

Covid-19 a pandemic that should be handled by the Compram methodology


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1

Covid-19, Corona virus, Sars-Cov-2

the effect of this new pandemic to society:
a complex societal problem

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2

where it started

Fisch market in Wuhan South –East China December 2019



3

spread of virus

probably
 virus in bats → infects wild animals sold (illegal) on the **Fisch market in Wuhan South –East China**
 virus → infects people of the Wuhan market (animal → human infection)
 infected humans → infect other humans (human → human infection)
 a new virus → chances of pandemic

one person infects more than > 1 person virus spread increases
 less than < 1 person virus decreases

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easy to contaminate humans
 by sneezing and coughing
 it causes long infection



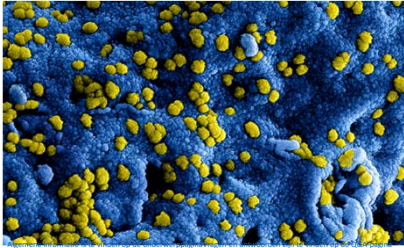
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5



Informatie over coronavirus (COVID-19) voor professionals

RIVM

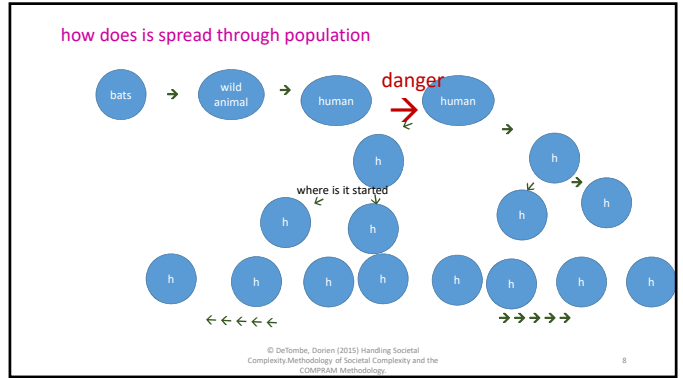


Actuele informatie over het nieuwe coronavirus (COVID-19)

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7



medical effect on humans

some nothing
some ill
old and weak people die

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9

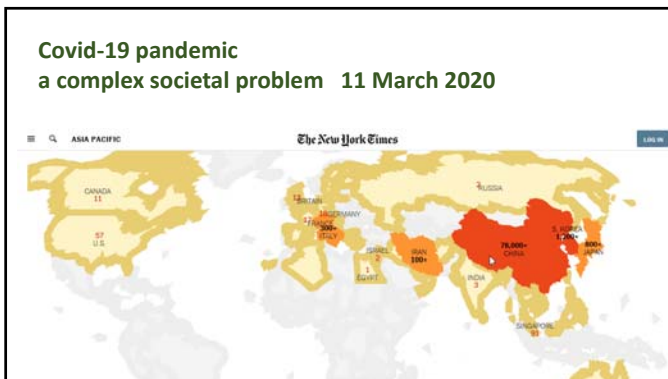
slowly it became clear

the virus caused a pandemic (spread all over the world)

the virus would kill many people when no adequate measurements were taken

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how many and which effect is still unclear

official data are not complete, underscore because a shortness of tests or reluctance of tests the data of Covid -19 is not adequate

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12

soon the hospitals were overflowed with patients, often old, obese or young with before not known diseases many people died

governments panicked:
 too less protection material
 too less intensive care units available
 too less doctors and nurses specialized
 terrible views of sorrow on the public television

in The Netherlands
 old people (Alzheimer) isolated but infected by unprotected nurses

soon the treatment of the ill people became a political game

who will be treated who not

over 80/ 7060? year will not be treated

governmental policy

some countries reacted direct adequately to mitigate the contamination
 some countries were too late
 some countries were reluctant to react properly (UK, USA, Brasil)

Covid-19

governmental policy

lock-down

Wuhan China after January
 Iran Omsk February
 Italy February/March

France March
 Spain March

in other countries the people are advised to stay home

lock-down has economic effect
 shops, theaters, cafes, hotels are closed
 universities and school are closed

people are forced or advised to stay home
 not go to their work

situation at home not always safe for women and children
 more abuse is mentioned

mask 19 code word at pharmacy for help

work at home not always possible

in Europe tourism stopped for months
soon Covid-19 became a geopolitical game

and a fight between healthcare and economic interests

live \longleftrightarrow money.

