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Engineering oral stories: a conceptual model of traditions as water

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Abstract

Introduction. Oral narratives often change form and ownership as they transition from speech to text, yet cataloguing practices rarely capture this fluidity. This study examines how description can mirror the layered nature of stories, rather than freezing them at the moment of initial recording.

Method. A comparative case design is used. First, recensions of the *Táin Bó Cúailnge* are examined through de Laet and Mol's (2000) *fluid-technology*' lens to model how narrative parts are exchanged like pump components. Second, Mapping Assiniboia Residential School Survivor Stories: Did You See Us? is presented to demonstrate an Indigenous perspective in contemporary North America.

Analysis. The analysis of these two case studies is a literary review that provides a theoretical framing of scholarly responses to FRBR, addressing and situating how different oral traditions align in a central ambiguity.

Results. In both cases, a recurring chain appeared: community blueprint, local knowledge carriers, and distribution principles. Conventional catalogues only document the carrier, leaving the blueprint and flow unseen. A three-tier FRBR-Lite model captures all layers without the data overhead that hinders full FRBR adoption.

Conclusions. Treating description as hydraulic stewardship—tracking blueprint, pump, and flow—aligns metadata with long-standing narrative fluidity and honours Indigenous sovereignty by incorporating community protocols at the carrier level.

Introduction

When archivists encounter a spoken narrative, their instinct is to capture it as audio, transcribe it, and file the result as a final artifact. Such fixation echoes a colonial habit of prioritizing textual stability over relational vitality, thereby engaging in a process of ownership and White Possession that may seem harmless to the practitioner (Christen & Anderson, 2019; Moreton-Robinson, 2015). Old Irish literature complicates that habit. Its most famous epic, the *Táin Bó Cúailnge* (hereafter *Táin*), circulated for centuries without a single author or canonical text; no manuscript claims the right to close discussion. Reading that tradition through an engineering metaphor, therefore, offers a conceptual apparatus for modern oral records—one that foregrounds provenance, layered ownership, and community consent. This article moves from early medieval Ireland to twenty-first-century Indigenous storytelling. It returns with a FRBR-lite model that helps archivists describe, rather than dam, the cultural waters that sustain oral knowledge.

FRBR In theory and the challenges of implementation

Released in 1998, the International Federation of Library Associations and Institutions' Functional Requirements for Bibliographic Records (FRBR) gave librarians what historians had long relied on: a clear entity-relationship model that separates the abstract *Work* an author conceives from the physical *Item* that eventually sits on a library shelf, thereby linking cataloguing practice to a shared conceptual vocabulary (IFLA Study Group on the Functional Requirements for Bibliographic Records, 1998).

The subsequent reports identify four nested entities that extend into future iterations—*Work*, *Expression*, *Manifestation*, and *item*—and map their relationships (International Federation of Library Associations and Institutions, 2017). All editions of *Moby-Dick*, for example, can be grouped under a single *Work* while still differentiating the 1851 Bentley edition from a 2020 audiobook.

Enthusiasm was high, but implementation proved difficult. Allyson Carlyle (2006) begins her argument by stating that '(FRBR) presents a complex conceptual model. Because of this, it is not easy for everyone to understand' (p. 264), noting that even experienced cataloguers stumble when asked to decide whether a variant title belongs to an *Expression* or a *Manifestation*. Jennifer Bowen (2005) observes a persistent 'FRBR phobia' (p. 175) in libraries because the model 'does not relate directly to any familiar data standard,' leaving staff unsure how to adapt legacy records or train new cataloguers. Surveys of pilot projects show only a few full FRBR-integrated catalogues worldwide, nearly a decade after the initial report (Zhang & Salaba, 2009). In practice, most catalogues describe entities at the *Manifestation* level and either fold *Expression* into *Manifestation* or skip it entirely, effectively combining the two FRBR entities to avoid the difficulty of full implementation (Coyle, 2016; Smiraglia et al., 2013). This pragmatic shortcut reflects workflow and system constraints rather than theoretical disagreement, erasing the conceptual levels from a record, focusing instead on records for which intellectual property exists.

