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Darzentas, Jenny and Darzentas, John

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Accelerating learning and adaptation at organizational and societal scales: really adopting Design for All

Jenny S. Darzentas*, Helen Petrie** and John Darzentas*

University of the Aegean, Greece*

University of York, UK**



Design for All ...low uptake

Could a systemic perspective:

- help to understand why?
- make clearer how to increase uptake?

If so, then, could this be a means

- to accelerate the learning and adaptation of the organizations that are tasked with adopting and implementing Design for All?
- To encourage more global and proactive adoption by societal elements in general?

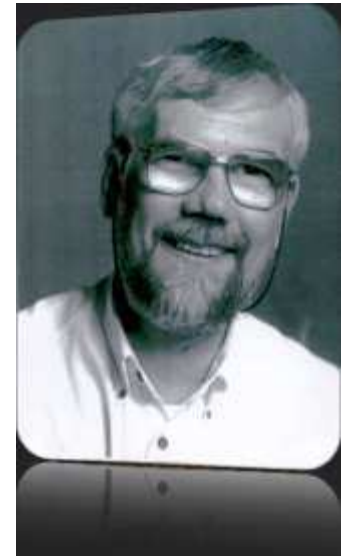
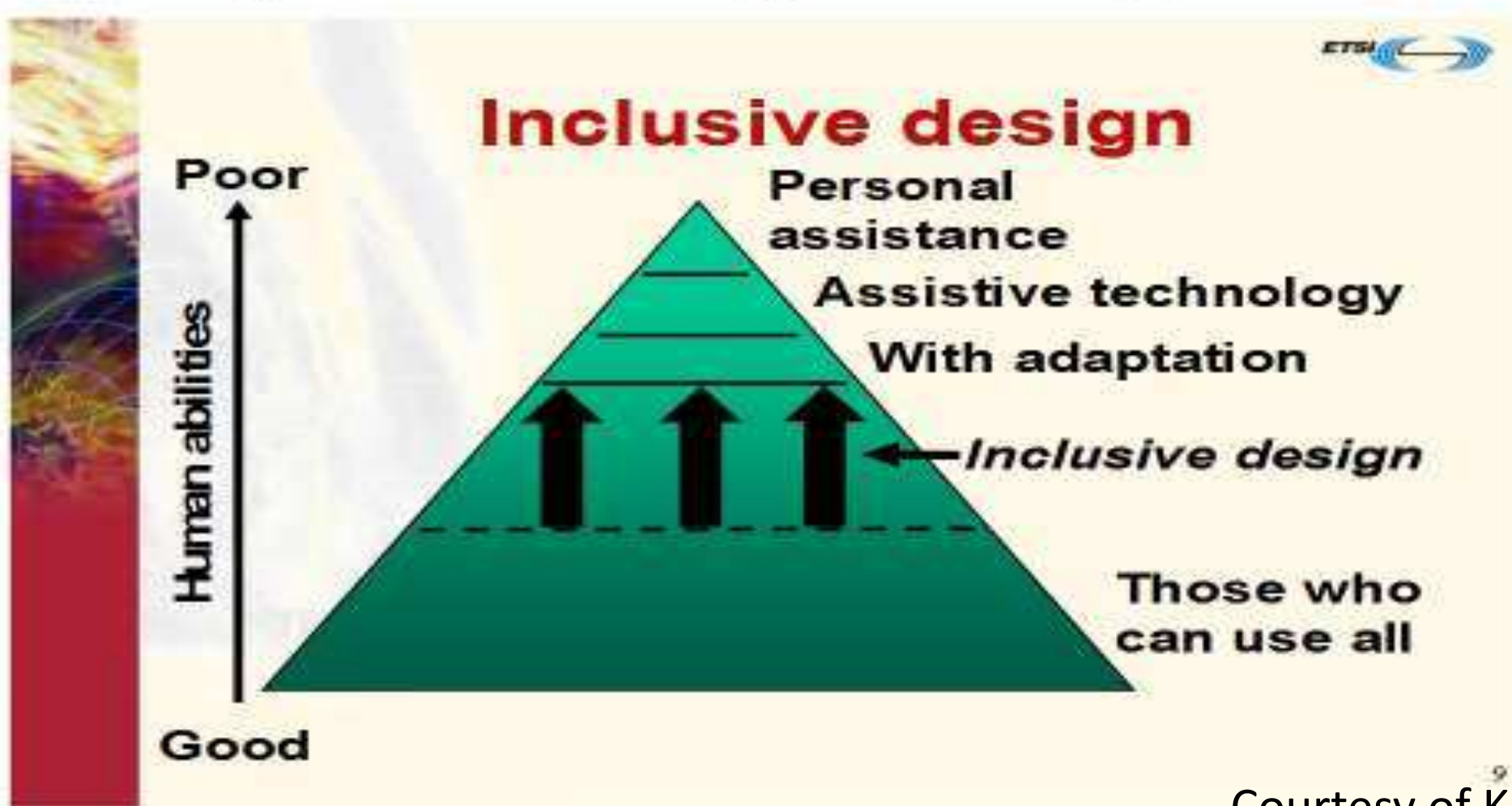
A few words about “Design for All”

