The scientists' peace initiative in Hamburg and the big Conference "Ways out of the arms race" 1986

Hartwig Spitzer (University Hamburg)

1. How I got into it
2. Scientists' peace initiatives in Germany in the 1980s
3. The drive for a major international conference
4. The conference setting 1986
5. Major insights
6. The Hamburg disarmament proposals
7. Looking back from today

18 December 2024

1. How I got into it

- I was **socialised** as a particle physicist and I loved it.
- I got **politicised** when I became aware of the nuclear arms race and its effects
- My **role models**
  - *Victor Weisskopf at CERN in the 1960s*
  - *Wolfgang Panofsky at SLAC in the 1970s*
  - *Carl Friedrich von eizsäcker in the 1980s*
- **Who questioned my belief in** the stability of deterrence by **mutually assured destruction**(MAD):

  → Students from U Hamburg who confronted me with an article on EXTERMINISM (E.P. Thompson)

  „The threat of exterminating the other side is morally untenable and it lacks assured stability.“

  → many near misses, Cuba crisis etc

2. Scientists' peace initiatives in Germany in the 1980s

- **Late 1970s** **Soviet Union deployed SS20 mobile missiles** with flight range covering all of Europe.
- **Dec. 1979** **NATO Two-track decision**
  - →*Deployment of nuclear-tipped Pershing 2 missiles (1983) and nuclear-tipped cruise missiles in Germany (1986) and elsewhere in Europe.*
  - →*1981-1983 huge peace demonstrations in Germany*
- **1983** Formation of **German Scientists' Peace Initiative** 'Responsibility for Peace'
- **1983 -85** Three national **conferences** (Mainz, Göttingen, Hamburg)
- **1983** onwards **Scientists from Hamburg** universities and DESY get active
  - → appeals
  - → Seminars
  - → Establishment of a registered organisation

3. The drive for a major international conference

1985 German scientists' peace committe plans a major international conference in Hamburg

- **Organizing Committee** from Western and Central Europe
  incl. GDR, Poland, Hungary, Switzerland: Jack Steinberger
- **Local support**:
  -President U. Hamburg
  -Hamburg Senator for Science and Research
- **International partners**
  USA ***Union of Concerned Scientists*** founded 1969 by Henry Kendall (Nobel prize winner) Over 100 000 supporting members
  USSR ***Soviet Scientists Committee*** for the Defence of Peace against Nuclear Threat
  A small group of higly educated weapon and space experts from the Academy of Sciences with direct access to General Secretary M. Gorbatchev: e.g. Y. Velikhov, R. Sagdeev

Roald Sagdeev: a member of the Soviet Scientists Commitee

- Roald Sagdeev was one of the Nobel laureate **Lev Landau's few students**.
- In the university dormitory **he lived next to Mikhail Gorbachev,**