The scale of the collection magnifies the complexity of the problem. Extensive multimedia holdings require cataloguers to establish *Work-Expression* clusters across millions of legacy MARC records, a labour-intensive task that most budgets cannot sustain. Partly for this reason, IFLA consolidated FRBR, FRAD, and FRSAD into the library reference model (LRM) in 2017, simplifying some relationships to facilitate machine implementation (International Federation of Library Associations and Institutions, 2017). Even RDA, the cataloguing code rewritten around FRBR concepts, still leaves most libraries describing resources at the *Manifestation* level because local systems cannot yet store or display the whole hierarchy.

That mixed record does not invalidate FRBR's intellectual contribution; it simply shows that a conceptual model is not an implementation plan. What FRBR offers—and what this article adopts—is a vocabulary for understanding how a single intangible narrative can give rise to many tangible

carriers. The following sections, therefore, contextualize how the implications of FRBR for oral records should be discussed and addressed.

Archival afterlives of orality

Under Canadian copyright law, an unfixed spoken narrative—one that has never been recorded or written down—generally does not receive statutory copyright protection. Canada defines records very narrowly and Canadian archives work to extract records, rather than generate new ones (Access to Information Act, 1985; Library and Archives of Canada Act, 2004). An archivist's goal is often to preserve a physical record, so that copyright belongs to the person or entity making the copy, granting them exclusive control over any reproduction, even though the story's cultural authority remains with the speakers themselves. A transcript or printed memoir then becomes another derivative object. Each stage produces a discrete record whose origin must be transparent, much like the scenario medieval recension logic prepares us to handle.

OCAP—Ownership, control, access, possession—insists that communities govern every *Manifestation* (First Nations Information Governance, 2014). Because statutory regimes rarely align with collective custodianship, descriptive systems must incorporate rights statements that reference the originating communities, such as *traditional knowledge* labels, to situate the conditions under which a particular record may be accessed within an institution or by a community (*Local Contexts*, n.d.). The *Táin's* manuscript ecology demonstrates that this is possible: multiple legitimate forms can coexist, provided that the channels connecting them are respected.

Indigenous oral traditions in the archive

For many Indigenous nations, stories are not merely containers of information, but living relations that enact responsibilities between the speaker, the listener, the land, and future generations (Smith, 2012). Fixing those relations to tape or text may preserve a voice, yet it can also estrange the story from the reciprocal obligations that once animated it. Early ethnographers often treated such recordings as authorless 'folklore' ready for scholarly extraction. Still, the last two decades have seen a decisive shift toward community-led frameworks that align description and access with Indigenous sovereignty.

The turning point is usually traced to the *Protocols for Native American Archival Materials* (First Archivist Circle, 2007), which ask custodians to treat recordings as cultural patrimony, subject to ongoing consultation rather than a one-time deed of gift. Because statutory regimes rarely align with the collective custodianship that Indigenous nations expect, archivists are increasingly attaching cultural or 'relationship' protocols—such as TK Labels or Mukurtu access tiers—to the metadata of each digital item, allowing authority to 'flow back to the originating community' and be renegotiated as circumstances change. The First Nations principles of OCAP extend that stance by asserting that data—including digital audio—must remain under Ownership, Control, Access, and Possession of the Nation to which it belongs (FNIGC, 2019). Repositories, therefore, negotiate not only the initial deposit but the descriptive vocabulary, the access tiers, and even the download button itself.

Practical tools have followed theory. Mukurtu, a co-designed content management system developed in collaboration with the Warumungu community and now adopted by Indigenous groups worldwide, allows record creators to attach cultural protocols that govern who can view, annotate, or reuse a file. These protocols can be updated as community expectations change. Pilot studies, such as [author's study], emphasize the need for diverse data options that enrich data rather than confine them within Western frameworks of thinking and hierarchical possibilities.

