

Re-engineering  
*“Open”*  
in digital  
creation



# Anestis Anestis New Media Artist

Anestis is a software developer, data scientist and new media artist who uses computers and hardware interfaces as emotional tools to mediate the virtual with the real. He develops abstract images and interactive installations to express his passion with experiences of complexity in an interdisciplinary and highly technological world

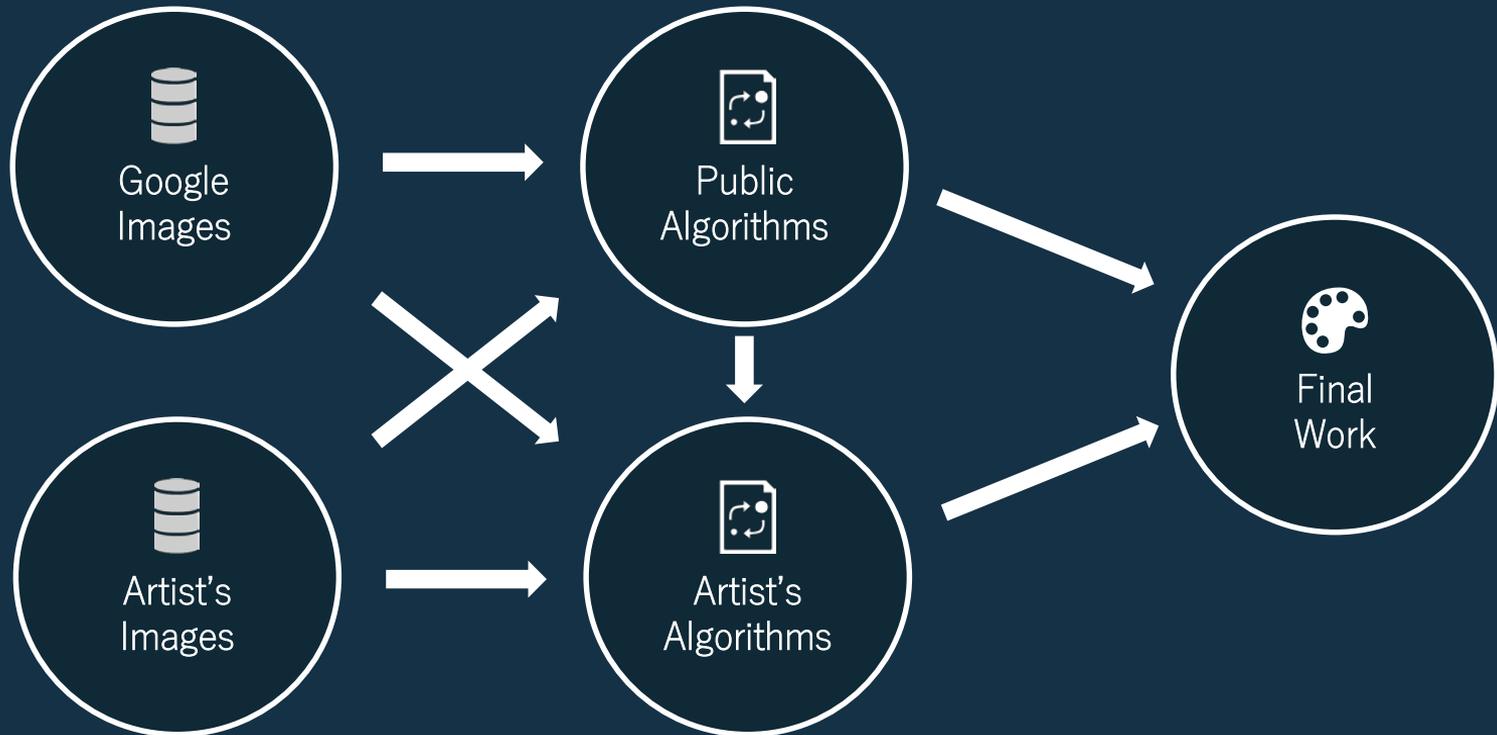
# Algorithmically Generated Landscapes



Abstract landscapes representing Spring and Autumn, composed by blending thousands of images returned by Google image searches into single pictures. Using custom made algorithms, each image returned by Google is stacked on top of each other, and the total set of the query results is condensed into a single emotional impression by a complex processing of each original's pixel color value. Thus, each pixel captures the light and color details of