This essay is part of a series essays dedicated to Open Data Day, in which we highlight the added value of different open data initiatives.

From OPEN to FAIR

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The image we used for a long time when we talked about our decision to open up our data, was the triumphant fireworks at the reopening of the Rijksmuseum after 10 years of renovation in 2013. When we began sharing our collection information and data in 2012-2013, we were excited by the impact and honored to be globally recognized as one of the poster children of the cultural open data movement. Our high-resolution images, released as Creative Commons Zero CC0, were reused both within and beyond the heritage sector: by researchers, designers, developers, educational institutions, commercial parties and many more. Reuse happened in ways that we could never have anticipated. And the fact that other heritage institutions followed a similar path suggested we were on the right track. We believed in the Rijksmuseum that "open data" in itself was sufficient.

Today, we understand that openness alone is not enough to generate lasting and structural impact. Open without structure is like a library without a catalogue. Open without standards is like an archive without context. Making information and data available online aligns with our mission. But, if we want our collection information and data to have a meaningful and lasting impact, we must invest in quality, structure, and coherence. That is why, as a museum, we have embraced the FAIR data principles: Findable, Accessible, Interoperable, and Reusable. Not as an easily transposable buzz word from the research world, but as a guiding framework for how we organize and share our collection information and data.

Moving from open to FAIR data may sound technical, but at its heart, it reflects a societal ambition with technical consequences. As part of the FAIR GLAM movement – connecting Galleries, Libraries, Archives and Museum with the FAIR data principles - we firmly believe in actively contributing to an open knowledge ecosystem in a democratic society in which information and data can flow freely, be enriched, and continuously reinterpreted. By choosing FAIR, we are not only committed to preserving heritage information and data, but also to making it optimally accessible and reusable—for research, for creative practice, and for a society that has the right, perhaps even the responsibility, to engage with its own art and history.

What does FAIR mean in practice?

Working with the FAIR data principles in recent years has made their implications tangible. They force us to look beyond a basic question like: can potential users find and access our collection information and data? We must also ask whether both humans and machines can understand and use it, now and in the future. And can it be connected to information and data from other institutions, countries, and disciplines?

FAIR data principles also calls for integration. It requires galleries, libraries, archives, museums, and academia to stop operating in parallel worlds with separate systems, vocabularies, and workflows. It asks us to recognize and act upon the idea that they form a continuum: from object to documentation, from archival record to publication, from research data to interpretation. We know from firsthand experience that this is far from easy, as it means investing in standards, ontologies, persistent identifiers, linked data, and connected infrastructures. But we believe it is really worth the effort.

One of the areas in which the added value of our FAIR approach becomes particularly visible is provenance research. See for example the recent semantic overhaul of the Getty Provenance Index. International collaboration on questions of origin, injustice, and restitution is strengthened by integrated and FAIR information and data. When archival acquisition files, auction catalogues from libraries, and object records from collection management systems of museums are brought together, ownership histories can be reconstructed with greater accuracy and transparency. In this way, FAIR data does not merely support research; it contributes directly to historical justice by enabling connection, accountability, and openness.

Based on these kinds of experiences, we are working toward a situation in which different forms of collection information and data function in an integrated semantic infrastructure rather than as separate silos. We are working hard to bring together our object images, object metadata, bibliographic data, archival records, and research data via a semantic integration layer and making them visible via our collection website and usable via open data services. On our collection website—Collection Online— and on data.rijksmuseum.nl you can see the results of this approach. That said, anyone who visits our website can also see that there is still much work to be done and that we still face many challenges ahead.

Challenging times for FAIR and open data

One of the dilemmas, in the age of AI, is that openness brings new complexities. The circulation of information and data can enable uses we may not agree with. AI companies are scraping collection information and data at a huge scale, and generative AI is trained on GLAM data. The opacity of many AI systems, the concentration of power in a handful of technology platforms, and unresolved ethical questions around bias, consent, and control over cultural data call for continuous critical reflection and responsible data practices. Those with the greatest computational power, infrastructure, and capital are best positioned to extract value from openly available resources. As a result, knowledge, economic benefit, and cultural influence run the risk of becoming further concentrated rather than broadly and democratically distributed, as openness originally intended.

At the same time, well-structured, machine-readable, and richly documented data enable AI systems to generate insights, enhance discoverability, and support large-scale research with potential societal and academic value. Realizing these benefits, however, requires approaches that safeguard public values. Greater control by GLAM institutions over how their data is accessed and reused could help address concerns about the transparency and traceability of AI systems, for instance regarding the sources behind generated outputs—which often originate from GLAM collections.

Several heritage institutions are therefore exploring new governance frameworks. For example, the University Library of Virginia has developed an Archival AI Protocol stating that access should not be provided without institutional control. Moreover, it emphasizes that provenance is key: AI systems should be able to indicate what data they rely on and, where possible, cite their sources. Institutions should also retain the possibility of removing their data from AI models. Making initiatives like this effective will require collective action and the development of shared standards across GLAM institutions.

In this context, FAIR data can support responsible AI-driven innovation as well as transparency and the responsible reuse of data. While the FAIR data principles cannot by themselves resolve structural imbalances within the AI ecosystem, they can help academic and heritage institutions exercise greater agency and promote more equitable conditions for access, collaboration, and knowledge production.

There are no simple answers to these dilemmas. However, rather than weakening our ambitions, they reinforce our commitment to our principles. At a time when parts of the digital world are becoming less open and trustworthy information can no longer be taken for granted, we see it as our responsibility to uphold public values as the foundation for openness, reliability, and trust—and to continue advancing the FAIR data principles.

Join us!

For the Rijksmuseum, the FAIR data principles are at its core about something fundamental: public cultural heritage belongs to all of us—and so does the information and data related to it. The question is not whether FAIR GLAM information and data have societal impact, but whether we are prepared to uphold that impact—especially at a time when these public values are increasingly under pressure. Will you join us in building a FAIRer knowledge, information, and data ecosystem for public cultural heritage?