# Freedom in Geographical Information Systems

Ganesh

Trying to be an Independent Researcher, Hacker & Activist

☞ ***geoneo***

≋ ***vu3ygg***

✉ ***31gane@gmail.com***

January 1, 2017

# License

This document is licensed under Creative Commons NC ND 4.0.

This document represents mostly my thoughts, research, experiences and references to other creative works.

Read the CC NC ND 4.0 License Deed here

Read the CC NC ND 4.0 Legal Code here

# Overview

Inspiration

What is GIS ?

Cartography & Maps

- Carto-Cube

Organized Diversity

- Modality
- Remixxxx...

Flow of Information

whaaaazzz up human ?

# Good or Bad or Neutral ?

**technology**

is

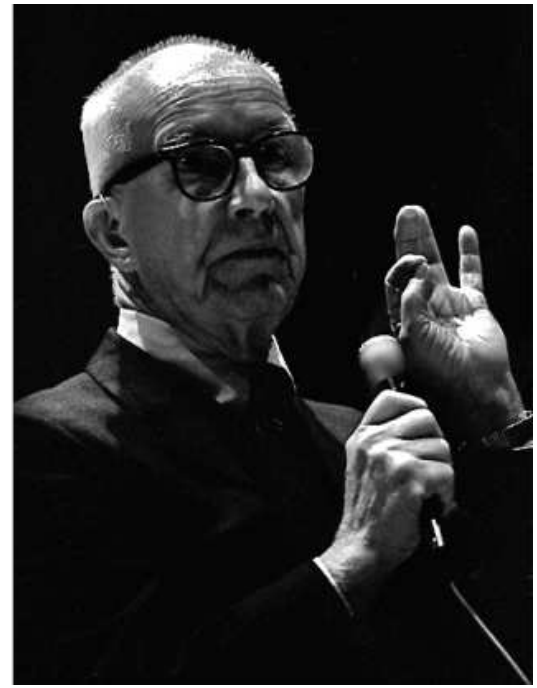
neither *Good*

nor *Bad*

not even *Neutral*

*Melvin Kranzberg*

# people inspire people



these ***dudes*** somehow inspired me to learn & do Geo(G/IS)

locally these folks continues to inspire me by their silent actions... :)

# ?

# what is gis anyway

one of the interesting ways

**"to look"**

at things happening in

Earth

*(present World)*

## GIS = Geo Systems + Information Systems

- - - - - -

which is a ***psychedelic*** mix of :

- theories
- tools
- information
- methods
- strategies

from both the domains

a collaborative scientific process associated with geographical systems to collect data, analyze, disseminate, share, distribute information adhereing to open standards

- - - - - - - -

gis proliferates and promulgates a democratic and romantic relationship between man, machine, and earth to reach a positive emergence

# So What ?

well !... we have limitations

- senses
- perception
- reliable data collection
- repetetive & concurrent analysis
- modeling & repetetive reporting

