

# Beyond the automobile as a horseless carriage

## New frontiers for research output services

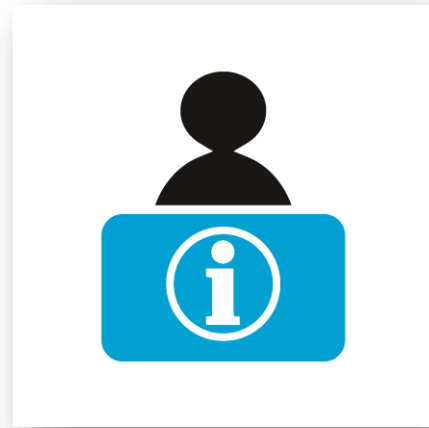
Anja Smit, Director

*Introductie DANS voor nieuwe WAR-leden*





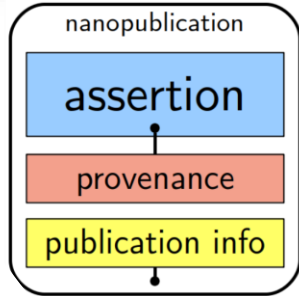
Trusted Repository



Centre of Expertise

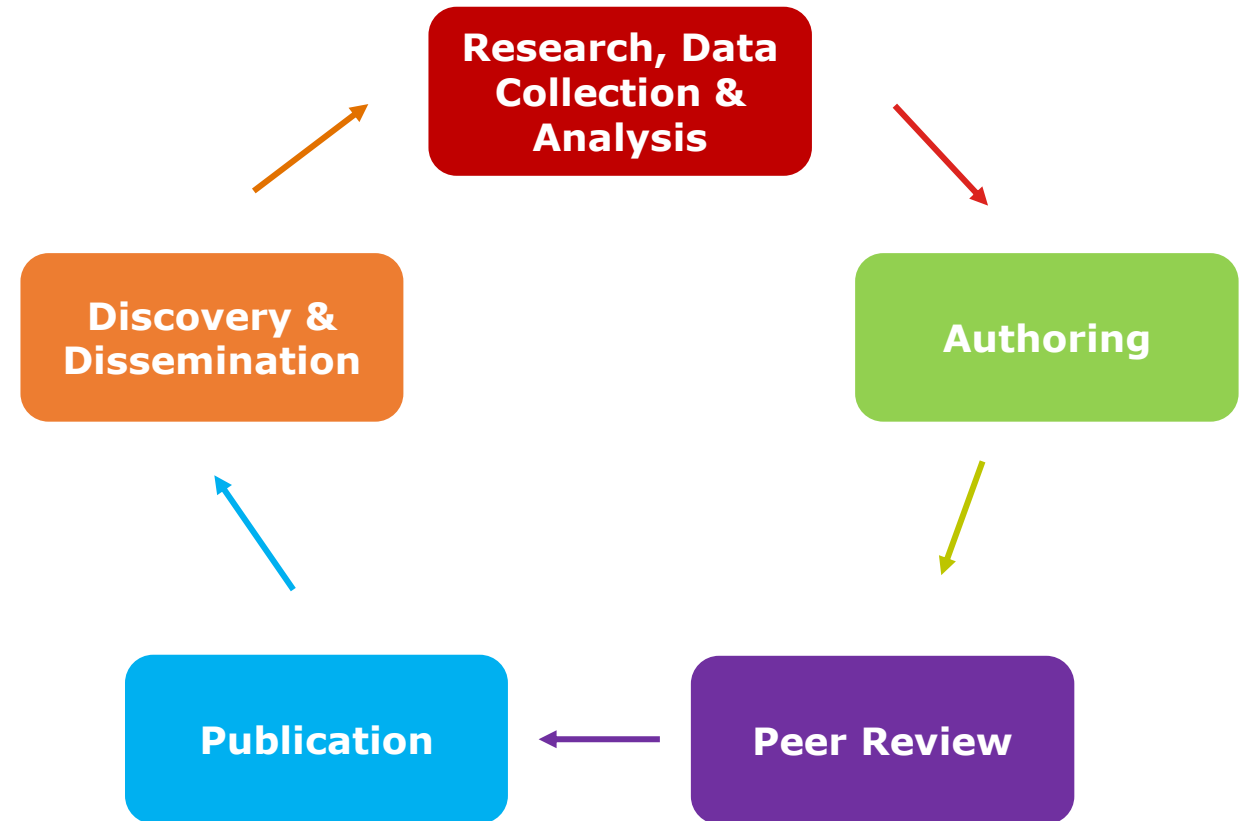


# Publications and research data: research output

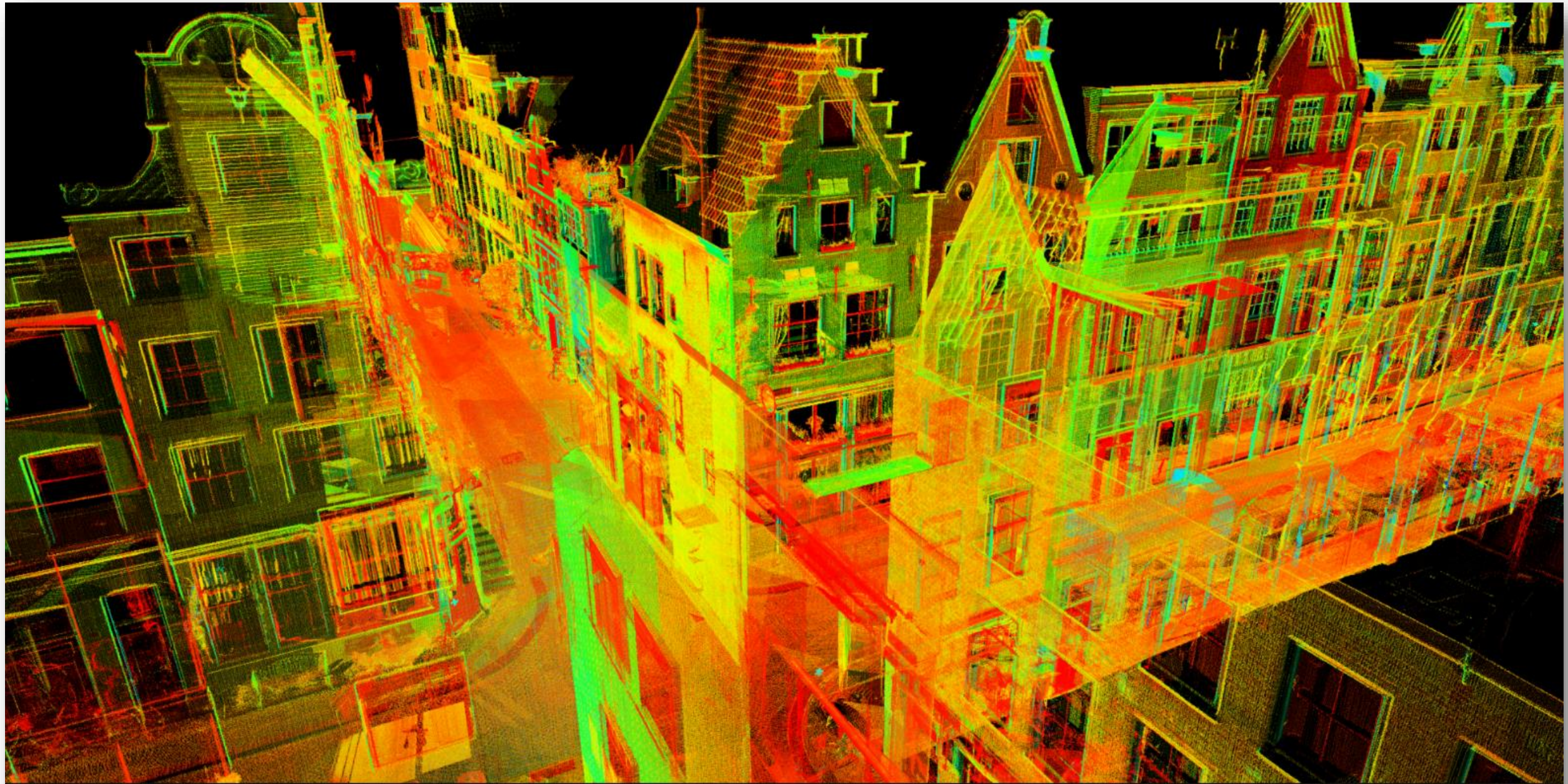


Drivers for change:

- Disciplines, Methodologies
- Digital Transition
- Incentives & Rewards systems
- Open Science Agenda







Snapshot of 3D laserscan data captured in the Bloemstraat.





3D models of the 18th century Bloemstraat, colours indicating degrees of confidence based on the quality of the historical sources.

18TH CENTURY BLOEMSTRAAT, JORDAAN NEIGHBOURHOOD AMSTERDAM Supervision, Modelling and Research: Tijl Lanjouw, 2020  
<https://4dresearchlab.nl/research/bloemstraat/>



