# Higher education and ESD in Central Europe: comparative study



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MEZIOBOROVA SIT UDRŽITELNÉHO ROZVOJE OP VK CZ.1.07/2.4.00/17.0130 Jana Dlouhá Andrew Barton Charles University Environment Centre Prague





## Still (?) divided World



Central and Eastern Europe (CEE)





# Compared states - Central Europe

Poland Czech Republic Slovak Republic Hungary Slovenia Austria Germany



Central Europe according to <u>The World</u> <u>Factbook</u> (2009)[1]Encyclopedia Britannica and <u>Brockhaus</u> <u>Enzyklopädie</u> (1998). Source: Wikipedia

# HE system in CEE before 1989

- Hierarchical structure
  - Supervision by Communist Party (CP)
  - Teachers CP members
- Ideological tool
  - Marxism = cross-cutting theme, basis for interdisciplinarity in social science & beyond
- Teacher education: high importance
  - Separate faculties & system of in-service



# Science in CEE before 1989

- Central planning & Western system:
  - Technology leading force in economy
- Central planning X Western system:
  - CEE: linear technical development
  - Western: innovation
- CEE science
  - Separate from HE institutions, personel
  - Fragmented: training, basic X applied research, development...



## CEE policy before 1989 - envi & SD

- Planned economy
  - Resource intensive, inefficient
  - Mass production, no envi care
- Environmental degradation
  - Air, water, soil, hazardous waste,..
  - Correlation with health problems
- Environment -> civic movement
  - Czech R., Poland, Hungary, Slovakia, ...
- State response censorship on envi data





# HE in CEE: 3 periods of transition

### First period (1990-1993):

- Liberalisation and decentralisation processes
  - Academic self-governance
  - Academic freedoms
- De-politicisation (X ideological ballast)
- Building of democratic structures
- Re-connection with research



Autonomy: prerequisite "to restore the university in CEE to its former vitality"

## Second period (1994-1999)

Challenges of systemic transition:

- Growing numbers of students
- Lack of financial resources
- New private higher education providers
- Quality-issue turn:
  - demand for accountability, and
  - well-defined academic performance

"Liberal absolutism" replaced with civic and market accountability



# Bologna process

Bologna declaration - 29 Eur. countries, 1999

- proposed European Higher Education Area
- adopted system of easily interpretable and comparable degrees
- three-cycle framework of qualifications

Bologna process: The Lisbon Recognition Convention, 1999 - degrees and periods of study must be recognised (ratified by all 47 member states of Council of Europe, 2012)



## Lisbon process

EU challenges from 1990s

- globalised economy and interdependence
- technological revolution Internet & ICT
  2000 European Council goals (Lisbon strategy):
- 'the most competitive and dynamic knowledge-based economy by 2010'
- 'sustainable growth with more and better jobs and greater social cohesion'