numerous original images in an "impressionist" way, and the huge algorithmic textures displayed in large dimensions challenge the viewer to fuse his physiological perceptions with their digital representations in a world of big data.

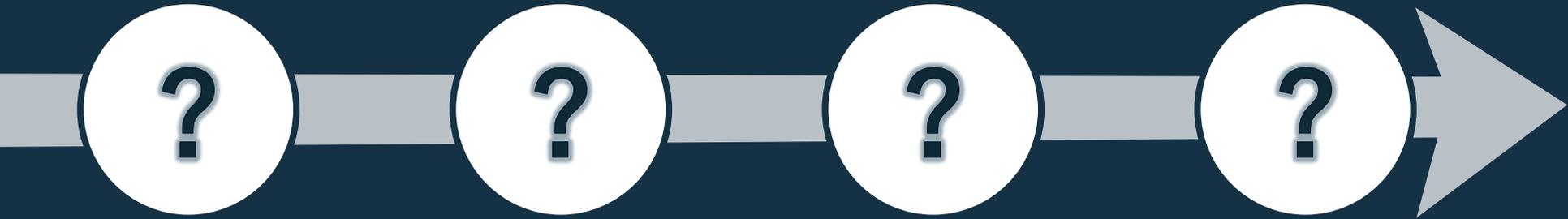
# Creative process

How the algorithmically generated landscapes are created



# Main concerns

How to use **data** and **algorithms**



## Data

To what extent is permissible to use input data for custom processing and algorithm training towards an absolutely distinguishable output?

## Data

The original data become extremely scrambled by algorithms to the point that even if proprietary data are excluded the result does not change noticeably. Yet the effort of excluding them may be enormous!!

## Algorithms

What happens when we use an open and a self generated algorithm? Is it considered a work of joint authorship?

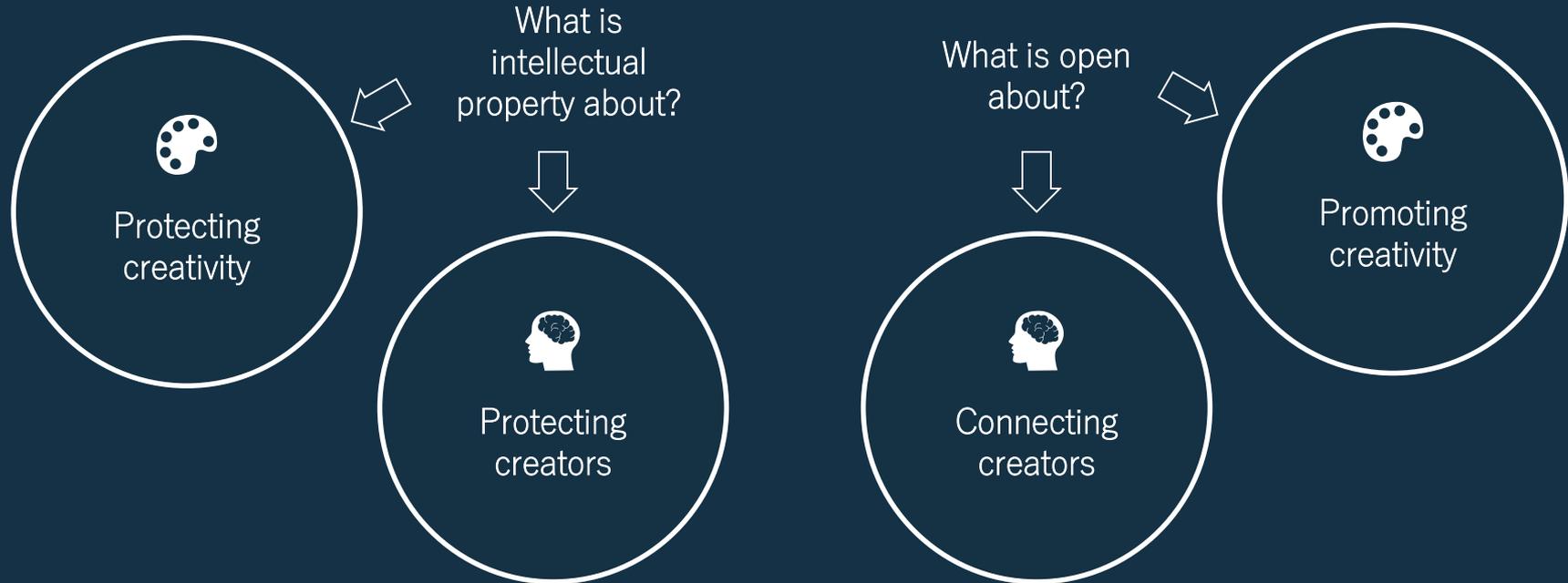
(copyrights)

