World Data System

Domain Specific *versus* Generalist Repositories

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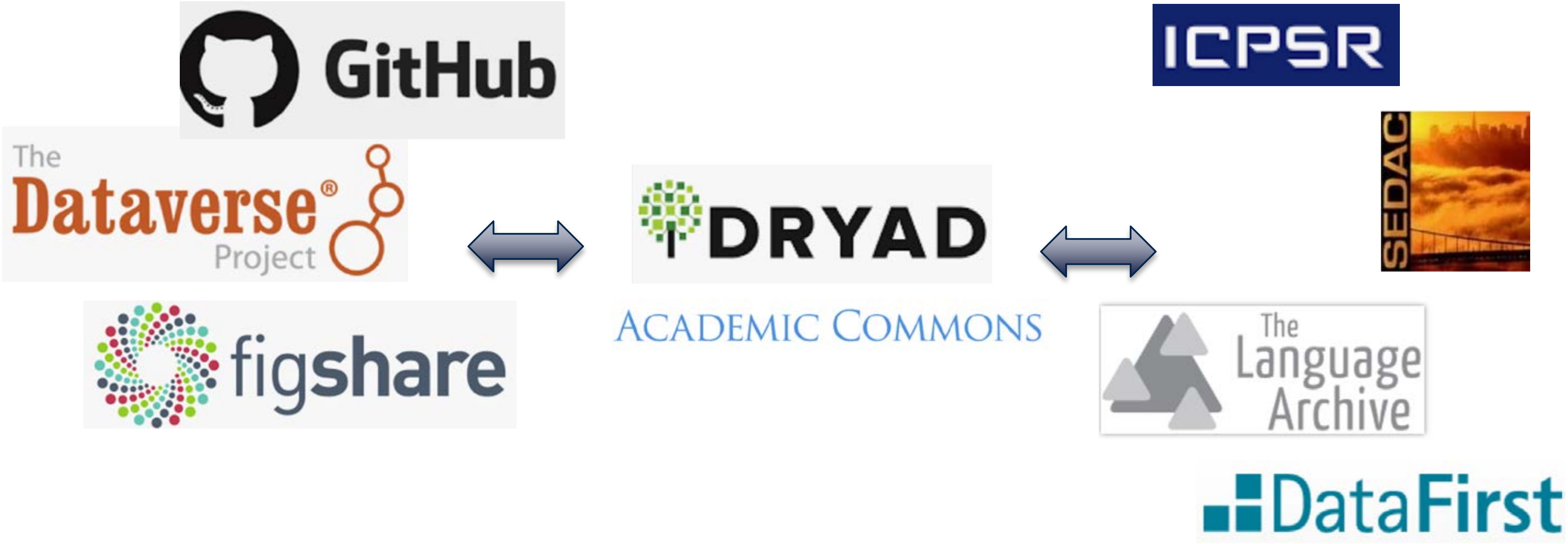
Domain repositories

WDS membership and CoreTrustSeal accreditation are targeted to domain specific repositories

Repositories are expected to have a mission to serve a **specific scientific community**, to engage representatives of those communities in **advisory groups**, and to use **domain knowledge** to **curate and serve** data

Spectrum from generalist to domain



- Many generalist repositories also run underlying infrastructure for domain repositories (e.g. Dataverse, CKAN)

Generalist repository risks

- Data could be lost (depending on their sustainability/commitment)
- For users:
  - Reduced discoverability
  - Relevant data are scattered
  - Self-archived data documentation are often insufficient for end users
  - Potential lack of QA/QC of data
- For domain repositories:
  - Propagate perception that domain expertise and peer review of data are not needed
  - Potentially undercut sustainability of domain repositories

Case Study: NASA Socioeconomic Data and Applications Center (SEDAC)

- The open science movement – in itself an important advance that SEDAC supports – has made the publication of data along with journal articles an increasingly accepted norm
- DOIs are unique, global, persistent identifiers for a given version of a data set
- In the past, SEDAC would approach authors to discuss dissemination of those data; today, by the time an article is published the data are often made available via generalist repositories with DOIs
- We even find that many of the submissions through SEDAC's submissions page are for data sets that already have DOIs
- This prevents SEDAC from disseminating the data under its own DOI
- SEDAC response:
  - Educate authors and work with them upstream in the process
  - Learn from authors and explore domain repositories to understand better why they are attractive, and potentially adopt some of their approaches
  - Have SEDAC listed by journals as a preferred repository

Potential responses

- CoreTrustSeal is being approached by generalist repositories for accreditation; it may create a separate category for them
- Domain repositories can work with journals to be listed as repositories of choice in given fields
- Domain repositories can make the case to authors that if they deposit with them:
  - There will be higher levels of data (and journal article) citation owing to enhanced discoverability or prestige
  - Reputation of the author is likely to be enhanced
  - Data reuse will increase (including by researchers outside their domain)
  - Having the data in a larger ecosystem of similar data makes it easier to develop services based on the data
- Domain repositories could just acknowledge that there are more data being published than can be archived by any one repository, and that this trend is okay

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Discussion questions

- Do you see this as an issue – and if not, why not?
- If you do see it as an issue, has it affected your repository?
- If so, what has been your response so far?
- Do you have thoughts on future responses?
- How might WDS and CoreTrustSeal address the issue / help?