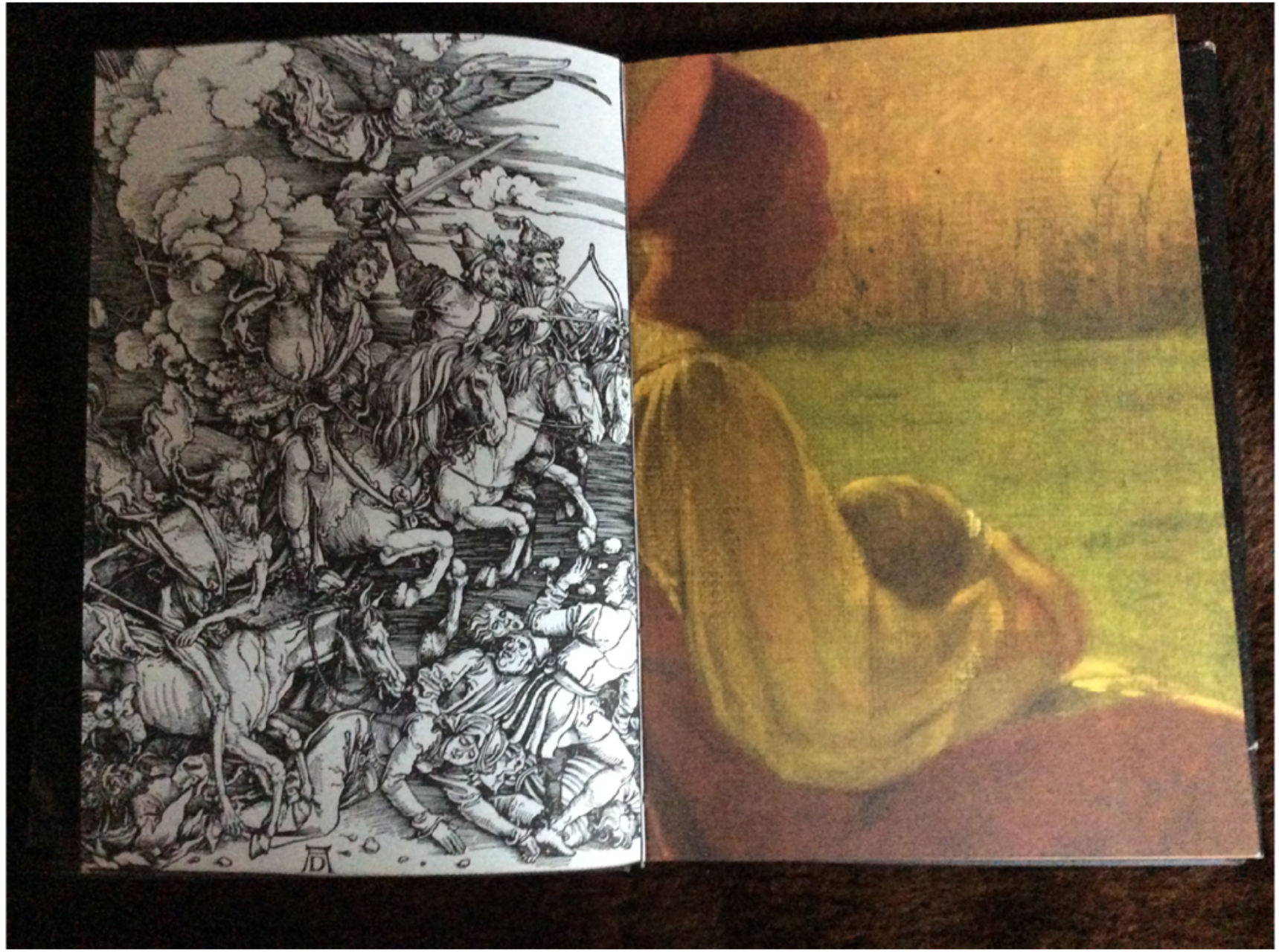
  a law student, and **Raisa Gorbacheva**, a sociology student.

- In 1983 the Breshnev era ended. Sagdeev participated in the work of a **think tank with Gorbachev as the head**, which was **mandated to find scientific justifications for nuclear disarmament.**
- He worked until 1991 as an **advisor on the issues related to civil and military space** problems for Mikhail Gorbachev and Eduard Shevardnadze
- He was awarded the title of the Hero of Socialist Labour for his role in the **international research** program of the **Halley Comet** in 1986.

source Wikipedia

Example: A book on nuclear winter from the Committee:

