villages, ethnic groups
- **Avoid Environmentally-induced Conflicts:** address structural or causal factors (of survival hexagon, PRISOR Model): climate policy, combat desertification, cope with water stress.

5.9. Mainstreaming: Adaptation & Mitigation Against Climate Change & Disaster

Advantages of linking early warning: disasters & conflicts

- ❖ Successful early warning of hazards will also mitigate conflicts
- ❖ Successful early warning of conflicts will reduce vulner. to hazards

Need for three-fold mainstreaming of early warning efforts:

- Vertical**: global – regional – national – local, e.g. UNISDR, EU
- Horizontal**: disaster reduction and conflict prevention
 - Technical (**natural disasters**) vs. political (**conflicts**)
 - Impediments: knowledge gap on linkages between **fatal outcomes** of global environmental change and their **societal consequences**
 - **Learning from case studies** both success and failure
- Actors**: Political & scientific community: time- & theory-driven efforts

Who will benefit? Humanitarian organisations: **IFRC-RCS** et al.
and sponsors: **ECHO** (50% of humanitarian aid), **OCHA** et al.

5.10. Environmental Conflict Avoidance: Addressing Causes & Societal Outcomes

- Environmental and human security strategies: address the two values at risk a) **sustainability (environmental security)**; and b) **survival (human security)**;
- Deal with the different referent objects of security:
 - **ecosystem (environmental security)**; and
 - **individual & humankind (human security)**;
- Address different causes of threat, challenge, vulnerability and risk:
 - **humankind (environm. security)**;
 - **nature, state, globalisation (human security)**;
- We need **sustainable development strategies**
 - development, environment policies addressing GEC
- We need **survival strategies**
 - protection & empowerment).

5.11. Human & Environmental Security and Peace Project (HESP)

- **Synthesis of four approaches: goal: develop environmental dimension of human security**
 - a) Environmental security debate (environm. dimension)
 - b) Human security (human being: cause & victim of GEC)
 - c) Grotian approach: multilateral, international law based
 - d) Proactive focus: conflict avoidance (structural factors)
- **AFES-PRESS contributions to 4th Research Phase on Environment and Security Linkages:**
 - HEXAGON Series on Human & Environmental Security and Peace Project (HESP) with Springer (Berlin – NY - London - Tokyo)
 - Environmental and Human Security Handbook for the Anthropocene
(see book launch on 1 April, 15.00-16.30)

6. Linking Anthropocene, HUGE and HESP: 4th Phase of Environmental Security Research

- 98.2. **D:** Earth System Research and the 'Anthropocene'
- 98.3. **O:** Human, Gender & Environmental Security (HUGE)
- 98.4. **B:** Human & Environmental Security & Peace (HESP)
- 98.5. Substantive Issues for the Fourth Research Phase
 - 98.5.1. Extreme Weather Events
 - 98.5.2. Social Systems and Gender Relations
 - 98.5.3. Environmental, Social and Urban Vulnerability
 - 98.5.4. Migration
 - 98.5.5. Complex Emergencies, Crises and Conflicts
 - 98.5.6. Resilience-Building and Political Coping Strategies
- 98.6. Looking Forward: Implementing the Fourth Phase
- 98.7. Anthropocene Ethics and the Fourth Phase

6.1. Political Geoecology for the Anthropocene (Vol. V: Brauch/Dalby/Oswald Spring, 2010)

- **Thesis: Fundamental change in earth history requires a rethinking of the relationship between humankind and nature, including the political realm and international relations, that makes geopolitical approaches in the Hobbesian tradition obsolete.**
 - During Anthropocene our thinking on peace and security must change. Fundamental shift in concept of security that is influenced by human interventions into the earth system.
 - In **Anthropocene**: nature of threat for survival of humankind is changing from 'them' to 'us', to our lifestyle & consumption of fossil energy that has resulted in **major increases of greenhouse gases since 1750**.
 - If 'we' are the threat it is impossible to fight a war against ourselves. To cope with this threat to human well-being, survival and security **a radical change in our thinking on international relations and security is needed**. This new threat is global in nature and does not respect national borders or political systems, nor does it discriminate between the 'good' and 'bad'.
-

6.2. Components of a Political Geoecology

Political geoecology approach combines 4 components:

- A sensitivity for Braudel's three historical times or for three temporal dimensions of events, cycles, structures
- Three features of the notion of 'policy' (field), 'politics' (process) and 'polity' (legal structures, institut. framework):
- Reference to 'geo' specific spatialization that is **delinked from the Hobbesian tradition of notions of 'geopolitics', 'geostrategy' and 'geoeconomics'**;
- Reflecting research on the environment from
 - physical geography (*geoecology*),
 - natural sciences on *earth systems science*,
 - from a wider & holistic *social* and *human ecology* approaches.

6.3. 'Geo' Approaches to the Spatial Effects of GEC

Both the old and the new approaches of geopolitics & related issue areas of **geostrategy**, **geoeconomics**, and **geo-culture** have addressed issues of international politics from a perspective of **political geography** where spatial categories are essential. Since the end of the Cold War, geo-political considerations within geography in particular experienced a renaissance with the emergence of new scholarly journals.