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effect on economic

first hardly effect on stock markets till 23 February
after that 5-10% down

8 March 2020 Shell minus 30 %
a new credit crisis?

due to combination Corona and oil prices down
Brent barrel January 66 \$ on 9 March 33\$
down in the battle between Russia and OPEC (Arabic) countries

gold price very high July 2020

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economic effect

many (closed) business are subsidized
for how long?
will the money be paid back?
who pays???

KLM
Booking.com

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how long will it take till the virus is concurred ?

first second third upheaval

by vaccination 1,5 year?
faded out 3 years ?

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in general

the living world consist of flora and fauna
part of the fauna are animals and human beings

viruses stay in the body active unless heated or outside one, or more days
viruses are in huge quantities and many kinds
humans are vulnerable for viruses that sometimes cause death

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viruses from animals

all humans and animals have viruses

domestic viruses of dogs and cats often not
dangerous or contagious for human

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24

natural threats: local
chicken farms fowl pest virus from wild birds



25

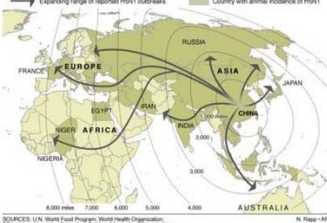
wild birds



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Bird flu breaks out of its Asian corral
For years after its appearance, the current bird flu virus (H5N1) seemed confined to a few east Asian countries. Within the past four months, it has moved across Europe and into Africa. World health experts say its rapid spread is troubling because it increases the chance the virus could change into a disease contagious to humans.



27

In the past many pandemics:
some well known
plague 1348 Italy
flea in Venetia on rats to human from China
animals and people life too close together less hygienic
zoonotic illness (from animal to humans)

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Spanish Flu pandemic 1918-1920 from pigs
Spanisch because open publication spread by American soldiers
After two year the virus mitigated
-1

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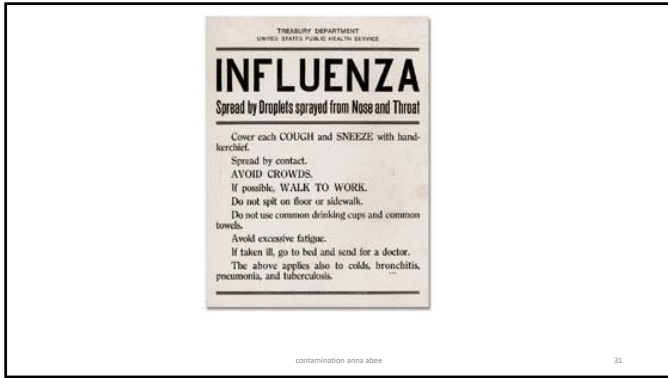
29

'Spanish' flu pandemic 1917-1918



contamination anna abee

30



scientists expected already decennia new pandemic
Installation Anna Abee 2004

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scientists were aware of coming pandemic
however....
governments were not willing to prepare

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the animal food markets in South China province Hubei
Wuhan
every autumn new flu virus

Vaccination half year
Example
N1H5
Mexican flu

Corona covid-19 is not the first corona virus

Sars 2013 and Mers 2018

they are successfully stopped

in many countries advice boards consisting of
medical people with expertise of many subfields
of healthcare.

good start, enlarged by experts of other fields
such a historians, social scientist and people
from law.
using the Compram methodology

Covid-19

Complex societal problem

needed to use the Compram methodology

why the Compram methodology?

because it analyses carefully the whole problems with all its
effects.

not only the economic effect and healthcare effect
Also the psychological effect, the human rights effects, the
effects on education, the political effects etc.

and can give sustainable answers for handling the
problem



DeTombe, Dorien (2015)

Handling Societal Complexity. A Study of
the Theory and the Methodology of
Societal Complexity and the COMPRAM
Methodology.
Heidelberg: Springer Verlag. ISBN /EAN
978-3-662-43916-6.(550 pages)

complex societal problems problems
on the front page of the quality
newspapers

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complex societal problems

what is it
what causes it
who is suffering
who has the benefit

who can change it

how can it be changed

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policy making
for handling societal complexity
in order to implement changes

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theory of Societal Complexity
and the Compram methodology
supports policy making in
handling complex societal problems

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Methodology of Societal Complexity
supports decision making for politicians
on local, state and global level
using the Compram Methodology

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Definition of Complex Societal Problems DeTombe 2005 (1)

a complex societal problem is a real life problem, which has a large however often different impact on different groups in the society. The problem has often an impact on all the levels of the society, on micro, meso and macro level.

Often it seems that the problem suddenly 'pops-up'. The problem is dynamic, it changes during its development. The future development of the problem is uncertain.

