

## F28 Expression Creation (and related)

**Issue:** Points relating to F28 Expression Creation and mapping to LRMer

**Discussion:** Review of the text of the scope note of F28 highlighted 4 related points:

1. The scope note of F28 covers expression derivation (between expressions of the same work) and also gives a path for the derivation of a new work based on a specific expression of another work. In LRMer these are two distinct relationships: LRM-R22 for work transformation (maps to R2 *is derivative of (has derivative)*), and LRM-R24 for expression derivation (for expressions of the same work) which has no direct equivalent in LRMoo. **Should a property be created to map to LRM-R24?** This is an important property which is much used and should not just be a path. This property has a constraint that both expressions realise the same work.
2. The scope note of F28 talks about the whole creation process and covers works, expressions, manifestations, items all together.
  - o Attempt to be more systematic.
  - o Possibly some of the second paragraph belongs in a model overview?
  - o Clarify whether the 3rd paragraph is discussing typing the F28 or the resulting F2
  - o Separate the explanation of deriving new expressions of a work from using a specific expression to derive a new work. Refer to new proposed property (if created)
3. F28 has two properties: R17 *created (was created by)*: F2 Expression, and R18 *created (was created by)*: F5 Item. The motivation for establishing R18 as well as R17, skipping the manifestation, is not clear. Is R18 necessary, or can a path through F32 Carrier Production provide the link to both the F5 Item and F3 Manifestation created in an instance of F28 Expression Creation?
4. F32 Carrier Production Event has two properties: R26 *produced things of type (was produced by)*: E99 Product Type and R27 *materialized (was materialized by)*: F3 Manifestation. Does R26 express more than the situation where the F3 materialized (R27) is multiply instantiated as E99? This pair of similar properties may be a holdover from before E99 Product Type was declared in CRMbase, when F3 Manifestation (Product Type) was distinct from F4 Manifestation Singleton (now deprecated).

### 1. Proposed new property:

#### Rnn is derivative of (has derivative)

Domain: F2 Expression

Range: F2 Expression

Subproperty of: [E70](#) Thing. [P130](#) shows features of (features are also found on): [E70](#) Thing

Shortcut of: ?

Quantification: (0,n:0,n)

Scope note: This property associates an instance of F2 Expression with another instance of F2 Expression (~~which realises the same instance of F1 Work~~) which was its source or one of its sources. This property is not transitive. This property can be expressed by a longer path: F2 Expression(1). *P16i was used for*: F28 Expression Creation. *R17 created*: F2 Expression(2).

The property Rnn.1 *has type* of this property allows for specifying the kind of derivation, such as translation, revision, etc.

### **Discussion:**

Separate property within the same work is not needed and may lead to issues with monotonicity, if the work boundary is revised later.

However, LRMoo does need a property to link expressions when there is a derivation, it is more general than LRM-R24.

The relationship LRM-R24 is expressed through the consequences of the realises property of the two expressions.

In the mapping for LRM-R24 need to use the path with new property and add a logical constraint. The mapping needs to more clearly indicate

Votes in favour of creating the property: 6

## **2. Simplification of F28 scope note**

### **Current definition of F28 Expression Creation**

## **F28 Expression Creation**

Subclass of: [E12](#) Production

[E65](#) Creation

F56 Externalization Event

Superclass of: [F29](#) Recording Event

[F30](#) Manifestation Creation

Scope note: This class comprises activities that result in instances of F2 Expression coming into existence. This class characterises the externalisation of an F1 Work. The creation of an instance of F1 Work is considered to occur at the time of creation (F28) of its first F2 Expression.

Although F2 Expression is an abstract entity, a conceptual object, the creation of an expression inevitably also affects the physical world: when you scribble the first draft of a poem on a sheet of paper, you produce an instance of F3 Manifestation. F28 Expression Creation is a subclass of E12 Production because the recording of the expression causes a physical modification of the E18 Physical Thing that serves as the carrier. The work becomes manifest by being expressed on a physical carrier other than the creator's brain. The spatio-temporal circumstances under which the expression is created are necessarily the same spatio-temporal circumstances under which the first instance of F3 Manifestation is produced.

It is possible to use the *P2 has type (is type of)* property in order to specify that the creation of a given expression of a given work played a particular role with regard to the overall bibliographic history of that work (e.g., that it was the creation of the progenitor expression on which all other expressions of the same work are based; or that it was the creation of the critical edition that served as the basis for canonical references to the work).