These strategies do not eliminate tension—researchers still want to capture as much as they can to protect oral histories that may or may not be their own. Still, they reframe control as a negotiated, renewable relationship. In that sense, they reflect the scribal ethics behind the *Táin*

recensions: a story's vitality depends on its ability to circulate under terms set by those it matters most to. The archival task, then, is not to silence circulation but to document and honour the channels—legal, technical, ceremonial—through which circulation remains legitimate. OCAP-aligned metadata, TK Labels, and community-approved protocols provide concrete mechanisms for doing so while recognizing that an oral recording is never the final form of the story, only the most recent carrier in a multiform lineage.

Historical case study: old Irish story-engineering with fluid technology

To re-contextualize this outside of Indigenous issues, within a theoretical frame, Marianne de Laet and Annemarie Mol's (2000) discussion of the Zimbabwe bush pump provides the engineering template for understanding oral traditions. The article features a mass-produced 'Type B' pump that was installed across rural Zimbabwe in the 1980s (De Laet & Mol, 2000). What makes this bush pump interesting is that it exists as a conceptual starting point for thinking through how our thinking of what is physical informs our understanding of conceptual entities. For the bush pump, we have an image in our minds that exists beyond the materiality of the bush pump itself, and a written blueprint may also not represent any individual instance of a bush pump Type B. There are potentially many bush pumps that are Type B, and each is a ship of Theseus: parts are meant to be swapped, the pump's 'boundaries are vague and moving' (de Laet & Mol, 2000, p. 225). The durability of the bush pump as a concept depends on both a conceptual understanding of what the bush pump is and does, as well as the physical materiality of washer cracks and leather gaskets that inform any individual copy. The technology persists by encouraging local reengineering rather than resisting it.

Early Irish storytelling functioned similarly. Professional poets—the *filid*—memorized vast repertoires yet re-told the stories in an oral format with details that suited the patron and the moment (Hirsch, 2014). Such flexibility produced what Nagy (Nagy, 2001) critiques as a form of 'multiformity,' the condition in which an idea 'may exist in several forms' without privileging any one variant, which he says is 'defined in relative rather than absolute terms' (p. 109).

The design logic becomes clear when the three versions of the *Táin* are documented. Recension I, mostly preserved in an eleventh-century manuscript but based on ninth-century material, presents the least consistent version. The scribe Mael Muire mac Célechair erased and rewrote earlier prose as part of a series of 'H-text' interpolations. One interpolation was an erasure of the prophetic poem that originally opened the epic; another rewrote the death of Redg the Satirist. Each rewrite replaces a small piece: the manuscript continues to evolve, circulating cultural material while subtly changing its internal flow. Still, this ongoing shift toward authoritative texts replaces the original oral tradition. This change aligns with Gregory Nagy's model of a 'Panathenaic bottleneck,' which demonstrates how, like Old Irish texts, Homeric poetry shifted from high flexibility to more fixed forms over time (Nagy, 2001, pp. 110-113). In short, the medieval shift from fluid oral performance to a fixed manuscript anticipates the modern moment when recording an oral story similarly transforms an unfixed story into a legally governed object.

Contemporary case study: indigenous stories and community protocols

As a contemporary Indigenous example, the late Theodore Fontaine recounted a fifteen-episode bus journey from his childhood home in Sagkeeng First Nation. The audio recording, made under community protocol by Dr. Stephanie Pyne, became a born-digital item governed through consensus. Pyne et al. (Pyne et al., 2023, 2025) observed that the audio was presented via a GIS-enabled story map that extends the story into a historical context (p. 20). However, Fontaine also documented the same events in his memoir, *Broken Circle*, seven years earlier. Voice, map, and

book coexist like the three *Táin* recensions: none replaces the others, but each serves different archival purposes. In Fontaine's case, this encouraged our story map to explore the non-linearity of storytelling, as each version offered different details at different times, shifting the way time is remembered from a narrow and rigid view to a more fluid relationship with the listener.