## Algorithms

What happens when algorithms originating from different law/value systems (EU vs. US) merge into the final result?

(patents)

# Intellectual property and openness



Where Good  
Ideas Come  
From: The  
Natural History  
of  
Innovation  
(2011)  
Steven Johnson.

“Good ideas may not want to be free, but they do want to connect, fuse, recombine. They want to reinvent themselves by crossing conceptual borders. They want to complete each other as much as they want to compete”



STEVEN  
JOHNSON

“A FIRST-RATE STORYTELLER.” —*THE NEW YORK TIMES*

WHERE GOOD IDEAS  
COME FROM

A *NEW YORK TIMES* BESTSELLER

THE NATURAL  
HISTORY OF  
INNOVATION

“ENTERTAINING AND SMART.”

—*LOS ANGELES TIMES*

FROM THE BESTSELLING  
AUTHOR OF *EVERYTHING  
BAD IS GOOD FOR YOU*  
AND *THE INVENTION  
OF AIR*



# Anestis's creative process

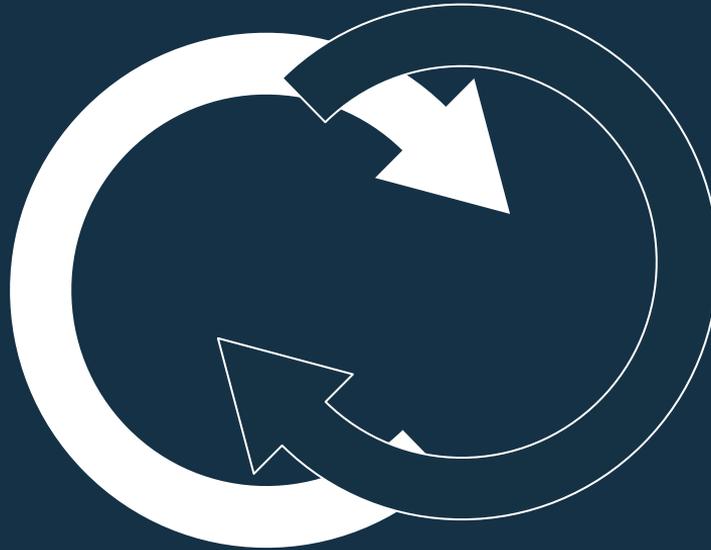
A fusion and recombination of data and algorithms from various sources

# Intellectual Property vs. Innovation

How to be open to innovation while respecting IPR's?