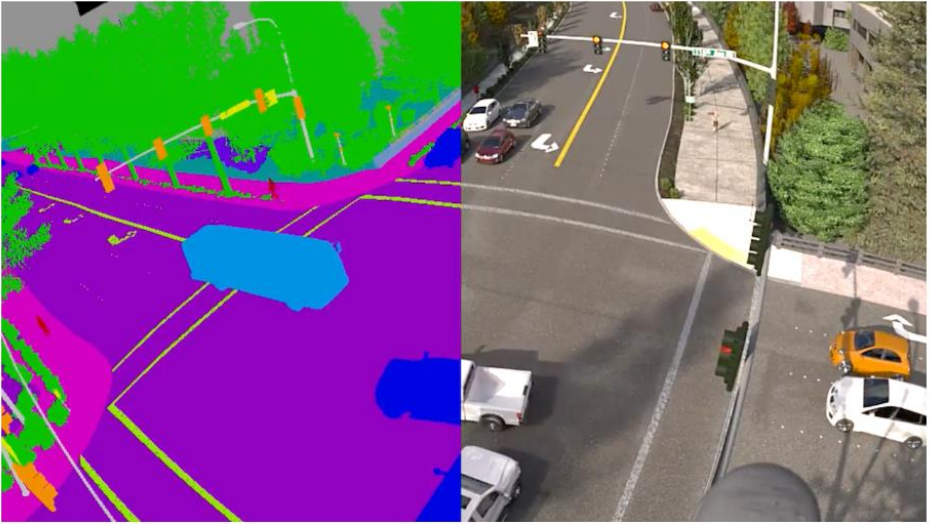
