###### ***Deleting F14 Individual Work, F15 Complex Work results in::***

###### ***F1 Work***

Subclass of: [E89](#_E1_CRM_Entity) Propositional Object

Superclass of: [F16](#_F16_Container_Work) Container Work

[F21](#_F21_Recording_Work) Recording Work

 [F17](#_F17_Aggregation_Work) Aggregation Work

 [F18](#_F18_Serial_Work) Serial Work

###### ***Delete R9 realizes***

###### ***R10 has member (is member of)***

Domain: [F1](#_F1_Work_1) Work

Range: [F1](#_F1_Work_1) Work

Subproperty of: [E89](#_E1_CRM_Entity) Propositional Object. [P148](#_P148_has_component_1) has component (is component of): [E89](#_E1_CRM_Entity) Propositional Object

Quantification: (0,n:0,n)

Scope note: This property associates an instance of F1 Work with another instance of F1 Work that forms part of it.

###### ***R50 assigned to (was assigned by)***

Domain: [F42](#_F42_Representative_Expression) Representative Expression Assignment

Range: F1 Work

Subproperty of: [E13](#_E18_Physical_Thing_) Attribute Assignment. [P140](#_P140_assigned_attribute_1) assigned attribute to (was attributed by): [E1](#_E1_CRM_Entity_) CRM Entity

Quantification: (1,1:0,n)

Scope note: This property associates the event of assigning a representative instance of F2 Expression with the instance of F1 Work to which it was assigned.

***The idea:***

An Expression realizes a work, it is not specified if it is the exclusive set of propositions of the expression or a more general set of ideas. This leaves the decision to the curator, which level is relevant. This changes the cardinality of R3.

###### ***Making F22 Self-Contained Expression => F2 Expression, deleting F23 Expression Fragment results in:***

###### ***F2 Expression***

Subclass of: [E73](#_E73_Information_Object_) Information Object

Superclass of: [F24](#_F24_Publication_Expression) Publication Expression

[F25](#_F25_Performance_Plan) Performance Plan

[F26](#_F26_Recording) Recording

F34 KOS

F35 Nomen Use Statement

F43 Identifier Rule

###### ***Delete*** ***F23 Expression Fragment – replace by E90 Symbolic Object***

###### ***R3 is realised in (realises) [=LRM-R4]***

Domain: [F1](#_F1_Work_1) Work

Range: [F2](#_F22_Self-Contained_Expression) Expression

Superproperty of: [F20](#_F20_Performance_Work) Performance Work. [R12](#_R12_is_realised_1) is realised in (realises): [F25](#_F25_Performance_Plan) Performance Plan

[F21](#_F21_Recording_Work) Recording Work. [R13](#_R13_is_realised_1) is realised in (realises): [F26](#_F26_Recording) Recording

[F1](#_F1_Work_1) Work. [R40](#_R40_has_representative_expression_() has representative expression (is representative expression for): [F2](#_F22_Self-Contained_Expression) Expression

Subproperty of: [E70](#_E70_Thing_1) Thing. [P130](#_P130__shows_) shows features of (features are also found on): [E70](#_E70_Thing_1) Thing

Quantification: (0,n:1,n)

###### ***R4 carriers provided by (comprises carriers of)***

Domain: [F2](#_F2_Expression) Expression better: E90 Symbolic Object

Range: [F3](#_F3_Manifestation_Product_Type) Manifestation Product Type [revise based on how F3/F24 are worked out. In CRMbase, P165: PLB I'd prefer to use the "is incorporated in" Publication Expression/Manifestation structure. Might deprecate R4]

Superproperty of: [F2](#_F2_Expression) Expression. [R41](#_R41_has_representative_manifestatio) has representative manifestation product type (is representative manifestation product type for): [F3](#_F3_Manifestation_Product) Manifestation Product Type

Subproperty of: [E73](#_E73_Information_Object_) Information Object. [P128](#_P128_carries_(is_1) is carried by: [E24](#_E24_Physical_Man-Made_1) Physical Man-Made Thing. [P2](#_P2_has_type_) has type: [E55](#_E55_Type_) Type

###### ***R5 has component (is component of)***

Domain: [F2](#_F22_Self-Contained_Expression) Expression

Range: [F2](#_F22_Self-Contained_Expression) Expression

Subproperty of: [E89](#_E89_Propositional_Object) Propositional Object. [P148](#_P148_has_component_1) has component (is component of): [E89](#_E89_Propositional_Object) Propositional Object

 [E90](#_E90_Symbolic_Object_1) Symbolic Object. [P106](#_P106_is_composed_) is composed of (forms part of): [E90](#_E90_Symbolic_Object_1) Symbolic Object

###### ***R15 has fragment (is fragment of)***

Domain: [F2](#_F2_Expression) Expression

Range: [E90](#_E90_Symbolic_Object_1) Symbolic Object

Subproperty of: [E90](#_E90_Symbolic_Object_1) Symbolic Object. [P106](#_P106_is_composed_) is composed of (forms part of): [E90](#_E90_Symbolic_Object_1) Symbolic Object