## Intellectual Property

Knowledge, creative ideas, or expressions of human mind that have commercial value and are protectable under copyright, patent, service mark, trademark, or trade secret laws from imitation, infringement, and dilution



## Innovation

The process of translating an idea or invention into a good or service that creates value or for which customers will pay

# New Media artist's creative chain

Anestis's creative work chain



## Dataset

Selecting originally created or publicly available data



## Algorithms

Using open or custom created algorithms



## Work

containing technologies that enable digital generative or interactive processes



## Open (content) under open (licenses) & Technology

Open knowledge allows for a decentralized (and asynchronous) development process. This greatly reduces rigidities and also allows for a far wider participation in a given project. At the same time it demands a more sophisticated set of development tools and processes.

# From Copyright to CC

Creative Commons spectrum

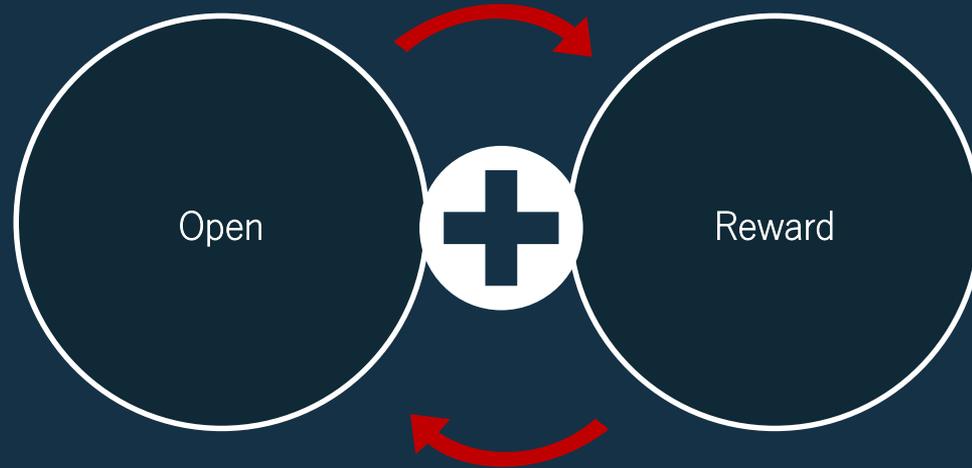
No rights reserved  
(public domain)

Some rights  
reserved

All rights reserved



# Tension between open and reward



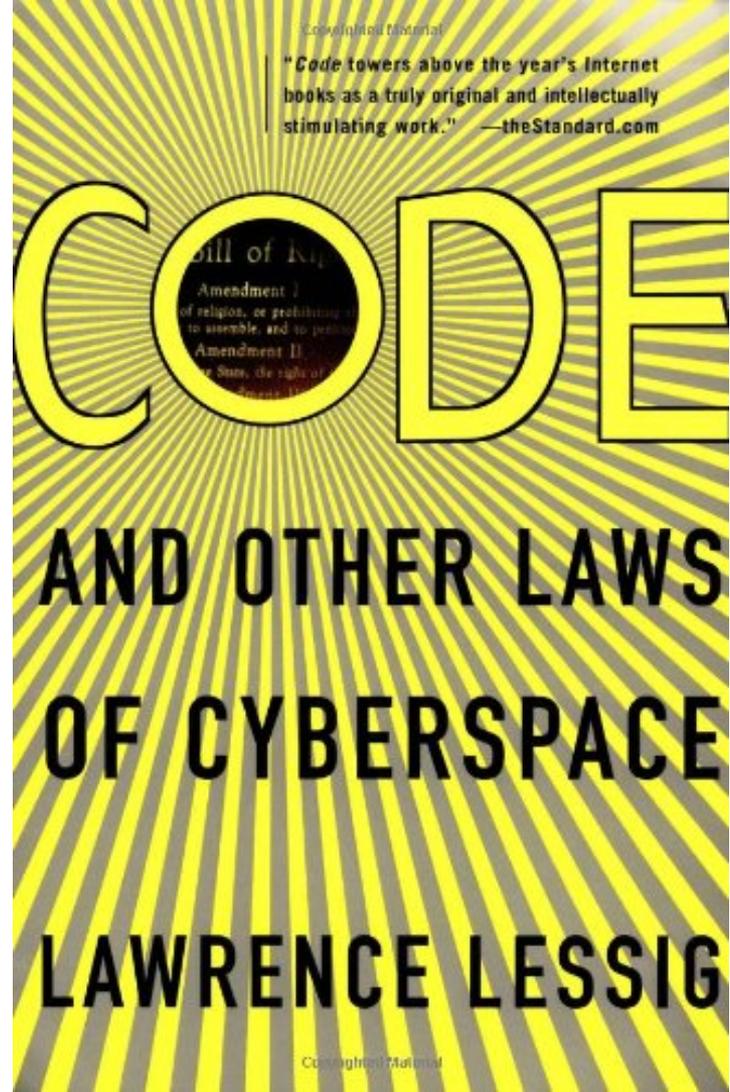
Instead of policing the internet let us reflect on the technology and reinvent open