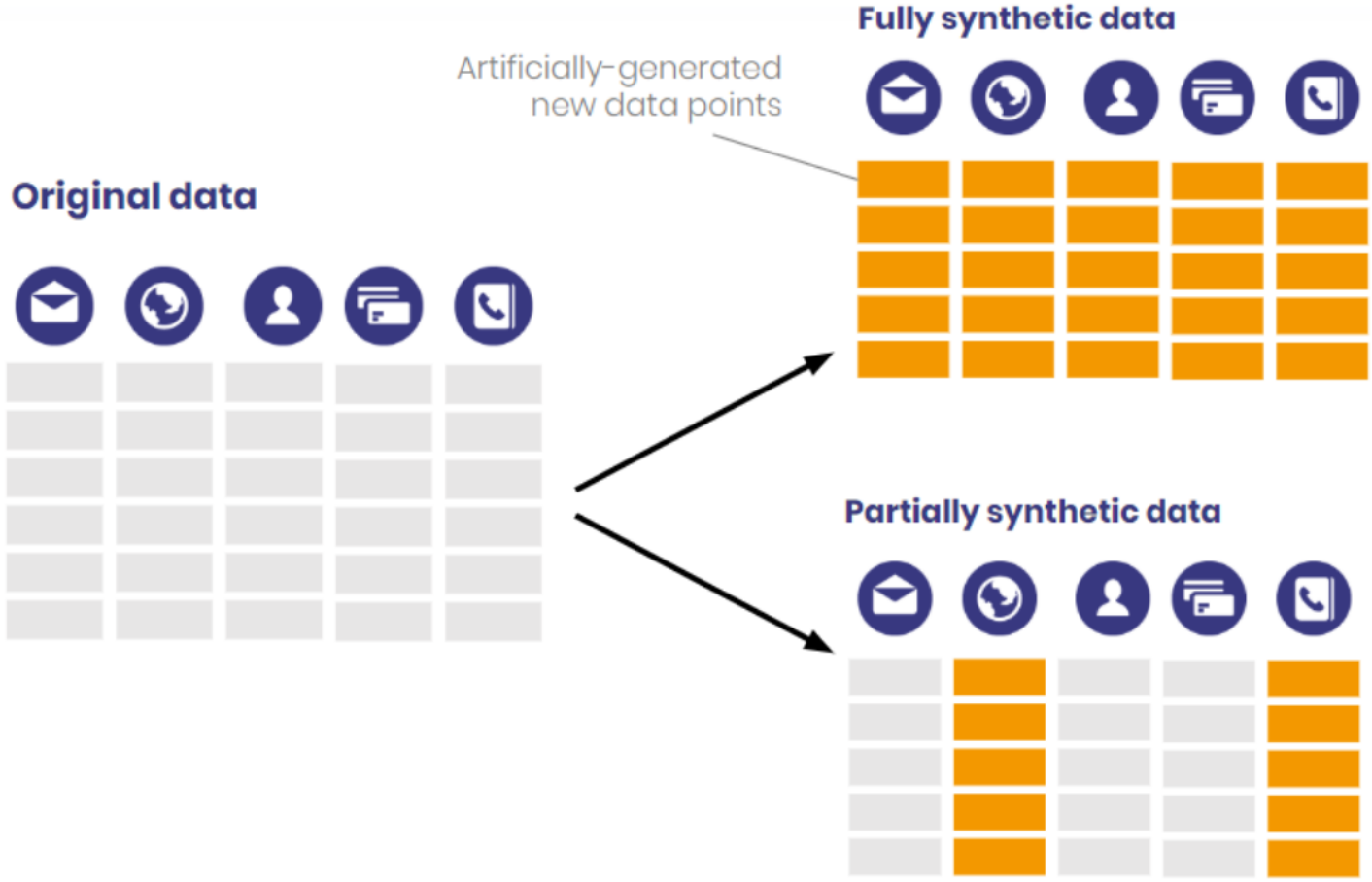
# Operation Night Watch



