
4. ATTRIBUTES

4.1 Attributes of Entities

Each of the entities defined in the model has associated with it a set of characteristics or attributes. The attributes of the entity serve as the means by which users formulate queries and interpret responses when seeking information about a particular entity.

Attributes, as they are defined in the model, generally fall into two broad categories. There are, on the one hand, attributes that are inherent in an entity, and on the other, those that are externally imputed. The first category includes not only physical characteristics (e.g., the physical medium and dimensions of an object) but also features that might be characterized as labeling information (e.g., statements appearing on the title page, cover, or container). The second category includes assigned identifiers for an entity (e.g., a thematic catalogue number for a musical composition), and contextual information (e.g., the political context in which a work was conceived). Attributes inherent in an entity can usually be determined by examining the entity itself; those that are imputed often require reference to an external source.

A given instance of an entity will generally exhibit only one value for each attribute (e.g., the value for the “physical medium” attribute of a particular object may be “plastic”). In some cases, however, a given instance of an entity may have multiple values for a single attribute (e.g., a book may contain more than one statement indicating the “title of the *manifestation*”). There are also cases where the value for an attribute of a given instance of an entity may change over time (e.g., the “extent of the carrier” for a serial will change as new volumes are issued). The value for an attribute (particularly an imputed attribute) of a given entity may sometimes be subject to variation, depending on the source that is used as a point of reference.

The attributes defined for each of the entities in the model will not necessarily be exhibited by all instances of that particular entity type. In the list of attributes for each entity, those that are generally applicable to the entity type as a whole are listed first. Those that are applicable only to a sub-type of the entity are listed after those that are generally applicable, and are qualified by a term indicating the sub type to which they apply (e.g., “musical work” as a sub-type of *work*). However, not every instance of an entity type nor every instance of an entity sub-type will exhibit all the attributes listed.

At first glance certain of the attributes defined in the model may appear to duplicate objects of interest that have been separately defined in the model as entities and linked to the entity in question through relationships. For example, the *manifestation* attribute

“statement of responsibility” may appear to parallel the entities *person* and *corporate body* and the “responsibility” relationships that link those entities with the *work* and/or *expression* embodied in the *manifestation*. However, the attribute defined as “statement of responsibility” pertains directly to the labeling information appearing in the *manifestation* itself, as distinct from the relationship between the *work* contained in the *manifestation* and the *person* and/or *corporate body* responsible for the creation or realization of the *work*. In many cases the information presented in the “statement of responsibility” will be substantively the same as that which is reflected through the relationships between the *work* and/or *expression* and the *person* and/or *corporate body* responsible. However, the information may not always be the same. In drawing responsibility relationships to the entities *person* and *corporate body* it is possible to correct false or misleading information presented in a “statement of responsibility” or to expand on that information. Using the responsibility relationship to the entities *person* and *corporate body* also provides a means of identifying the *person* or *corporate body* in a consistent way irrespective of the way in which that *person* or *corporate body* is identified in the “statement of responsibility” in that particular *manifestation*.

The model does not, however, parallel entity relationships with attributes in all cases where such parallels could be drawn. For example, “place of publication/distribution” is defined as an attribute of the *manifestation* to reflect the statement appearing in the *manifestation* itself that indicates where it was published. Inasmuch as the model also defines *place* as an entity it would have been possible to define an additional relationship linking the entity *place* either directly to the *manifestation* or indirectly through the entities *person* and *corporate body* which in turn are linked through the production relationship to the *manifestation*. To produce a fully developed data model further definition of that kind would be appropriate. But for the purposes of this study it was deemed unnecessary to have the conceptual model reflect all such possibilities. In cases such as the place of publication example it was considered sufficient simply to define an attribute to reflect labeling information as such without taking the analysis further to delineate a parallel entity relationship. Parallel delineation was done only in cases where it seemed warranted by the need to provide for controlled or normalized access to the information reflected in the attribute.

The attributes defined for the study were derived from a logical analysis of the data that are typically reflected in bibliographic records. The principal sources used in the analysis included the *International Standard Bibliographic Descriptions* (ISBDs), the *Guidelines for Authority and Reference Entries* (GARE), the *Guidelines for Subject Authority and Reference Entries* (GSARE), and the *UNIMARC Manual*. Additional data were culled from other sources such as the *AITF Categories for the Description of Works of Art*, from input provided by experts who were consulted as drafts of the report were being prepared, from an extensive review of published user studies, and from comments received as part of the world-wide review of the draft report. The scope of attributes included in the model is intended to be comprehensive but not exhaustive.