Toward a FRBR-lite description model—pumps, blueprints, and flow

Taken together, if we think of an oral tradition as a water system, FRBR's entities map directly onto its stages. The underground reservoir aligns with the *Work*—the shared cultural design or narrative pattern held collectively by storytellers. When that reservoir is translated into a blueprint, we arrive at something like *Expression*: an intangible articulation that anticipates performance without yet fixing it. The act of building a pump corresponds to *Manifestation*, the moment a particular recension, recording, or story map gives that *Expression* technical form. What emerges as flow is akin to the *Item*: each situated copy, listening event, or reuse, shaped by context and protocol.

Yet in most archival contexts, the *Expression* and *Manifestation* stages occur in a single motion—a story is performed *and* fixed at the exact moment—so the conceptual distinction between blueprint, pump, and flow becomes more practical than the full four-tier FRBR stack. The three-stage shorthand—blueprint → pump → flow—therefore reflects how oral narratives actually move into archives: a communal design, a situated instantiation, and a governed circulation. This FRBR-lite model does not discard the original entities; it simply merges the middle two where archival practice already treats them as one. What can be imagined is this paradigm:

Blueprint (*Work/Expression*): The shared cultural design or narrative pattern, which is intangible, communal, and not yet fixed into any particular form.

Pump (*Expression/Manifestation*): The situated instantiation of the story, a performance, recension, recording, or story map that gives the blueprint technical or material form.

Flow (*Item*): The specific copy, interaction, or listening event, each governed act of circulation is shaped by context, protocol, and community authority.

Treating FRBR this way shifts the archivist or cataloguer's focus from static descriptions to the dynamic management of relationships. Provenance notes are not mere footnotes to be filed away and forgotten. This model, therefore, rejects a one-size-fits-all hierarchy: it recognizes that each layer—design, device, and purpose—has its own form of ownership, risk, and mutual obligation.

Conclusion

Across centuries and across an ocean, the *Táin*'s various versions and today's OCAP-guided story Maps extend the same invitation: focus on the flow, not just the vessel. Medieval scribes understood and transmitted a cultural flow from which power resided in a shared narrative blueprint, not in any single telling. Indigenous nations ask archivists for the same trust: honour the relational design, respect the community-owned pump that brings it to life, and document each controlled release so future caretakers can decide when, where, and for whom it should flow.

The habitual collapse of *Expression* into *Manifestation* in library practices is not just a workflow shortcut—it shifts what can be *owned*. By focusing on the describable instance (the *Manifestation*) as the entire entity, we eliminate the expressive layer where oral stories remain fluid, relational, and—most importantly—'*unownable*.' That elimination exemplifies whiteness in action: it actualizes empire's property logics by turning living narratives into claimable property (Moreton-Robinson, 2015). If no one '*owns*' the story, then any recorded instance becomes discoverable, collectible, and controllable under settler IP regimes. Combining *Expression* with *Manifestation*, therefore, risks assigning proprietary value to a cultural flow that was never intended to be enclosed in the first place.

The FRBR-lite model—blueprint → pump → flow—responds by shifting description away from property toward responsibility. Instead of forcing multiform stories into a *Manifestation*-centric record, it highlights three stewarded layers: the communal design (blueprint), the situated instantiation (pump), and the governed circulation (flow). Provenance notes become part of tracing traditions rather than simply describing items in a collection, TK Labels and OCAP act as valves, and revisions are routine maintenance, not anomalies. Preservation becomes watershed care: clearing channels, repairing pumps, and, most importantly, keeping governance in community hands. In that hydraulic ethic lies a path towards designing Indigenous intellectual property futures that resist the bottling impulse of whiteness and empire, instead insisting on relational accountability for every drop that moves.

About the author

Andrew Wiebe is a PhD candidate at the University of Toronto's Faculty of Information. His specialization is in two-spirit knowledge and information management, with a focus on archival practice. His work focuses on connecting environmental responsibilities to how we manage our organizations, structure data for our users, and assist in regenerative or reparative practices. He can be contacted at andrewj.wiebe@mail.utoronto.ca.

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