Several phases of geopolitical thinking can be distinguished:

- old primarily German and Swedish school of *Geopolitik* and the British and American approaches to *geopolitics* and *geostrategy*,
- recent revival of geopolitics in the UK and the US, of **géopolitique in France** and its impact on the renewed thinking on **Geopolitica in Italy** & Spain, as well as in Cuba, Brazil, Mexico, Argentina, and other countries in Latin America in the 1990's, of *Geopolitik* in Germany, and in Israel
- postmodern approaches to critical geopolitics in the tradition of the deconstructivist schools and other new approaches partly provoked as a geopolitical response to the globalization challenge.**

Hobbesian obsession of geopolitics makes it obsolete for Anthropocene

6.4. Bringing the Environment into the Geopolitical Discourse

- Debate on GEC & climate change triggered new proposals for a spatialization of environmental issues: *ecological geopolitics & political geoecology*.
- While **Dalby** approached *eco-geopolitics* from critical geopolitics to challenge the framing of environmental matters in terms of national security, **Brauch** argued that a *political geoecology* is needed that combines the regional implications of GEC and its potential outcomes: disasters, environmentally-induced migration, crises, and conflicts.
- New geopolitical context of the Anthropocene requires a **forward looking, anticipatory understanding of security**, not the old one that emphasizes monitoring borders, providing insurance or cleaning up after a disaster.
- Both **geoecology & Anthropocene** suggest that old assumptions of environment determining human fate are no longer tenable, because carbon fuel use has already changed environmental conditions. **Old geopolitics diverts attention from new circumstances, refers to an inappropriate geography to suggest inevitability of conflict when large scale cooperation is needed to deal with the changes that are in motion due to use of carbon fuels & numerous other changes.**

6.5. Political Geoecology vs. Traditional Geopolitics

- **Political geoecology** suggests a more explicit focus on **ecology** and also a clear indication that **human choices** are shaping the world of the future.
- Recognition of **significance of our actions** as the debate about climate change suggests to people the profound **choices our predecessors & we** made in **shaping the future condition of the biosphere**.
- The most important theme for all concerned about security in the 21st century, the **inapplicability of traditional geopolitical notions of an external environment for discussions of human security**.

6.6. New Spatial Approaches in the Anthropocene: Geoecology & Earth Systems Analysis or Science

Combining Human, Social, and Geoecology:

- Analysis of security impacts of GEC in the Anthropocene requires knowledge produced by **geoecology in physical geography, earth system science and by social and human ecology approaches**.
- **A proactive security policy in the Anthropocene** must be knowledge-based, and requires a **different knowledge** from what intelligence agencies offer policy-makers, and traditional security experts trained in the Hobbesian tradition of security studies can offer.
- **A new security policy in and for the Anthropocene** necessitates for the new security dangers posed by GEC a **new policy framework** that integrates **experience of past nature-human interactions** as well as the **scenario- and model-based projections of the probable societal outcomes of future trends**.
- New security policy requires a **new peace policy** in the 21st century that combines **‘sustainable development’ with ‘sustainable peace’**.

6.7. From Ecological Geopolitics to Political Geoecology

- **Both discourses on spatialization of IR and security & on the nature-human interactions have 2 major deficits:**
 - ❑ the discourse on **geopolitics, geostrategy and geoeconomics in the social sciences has been dominated by the Hobbesian pessimism** and ignoring environmental concerns and issues of **global environmental change** as dangers for security and survival;
 - ❑ the newly emerging research in the natural sciences on Lovelock's Gaia hypothesis, geoecology in geography, and *Earth Systems Analysis* (ESA) or **Earth Systems Science (ESS)** has ignored the political dimension of transforming this new systemic knowledge into proactive policy initiatives
- **Bringing the Environment into the Security Discourse**
- **Introducing the Political Dimension into the Research on Nature-Human Interactions in ESS.**