Quantification: (0,n:0,n)

###### ***R17 created (was created by)***

Domain: [F28](#_F31_Expression_Creation) Expression Creation

Range: [F2](#_F2_Expression) Expression

Superproperty of: [F29](#_F33_Identifier_Assignment) Recording Event. [R21](#_R21_created_(was_1) created (was created by): [F26](#_F26_Recording) Recording

[F30](#_F30_Publication_Event) Publication Event. [R24](#_R24_created_(was) created (was created through): [F24](#_F24_Publication_Expression) Publication Expression

Subproperty of: [E65](#_E65_Creation_1) Creation. [P94](#_P94_has_created_) has created (was created by): [E28](#_E28_Conceptual_Object_) Conceptual Object

Quantification: (1,1:1,n)

Scope note: This property associates the expression that was first externalised during a particular creation event with that particular creation event.

###### ***R40 has representative expression (is representative expression for)***

Domain: [F1](#_F1_Work_1) Work

Range: [F2](#_F22_Self-Contained_Expression) Expression

Subproperty of: [F1](#_F1_Work_1) Work. [R3](#_R3_is_realised_1) is realised in (realises): [F2](#_F22_Self-Contained_Expression) Expression

Quantification: (0,n:0,n)

###### ***R41 has representative manifestation product type (is representative manifestation product type for)***

Domain: F2 Expression

Range: [F3](#_F3_Manifestation_Product) Manifestation Product Type

Subproperty of: [F2](#_F2_Expression) Expression. [R4](#_R4_carriers_provided) carriers provided by (comprises carriers of): [F3](#_F3_Manifestation_Product) Manifestation Product Type

Quantification: (0,n:0,n)

###### ***R42 is representative manifestation singleton for (has representative manifestation singleton)***

Domain: [F4](#_F4_Manifestation_–_Singleton) Manifestation Singleton

Range: F2 Expression

Subproperty of: [E24](#_E24_Physical_Man-Made_1) Physical Man-Made Thing. [P128](#_P128_carries_(is_1) carries (is carried by): [E73](#_E73_Information_Object_) Information Object

Quantification: (0,n:0,n)

###### ***R48 assigned to (was assigned by)***

Domain: [F41](#_F41_Representative_Manifestation) Representative Manifestation Assignment

Range: F2 Expression

Subproperty of: [E13](#_E18_Physical_Thing_) Attribute Assignment. [P140](#_P140_assigned_attribute_1) assigned attribute to (was attributed by): [E1](#_E1_CRM_Entity_) CRM Entity

Quantification: (1,1:0,n)

###### ***R51 assigned (was assigned by)***

Domain: [F42](#_F42_Representative_Expression) Representative Expression Assignment

Range: F2 Expression

Subproperty of: [E13](#_E18_Physical_Thing_) Attribute Assignment. [P141](#_P141_assigned_(was) assigned (was assigned by): [E1](#_E1_CRM_Entity_) CRM Entity

Quantification: (1,n:0,n)

Scope note: This property associates the event of assigning a representative instance of F2 Expression with the F2 Expression which has been assigned.

***The idea:*** Any Expression is self-contained. Not-self-contained parts are more generally E90 Symbolic Objects or Information Objects. The Expression Fragment is not needed, but the property is useful. An Expression Creation creates only self-contained content. If interrupted or in between, we talk about E65 Creation events as part of the overall Expression Creation.

The “representative fragment” is a fragment of the supposed-to-be-lost self-contained expression. This means, that the representative manifestation may not carry the whole expression, but only a fragment of it.

###### ***Merging F3 Manifestation Product Type with F24 Publication Expression***

***The idea:*** Carrier Production Events are more general than the Product Types. F3 and F24 appear as parallel paths. I propose to reuse the properties of F24 for F3, rename properties and rename F3 to Manifestation. If we accept original manuscripts to be Manifestations (not manually copied books), we cannot distinguish the Expression from the Manifestation, as long as we regard it as immaterial. Therefore, Manifestation MUST be a kind of Expression.

###### ***F3 Manifestation***

Subclass of: F2 Expression

Properties**:** [CLP2](#_CLP2_should_have_type_(should_be_ty) should have type (should be type of): [E55](#_E55_Type_) Type

[CLP43](#_CLP43_should_have) should have dimension (should be dimension of): [E54](#_E54_Dimension_) Dimension

[CLP45](#_CLP45_should_consist) should consist of (should be incorporated in): [E57](#_E57_Material_) Material

[CLP46](#_CLP46_should_be) should be composed of (may form part of): [F3](#_F3_Manifestation_Product) Manifestation Product Type

[CLP57](#_CLP57_should_have) should have number of parts: [E60](#_E60_Number_1) Number

We should reconsider the CLP104/105

We should reintroduce the “incorporates” property! Possibly R4? ***Or delete R4***

###### ***Delete*** ***R6 carries (is carried by)***

###### ***Delete CLR6 should carry (should be carried by)***

###### ***R7 is materialization of (is materialized in) [=LRM-R4]***

Domain: [F5](#_F5_Item_1) Item

Range: [F3](#_F3_Manifestation_Product) Manifestation

Subproperty of: [E1](#_E1_CRM_Entity_) CRM Entity. [P2](#_P2_has_type_) has type (is type of): [E55](#_E55_Type_) Type

Subproperty of: [E24](#_E24_Physical_Man-Made_1) Physical Man-Made Thing. [P128](#_P128_carries_(is_1) carries (is carried by): [E73](#_E73_Information_Object_) Information Object

Quantification: (1,1:0,n)

Scope note: This property associates a publication with one of its exemplars.