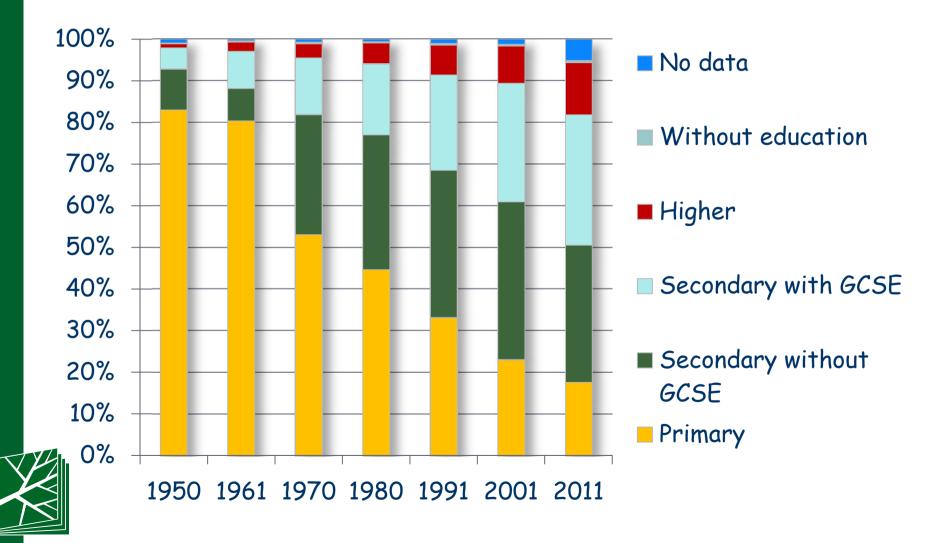


## Third period (1999 till now)

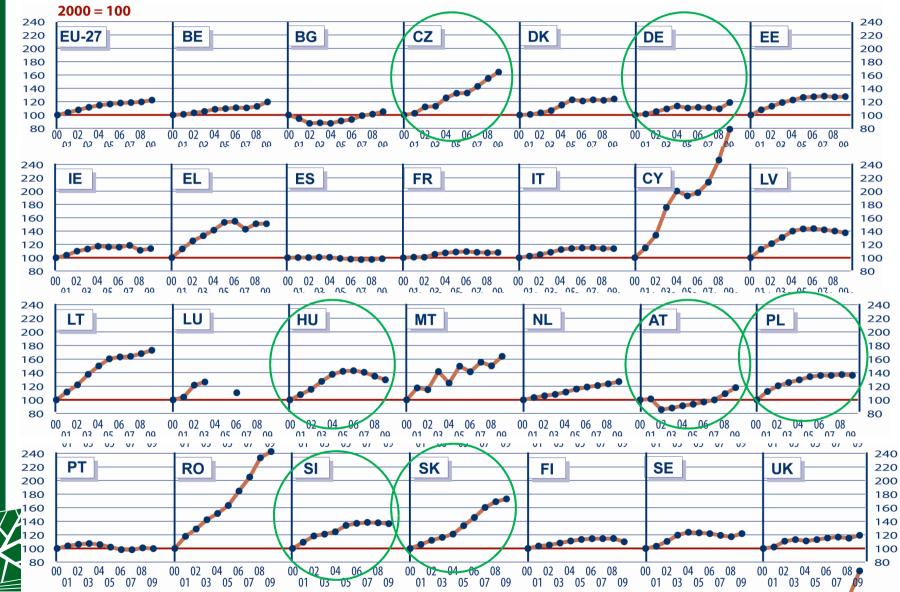
HE - stakeholder in the "knowledge society" Education - driving force for economy ... for political & cultural renewal **Emerging pragmatism - competitiveness** Change in degree structure and quality assurance - comparability through EU CE still special case education systems X needs of a market economy political turbulence - changing rules of the game



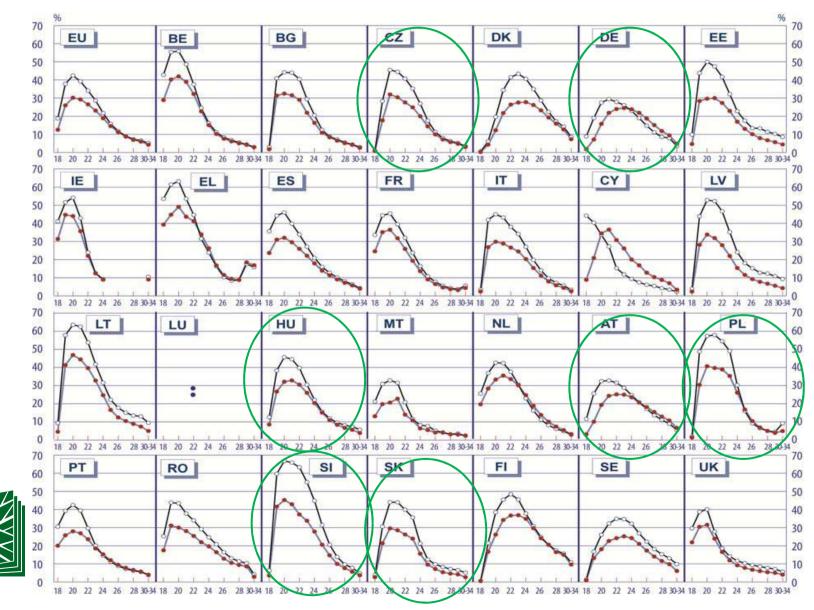
### Population according reached level of education, Czech Republic (Source: <u>Czech Statistic Office</u>)