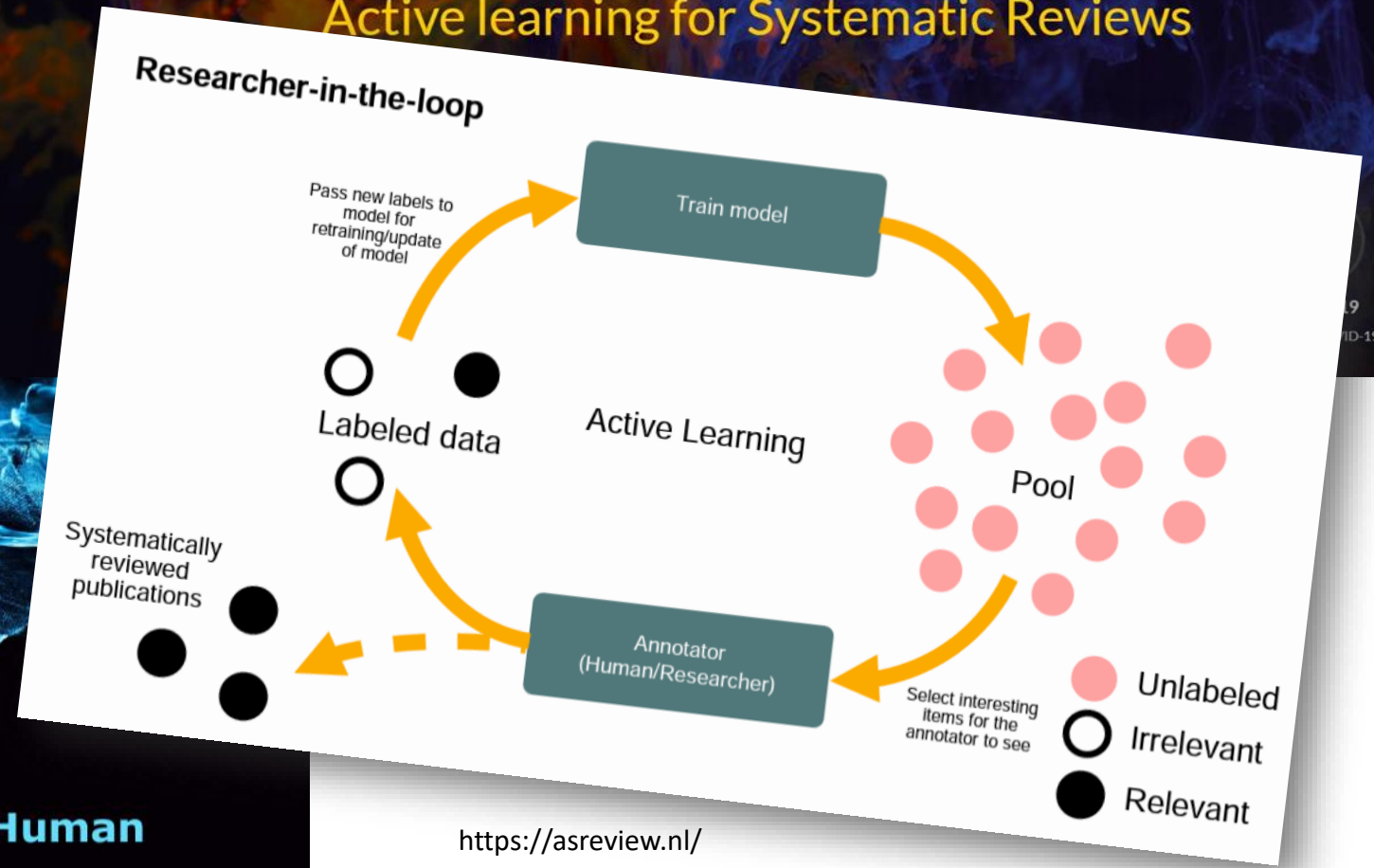
