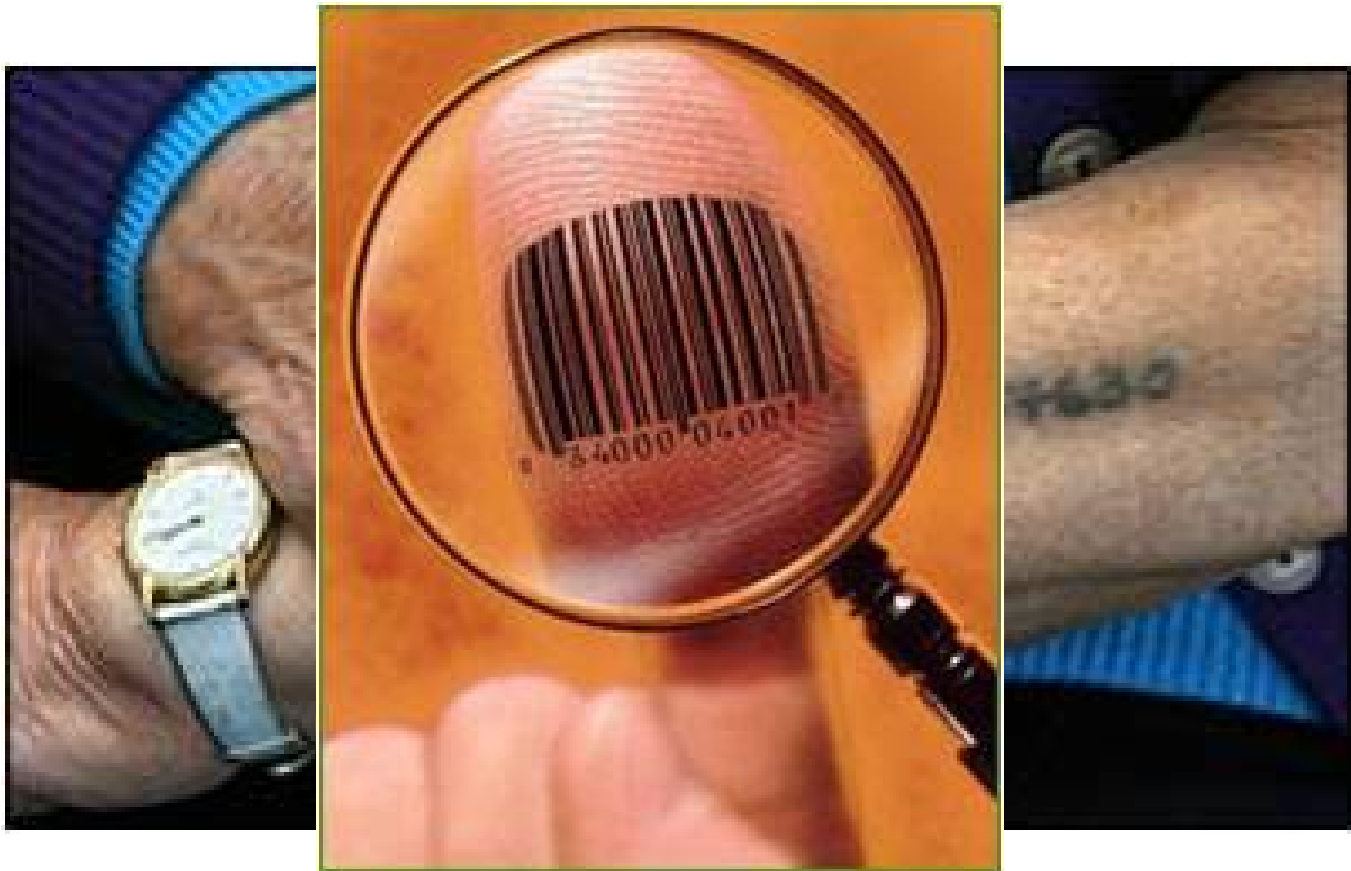


EACME ANNUAL MEETING, 10-11 September 2009 - Venice

# ETHICAL ASPECTS OF BIOMETRIC IDENTIFICATION TECHNOLOGIES IN A MULTICULTURAL SOCIETY

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EACME ANNUAL MEETING, Venice 10-11 September 2009