An instance of F28 Expression Creation may use as source material a specific existing instance of F2 Expression. The property [P16 used specific object \(was used for\)](#) can be used to specify the source expression for the derivation. In cases such as a translation or a revised edition, etc., a new instance of F2 Expression of the same F1 Work, a derived expression, is created. In the situation where an expression of one instance of F1 Work serves as source material for the creation of the first expression of a new instance of F1 Work, the relationship is indicated using the property *R2 is derivative of (has derivative)* between the two instances of F1 Work. Path: F1 Work(1). *R3 is realised in*: F2 Expression(1). *P16i was used for*: F28 Expression Creation. *R17 created*: F2 Expression(2). *R3i realises*: F1 Work(2). *R2 is derivative of*: F1 Work(1)

Properties: R17 created (was created by): [F2 Expression](#)

R18 created (was created by): [F5 Item](#)

[R19](#) created a realisation of (was realised through): [F1 Work](#)

### **Proposed rewrite of F28 scope note:**

Scope note: This class comprises activities that result in instances of F2 Expression coming into existence. This class characterises the externalisation of an F1 Work. The creation of an instance of F1 Work is considered to occur at the time of creation (F28) of its first F2 Expression.

Although F2 Expression is an abstract entity, a conceptual object, the creation of an expression inevitably also affects the physical world: when you scribble the first draft of a poem on a sheet of paper, you produce an instance of F3 Manifestation. F28 Expression Creation is a subclass of E12 Production because the recording of the expression causes a physical modification of the E18 Physical Thing that serves as the carrier. The work becomes manifest by being expressed on a physical carrier other than the creator's brain. The spatio-temporal circumstances under which the expression is created are necessarily the same spatio-temporal circumstances under which the first instance of F3 Manifestation is produced.

It is possible to use the *P2 has type (is type of)* property in order to specify that the creation of a given expression of a given work played a particular role with regard to the overall bibliographic history of that work (e.g., that it was the creation of the progenitor expression on which all other expressions of the same work are based; or that it was the creation of the critical edition that served as the basis for canonical references to the work).

An instance of F28 Expression Creation may use as source material a specific existing instance of F2 Expression. The property [P16](#) *used specific object (was used for)* can be used to specify the source expression for the derivation. In cases such as a translation or a revised edition, etc., a new instance of F2 Expression of the same F1 Work, a derived expression, is created. In the situation where an expression of one instance of F1 Work serves as source material for the creation of the first expression of a new instance of F1 Work, the relationship is indicated using the property *R2 is derivative of (has derivative)* between the two instances of F1 Work. Path: F1 Work(1). *R3 is realised in*: F2 Expression(1). *P16i was used for*: F28 Expression Creation. *R17 created*: F2 Expression(2). *R3i realises*: F1 Work(2). *R2 is derivative of*: F1 Work(1)

Properties: R17 created (was created by): [F2](#) Expression

R18 created (was created by): [F5](#) Item

[R19](#) created a realisation of (was realised through): [F1](#) Work

### **Clean version of proposed scope note**

Scope note: This class comprises activities that result in instances of F2 Expression coming into existence. An instance of F2 Expression is considered to be created when it is captured on a carrier other than the creator's brain.

Although F2 Expression is an abstract entity, a conceptual object, the creation of an expression inevitably also affects the physical world: when you scribble the first draft of a poem on a sheet of paper, you produce an instance of F3 Manifestation and an instance of F5 Item. F28 Expression Creation is a subclass of E12 Production because the recording

of the expression causes a physical modification of the E18 Physical Thing that serves as the carrier. The creation of an instance of F2 Expression coincides with the creation of the first instance of F3 Manifestation that *R4 embodies (is embodied in)* this instance of F2 Expression.

The *P2 has type (is type of)* property can be used to specify the type of the instance of F28 Expression Creation. This often corresponds with the category of the instance of F2 Expression that resulted from the creation process (such as a translation, a revision, or a musical arrangement).

An instance of F28 Expression Creation may use as source material a specific existing instance of F2 Expression. The property *Rnn is derivative of (has derivative)* ~~applies in cases such as a translation or a revised edition, etc., where a new instance of F2 Expression which is an expression of the same F1 Work, a derived expression, is created.~~

In the situation where an expression of one instance of F1 Work serves as source material for the creation of the first expression of a new instance of F1 Work, the relationship is indicated using the property *R2 is derivative of (has derivative)* between the two instances of F1 Work. Path: F1 Work(1). *R3 is realised in:* F2 Expression(1). *P16i was used for:* F28 Expression Creation. *R17 created:* F2 Expression(2). *R3i realises:* F1 Work(2). *R2 is derivative of:* F1 Work(1)

Notes;

- Final paragraph still needs rewording to express the relationship to the long path, and that the work as a whole can be the source for an expression creation, ie F28 does not need a specific F2 as its source. Can use P16i with either a source F2 or a source F1.