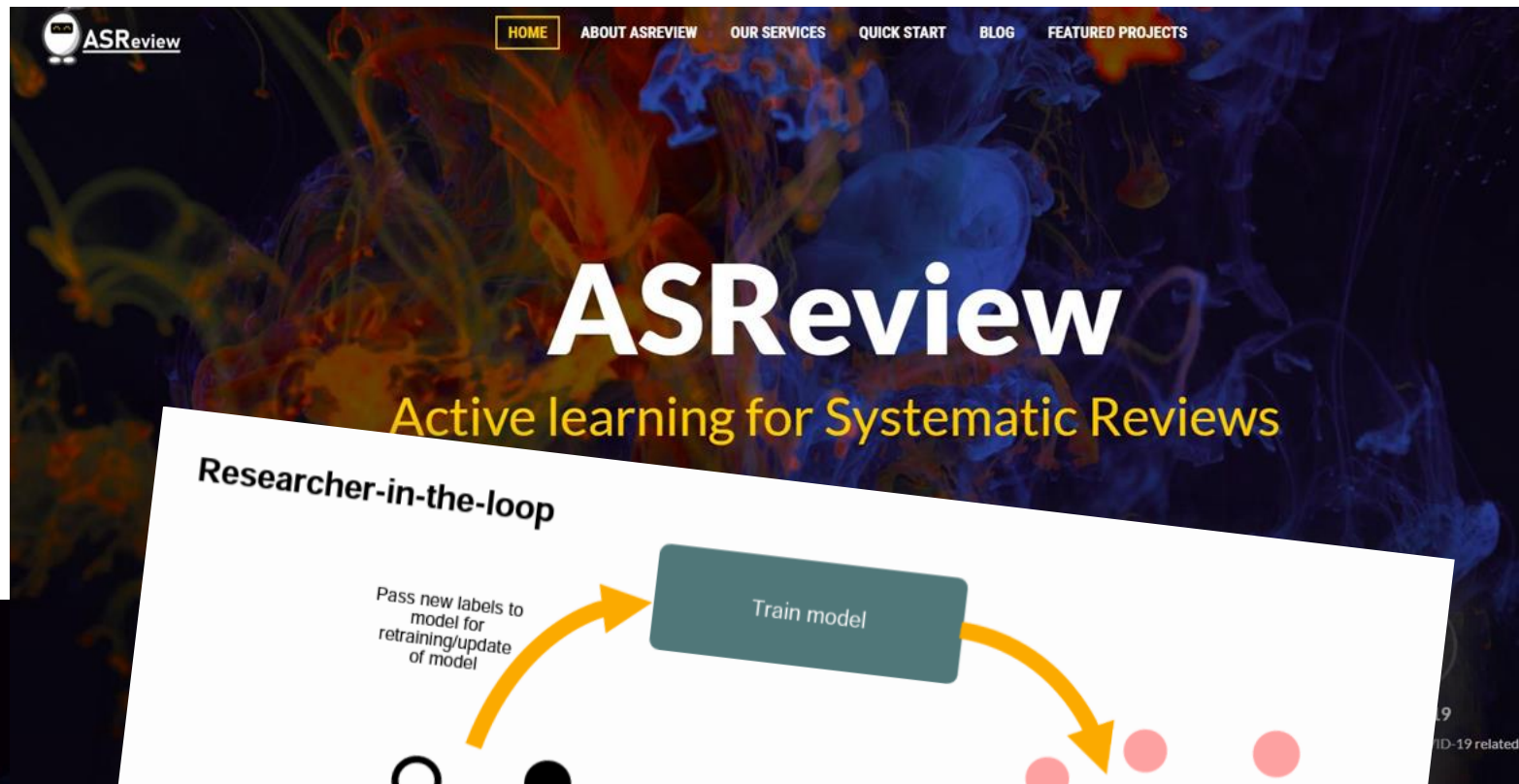
Rembrandt used poisonous arsenic



