# Going Green on Digital Technology:

# **Enhancing Socially and Psychologically Sustainable USE of Digital Technology**

#### International conference

#### **Internet and Socio-Cultural Transformations in Information Society**

September 8–12, 2013, Yuzhno-Sakhalinsk, Russian Federation

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#### **Main Points**

- I. The Janus Face of the Digital Reality
- II. The Janus Face of the literature
- III. So what should we do?
- IV. What should be the first stage?
- V. Is it an easy task? Or- Why hasn't it happened?

# I. The Janus Face of the Digital Reality

# How do we perceive the digital media?

**Functionally** 

**Emotionally** 



# **Functionally**

- Catering to our basic social needs
  - "Connecting people" Connecting People
  - "Connect with friends and the world around you"



- "Share with just the right people" Google+
- "Find out what's happening right now" twitter





# **Functionally**

 Catering to our need for meaningful and satisfying life

Microsoft "Your potential. Our passion"

• flickr "Smile"

# **Functionally**

- Enhancing democracy and proactive citizenship through:
  - The democratization of access to information
  - The democratization of formation and dissemination of knowledge
  - Creating vivid "public forum"
  - Facilitating political organization



# **Functionally**



- Catering to knowledge and Enhancing learning and creativity
  - Google: organize the world's information and make it universally accessible and useful



With the power of the Internet, everyone has the unprecedented ability to change the world.

Poin Climace

# **Functionally**

Boosting capacity for economic autonomy and entrepreneurship

source

- work from distance,
- Internet based businesses
- Boosting the economy
- Supporting mindful consumption

# **Emotionally**

# Holy





# **Emotionally**

The goal of life



# **Emotionally**

Our best friend



source

# Is it THE truth? Is it THE ONLY truth? Is it THE WHOLE truth?

Functional Aspects

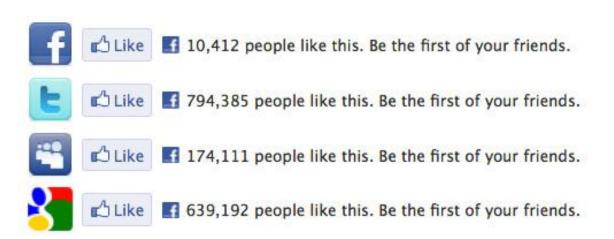
**Emotional Aspects** 

# The Functional Aspects

• Does it really connect people?

Certainly, but at the same time disconnects them by transforming human relations

From quality >> to quantity.



# The Functional Aspects

• Does it really connect people?

Certainly, but at the same time disconnects them by transforming human relations

- From intimacy >> to public exposure.
- From belonging to, and being responsible of, a geographical community >> to loosely "belonging" to remote virtual groups of virtual friends.

# The Functional Aspects

- Does it really enhance democracy and proactive citizenship?
- Maybe to some extent, but at the same time undermines
   proactive citizenship and democracy by transforming political discourse
  - From rational criticism >> to the "wisdom of the masses"
  - From culture of debate >> to culture of shallow slogans and demagogy and politics based on sex-appeal

# The Functional Aspects

 Does it really diffuses knowledge and enhance learning?

Maybe, but at the same time lead to ignorance and irrationality by encouraging

- Fragmented thinking and loss of abilities and motivation for:
  - focusing
  - reflecting
  - Analyzing
- Multitasking, which furthers the above phenomena

# The Functional Aspects

• Does it really diffuses knowledge and enhance learning?

Maybe, but at the same time lead to ignorance and irrationality by encouraging

- ADHD( a probable consequence)
- Impoverishment and "Hieroglyphization" of language
- Shallow reading



# The Functional Aspects

• Does it really boost individual autonomy in the labor market?

Probably, but at the same time limits it by

- Loss of tenure and work security
- Increase of part-time, freelance employees who depend on market whims

# The Functional Aspects

• Does it really boost the economy?

Undoubtedly, but at the same time contributes to economic crises by allowing

- Rapid transfers of huge amounts of money via chain reactions among computers that run the money market and lead to market crushes
- Sophisticated financial instruments which jeopardize market stability

# The Functional Aspects

• Does it really support mindful consumption? Probably, but at the same time jeopardizes it by

Engulfing us with nonstop brainwashing of unavoidable

advertisements

 Flooding us with ever newer and "better" technological gadgets which are marketed religiously and consumed hysterically



# The emotional aspects

• Is it the Holy?

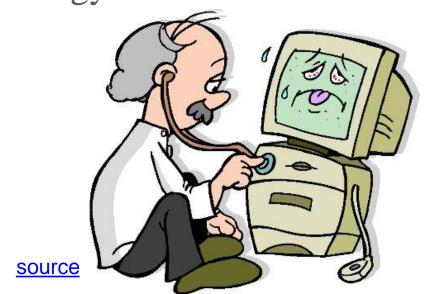
 For many who are caught in the endless admiration and consumption loop for the newest gadget Certainly yes!

Should it be the case? - No!!!

# The emotional aspects

Should it be our main goal in life?

- who has to serve whom?
- We technology? Or technology us?



# The emotional aspects

• Are technological innovations always good?