# Mapssssss !

# What are Maps ?

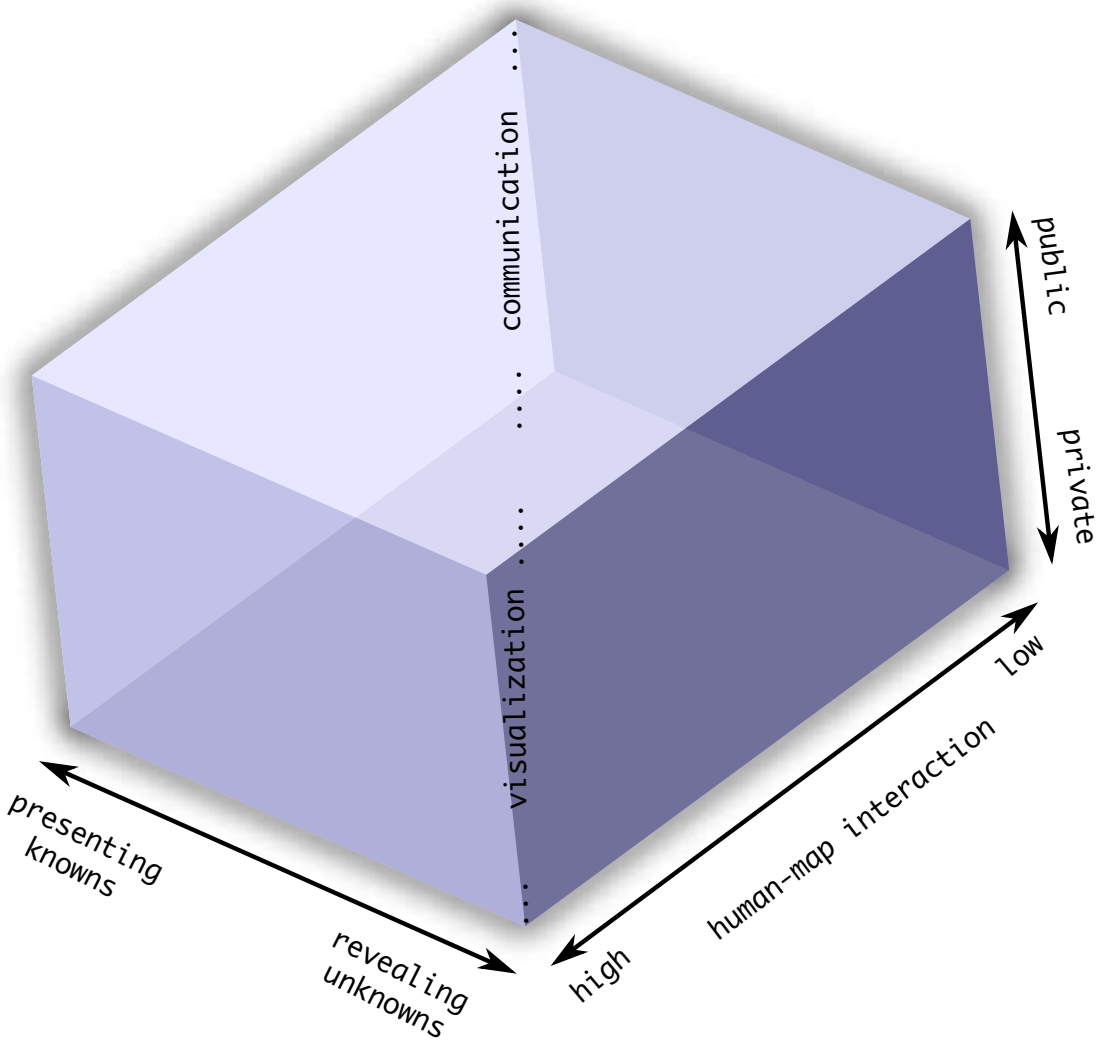
the **medium** through which geographically representable information is shared and disseminated