# Code: And Other Laws Of Cyberspace (1999, 2006) Lawrence Lessig.

“We can -we must- choose what kind of cyberspace we want and what freedoms we will guarantee. **These choices are all about architecture: about what kind of code will govern cyberspace, and who will control it.** In this realm, code is the most significant form of law, and it is up to lawyers, policymakers, and especially citizens to decide what values that code embodies”



From Code *is* Law  
to Code *as* Law



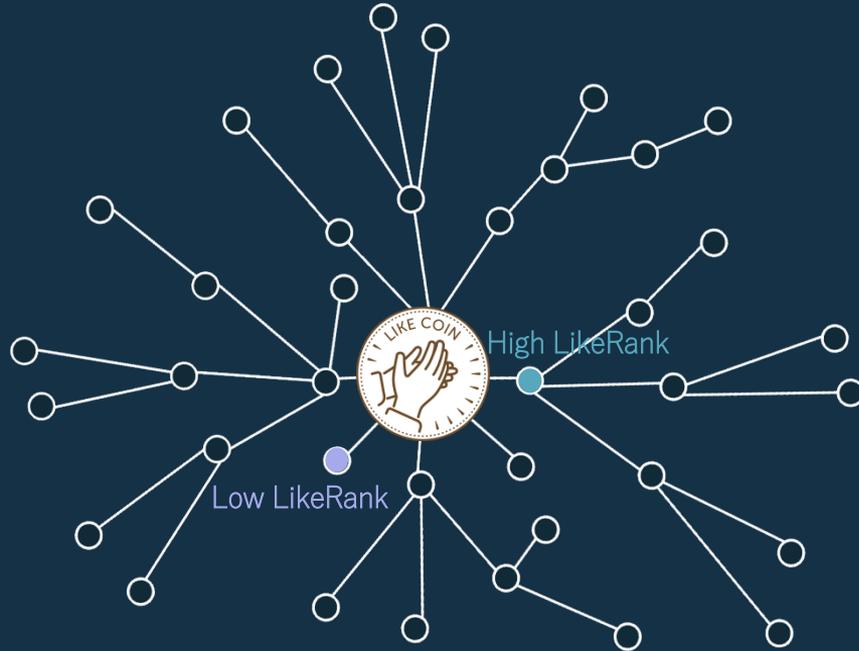
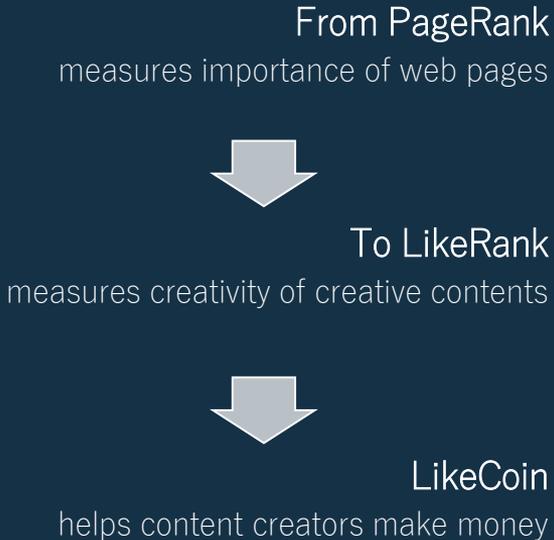


## Anestis's need for data

Even custom made algorithms need tons of data for processing and learning

# Reengineering the reward system

To reinvent open we need to reengineer the reward system.  
Imagine a mechanism that rewards works out there according to their degree of usage.