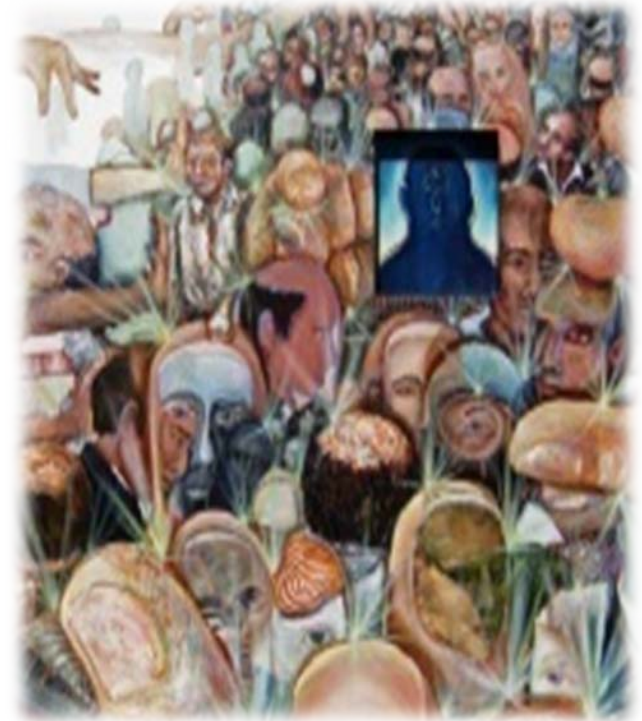
# Identity in a Globalized World

## □ IDENTITY

- A prerequisite of any inter-personal and social interactions
- A basic fundamental human right

## □ PERSONAL RECOGNITION

- The action of associating a PERSON with an IDENTITY
- An important social practice which changes over time and across different cultures



# Identity

## in a Globalized World (2)

**PERSONAL RECOGNITION** depends on the complexity of human interactions and on the technologies available at a certain time:

- **1<sup>st</sup> recognition scheme** in small scale urban societies based on body modifications and analogical identifiers
- **2<sup>nd</sup> recognition scheme** in large scale industrial societies based on passports and ID cards issued by States
- **3<sup>rd</sup> recognition scheme** introduced by globalization

# Identity in a Globalized World (3)

## **GLOBALIZATION and IDENTITY**

Removal of fixed boundaries,  
mobility of people,  
goods and information

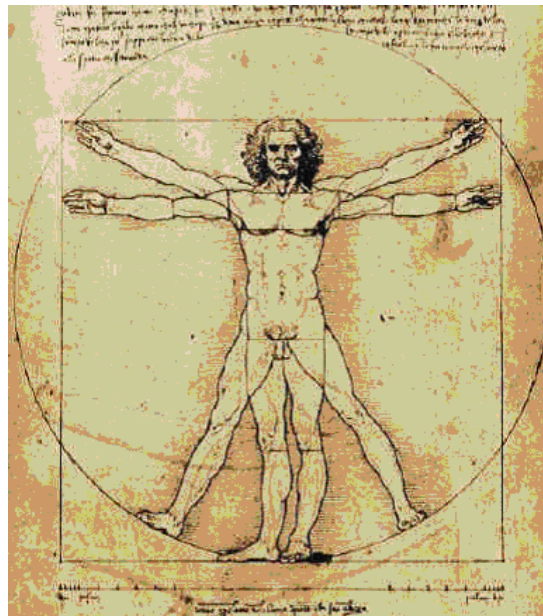


Recognition of identities possible through:

- Birth registration, ID cards and passports
- From the 1960's, Automatic Identification and Data Capture Technologies (Auto-ID)

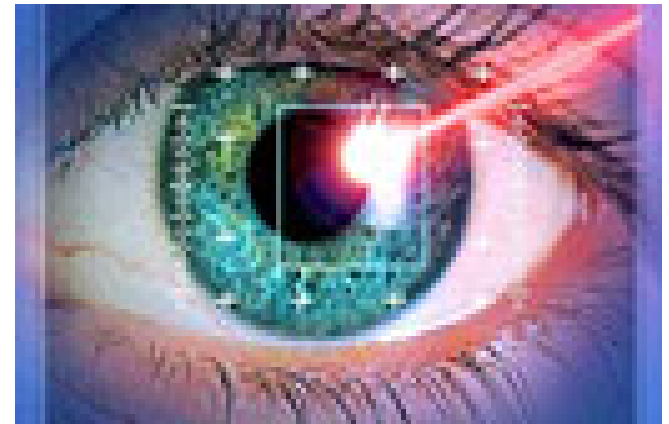
# BIOMETRICS

**BIOS** (Life) and **METRON** (Measure)  
measurement of any living entity



# Biometric Identification

- **Automated recognition of individuals based on the measurement of their biological or behavioural characteristics**
- Intense evolution in last decades chiefly due to **digitalization** and **advances in informatics**
- **1<sup>st</sup> generation** (e.g. fingerprinting, iris scanning)  
**2<sup>nd</sup> generation** (e.g. neural wave analysis, body odour)