# What is Cartography ?

the art & way of designing maps effectively

$=$ science $+$ aesthetics $+$ technique

# Carto-Cube




**Reference** : *cartography cube*

# Organized Diversity

ontological, theoretical

$\Downarrow$

knowledge organization

$\Downarrow$

**modalities**

measurement & data collection

$\Downarrow$

processing, analysis

$\Downarrow$

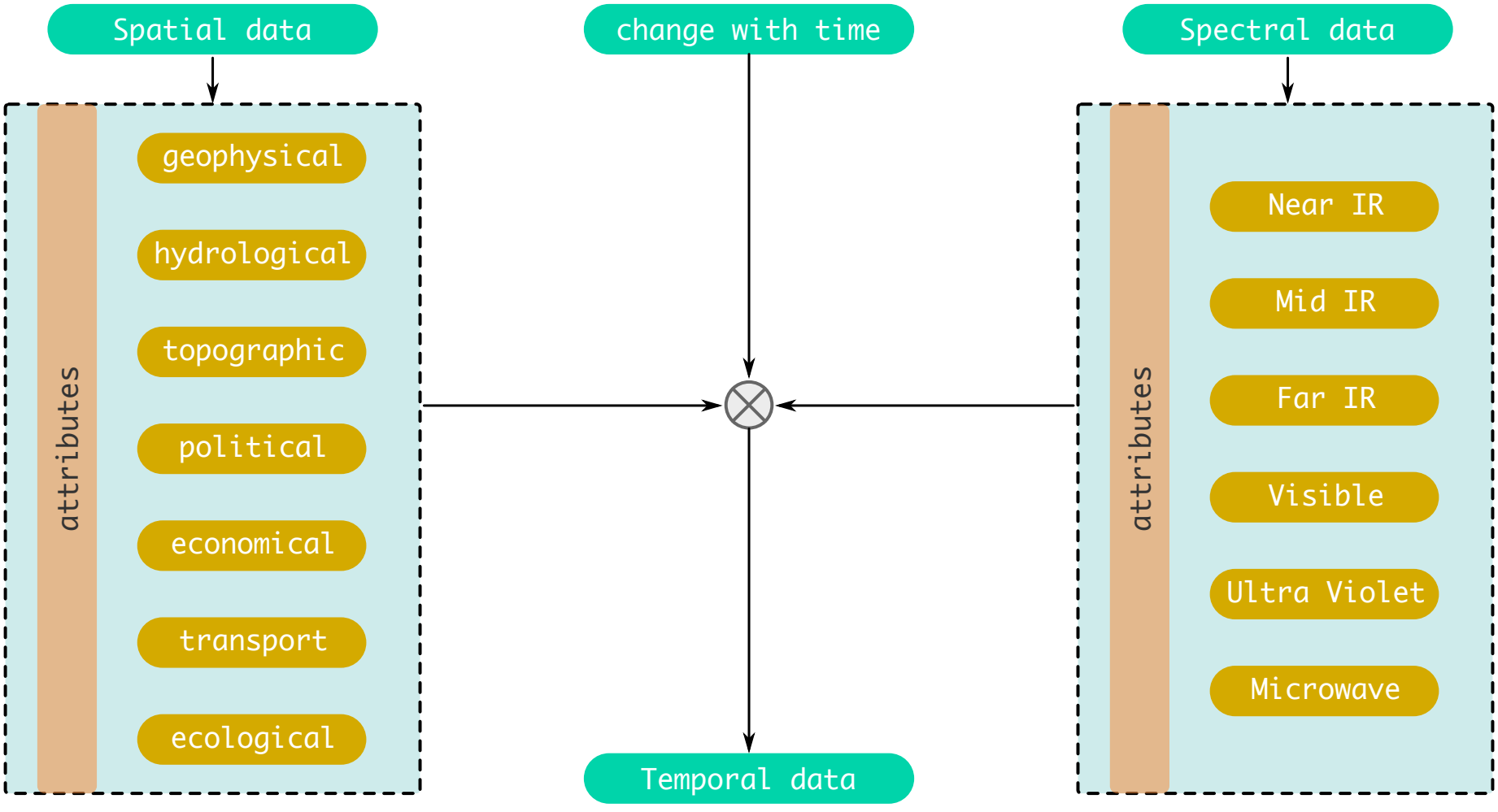
**attributes**

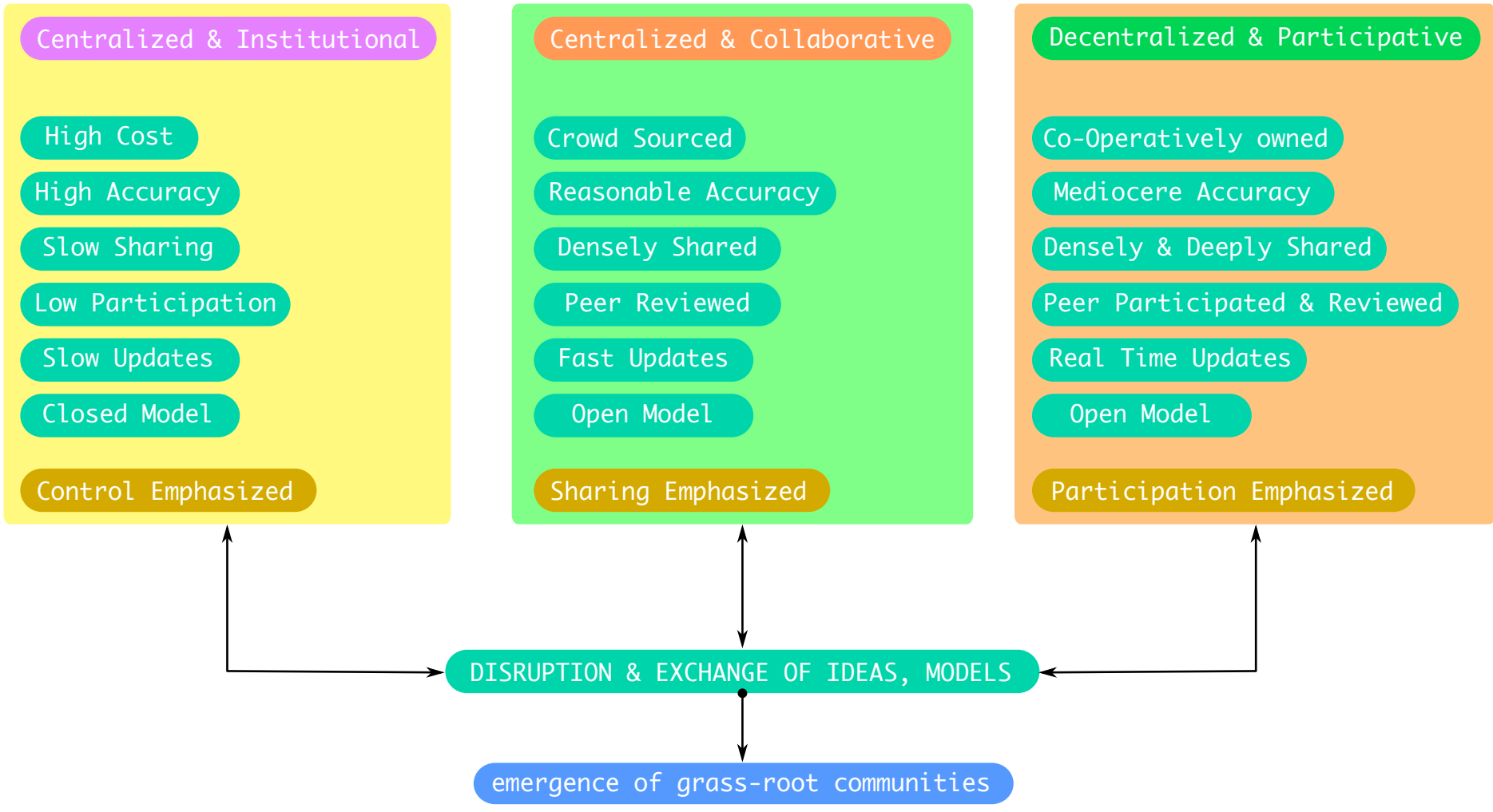