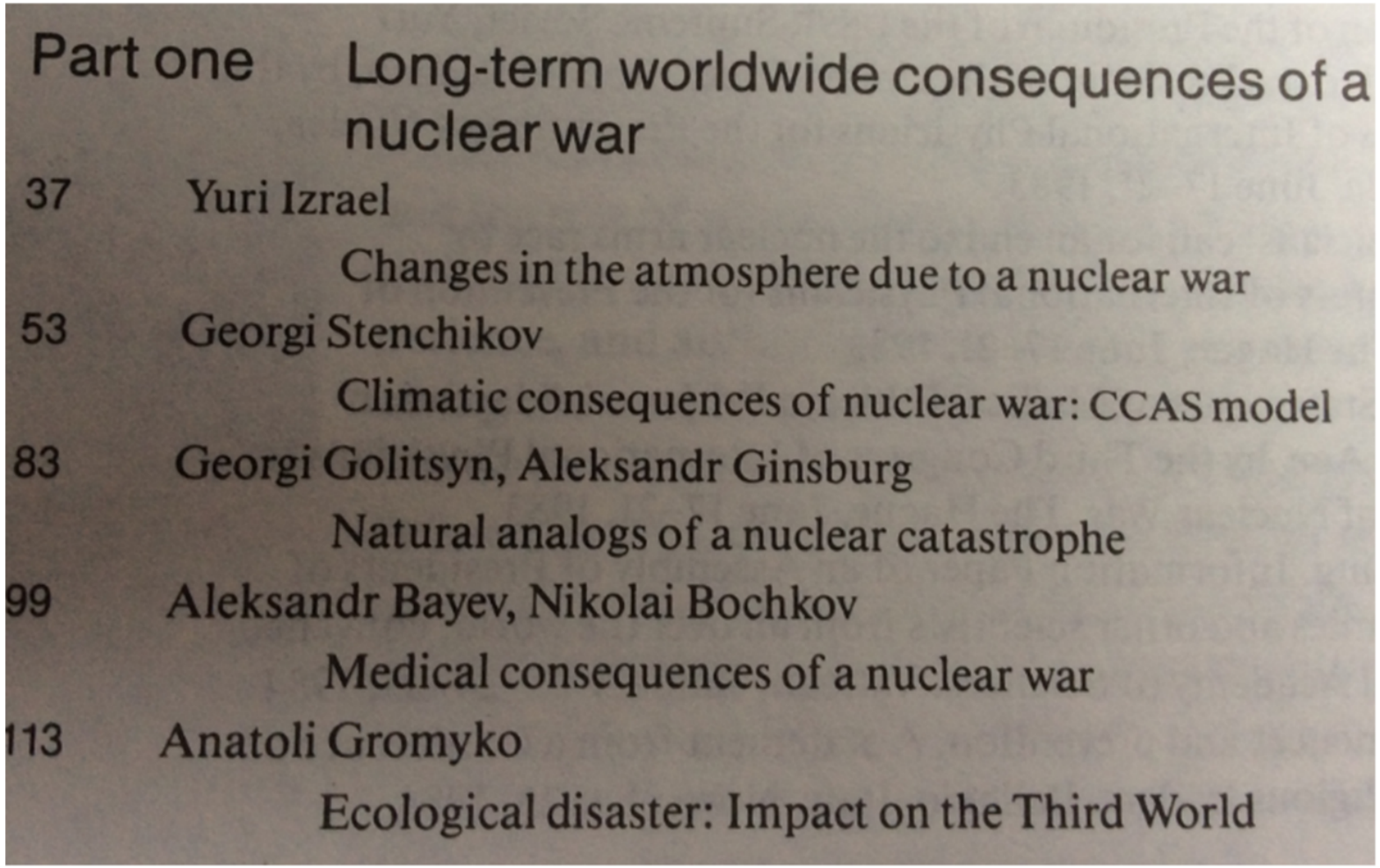
Combining high artistic and scientific standards



Albrecht Dürer Apocalyptic Horsemen

Alexei Venetsianov The harvest

Example: A book from the committee



Part one Long-term worldwide consequences of a nuclear war

What did we know and believe when planning the conference

1. Arms control is possible between states

- *If there is military tension and threat*
- *If all sides profit from threat control*
- *If the control regimes can be reliably verified* → *'trust but verify'*
- *If states cooperate in enabling verification (e.g., onsite inspections)*
- *If states have the science and technology for reliable verification*

→That is where scientists come in with open research,

e.g., seismic detection

2. The East-West arms race had reached a critical dangerous phase

- **Quantity** of conventional, chemical and nuclear weapons
  → danger of surprise attacks and large offensives with conventional weapons
- **Qualitative upgrades** (binary chemical weapons, fuel air explosives etc.)

