

Human Rights in the era of Information and Communication Technology

May 31, 2017

Cesare Bartolini, Gabriele Lenzini

Interdisciplinary Centre for Security, Reliability and Trust (SnT), University of Luxembourg



Outline



• Human rights

2 Human rights here and now

3 Impact of new technologies

Outline



1 Human rights

Human rights here and now

• Impact of new technologies

What are human rights?



What are human rights?



Nobody knows.





Religious freedom



- Religious freedom
- Carrying a weapon



- ► Religious freedom
- Carrying a weapon
- ► PATRIOT Act

Right to life



- ▶ What is the meaning of life?
- ▶ When does it start?
- ► When does it end?
- Can it be terminated?
- Can other rights balance it?

Where do I find human rights?



Where do I find human rights?



In the laws.

Sources



- ▶ Declaration of the Rights of Man and of the Citizen (France, 1789)
- ▶ Bill of Rights (USA, 1789)
- Geneva Convensions (apply times of war–we ignore these)
- European Convention on Human Rights (Council of Europe, 1950)
- ► Charter of Fundamental Rights of the European Union (EU, 2009)

Sources



- Declaration of the Rights of Man and of the Citizen (France, 1789)
- Bill of Rights (USA, 1789)
- Geneva Convensions (apply times of war–we ignore these)
- European Convention on Human Rights (Council of Europe, 1950)
- ► Charter of Fundamental Rights of the European Union (EU, 2009)

Outline



Human rights

2 Human rights here and now

Impact of new technologies

Human rights in the ECHR



- ▶ Life (but death penalty is accepted)
- No torture
- No slavery
- No forced labour
- Liberty and security (not much emphasis on security)
- Fair trial
- ▶ Presumption of innocence (might contain a mistake)
- Principle of legality

Human rights in the ECHR (cont'd)



- Privacy and family life
- ▶ Freedom of thought and conscience
- ▶ Freedom of religion
- Freedom of expression
- Freedom of assembly and association
- Marriage
- ► Effective remedies
- ► Non-discrimination

Inderogable rights



- ▶ Life
- No torture
- No slavery
- Principle of legality

Extra rights in the Charter



- Human dignity
- ▶ No death penalty
- Physical and mental integrity (informed consent, no eugenics, no clonation)
- Protection of personal data
- Freedom of information
- Freedom of arts
- ► Freedom of scientific research

Extra rights in the Charter (cont'd)



- ► Education (free compulsory education)
- Seek work and conduct a business
- Property
- Asylum
- Protection in case of expulsion or extradiction
- Equality (before law, gender, disabilities)
- Fair working conditions

Extra rights in the Charter (cont'd a bit more)



- Health care
- Environmental protection
- Consumer protection
- Vote and be voted
- Good administration
- Freedom of movement and residence
- Proportionality and ne bis in idem

Other rights in the USA



- ► Weapons (USA)
- No search
- ► Trial by jury (USA)

Difference from contractual rights



- Strictly personal
- Duties of States
- Not subject to contractual regulation
- Cannot be renounced abstractly
- Can be renounced concretely

Difference from contractual rights



- Strictly personal
- Duties of States
- Not subject to contractual regulation
- Cannot be renounced abstractly
- Can be renounced concretely

Example: fair trial

I cannot renounce the right to own property, but I can forfeit a specific property.

Outline



Human rights

Human rights here and now

3 Impact of new technologies

Right to a fair trial



- ► Trial must not be overly lengthy
- ► IT management of courts
- Easier judicial searches
- ODR

Right to a fair trial



- ► Trial must not be overly lengthy
- ► IT management of courts
- Easier judicial searches
- ODR

Drawbacks

- New technologies are not implemented efficiently
- Drastic increase of litigation actually increases length

Right to security



- ▶ New means to ensure security
- Security with less victims
 - ► Tasers...
- Security without risking human lives
 - Dallas shooting
- ► Al and threat detection

Right to security



- ▶ New means to ensure security
- Security with less victims
 - ► Tasers...
- Security without risking human lives
 - Dallas shooting
- Al and threat detection

Drawbacks

- Leaving security to Al is very uncertain
- ► Technologies can fall into the wrong hands

Right to privacy



Not affected by new technologies.