$\Downarrow$

dimensions

$\Downarrow$

visualization


Spatial data
change with time
Spectral data
attributes
geophysical
hydrological
topographic
political
economical
transport
ecological
attributes
Near IR
Mid IR
Far IR
Visible
Ultra Violet
Microwave
Temporal data


Centralized & Institutional
High Cost
High Accuracy
Slow Sharing
Low Participation
Slow Updates
Closed Model
Control Emphasized
Centralized & Collaborative
Crowd Sourced
Reasonable Accuracy
Densely Shared
Peer Reviewed
Fast Updates
Open Model
Sharing Emphasized
Decentralized & Participative
Co-Operatively owned
Mediocere Accuracy
Densely & Deeply Shared
Peer Participated & Reviewed
Real Time Updates
Open Model
Participation Emphasized
DISRUPTION & EXCHANGE OF IDEAS, MODELS
emergence of grass-root communities

# How does Info. Flow ?

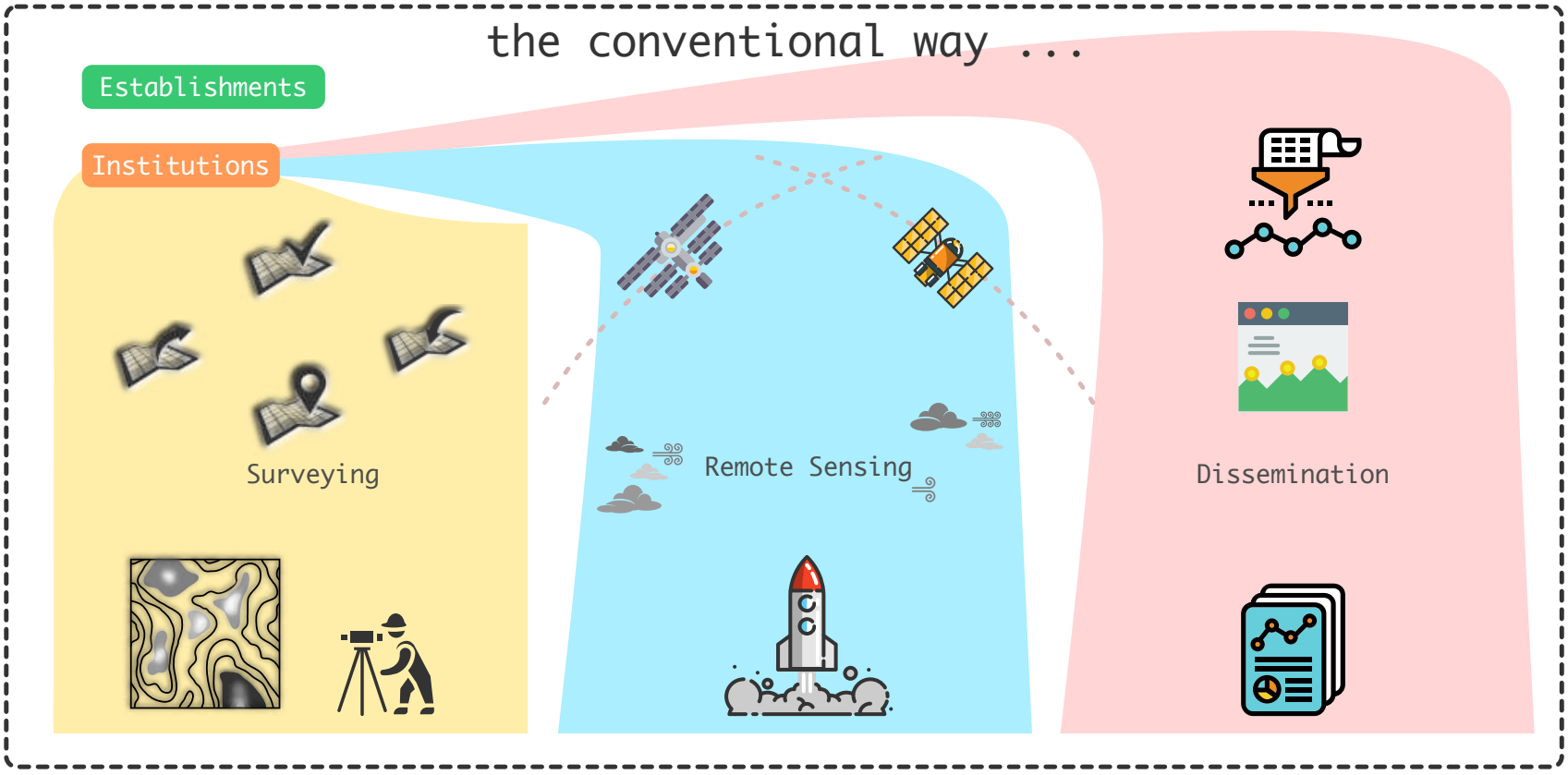
Once upon a time ...