- Design for All is the term adopted by the European Union for a policy of not “designing out” vulnerable populations.
- Following on from the Universal Design movement in the 1970s in the United States, the EU placed emphasis on the removal of barriers of access to products and services for persons with disabilities.
- Furthermore, the ageing of the population has put these issues high on the political agenda.
- All this places a clear emphasis on the social aspect of design, and in turn of design’s impact on society

Design for All - EU definition and others

- The design of products, services and environments to be usable by all people-to the greatest extent possible- without the need for adaptation or specialized design”. (EU)
- “Design for All means designing mainstream products and services so as many)people as possible can use them - whatever their age and ability”. (ANEC)
- mainstream products made so they include all (Inclusive design-UK)
 - (and assistive technology should be more mainstream)
- "Universal design seeks to encourage attractive, marketable products that are more usable by everyone. It is design for the built environment and consumer products for a very broad definition of user” (Ron Mace)

Design for All – a graded approach



Courtesy of Kurt Nordby,
(1942-2005) Telenor and ETSI

Barrier-free (Barrierfrei - Germany)

A barrier is anything that gets in the way of people with disabilities participating in day-to-day activities, or taking part in opportunities that are available to the public.

1. **Physical barriers**
2. **Virtual barriers**
3. **Attitudinal barriers**
4. **'Systemic' barriers:** policies, practices, or procedures that discriminate against people with disabilities.
 - A hiring process that does not provide accommodations for people with disabilities
 - Outdated legislation regarding people over 65 years of age

Design for All Advocacy

- Demographic: ageing population and living longer with disability
- Economic: makes a large segment of market
- Legislative: legal compliance (and bad press- Ryan Air finally changes policy)
- Social/Ethical: beliefs and values
- Inspiration for Designers
 - Challenges looking for solutions to problems faced by those who are older and/or have physical, sensory or cognitive impairments,
 - Seeing their “workarounds”.
 - Finding the solutions that are useful to the population at large, in effect, ‘for All’

Design for All- in a global context

Not just a euphemism for “Designing for Disabled and/or Elderly People”

- Bringing design to bear on problems to do with:
 - Diversity of Abilities (people)
 - Diversity of Infrastructure (technology, utilities)
 - Diversity of Culture
 - Diversity of Activities (including multi-tasking), Contexts of use
 - Diversity of Incomes
- A Continuum in Human Rights
 - Beginning with 1948 United Nations Universal Declaration of Human Rights
 - And now updated 2006 United Nations Convention on Rights of People with Disabilities (UNCRPD)

Zooming in on ‘vulnerable people’