Ok, seriously



- Massive data collection
- Profiling
- Advertising
- Drones

Ok, seriously



- Massive data collection
- Profiling
- Advertising
- Drones
- Ubiquitous computing
- Social networks
- ► Instant diffusion
- Security breaches

Ok, seriously



- Massive data collection
- Profiling
- Advertising
- Drones
- Ubiquitous computing
- Social networks
- Instant diffusion
- Security breaches

Drawbacks

- Severe consequences in case of violation of privacy
- Profiling is extremely dangerous
- Advertising is annoying and can't be stopped (for now)

Freedom of thought/expression



- Communication technologies
 - Mass media, Twitter-like tools
- Easy diffusion of messages
- Political messages

Freedom of thought/expression



- Communication technologies
 - Mass media, Twitter-like tools
- Easy diffusion of messages
- Political messages

Drawbacks

- Easier to influence people and form "belief groups"
- Censorship
- "The web never forgets"

Freedom of assembly/association



- ► Technology helps a lot in communicating or organizing activities
- Easier political activity

Freedom of assembly/association



- ► Technology helps a lot in communicating or organizing activities
- Easier political activity

- Extreme political messages
- Terrorism
- Fake news

Human dignity



- Social networks
- Notice and take down (E-Commerce Directive)
- Not very efficient

Human dignity



- Social networks
- Notice and take down (E-Commerce Directive)
- ▶ Not very efficient

Drawbacks

Slander

Health



- New medical technologies
- Replication of human tissues
- Medical assistance on the spot
- Remote surgeries
- Al-aided diagnoses (e.g., Deep Patient)

Health



- ► New medical technologies
- Replication of human tissues
- Medical assistance on the spot
- Remote surgeries
- Al-aided diagnoses (e.g., Deep Patient)

- Hard to identify the reasons in Deep Learning
- Social consequences

Protection of personal data



- ▶ Recent right, born because of computers
- Not privacy
- Plenty of data collections, both voluntary and unrequested
- Avoiding abuse

Protection of personal data



- ▶ Recent right, born because of computers
- Not privacy
- Plenty of data collections, both voluntary and unrequested
- Avoiding abuse

- Major economic interests
- Non-homogeneous legislation
- Impossible to track everything
- Hard to implement effective measures

Freedom of information



- Very easy access to information
 - ► Newspapers, blogs, independent sources
- Generally information is free of charge

Freedom of information



- Very easy access to information
 - Newspapers, blogs, independent sources
- Generally information is free of charge

- Hard to sort relevant information (informative flood)
- Fake news
- Mass media control

Freedom of scientific research



- Access to documents
- Powerful problem-solving tools (four colors)
- Easy dissemination
- Mobility

Freedom of scientific research



- Access to documents
- Powerful problem-solving tools (four colors)
- Easy dissemination
- Mobility

- Junk conferences (\$\$\$)
- ▶ Junk research
- Eduroam doesn't work

Education



New educational tools

Education



New educational tools

Drawbacks

► Impact is unclear yet

Work and business



- Automation
- Efficiency
- Safety
 - Better measures
 - Dangerous activities done by robots
- General life improvements

Work and business



- Automation
- Efficiency
- Safety
 - Better measures
 - Dangerous activities done by robots
- General life improvements

- Many jobs are being replaced (EU)
- Welfare problems
- Security risks

Property



- Financial technologies
- Faster transactions
- Online stores
- ► IP
- Real estate
- Automation (Amazon)

Property



- Financial technologies
- Faster transactions
- Online stores
- ► IP
- Real estate
- Automation (Amazon)

- Security risks
- ▶ IP violations
- Frauds
- Need for consumer protection

Environmental protection



- ▶ "Green" technologies
- Energetic efficiency

Environmental protection



- ▶ "Green" technologies
- Energetic efficiency

- Global warming
- Weak protection by major industrial countries

Politics and administration



- ▶ Interaction between PAs
- Efficient administrative policies (Luxembourg and OTP)
- Cheaper elections
- Easier visibility (Trump + Twitter)

Politics and administration



- ► Interaction between PAs
- ▶ Efficient administrative policies (Luxembourg and OTP)
- Cheaper elections
- Easier visibility (Trump + Twitter)

- Not-so-efficient
- Easier to hack databases or alter votes
- Strength of the message > content

Freedom of movement and residence



- Better transportation means
- Cheap travel
- Efficient tracking means (e.g., identifying citizens after disaster)

Freedom of movement and residence



- Better transportation means
- Cheap travel
- Efficient tracking means (e.g., identifying citizens after disaster)

- Safety issues (e.g., airports)
- Administrative difficulties