# Not always!!

For example:

- The creation of pollution, global warming.....by heavy industry
- The production of Humans through Genetical Engineering or Cloning

# The emotional aspects

- Are technological innovations always good?
  - In the same way digital technology can lead both to human flourishing and decay.
  - Its dangers might grow exponentially when computers surpass human thinking ability



#### II. The Janus Face of the literature

#### **Enthusiasts:**

Prensky, M. (2006). Don't Bother Me, Mom—I'm Learning! How Computer and Video Games Are Preparing Your Kids for 21st Century Success and How You Can Help!.

Prensky, M (2010). Teaching Digital Natives: Partnering for Real Learning.

Shaffer, D. W. (2006). **How Computer Games Help Children Learn**.

Shirky, C. (2008). Here comes everybody: The power of organizing without organizations. .

Shirky, C. (2010). Cognitive Surplus: Creativity and Generosity in a Connected Age.

Suroweicki, J. (2005). The wisdom of crowds.

Tapscott, D. (2009). Grown Up Digital: How the Net Generation is Changing the World.

#### II. The Janus Face of the literature

#### **Dooms Day Prophets:**

Carr, N. (2010). The Shallows: What the Internet Is Doing to Our Brains.

Keen, A. (2007). The Cult of the Amateur: How Today's Internet is Killing Our Culture and Assaulting Our Economy.

Morozov, E. (2010). The Net Delusion: The Dark Side of Internet Freedom. Jackson, TN: Public Affairs Print.

Oppenheimer, T. (2003). The Flickering Mind: Saving Education from the false Promise of Technology.

Siegel, L. (2008). Against the machine: Being Human in the Age of the Electronic Mob.

Rushkoff, D. (2013). Present Shock: When Everything Happens Now.

Ito, M. (2009). Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media

Livingstone, S. and Bober, M. (2006). Regulating the internet at home: Contrasting the perspectives of children and parents.

#### III. So what can and should we do?

We have to "go green" on digital technology by:

Enhancing policies of psychologically, socially and culturally sustainable development of digital technology

As in the case of heavy industry, these "digitally green policies" should be aimed to maximize the blessings and minimize the dangers of digital technology

# What can that mean?

Examples: Three kinds of optimizing policies (all used in policies aimed at enhancing sustainable development of heavy industry)

- Regulating Policies
- Financial Policies
- Balancing Policies

# **Regulating Policies**

- Regulating policies regarding the development, production, distribution and use of digital media, e.g.:
  - Standards limiting the number of hyperlinks and other sources of cognitive "noise" per screen, or at least allow the users to customize it
  - Standards limiting the size and colorfulness of ads,
     and their number per screen and location

## **Financial Policies**

## Financially Support:

- Games that require systematic rational analysis and enhance cooperation instead of aggression
- Social platforms that encourage quality (instead of quantity) relations, and honesty (instead of marketing and manipulative) relations
- Platforms that encourage "old fashion" reading

# **Balancing policies**

• Encourage formal informal and adult education and learning systems to try to repair some of the damaged caused by digital media (irrational thinking, shallow relationships, detachment from geographic community, etc.)

# IV. What should be the first stage?

Creating a permanent international forum under the auspices of IFAP and UNESCO, which will include:

- Scientists researching various aspects of the issue at hand, both from descriptive and critical perspectives
- Decision makers on national and international levels
- Developers and industry representatives
- Public and intellectual leaders

#### Forum aims

- Draw the "big picture" (now dispersed among many disciplines, sub-disciplines and research groups that don't talk to each other) of the various impacts of digital media
- Form methodologies for evaluating these impacts in light of humanistic values
- Suggesting policies for the enhancement of sustainable development of digital technology

# In light of these preliminary goals:

- Encourage critical interdisciplinary debate on segments of the big picture
- Raise public and political awareness regarding the issues at hand and their utmost importance
- Dialogue with developers, users and decision makers to enhance awareness of the issues

# V. Is it an easy task?

# Or

Why hasn't it happened?

#### General cultural obstacles

- The dangers are not material (as opposed to global warming or pollution) and are incremental, hence they and their consequences are not easy to grasp
- There is enormous reluctance of systematic normative discussions that relate to policy making

# Scientific methodological obstacle

• It is very difficult to show the prevalence of correlations in social sciences when relating to the hectic real world

- Showing casual relations in this world is even harder
- Thus there is
  - Little scientifically reliable large-scale knowledge on correlations and causal relations between certain uses of certain digital media and specific psychological and social changes in real life

# The communication obstacle (lack of dialogue)

- NO dialogue among research groups
- NO big picture of the situation on the ground
- NO dialogue between critics
- NO dialogue between critical researchers and descriptive researchers
- NO dialogue among researchers-intellectualsdevelopers-policy makers

# Obstacles stemming from the nature of technology

- Technology is continuously changing, and with it probably its impact
- Unlike older communication technologies (TV, phone), new technologies have very large variety of applications and uses which might have different impacts on users and societies
- The impact might be different for different groups of users divided according to age, gender, culture, level of education, context, etc.

# Now What 711

## What should we do?

Work hard and systematically in the suggested forum in order to form methodologies to face these and other obstacles

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