It is often difficult to become aware of the problem and difficult to put it on the political agenda. It is difficult to get grip on the problem and to handle the problem. Only changes are possible, no 'solutions'.

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Definition of Complex Societal Problems DeTombe 2005 (2)
 The problem has a knowledge, a power and an emotional component.
 The problem consist of many phenomena which are complicated intertwined with each other. Often there is a lack of knowledge, the data are incomplete, uncertain or in contradiction with each other. The problem is interdisciplinary and it needs theories from different fields to explain what is happening.
 There are many parties involved. Each party has a different view on the problem, a different definition of the problem, and has different goal and desires. The different parties have different power over the problem. The parties often have different 'solutions' for the problem.
 The problem often provokes much emotion in society.

benefits are privatized
 costs are socialized



complex problem handling methodology
 DeTombe
 selected in 2006 by the OECD to handle Global safety

the Compram Methodology



COMPRAM Methodology: 3 basic elements

each complex societal problem has

- knowledge
- power
- emotion

the Compram Methodology

how does it works?



COMPRAM Methodology: how does it works?

6 steps

- step 1 team of experts model the problem **knowledge**
- step 2 actors model the problem **power**
- step 3 experts + actors find interventions
- step 4 societal reactions **emotion**
- step 5 interventions implemented
- step 6 interventions and process evaluated

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COMPRAM Methodology: =====
and phases of the problem handling process

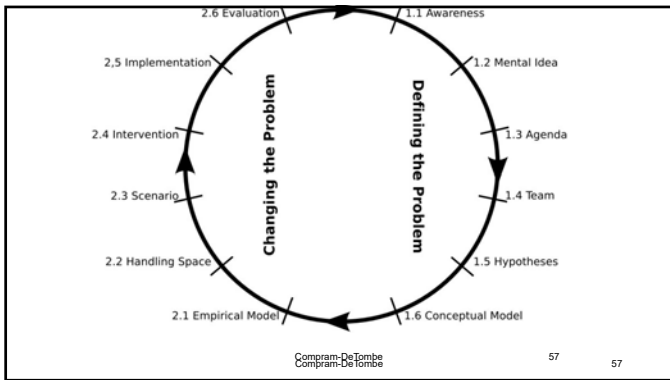
defining the problem

awareness	mental idea	agenda	team	hypotheses	conc.model
1.1	1.2	1.3	1.4	1.5	1.6

changing the problem

emp. model	handling space	scenario	intervention	implementation	evaluation
2.1	2.2	2.3	2.4	2.5	2.6

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step 1 knowledge experts

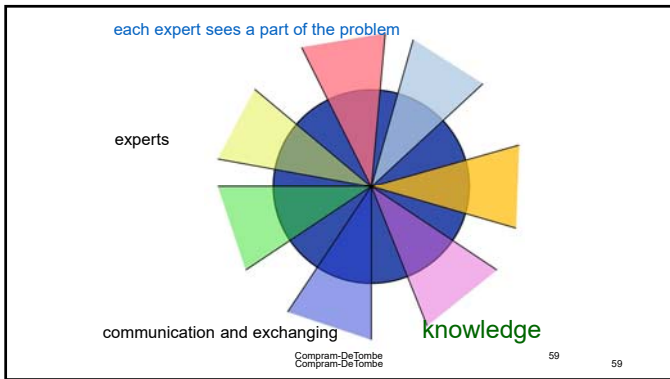
problem owner ask facilitator to invite experts based on (vague) idea of the problem

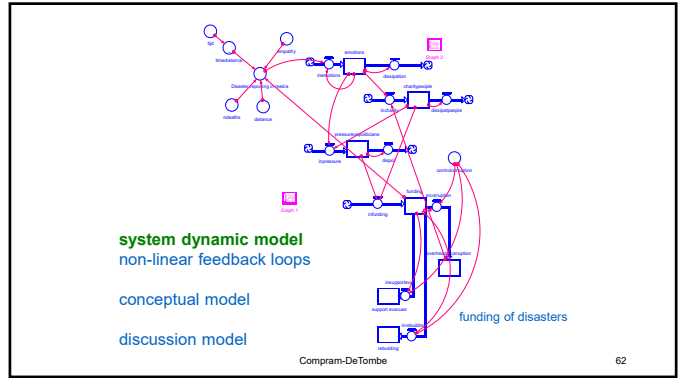
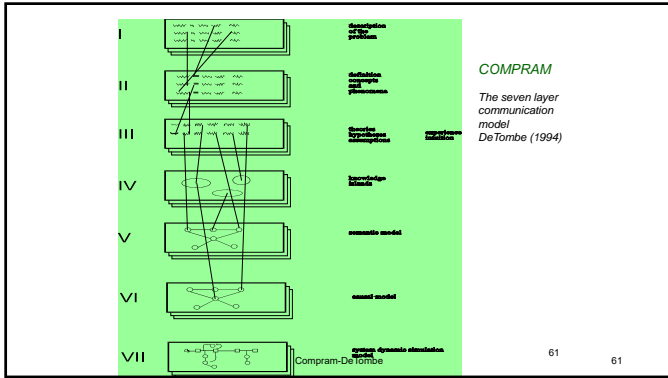
experts discuss in 6 or more meetings the problem