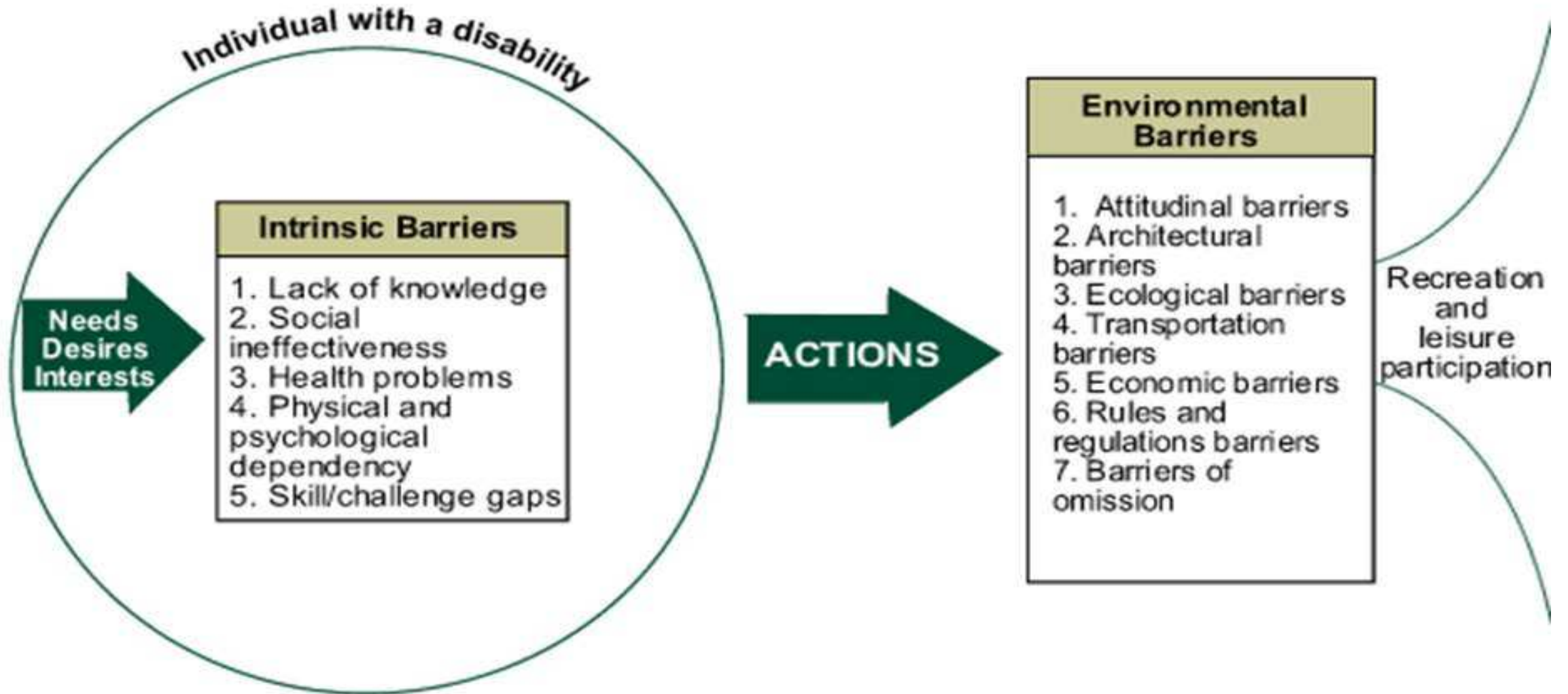
- Who are these “vulnerable people”?
 - Older people, people with disabilities, (physical, sensory, cognitive) including low literacy, minorities, low income, gender (and combinations of all these)
 - Changing over time; we can all be vulnerable (temporary problems)
- Are their problems solvable completely by addressing the issues raised by these arguments?
 - Are these arguments just for “business realities”?
- Do vulnerable people have a voice?
- “Nothing about us with us”
 - Slogan of European Disability Forum: umbrella group of organisations representing people with disabilities
 - Does not cover other groups, and groups themselves are very heterogenous

Attitudinal barriers/ empowering people

Service personnel:

- are not trained to deal with people who cannot communicate using the usual channels
 - Shout to people with a speech impairment (perhaps thinking they are deaf)
 - Showing glossy brochures to a blind person
- Do not have support from their organization
 - interpretation services
 - Alternative formats
 - Allowed to communicate in other ways: e.g. face to face or via phone