4. The conference setting 1986

Duration Fri 19.00 - Sun 14.00 14-16 November

Venue: Main university auditorrium

Participation: - 3000 general public

- 250 scientists from abroad

Format: - Plenary talks

- 26 working groups
- satellite link: **Online discussion** with experts from Washington and Hamburg

→ *Tansmitted to 400 local meetings of UCS members in the US*

Themes: - State of the arms race
- Arms control steps and verification technology
- Stability questions (missile defence, non-offensive force structures)

Prominent speakers: *- Bruno Kreisky, Austria, - Richard Garwin, USA,*
- Joseph Rotblat, UK – Valentin Falin, former USSR Ambassador

5. Major insights

1. Understanding the arms race

Paul Parin (psychoanalyst and ethnologist)

- *The arms race can never be won*
- *The arms race is sustained by a sense of national insecurity*
- *Enemy pictures serve (and are magnified) in order to overcome insecurity feelings.*

Kosta Tsipis (physicist, MIT)

- *Deterrence cannot solve a conflict*
- *The nuclear arms race is driven by military-scientific constituencies*
- *Only the military would lose by giving it up*

PS true still today?? – Nuclear weapons as **symbol of national power**

- never ending **race between weapon and weapon defence**/anti weapons
- **new military technologies are science driven**

→ never ending misuse of science results

Major insights cont.

2. East West dialogue

Bruno Kreisky (*former chancellor, Austria*)

- *Scientists have to teach politicians (about nuclear weapons)*
- *The iron curtain is much more transparent today (1986) .. than before.*
- *'We have the singular chance to start a new period of global detente.*'
- **Valentin Falin** (*former USSR Ambassador in Bonn)*

  He met Reagan and Gorbachev in Rejkjavik 1985
- *Nuclear war will have no victors*
- *'Lets aim for abolition of all nukes in ten years.*'
- *The Soviet leadership is open to reductions of nuclear, chemical and conventional weapons.*

6. The Hamburg disarmament proposals

Signed by scientists from 25 states worldwide incl. 9 Nobel laureates:

incl. Abdus Salam, Jack Steinberger, Linus Pauling

- A **comprehesive nuclear test ban** can be adequately verified
- **Deep cuts of nuclear strategic** weapons are feasible.
- Stop production of **weapons-grade nuclear material**
- Ban **space weapons**
- Complete ban of **chemical weapons**
- Deep cuts of **conventional weapons**

  and conversion to **non-offensive force structures**

Which effects had the conference and the Hamburg disarmament proposals?

- *Little in NATO states*
- *More so in Moscow*

1. **The advice from members of the Soviet Peace Committee**

   helped pave the way to the

   - INF Treaty 1987
   - CFE Treaty 1990
   - Open Skies Treaty 1992

2. **Joint verification experiments of Soviet and US scientists**

   had symbolic and practical benefits.

   - Seismic test stations at nuclear test sites in Nevada and Semipalatinsk
   - Radiation monitoring close to soviet warships in the Black Sea

→ *Scientists can contribute through open R&D to arms control*

7. Looking back from today

The scientists' peace movement had its climax in the 1980s

Movements come and go

- **A movement will bear lasting fruit**

  a) if some of the activists

  - *professionalise*
  - *infiltrate institutions*

  b) If the ideas and objectives become part of the political and societal main stream.

- **Did we succeed?**

  a) partially: e.g. in Germany

  - 3 professorships for Science&Peace Resarch/arms control
  - 1professional association FONAS ca. 100 members
  - 1 high-quality quarterly journal for the general public:

Science&Peace (Wissenschaft und Frieden) -> good but should be more

  b) Not really: Little or no chances for stopping arms races worldwide

But: Some track-two diplomacy contacts with Russia on security issues continue.