Risk perception factors

Two types of risk

- External risk

– the sources of external risk are nature forces (natural risks)

- Manufactured risk

– The sources of manufactured risk are man-made objects (mainly technologies)

(Giddens, 2004)

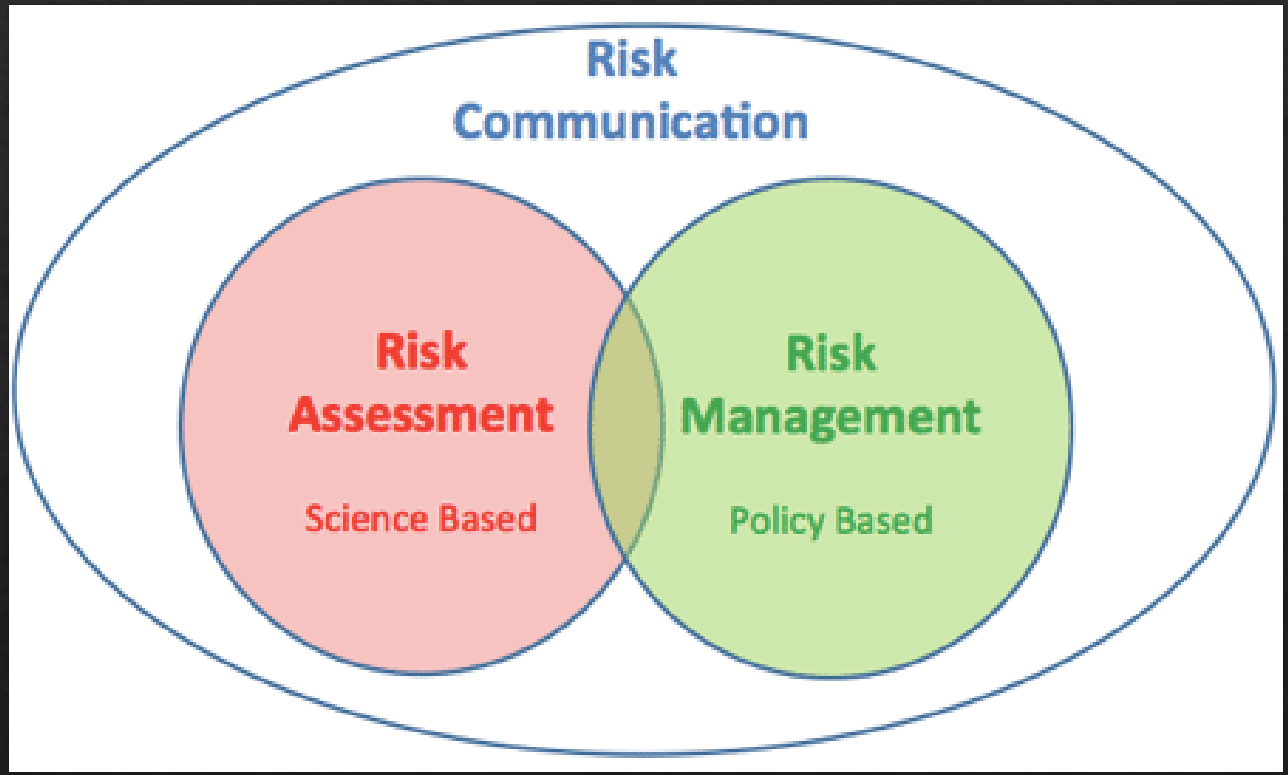
TWO ELEMENTS OF RISK

- Risk implies the **possibility** of certain outcome
- Risk implies **uncertainty**

… Risk is 'a situation or event in which something of human value (including humans themselves) has been put at stake and where the outcome is uncertain.' (Jaeger et

- al. 2001:17)

Risk management
Objective risk vs. Risk perception



Threat:

Nuclear energy

Automobiles

Smoking

Police work

Planes

X-ray

Electricity

Mountain climbing

Threat:	„Women club“
Nuclear energy	1
Automobiles	2
Smoking	3
Police work	5
Planes	4
X-ray	8
Electricity	7
Mountain climbing	6

Threat:	„Women club“	Experts
Nuclear energy	1	7
Automobiles	2	1
Smoking	3	2
Police work	5	6
Planes	4	5
X-ray	8	3
Electricity	7	4
Mountain climbing	6	8

Miller – 458, 459

Ideas about risk:

• **Modern societies**: risk as mathematically calculated probability of undesired consequences of certain event.

• **Post-modern**: risk as a social construct. Risk perception differs depending on:

cultural contexts

socio – demographic differences

proximity of individual living place to risky object

level of knowledge about risky technologies

role of media (amplification or negation of certain topics on risk)

FACTORS OF RISK PERCEPTION

a) Psychological
b) Attributes of technology
c) Context factors
d) Structural factors

b) Characteristics, that influence risk perception of technologies

Acceptable risk:

- Voluntary
- Controlled by individual
- Observable
- Useful
- Old risk
- Natural
- Consequences: statistical
- Immediate effect
- Known to science
- Influences adults