It is a shortcut of the more developed path: F5 Item *R28i was produced by* F32 Carrier Production *R26 produced things of type (was produced by):* F3 Manifestation Product Type.

***F32 Carrier Production Event [= LRM-R8 manufactured]***

Subclass of: [E12](#_E12_Production_) Production

Scope note: This class comprises activities that result in instances of F54 Utilised Information Carrier 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 property *R27 used as source material* F24 Publication Expression.

Clearly, F32 is more general than F3!

Properties**:** [R26](#_R26_produced_things) produced things of type (was produced by): E99 Product Type

[R27](#_R27_used_as) materialized (was materialized by) F3 Manifestation

[R28](#_R28_produced_(was) produced (was produced by): [F54](#_F54_Utilized_Information) Utilised Information Carrier

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

Domain: [F32](#_F32_Carrier_Production) Carrier Production Event

Range: E99 Product Type

Subproperty of: [E12](#_E12_Production_) Production. P186 produced thing of product type (is produced by): E99 Product Type

Quantification: (0,1:0,n) ***becomes optional!***

######

###### ***R27 materialized (was materialized by)***

Domain: [F32](#_F32_Carrier_Production) Carrier Production Event

Range: [F24](#_F24_Publication_Expression) Publication Expression [F3](#_F3_Manifestation_Product) Manifestation

Subproperty of: [E7](#_E7_Activity_) Activity. [P16](#_P16__used_) used specific object (was used for): [E70](#_E70_Thing_1) 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 and any other foreseen physical feature.

***The idea: F19*** Publication Work and Manifestation Creation must pertain to the optical and material form of a distributable item. Rewrite scope note of F30. I would keep “Publication Work” as label.

###### ***F30 Publication Event [=LRM-R7 manifestation creation]***

Subclass of: [F28](#_F31_Expression_Creation) Expression Creation

Properties**:** [R23](#_R23_created_a) created a realisation of (was realised through): [F19](#_F19_Publication_Work) Publication Work

[R24](#_R24_created_(was) created (was created through): F3 Manifestation

###### ***R23 created a realisation of (was realised through)***

Domain: [F30](#_F30_Publication_Event) Publication Event

Range: [F19](#_F19_Publication_Work) Publication Work

Subproperty of: [F28](#_F31_Expression_Creation) Expression Creation. [R19](#_R19_created_a) created a realisation of (was realised through): [F1](#_F1_Work_1) Work

Quantification: (0,1:0,n)

Scope note: This property associates an instance of F30 Publication Event with the instance of F19 Publication Work it realised.

Examples: Establishing in 1972 the layout, features, and prototype for the publication of Stephen Crane’s complete poems (F30) *R23 created a realisation of* Cornell University Press’s concepts for an edition of Stephen Crane’s complete poems (F19)

###### ***R24 created (was created through)***

Domain: [F30](#_F30_Publication_Event) Publication Event

Range: [F24](#_F24_Publication_Expression) Publication Expression F3 Manifestation

Subproperty of: [F28](#_F31_Expression_Creation) Expression Creation. [R17](#_R22_has_created) created (was created by): [F2](#_F2_Expression) Expression

Quantification: (1,n:1,n)

Scope note: This property associates the instance of F24 Publication Expression F3 Manifestation that was created during a particular F30 Publication Event with that F30 Publication Event.

Examples: Establishing in 1972 the layout, features, and prototype for the publication of Stephen Crane’s complete poems (F30) *R24 created* the set of signs and instructions as to manufacturing established by Cornell University Press for a publication of Stephen Crane’s complete poems (F24)

The following figure will become symmetric:

The following image becomes clear: F24 becomes F3

**F4 Manifestation**

**Singleton**

**F28 Expression Creation**

R6 carries (is

carried by)

R18 created

(was created by)

**F24 Publication Expression**

**E12 Production**

**From Expression to Publication**

**E70 Thing**

**F2 Expression**

**F3 Manifestation**

**Product Type**

R4 carriers provided by

(comprises carriers of )

**F5 Item**

R7 is example of

(has example)

**F32 Carrier**

**Production Event**

R26 produced

things of type (was

produced by )

R27 used as source

material (was used by )

R28 produced

(was produced by)

**F33 Reproduction Event**

R17 created

(was created by)

R29 reproduced (was

reproduced by)

**E84 Information**

**Carrier**

R30 produced (was produced by)

P165 incorporates

(is incorporated in)