# A new scheme for rewards

The more permissive the license the higher the usability reward



Permissive licenses

CC0, CC-BY



more usage, more derivatives,  
more appreciation, more  
monetary rewards



Copyright & Restrictive Licenses

CC BY-NC-ND and the like

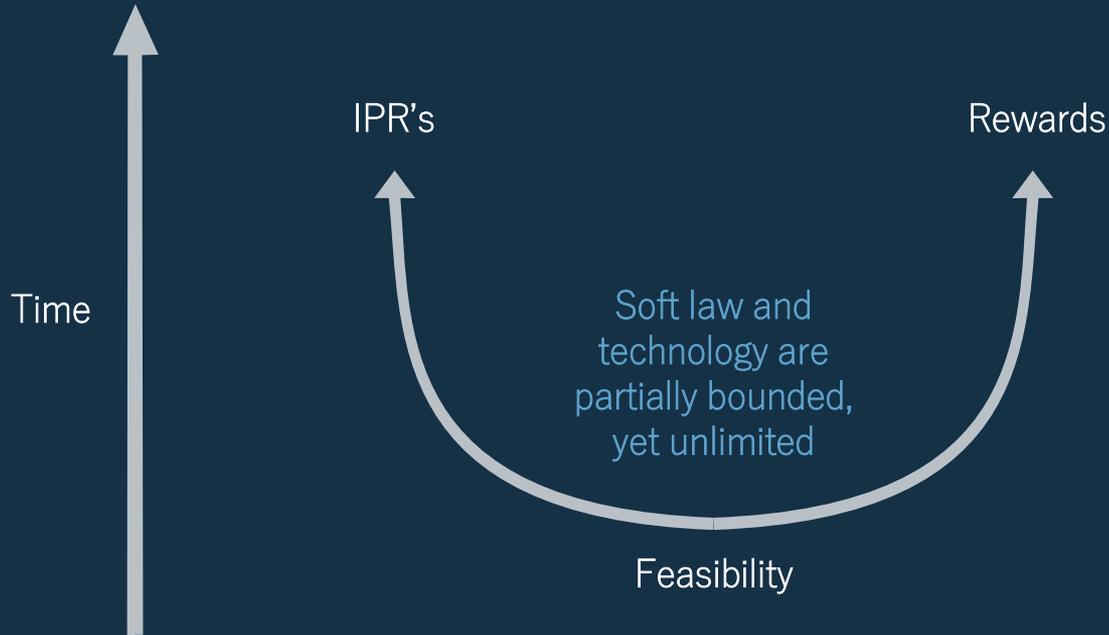


less usage, less rewards

In this scheme the more permissive the license the higher the usability reward and blockchain technologies allow us to place such rewards on open

# Soft Law (CC) & Technology

Post web 2.0 era. What ought/ought not to be done over and above the existing regulation (self regulation)



*Figure inspired by Luciano Floridi, Soft Ethics and the Governance of the Digital and the GDPR, Published by Royal Society in Philosophical Transactions of the Royal Transactions, 15 October 2018*

# Conclusion

Four pillars of successful reengineering of *'open'*



## Hard Law

Tallinn Declaration  
that promotes  
open



## Soft Law

CC licenses



## Technology

Blockchain  
Big Data  
Data Mining  
AI/ML



## Business model

LikeCoin



# Thank You

Alexandros Nousias



## Alexandros Nousias

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