Dualities of the Digital: Theorizing the Practical Realities of Digital Curation

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Binary Foundations

- Digital collections rest on binary foundations.
- All digital objects and associated metadata are composed entirely of binary values (bits).
- Technologies to manage and use digital objects can only perform actions that are reducible to binary values.

The Working Reality - Dualities

- Meanwhile, in the world of human decision making, we confront dualities.
- A duality is "a single conceptual unit that is formed by two inseparable and mutually constitutive elements whose inherent tensions and complementarity give the concept richness and dynamism."*

*Wenger, Etienne. *Communities of Practice: Learning, Meaning and Identity*. Cambridge, UK: Cambridge University Press, 1998, p. 66.

Defining and Implementing the Archival Record

Performing actions on digital objects (e.g., description, OCR, redaction) just-in-case	Performing actions just-in-time (if/when needed)
Capturing state of a target entity at a given time	Recording changes of its state over time
Retaining state information directly	Retaining ability to generate similar states over time
Reflecting affordances of current interaction contexts (more easily usable in the present)	Reflect affordances of previous interaction contexts (more fidelity to original use environment)
Internal complexity (within objects)	External complexity (pushed into the system)

Focus and Priorities

Transfer of custody and service provision	Embedded curation and capacity building
Appraising to reflect highest societal attention	Appraising to reflect marginalized interests and perspectives
Exploring (pursue new directions)	Exploiting (building on successes)
Single point of strength	Multiple points of failure
Tight coupling	Loose coupling

Life in the Zone

- Resources are limited, and archivists can't pursue all objectives equally.
- Rather than simply picking one side of a duality, archivists must often pursue them simultaneously to varying degrees while ensuring a certain threshold level of commitment to each, finding the "zone of complementarity."*
- Proper balance depends on a variety of contextual factors that evolve over time.

* Evans, Paul A. L., and Yves Doz. "Dualities: A Paradigm for Human Resource and Organizational Development in Complex Multinationals." In *Globalizing Management: Creating and Leading the Competitive Organization*, edited by Vladimir Pucik, Noel M. Tichy and Carole K. Barnett, 85-106. New York: Wiley, 1992, p. 89.

Conclusions

- The dualities of digital curation provide a powerful way to strategize complex, often messy human activities that must be enacted through entirely binary representations.
- I hope they allow us to collectively hash out ideas without falling unnecessarily into binary oppositions.