Herinnering aan Jan Kuiler Hoogleeraar (Chron.)
December 1943
voor Henny Braakhuis te Haren.

DRAWN BY JOHN GILBERT

London: JAMES NISBET & Co., 21, Berners Street.—Price One Penny, or 7s. per 100, Plain; Twopence, or 14s. per 100, Coloured

ENGRAVED AND PRINTED BY EDMUND EVANS.

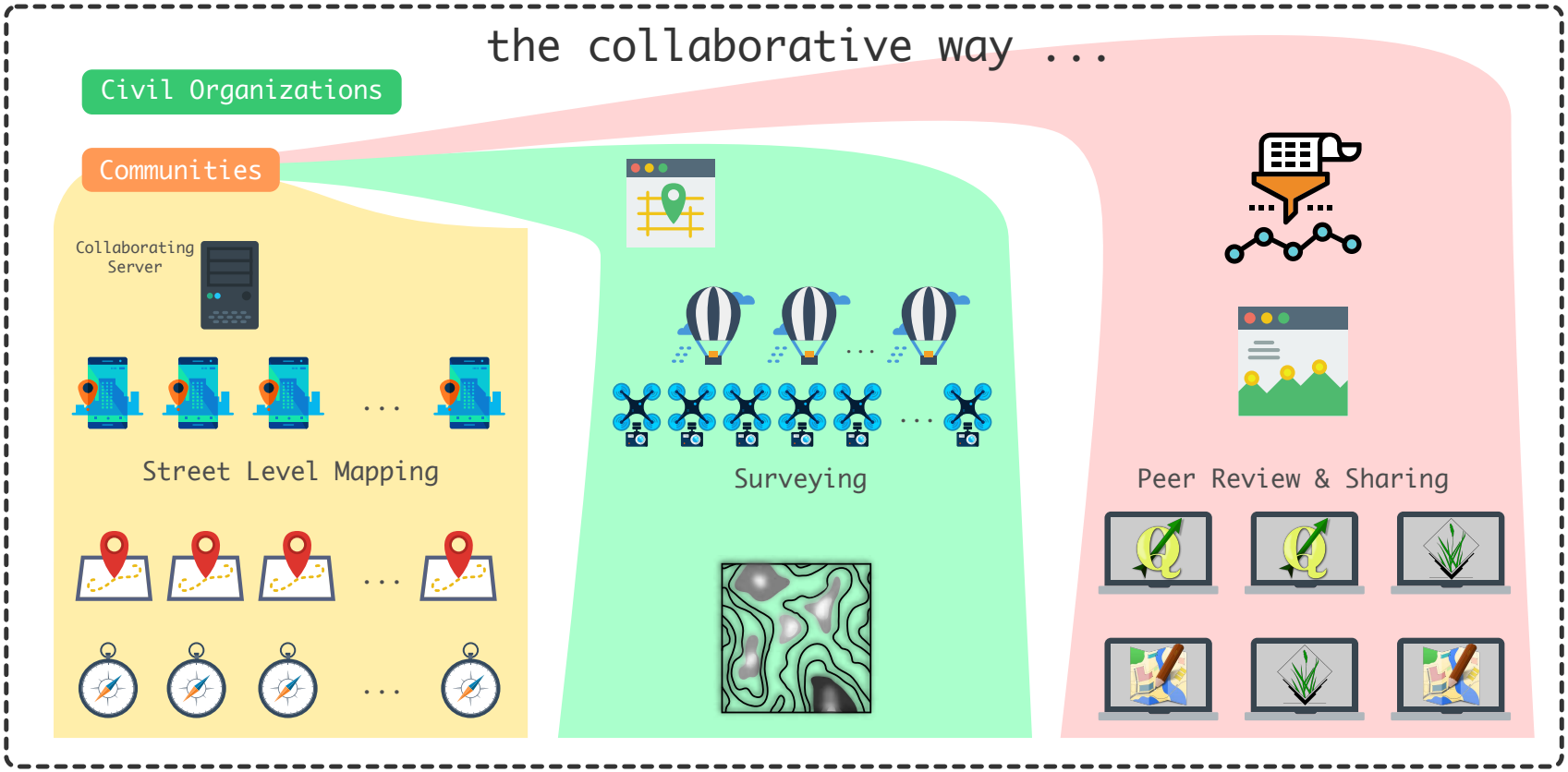



it is centralized too !

resulted in maps like these..... !

meanwhile, rise in ...

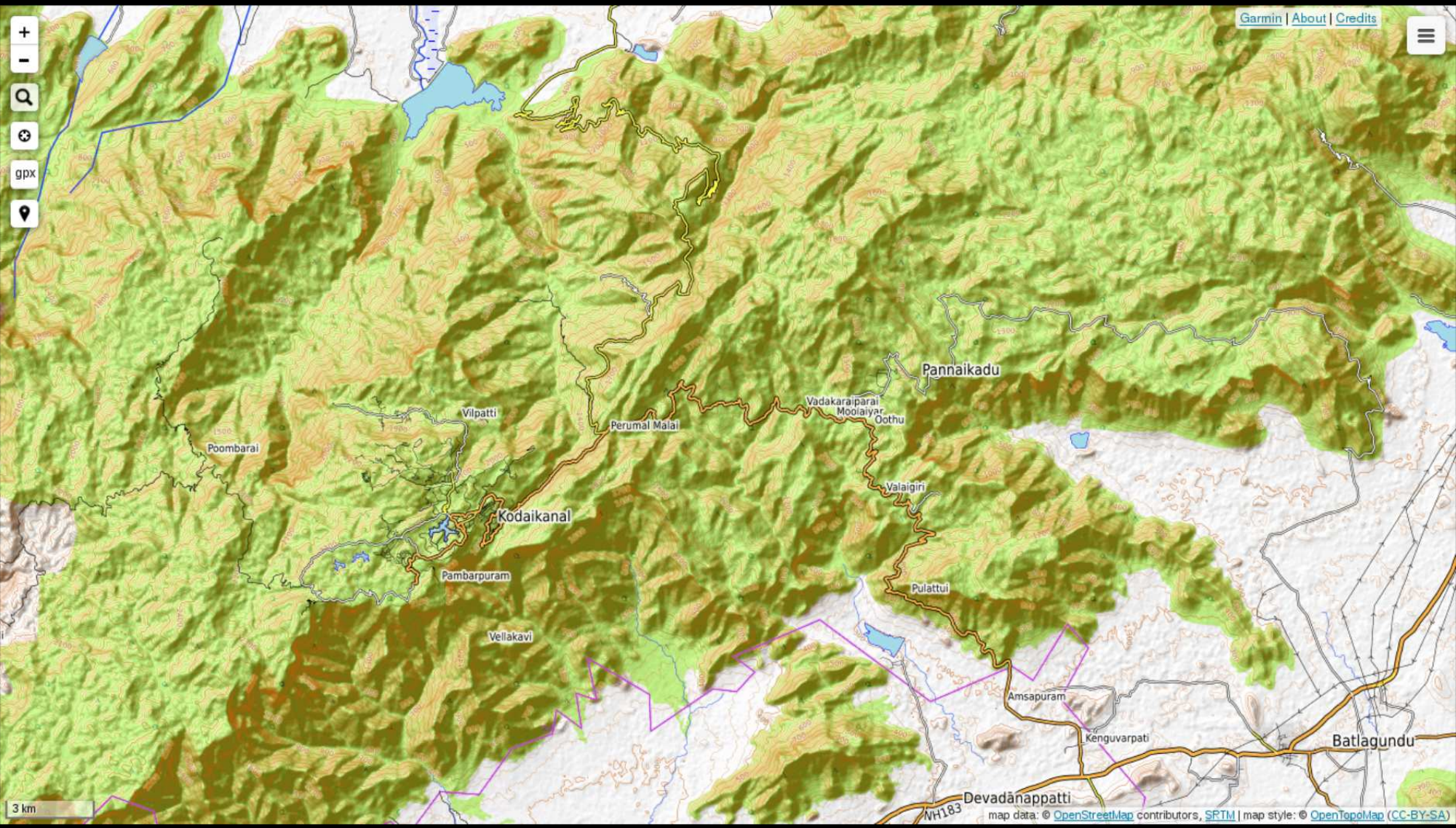
education, science, technology & creative commons ...




