**Aggregates as Manifestations**  
**O’Neill & Žumer Proposal**

*Aggregate*: a *manifestation* embodying multiple *expressions*.

The Figure 3.1 in the *FRBR Report* shows the group 1 entities explicitly permit *manifestations* to contain multiple *expressions* (and by implication multiple works) as indicated by the many-to-many relationship between *expressions* and *manifestations* as shown below:

![Diagram of many-to-many relationship between expression and manifestation](image)

This is the only many-to-many relationship among the group 1 entities\(^1\); the other relationships shown in Figure 3.1 are one-to-many. A *manifestation* can embody multiple *expressions* and an *expression* can be embodied in multiple *manifestations*. By contrast, an *expression* can only realize a single *work* and an *item* can only exemplify a single *manifestation*. Although this many-to-many relationship between *expressions* and *manifestations* is necessary to reflect the bibliographic universe, it introduces added complexity to the FRBR model.

Aggregates, as defined above, are relatively common. Bennett et al.\(^2\) estimated that of all the complex works (works with multiple expressions) in OCLC’s WorldCat, approximately 12% were aggregates. They reported that revised works (works that have been updated typified by the many editions of *Grey’s Anatomy*) accounted for 57% of the complex works with translations accounting for the remaining 31%. Their definitions vary slightly from those used here but their estimates are still indicative of the frequency of the various types of works in WorldCat. They also identified at least two distinct types of aggregates; collections (aggregates of independents works) and augmentations (aggregates created through the addition of supplemental material such as forwards, illustrations, notes, etc.). A third type, parallel aggregate, was recently identified. Parallels are aggregates of expressions of the same work.

Collections occur when multiple independently created expressions are ‘published’ together in the same manifestation. Collections include selections, anthologies, monographic series, serials and other similar groups of resources. Examples include journals (aggregates of articles), multiple novels published together in a single volume, books with independently written chapters, CDs (aggregates of individual songs), and various collected/selected works. A distinctive characteristic of collections is that the individual works are usually similar in type and/or genre such as a collection of novels by a particular author, songs by a particular artist or an anthology of a genre of poetry.
Collections have not been uniformly treated and no consensus has yet emerged regarding how they should be treated. Collections have been considered (1) to be a single work with the individual becoming parts of the collected work, (2) a manifestation of separate works, and (3) a collective work comprised of the individual works.

Augmentations occur when an expression is supplemented with additional material that is not integral to the original work and does not significantly change the original expression being augmented. Forwards, introductions, illustrations, notes, etc. are examples of augmenting works.

Before the amended definition of expressions, it had been generally accepted that when a work was augmented, the result was a new expression of the work although there was considerable debate as to whether this treatment was appropriate. However the question was resolved, at least officially, in 2007 when the FRBR Report was amended by the IFLA Standing Committee of the Cataloguing Section. That revision specified that “When an expression is accompanied by augmentations … that are not integral to the intellectual or artistic realization of the work, such augmentations are considered to be separate expressions of their own separate work(s).”

Parallel aggregates are comprised of multiple expressions of a single work. A single manifestation containing the work in multiple languages is the most common form of this type of aggregate. They are typically used to publish manuals and government documents for multilingual environments. Parallel aggregates are also common on the Web where the users are provided access to equivalent material in their choice of languages. Other examples include publishing a text in its original language with a translation.

Parallel aggregates are not as common as the other two types and have received relatively little attention. They are not explicitly discussed in Functional Requirements for Bibliographic Records nor have they received any significant discussion in the literature.

The modeling of aggregates is simple and straightforward; works and expressions are treated identically regardless of their form of publication or the physical manifestation in which they are embodied. The same expression may be published by itself or embodied in a manifestation with other expressions.

Modeling an aggregate simply as a combination of expressions may fail to recognize the creative effort of aggregator or editor. If so, an aggregating work may be used to describe this contribution. This type of work has also been referred to as the glue, binding, or the mortar that transforms a set of individual works into an aggregation. This effort may be relative minor—a publisher releases a boxed set of three previously published novels—or it may represent a major effort resulting in an aggregate that is significantly more that a sum of its parts. An aggregating work is not a discrete section or even necessarily an identifiable part of the resulting manifestation. Aggregating works may, or may not, be considered significant enough to warrant bibliographic identification.