# Synthetic data



Companies have been using synthetic data to train computer vision algorithms - Credit: [Unity3D](#)



<https://asreview.nl/>



# Publications and research data: infrastructures, services

## Publications



**F** Unique, standardised entities  
Mix of physical and digital  
Via local and global catalogs and reference systems, Wikipedia, ..

**A** Mature, permanent and trusted infrastructures  
Public and private sector

**I** Global metadata standards

**R** People and machines  
Mature services

## Research Data Sets



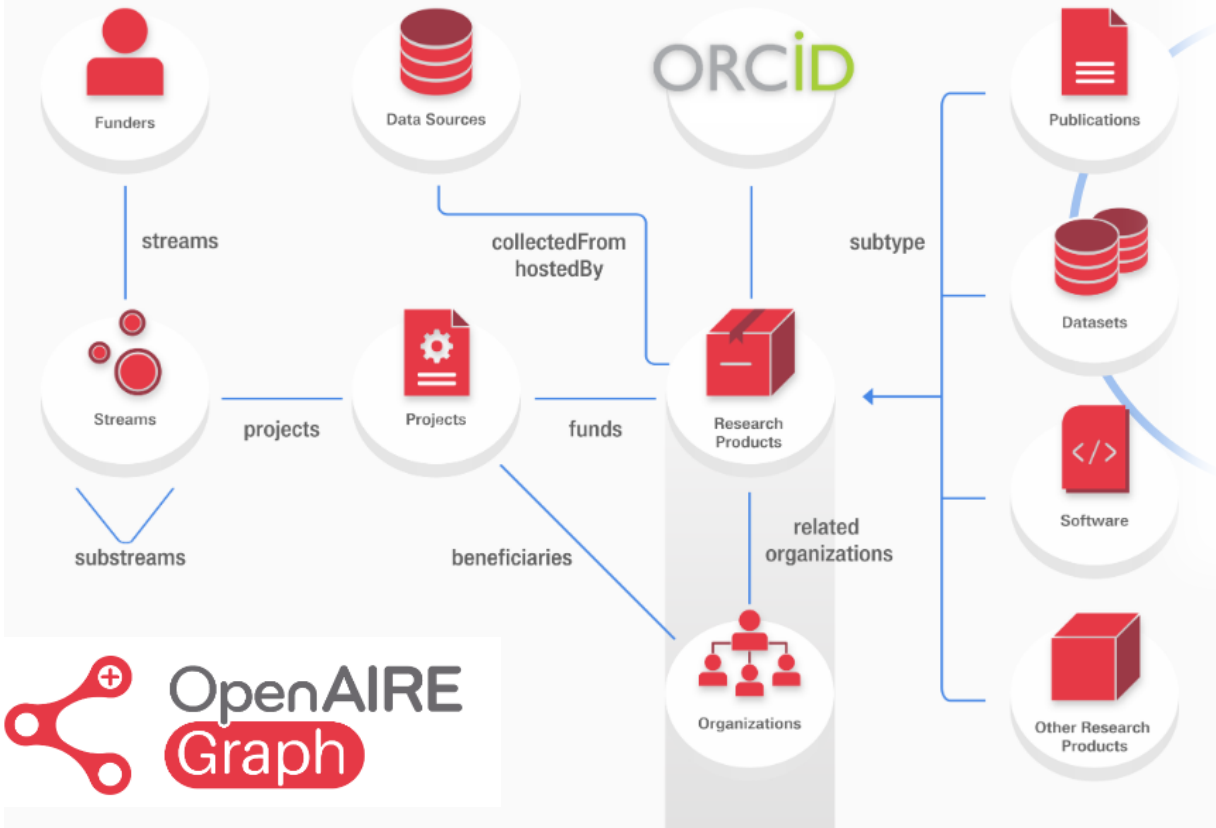
Unique, discipline specific entities  
*If F*, via open, specialized and local catalogs  
Digital-only

Scattered, temporary and only some trusted infrastructures  
Public and private sector

Discipline-specific metadata and vocabularies

Machines and people  
Support services in early stages

# The Knowledge Graph: research information



**SciLake** Increase discoverability and reproducibility of open scientific content

Overcome the underlying heterogeneity of scholarly content and address domain-specific and cross-disciplinary information needs





## (How) Will technology:

- Advance the roles of libraries, publishers regarding research output or even research information?
- Make research output the domain of IT (organizations / companies)?
- Provide opportunities for open, trusted community based infrastructures?
- ...

**Thank you for your attention!**

**Anja Smit**

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