partially centralized but collaborative (decentralized):

existing infrastructure + creative commons + opendata + internet

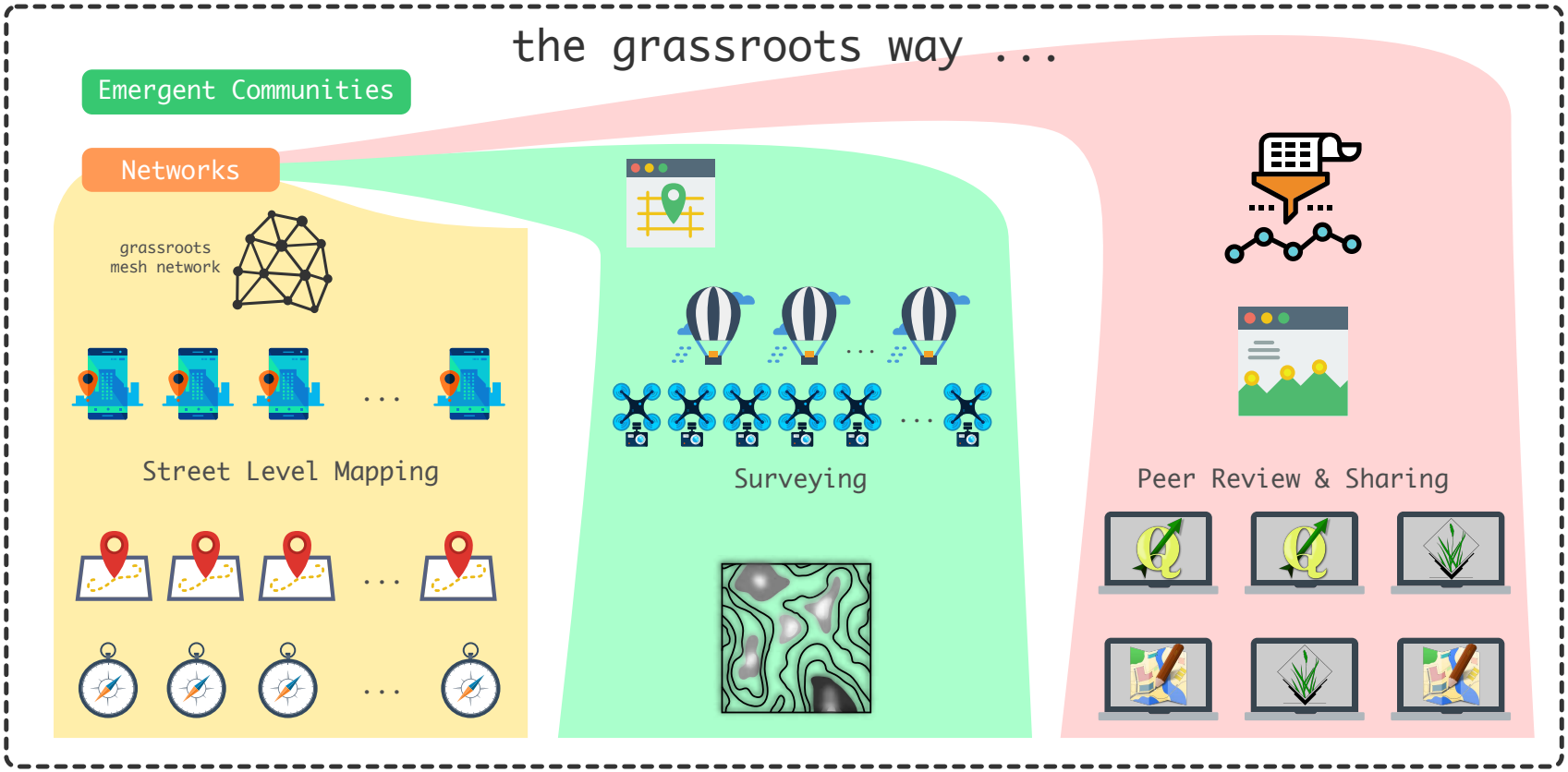
resulted in maps like these..... !