# Ethical Aspects of Biometrics

1. Respect for **human dignity**
2. “**Informatization**” of the human body
3. **Data protection and Privacy**
4. Respect for **intimacy and body integrity**



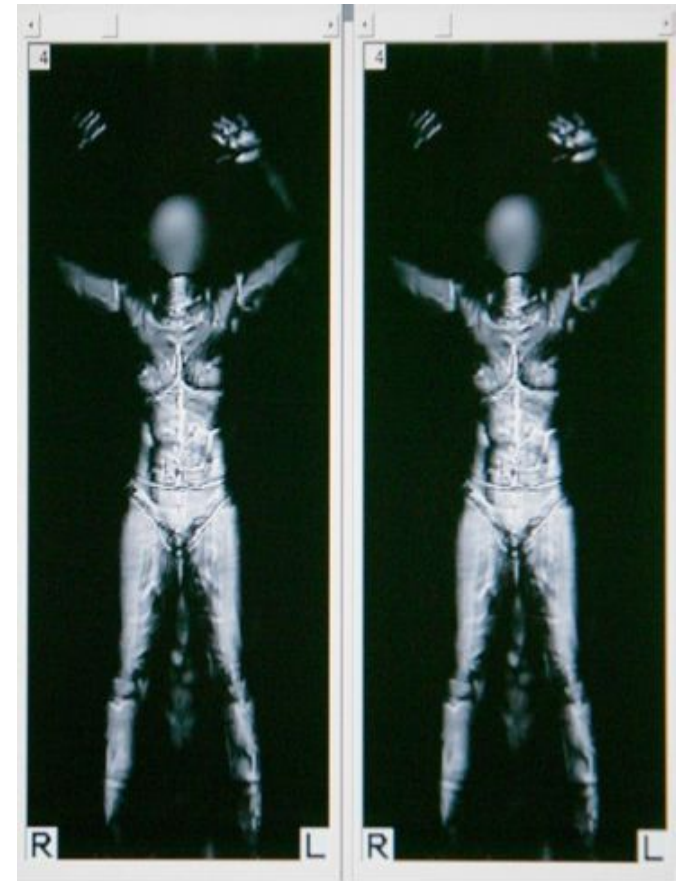
# 1) Respect for Human Dignity

By substituting names with codes, might biometrics degrade the human condition to that of animals or things?



## 2) Informatization of the body

Is there any risk linked to the digitalization of human attributes and their distribution across the global information network?