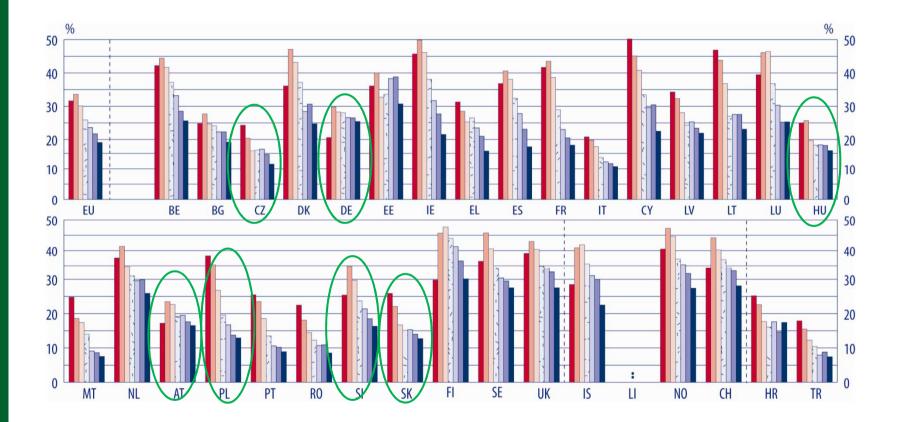
### **Index of Tertiary Education Students** (ISCED 5 and 6), trends, 2000-2009



## Participation rates in tertiary education (ISCED 5 and 6)

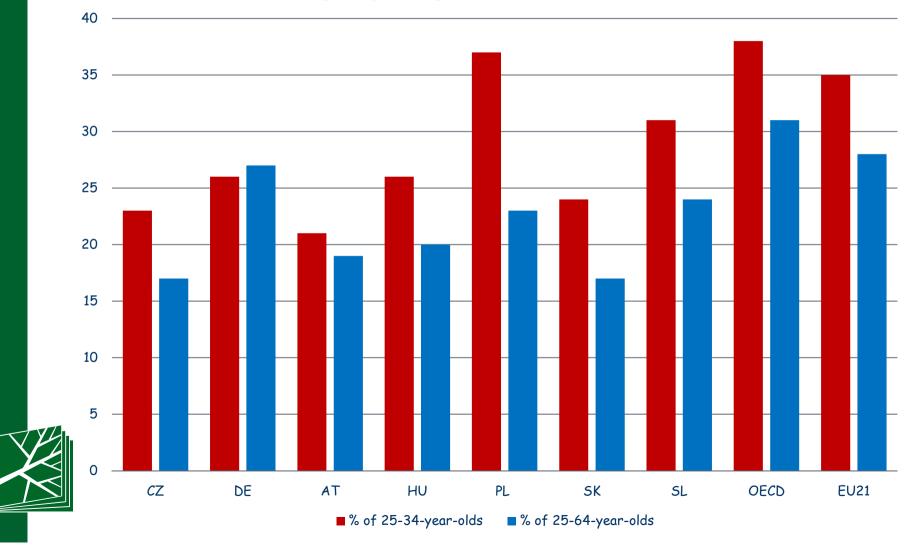


#### Percentage of the population with tertiary education qualifications (ISCED 5 and 6) in the population aged 24-64, by age group, 2010

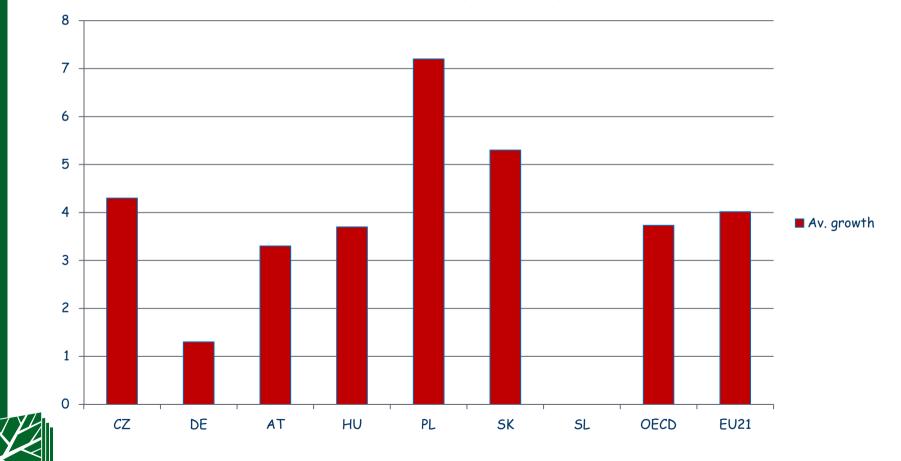


24-29 years, 30-34 years, 35-39 years, 40-44 years, 45-49 years, 50-54 years, 55-64 years Source: Eurostat, Labour Force Survey (data extracted July 2011).