Garmin | About | Credits
gpx
Pannaikadu
Vadakaraiparai
Moolaiyar
Oothu
Vilpatti
Perumal Malai
Poombarai
Valaigiri
Kodaikanal
Pambarpuram
Pulattui
Vellakavi
Amsapuram
Kenguvarpati
Batlagundu
Devadānappatti
NH183
3 km
map data: © OpenStreetMap contributors, SRTM | map style: © OpenTopoMap (CC-BY-SA)

with emergent grass root infrastructure

&

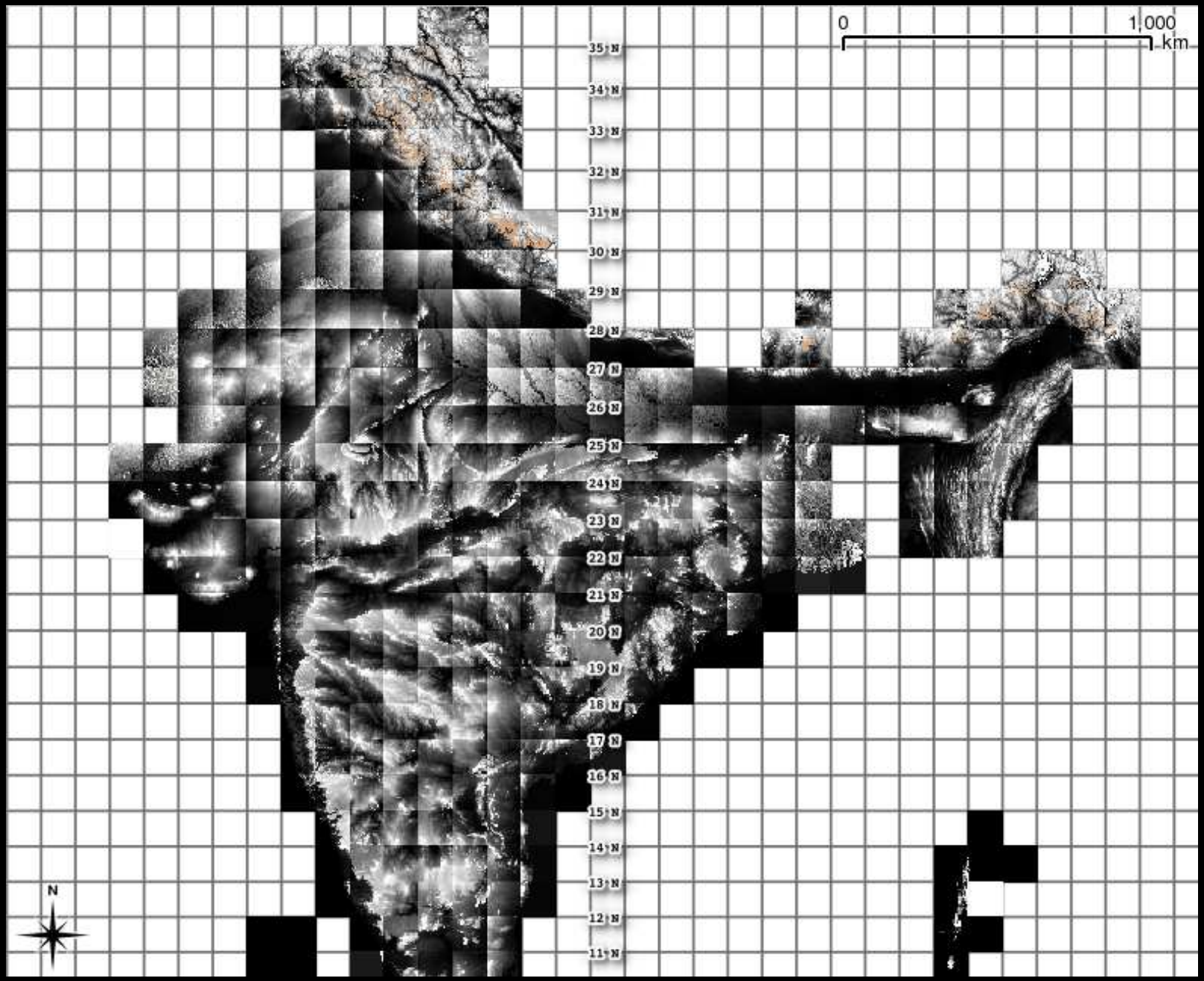
commons based peer production ...




partially centralized but collaborative (decentralized):

existing infrastructure + creative commons + opendata + internet

will create more than these..... !


0
1,000
km
35° N
34° N
33° N
32° N
31° N
30° N
29° N
28° N
27° N
26° N
25° N
24° N
23° N
22° N
21° N
20° N
19° N
18° N
17° N
16° N
15° N
14° N
13° N
12° N
11° N
N

Yolagin
Jolarpet
1200
1100
1000
800
600
500
400
SH122

# Credits

This Document Contains contents, icons, taken from collaborative internet web sites which offer the content distributed under Public Domain or CC license.

Since every icons in each block diagram cannot be attributed seperately
So i am providing the link where it can be from.

think !