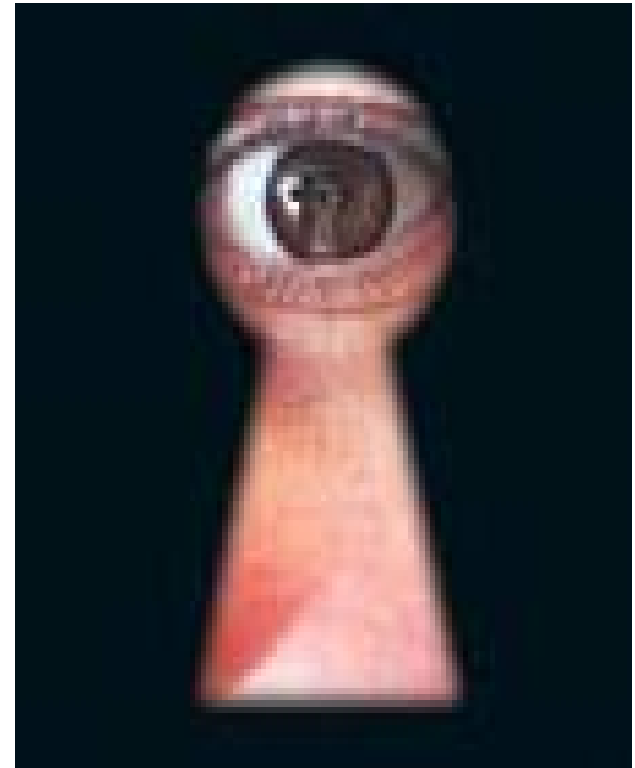


Getty Images

# 3) Data Protection and Privacy

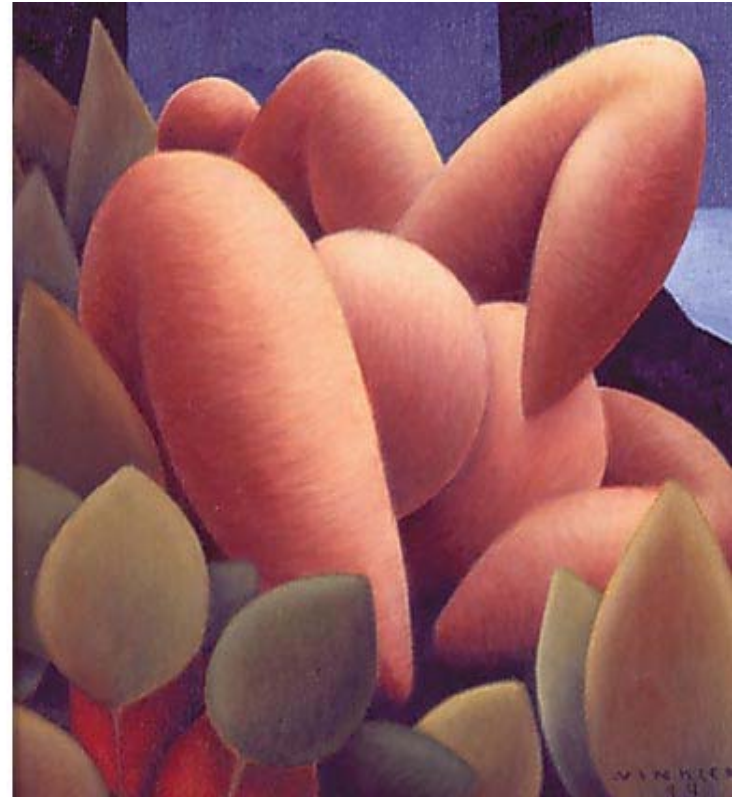
What level of protection do biometric data deserve?

Is there any risk related to the possible linkage of several biometric databases?



## 4) Respect for body integrity and intimacy

Is there any risk that biometrics may be felt as heavily intrusive technologies?



# Biometrics and Multiculturalism

**Multiculturalism** introduces further complexities:



1. Can ethnicity be derived from biometric data?
2. Do different ethnic types find it more or less difficult to use a particular biometric technique?
3. Is there any risk of discrimination against minorities?
4. Is there any risk of categorization through profiling groups of people?

# 1) Can ethnicity be derived from biometric data?

In certain cases, yes  
(e.g. : face recognition)

However, no sufficient  
research has yet been  
conducted on this subject



## 2) Do different ethnic types find it more or less difficult to use biometrics?

Still pending question  
(e.g. oriental people  
seem to find more  
difficulties towards  
face recognition)



### 3) Is there any risk of discrimination?

Maybe  
(e.g. short people  
may find it difficult to  
use the iris scan  
device)



# 4) Is there any risk of categorization through group profiling?

Big question

One of the issues to be discussed in the future



# The RISE project

- **RISE** (**R**ising pan-European and **I**nternational Awareness on Biometric and **S**ecurity **E**thics) is a 3 year project funded by the Seventh Framework Programme of the European Commission



[www.riseproject.eu](http://www.riseproject.eu)





# The RISE project (2)

## **BACKGROUND**

two previous conferences on ethics and biometrics (Brussels, 2005 – Washington, 2006) and two linked projects (**BITE** and **HIDE**)

## **VISION**

promoting global conversation between the main actors is essential in order to establish effective security policies, particularly in the field of biometrics

## **MISSION**

ensure continuity and enlarge the international dialogue to Asia

# The RISE project (3)



## □ PROJECT PARTNERS

**CSSC (Italy) – Project Coordinator**

**Aristotle University of Thessaloniki (Greece)**

**Biometric Research Centre, HK University (China)**

**Centre for Policy on Emerging Technologies (US)**

**Data Security Council of India (India)**

**European Biometric Forum (Ireland)**

**Global Security Intelligence (US)**

**Lancaster University (UK)**

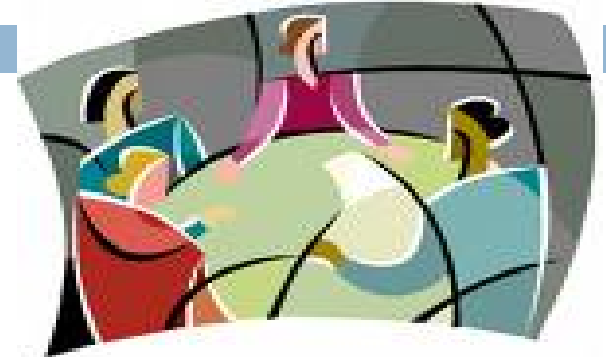
**University of Tartu (EE)**





# The RISE project (4)

- **EVENTS**



**India Meeting** – New Delhi, 24&25 Sept 2009

**3° International Conference** – Hong Kong, 4&5 Jan 2010

**3 Workshops** in Brussels

**Multistakeholder Conference** – Brussels, 9&10 Dec 2010

**Washington Meeting** – Washington, 5&6 May 2011

**4° International Conference** – Brussels, 1&2 Dec 2011

# Thanks!

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**RISE PROJECT**



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