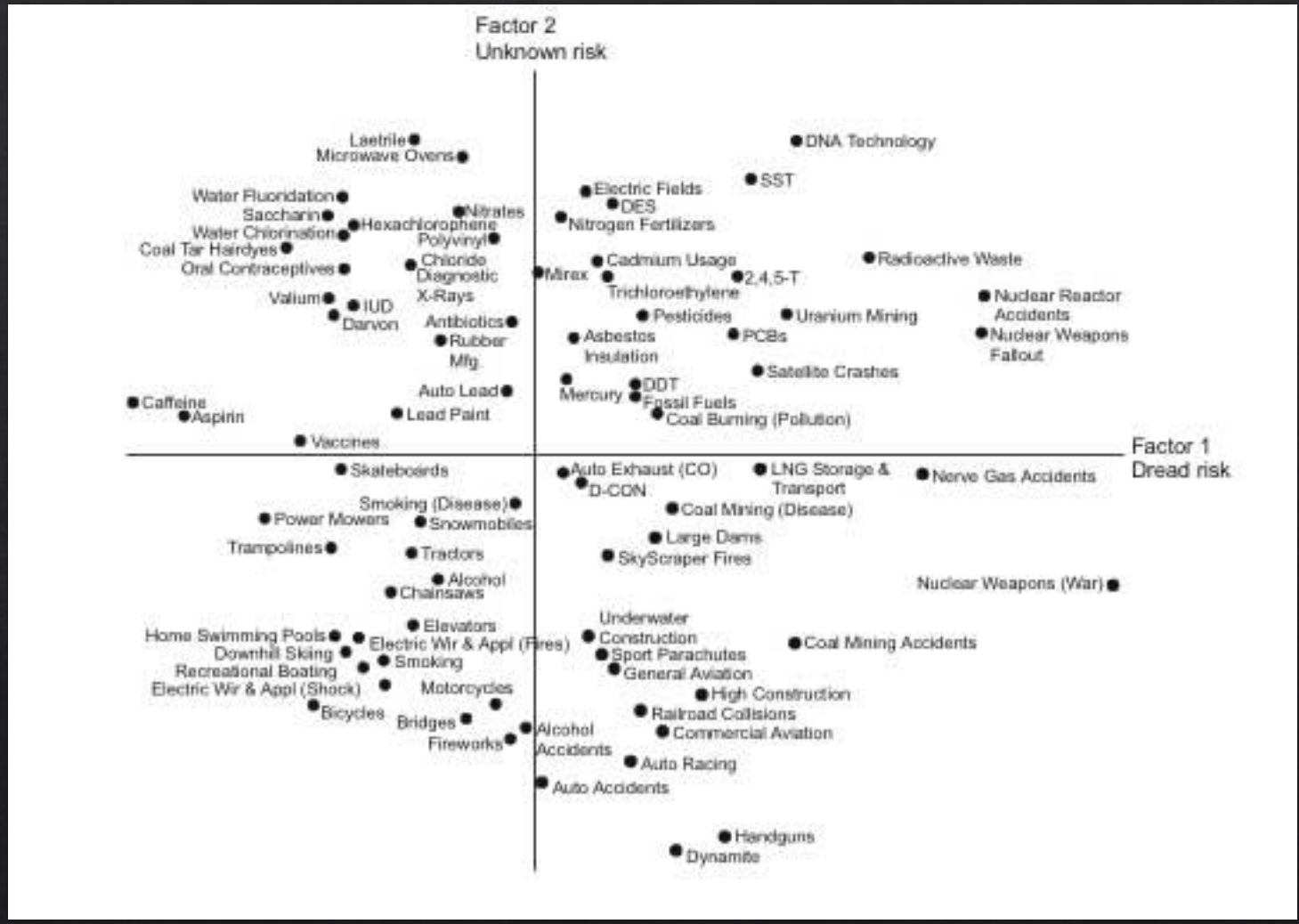
(example - bees, X-rays, car accidents

-https://nehody.cdv.cz/

Not acceptable risk:

- involuntary
- controlled by others
- non observable
- not useful
- new risk
- Man-made
- Consequences: catastrophic
- delayed effect
- unknown to Science
- influences children

(example – nuclear power, GMO)


Factor 2
Unknown risk
Factor 1
Dread risk
Laetrile
Microwave Ovens
Water Fluoridation
Saccharin
Water Chlorination
Coal Tar Hairdyes
Oral Contraceptives
Hexachlorophene
Nitrates
Polyvinyl Chloride
Diagnostic X-Rays
Valium
IUD
Darvon
Antibiotics
Rubber Mfg
Auto Lead
Lead Paint
Caffeine
Aspirin
Vaccines
Skateboards
Smoking (Disease)
Power Mowers
Snowmobiles
Trampolines
Tractors
Alcohol
Chainsaws
Elevators
Home Swimming Pools
Electric Wir & Appl (Fires)
Downhill Skiing
Smoking
Recreational Boating
Electric Wir & Appl (Shock)
Motorcycles
Bicycles
Bridges
Fireworks
Alcohol Accidents
Auto Accidents
Handguns
Dynamite
DNA Technology
SST
Electric Fields
DES
Nitrogen Fertilizers
Cadmium Usage
Radioactive Waste
Mirex
2,4,5-T
Trichloroethylene
Nuclear Reactor Accidents
Pesticides
Uranium Mining
Asbestos
PCBs
Nuclear Weapons Fallout
Insulation
Satellite Crashes
Mercury
DDT
Fossil Fuels
Coal Burning (Pollution)
Auto Exhaust (CO)
LNG Storage & Transport
Nerve Gas Accidents
D-CON
Coal Mining (Disease)
Large Dams
SkyScraper Fires
Nuclear Weapons (War)
Underwater Construction
Coal Mining Accidents
Sport Parachutes
General Aviation
High Construction
Railroad Collisions
Commercial Aviation
Auto Racing

- *Final notes:*

„paralysis by analysis“

X

„precautionary principle“ - “**better safe than sorry**.” Even if it is uncertain whether an activity will lead to harm, for example, to the environment or to human health, measures should be taken to prevent harm.