### % of population that has attained tertiary education – total tertiary by age group (OECD, 2010)



### Average % growth in educational attainment of 25-64-year-olds 2000-2010 (OECD)



# ESD - progressive trends

### ESD as political concept:

- Brundtland Report 1987 UN SD concept
- Chapter 36 of Agenda 21, "Promoting Education, Public Awareness, and Training."
- WSSD 2002 integrate SD in education
- UN Decade of ESD 2005 to 2014 -collaboration among stakeholders in ESD
- UNECE Strategy for ESD 2005 & Framework for Implementation

2012 Rio+20: <u>Peoples' Sustainability Treaty on Higher</u> Education Towards Sustainable Development (PST)

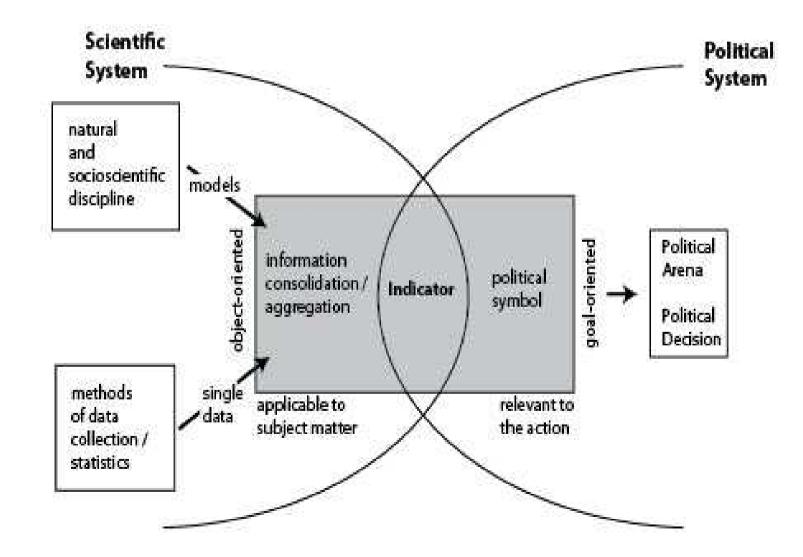


# HEIs sustainability transformation general principles (PST, 2012)

Transformation of knowledge structures holistic: cut across the traditional knowledge disciplines, theoretical and methodological mainstay; engage with communities of practice t. of lifestyles & professional competences Deep changes inter- and trans- disciplinary learning and action redefining the notion of quality higher education ... "Third role" of universities: social involvement partnerships with stakeholders



## Science and policy interface Zieschank (2002), AdomBent, (2012)



# ESD = opportunity for HEIs

"Environmental protection" → transition to Sustainable Development Systemic innovation:

- holistic & interdisciplinary
  - SD = framework
- future visioning
  - anticipatory
- new partnerships (outreach)



## ESD correlates with democracy

Environmental = value based

Sustainable development - democratic dialogue: transdisciplinarity, outreach,...

Sub-regions EU/West and EE&CCA difference: 'participation in democratic decision-making' Rated the lowest in the EE&CCA region and among the highest in the EU/West



- (National Implementation Reports to UNECE Strategy for ESD, 2010)

# Challenges

In general: "...a lack of simplest principles of ESD among university teachers."