define the problem: by making conceptual model of the problem

report

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COMPRAM Methodology

step 2 actors: power

facilitator invites based on definition of the problem the different actor groups

each actor group discusses (parallel) in 6 or more meetings

model of the problem filling the 7-layer model

define the problem, desired goals, objections, support

report

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COMPRAM Methodology

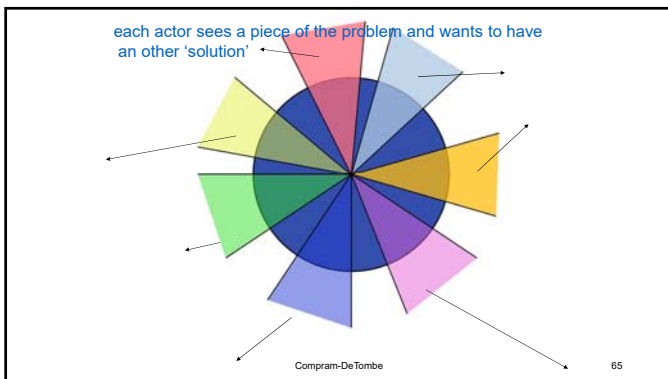
actors/ stakeholders/ parties involved in the problem have:

- their own view, own goals, own hidden agenda's
- different power

are: victim or profiteer

actors are needed for implementing the changes

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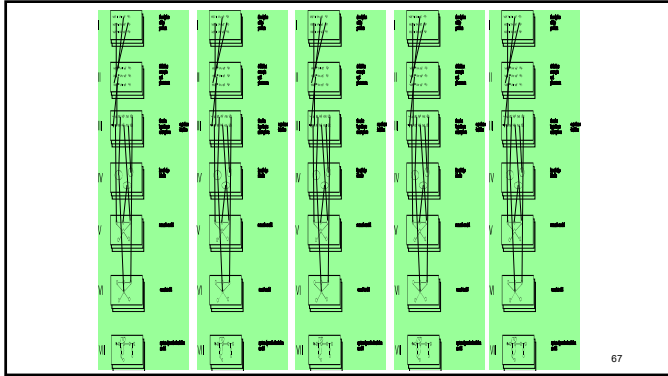
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step 3

actors and expert find mutual agreements

report

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COMPRAM Methodology

step 4 societal reactions emotions

publish interventions

meetings with the public and media

analyze + react to the societal reactions

change interventions?

report

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COMPRAM Methodology

step 5 implementation

implement interventions

guided by problem handling team

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step 6 evaluation

evaluate the problem handling process and the changes to the problem

evaluate this by the problem handling team and by the public

report

need new changes?

start again with a now changed problem

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complex societal problems can only to a certain extent be guided and are only to a certain extent predictable often unpredictable outcomes unpredictable effects

complex societal problems can never be solved only changed

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handling complex societal problems stays very difficult

complexity will never be simple

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policy making need scientific support
from **Knowledge Institutes** on societal complexity

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73

Knowledge Institutes to handle societal complexity

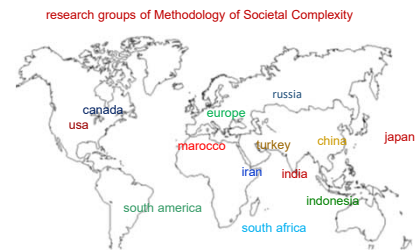
OECD based on the ideas of **COMPRAM**
methodology handling societal complexity for global
safety

JSF/RISTEX institute Japan
(COMPRAM) multidisciplinary approach

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Knowledge Institutes
work in close harmony working with universities
in order to handle complex societal problems
old problems and new problem
suddenly pop-up problems
to be prepared



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Field of Methodology of Societal Complexity

more information? literature? agenda?

see: www.doriendetombe.nl

become a member? send email to DeTombe@nosmo.nl



advised by OECD to handle Global Safety

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References Corona
NOS journal The Netherlands
NRC daily newspaper The Netherlands
The New York Times

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78