“People with disabilities have attitudes too”



Source: Smith, Austin, Kennedy, Lee and Hutchison, (2005). Inclusive and special recreation: Opportunities for persons with disabilities (5th ed.). Boston: McGraw Hill. p. 81

Speaking from perspectives of:

- **Educationalist:**
 - 2002: education for designers in DfA (policy from EU to establish a European-wide curriculum for Design for All)
- **Researcher:** working on design of products and systems that are designed for all, and accessible especially to ‘vulnerable’ people.
- **Standardizer:** Working on European mandate M473, which aims to include Design for All into relevant* standardization initiatives
 - *relevant: where there is a “human-facing” component

Inclusive Design Curriculum network (IDCnet)



- The brief from the EU
 - “draw up a university curriculum for University designers and engineers”
- Our mission:
 - “educate future generations of designers”
- Our outcome:
 - Curriculum is still in use
 - Publications constantly cited
- Has the world changed???

Latest research.. Service Design

Self-services :

What happens to vulnerable people in the “Self Service Society”
When is “self-service” “no-service”? (airport services executive)

Services and social innovation:

“communities sharing and caring” Casserole Club

Does this happen with design???

(Please, no more “apps”!)

Pre-conceived notions and the reality of vulnerable people

Standards: Design for All, European Law and the “exclusion clause”

In the case of electrical household appliances, (kettles, toasters, washing machines, etc.)

- Consumers expect electrical household appliances to be safe, for themselves, their children and the older members of their families.
- Regulators want a high level of health and safety protection for all consumers, as expressed in European Directives.

However

- these principles are undermined by the EN 60335 series of standards used to support legislation,
- These have an ‘exclusion’ or ‘limitation’ clause to the effect that the standard:
“... does not, in general, take into account the use of appliances by young children or infirm persons without supervision.”

ANEC and the “exclusion clause”



Are household appliances
really safe for all consumers?

An example of compliance – Swedish trains

- Nominal compliance, but no quality of the experience.
- Wheelchair user wanted to work during an intercity train journey with his colleagues, and tried to book a first class compartment with wheelchair accessibility. He was told that there was only one space that was set aside for wheelchairs:
- “I had used that place many times before and knew exactly where it was and what it entailed [...] it is located in the family car. The seat is right next to the lavatory and quite close to the exit. This is also the place for larger luggage. This means that you are seated where people are coming and going all the time on their way in or out of the toilet. Quite often there is a lot of luggage as well. Together, this makes for a noisy environment with frequent disturbances that make it impossible to work.”

What does a systemic approach add?

- Framing problems:
 - From a medical framing to a social framing “social model of disability”
 - Rather a multi-dimensional complex situation
 - not direct causality but interdependencies “cause and effect”,
- Understanding the whole
 - No one approach to DfA will have long-lasting impact without the others
 - well educated designers, unable to work on DfA
 - Design does not do everything! It can expose and intervene, and tweak improvements
 - Mandates and legislation complied with to minimum, and not in spirit
- Using tenets (emergence, variety, self-reference)
 - Design for all could to set the conditions for emergence
 - solutions for one problem help others or problems we did not know about yet
 - Uses requisite variety
 - basic principle: interaction using more than one modality)
 - Self reference: DfA knows it deals in extremes, but wants to be mainstream

Evidence from policy documents shows an awareness of the complexity of the problems

- 2006 United Nations Convention on Rights of People with Disabilities UNCRPD
- (Expected) European Accessibility Act 2015, looking at
 - built environment,
 - ICT (Information and communications Technologies)
 - transport systems
- EU disability strategy 2010-2020
 - Freedom of movement within EU people and goods/services
- Canada: Labrador and Newfoundland Disability Policy:
- Barriers, values, contexts (education, employment, housing, healthcare...)

Would an “systems approach” accelerate learning and adaptation at organizational and societal levels??

- What understandings would it bring?
- What tools would it offer?
- Would it help with:
 - Acceptance of other cultures, other values
 - Tolerance (and even appreciation)
 - Integration (especially our (developed world) heritage of segregation and institutionalization)
 - And.....