Learning from Each Other:

Second Evaluation Report on UNECE ESD Strategy

- Formalism, combination of old and new approaches without deep change
- Slovakia 2006 the National ESD Action Plan: ambitious HE goals - not in practice

Initiatives based on leadership



# Good ESD practice in Germany

- National Plan of Action 2004: 4 strategic goals; refining of goals NPA 2011-2014 permanently embed the concept of SD throughout all education sectors
- German national ESD declarations, e.g. Re-Thinking Academia 2004, Universities for Sustainable Development 2010, Science for Sustainability: The Need for a Successful Breakthrough 2012



# Good practice in Germany cont.

- 4 German RCEs with universities: e.g. Hamburg, Munich, Oldenburger Munsterland (University of Vechta)
- 21 signatories of Principles for Responsible Management Education (PRME)
- 6 signatories of Higher Education Sustainability Initiative for Rio+20
- Leuphana University of Lüneburg: green campus, SD curriculum, COPERNICUS



# Good ESD practice in Austria

- Sustainable universities initiative 1999: encourage greater institutionalisation of ESD processes, national award
- Austrian Strategy for ESD 2008
- 2 Austrian RCEs: Vienna, Graz-Styria
- 7 members of COPERNICUS Alliance
- University of Natural Resources and Life Sciences – green campus, SUSTAINICUM



# Good ESD practice in Slovenia

- Highly developed compared to other postcommunist countries
- "Green Growth Declaration" 2009 signed by Slovenia & 31 OECD: green investment and sustainable management of natural resources - relevant to the education sector, especially HE, by increasing familiarity with SD concepts
- Higher Education Sustainability Initiative for Rio+20 signed by 4 Slovene HEIs



# Good ESD practice in the Czech Republic

- Strategy for ESD 2008-2015: support for accreditation of interdisciplinary study programs, student mobility between programs & faculties, cooperative networks in education and research
- Action Plan 2010-2011
- Working Group for ESD within the Government Council for SD
- Networks: VCSE, COPERNICUS, LENSUS, MOSUR

# ESD in the Slovak Republic

- Action plan for the implementation of an Environmental Schooling & Education Plan at All School Levels in SK and within the Lifelong Learning System, approved 2006
- Ambitious goals not fulfilled due to weak political and financial support from government
- Nationwide HE debate on ESD strategy led to new environmental studies courses accredited, but no holistic approach



Few outreach activities

# ESD in Hungary

- National Sustainable Development Strategy 2007: "*Themes and values of sustainability must be presented more prominently in the contents and forms of education*"
- Emphasis on environmental education
- Summer school programs on green economy, sustainable human development



# ESD practice in Poland

- Emphasis on socio-economic issues; ongoing debate over SD definition
- Studies in "environmental protection", but no SD courses; few green campus facilities
- Polish National Strategy for Environmental Education University of Warsaw: informal WG on DESD; Warsaw & Silesia lectures on selected SD issues as interdisciplinary course option; UMCS Biology Dept - SD Educator 45hr interdisciplinary course



# Opportunities for developing ESD

- Greater networking & stronger alliances: mentoring of candidate RCEs in CEE, European RCE network
- Open Education Resources (OER) online sharing of experience via SD case studies & good practice, e.g. SCULPT proposal through EC's Lifelong Learning Programme