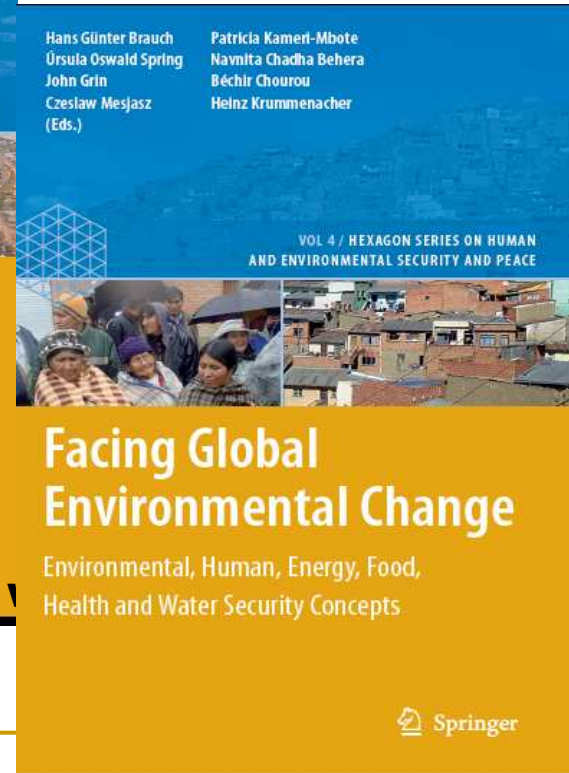
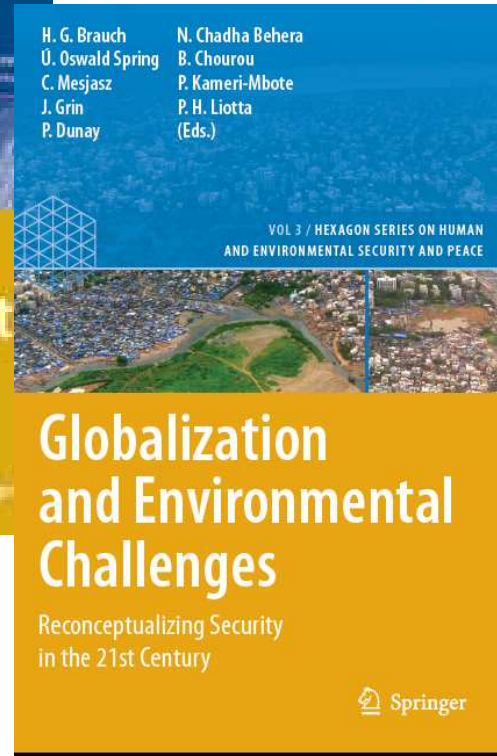
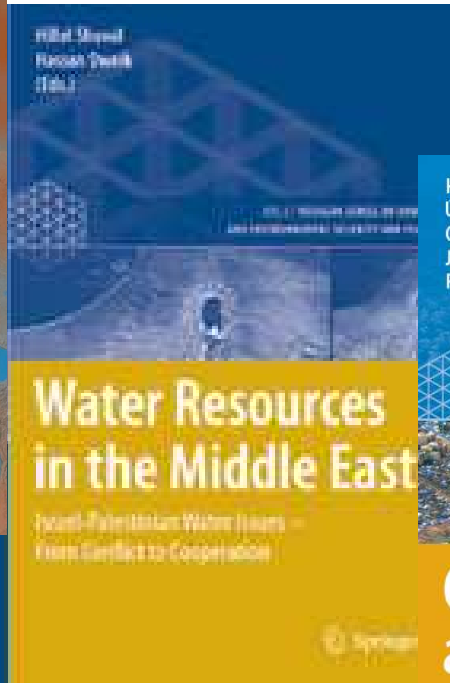
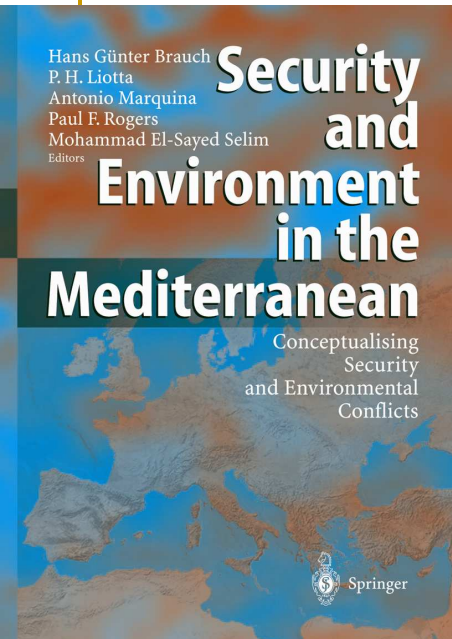
6.8. Towards an Integrative Concept of a Political Geoecology

- *Political geoecology* should, by bringing the environment into spatializations of international politics and security & by introducing a political and economic dimension into the discourses on geoecology and earth systems analyses (ESA) or science (ESS), overcome these dangers.
- **Thus, political geoecology combines three components:**
 - ‘**political**’ dimension of the transformation of complex knowledge into innovative and proactive action;
 - spatial of ‘**geo**’ contextualization of this new knowledge and action;
 - **ecological focus on the human-nature interface** during Anthropocene that combines approaches of geo-, social, human and political ecology.
- **A political geoecology will be used in a wider sense than the narrow approach of geoecologists in phys. geography.**

6.9. Political Geoecology: New Field of Research and Education

- Political geoecology focuses on linkages or transmitters of **translating knowledge into action**. It aims at a conceptual integration of 2 research approaches in the social and natural sciences that requires an **integrative approach to address the biophysical & societal causes & impacts of nature-human interaction in the Anthropocene**.
- The most important point of all is the simple one implicit in the use of the term **Anthropocene**; the **context for thinking about security has been changed by our actions**.
- **Knowledge must be recontextualized if it is to be useful for policy, research, education & political action.**

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