Vote on the first 3 paragraphs (with agreement on the intention for the last 2)

In favour : 7

An instance of F28 Expression Creation may use as source material one or more specific instances of F2 Expression. When the source is documented this is also expressed by the property *R76 is derivative of (has derivative)* ~~applies in cases such as a translation or a revised edition, etc., where a new instance of F2 Expression which is an expression of the same F1 Work, a derived expression, is created.~~

In the situation where an expression of one instance of F1 Work serves as source material for the creation of the first expression of a new instance of F1 Work, the relationship between the works is indicated using the property *R2 is derivative of (has derivative)* between the two instances of F1 Work. Path: F1 Work(1). *R3 is realised in:* F2 Expression(1). *P16i was used for:* F28 Expression Creation. *R17 created:* F2 Expression(2). *R3i realises:* F1 Work(2). *R2 is derivative of:* F1 Work(1)

### 3. Is R18 needed?

**Discussion:** F28 creates an F2 Expression, and also a first F3 Manifestation and (often) F5 Item appear through that process. And so it could be that an instance of F30 Manifestation Creation is happening simultaneously with F28? But is there really a need for a property like R18 to link F28 directly to F5? Instead, F32 Carrier Production Event has the property R28 produced (was produced by): F5 Item. The F32 Carrier Production Event may not happen at the same time as the F30 Manifestation Creation or F28 Expression Creation (in the case of digital manifestations). R28 makes the link to F5 Item through a more expected route and does not bypass the F3 Manifestation.

In R18, the F5 Item would be the “first” item of that expression, something rarely kept or documented.

What is the reason for the different quantification of R18 and R28?

**Propose to deprecate R18.**

#### Current scope notes of R17 and R18 and R28

#### R17 created (was created by)

Domain: [F28](#) Expression Creation

Range: [F2](#) Expression

Superproperty of: [F30](#) Manifestation Creation. [R24](#) created (was created through): [F3](#) Manifestation

Subproperty of: [E65](#) Creation. [P94](#) has created (was created by): [E28](#) Conceptual Object

Quantification: (1,1:1,n)

Scope note: This property associates the instance of F2 Expression that was externalised during a particular instance of F28 Expression Creation event with that particular creation event.

#### R18 created (was created by)

Domain: [F28](#) Expression Creation

Range: [F5](#) Item

Subproperty of: [E12](#) Production. [P108](#) has produced (was produced by): [E24](#) Physical Human-Made Thing

Quantification: (1,n:0,1)

Scope note: This property associates an instance of F28 Expression Creation with the first physical objects, instances of F5 Item, in which the resulting instance of F2 Expression was embodied.

## **R28 produced (was produced by)**

Domain: [F32](#) Carrier Production Event

Range: [F5](#) Item

Subproperty of: [E12](#) Production. [P108](#) has produced (was produced by): [E24](#) Physical Human-Made Thing

Quantification: (0,n:1,1)

Scope note: This property associates an instance of F32 Carrier Production Event with any one of the produced items (i.e., the instances of F5 Item).

Notes; R18 is superfluous, since P108 is already necessary for instances of F28

Vote on deprecation of R18: 5 in favour

Stopped here!

### **4. Compare R26 and R27**

Can multiple instantiation account for both cases? Then only R27 is needed, R26 can be deprecated. Multiple instantiation would need to be covered in the scope note of F32, it is already explained in the scope note of F3 Manifestation.

If R26 is deprecated, delete sentence in yellow from scope note of F32.

### **Current definitions of R26 and R27**

## **R26 produced things of type (was produced by)**

Domain: [F32](#) Carrier Production Event

Range: E99 Product Type

Subproperty of: [E12](#) Production. P186 produced thing of product type (is produced by): E99 Product Type

Quantification: (1,n:0,n)

Scope note: This property associates an instance of F32 Carrier Production Event directly with the instance of E99 Product Type that is the prototype displaying the features that all of the F5 Items produced should display. This property is used in preference to *R27 materialized (was materialized by)* when the instance of F3 Manifestation that is materialized by the instance of F32 Carrier Production Event is also an instance of E99 Product Type.

## R27 materialized (was materialized by)

Domain: [F32](#) Carrier Production Event

Range: [F3](#) Manifestation

Subproperty of: [E7](#) Activity. [P16](#) used specific object (was used for): [E70](#) Thing

Quantification: (0,n:0,n)

Scope note: This property associates an instance of F32 Carrier Production Event with the set of signs provided by the publisher to be carried by all of the produced items (i.e., the instances of F5 Item) and any other physical features foreseen as integral to the instance of F3 Manifestation that is materialised.

## F32 Carrier Production Event

Subclass of: [E12](#) Production

Scope note: This class comprises activities that result in instances of F5 Item coming into existence. Both the production of a series of physical objects (printed books, scores, CDs, DVDs, CD-ROMs, etc.) and the creation of a new copy of a file on an electronic carrier are regarded as instances of F32 Carrier Production Event.

Typically, the production of copies of a publication (no matter whether it is a book, a sound recording, a DVD, a cartographic resource, etc.) strives to produce items all as similar as possible to a prototype that displays all the features that all the copies of the publication should also display, which is reflected in the property *R27 materialized: F3 Manifestation*. **In the case where the instance of F3 Manifestation that is materialized is also an instance of E99 Product Type, the property *R26 produced things of type* is the preferred method to associate the instance of F32 Carrier Production Event directly with the instance of E99 Product Type.**