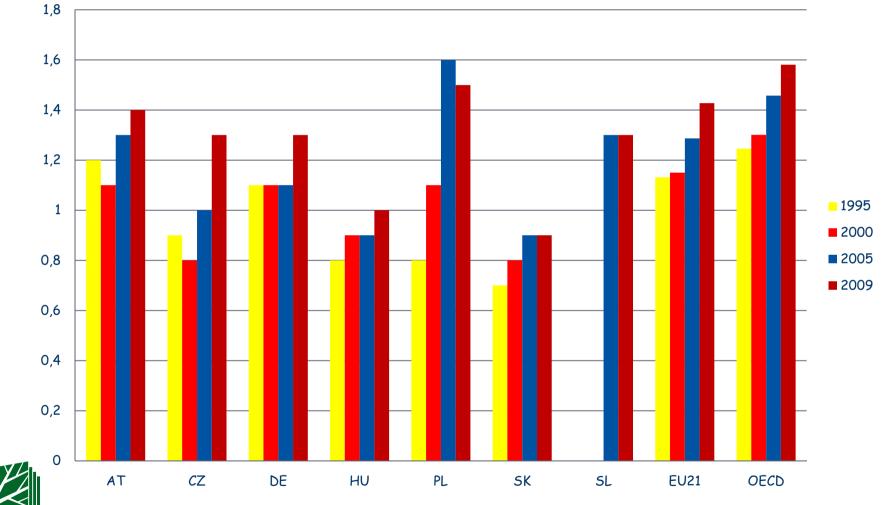


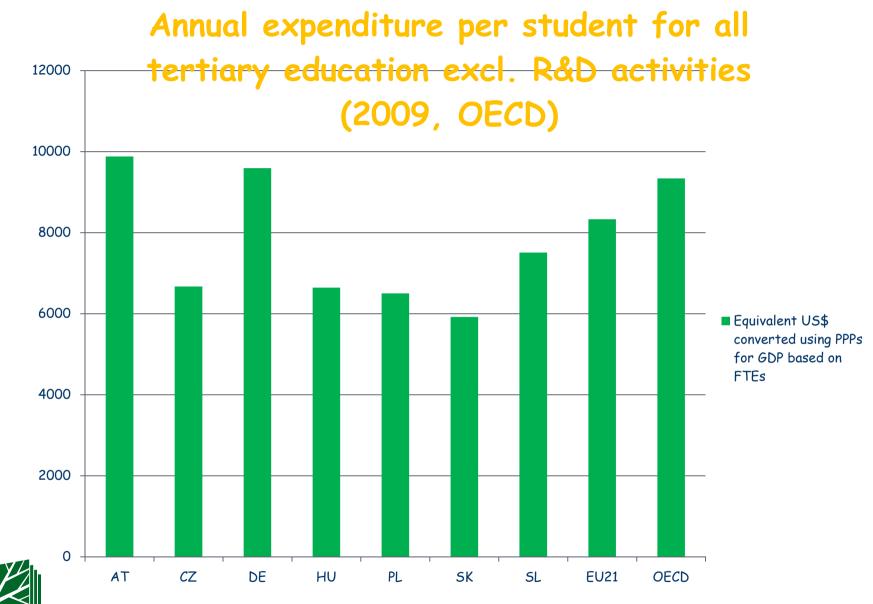
# ESD correlation with economy

- Slovenia case: highly developed compared to other CEE countries
- In 2009 Slovenia & 31 OECD: the "Green Growth Declaration".
- green investment and sustainable management of natural resources
- relevant to the education sector, especially higher education

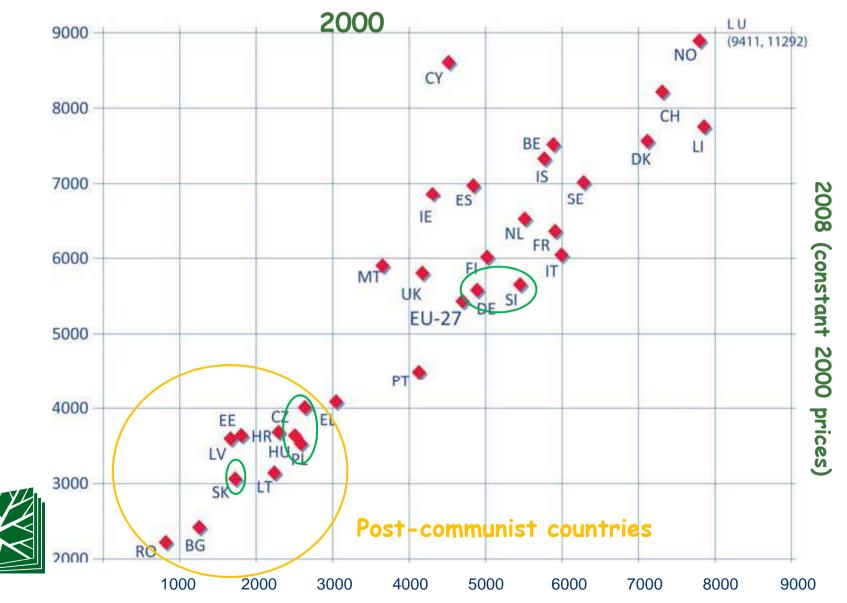


Expenditure on tertiary educational institutions as a % of GDP





## Annual expenditure on ed.institutions (ISCED 0-6) by pupil/student



# Europe 2020 strategy

EU growth priorities:

<u>smart</u>, more effective investments in education, research and innovation;

- 3% of the EU's GDP to be invested in R&D
- at least 40% of 30-34-year-olds completing HE

<u>sustainable</u>, decisive move towards a lowcarbon economy;

<u>inclusive</u>, strong emphasis on job creation and poverty reduction



# Thank you

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