For the purposes of this study attributes have been defined at a logical level. That is to say that attributes have been expressed in terms of the characteristics of an entity as they might be viewed by a user, rather than as specific data elements defined by those

responsible for compiling bibliographic data. In some cases the logical attribute parallels an individual data element (e.g., the logical attribute “*manifestation* identifier” has been defined in a way that parallels the definition of “standard number (or alternative)” in the ISBD(G)). But in most cases the logical attribute represents an aggregate of discrete data elements (e.g., the logical attribute defined as “title of the *manifestation*” encompasses several ISBD data elements: title proper (including number/name of part), parallel title, notes giving variant and transliterated titles, and key title). The descriptions of the logical attributes that are given in this chapter provide an indication of the scope of each logical attribute. Appendix A provides a detailed mapping of the logical attributes defined in the model to individual data elements in the ISBDs, the *Guidelines for Authority and Reference Entries* (GARE), the *Guidelines for Subject Authority and Reference Entries* (GSARE), and the *UNIMARC Manual*.

For the purposes of this study, the logical attributes for the entities *person*, *corporate body*, *concept*, *object*, *event*, and *place* include only those that are conventionally displayed as part of the bibliographic record *per se*. Additional logical attributes that might be reflected in an authority record are not included.

4.2 Attributes of a Work

The logical attributes of a *work* defined for this study are the following:

- title of the *work*
- form of *work*
- date of the *work*
- other distinguishing characteristic
- intended termination
- intended audience
- context for the *work*
- medium of performance (musical work)
- numeric designation (musical work)
- key (musical work)
- coordinates (cartographic work)
- equinox (cartographic work)

4.2.1 Title of the Work

The title of the *work* is the word, phrase, or group of characters naming the *work*. There may be one or more titles associated with a *work*. If the *work* has appeared under varying titles (differing in form, language, etc.), a bibliographic agency normally selects one of those titles as the basis of a “uniform title” for purposes of consistency in naming and referencing the *work*. Other titles under which the *work* has appeared may be treated as variant titles for the *work*, or in some cases as a parallel uniform title. The title of a *work*

that forms part of a larger *work* may consist solely of a number or other generic designation that is dependent on the title of the larger *work*.

4.2.2 Form of Work

The form of *work* is the class to which the *work* belongs (e.g., novel, play, poem, essay, biography, symphony, concerto, sonata, map, drawing, painting, photograph, etc.).

4.2.3 Date of the Work

The date of the *work* is the date (normally the year) the *work* was originally created. The date may be a single date or a range of dates. In the absence of an ascertainable date of creation, the date of the *work* may be associated with the date of its first publication or release.

4.2.4 Other Distinguishing Characteristic

A distinguishing characteristic is any characteristic that serves to differentiate the *work* from another *work* with the same title (e.g., the area of origin that serves to differentiate the medieval miracle play known as *The Adoration of the Shepherds* originating in Coventry from the play known by the same name that originated in Chester).

4.2.5 Intended Termination

Intended termination of a *work* is a reflection of whether the work has been conceived as having a finite end or whether it is intended to continue indefinitely.

4.2.6 Intended Audience

The intended audience of the *work* is the class of user for which the work is intended, as defined by age group (e.g., children, young adults, adults, etc.), educational level (e.g., primary, secondary, etc.), or other categorization.

4.2.7 Context for the Work

Context is the historical, social, intellectual, artistic, or other context within which the *work* was originally conceived (e.g., the 17th century restoration of the monarchy in England, the aesthetic movement of the late 19th century, etc.).

4.2.8 Medium of Performance (Musical Work)

Medium of performance is the instrumental, vocal, and/or other medium of performance for which a musical *work* was originally intended (e.g., piano, violin, orchestra, men's voices, etc.).

4.2.9 Numeric Designation (Musical Work)

A numeric designation is a serial number, opus number, or thematic index number assigned to a musical *work* by the composer, publisher, or a musicologist (e.g., the numbers assigned to the works of Mozart by Ludwig Köchel).

4.2.10 Key (Musical Work)

Key, in tonal music, is the set of pitch relationships that establishes a single pitch class as a tonal centre (e.g., D major). The key for a musical *work* is the key in which the *work* is originally composed.

4.2.11 Coordinates (Cartographic Work)

Coordinates are the degrees, minutes, and seconds of longitude and latitude, or the angles of declination and ascension that form the outer boundaries for the area represented in the cartographic image or object.

4.2.12 Equinox (Cartographic Work)

Equinox is the year that serves as the point of reference for a celestial chart or model.

4.3 Attributes of an Expression

The logical attributes of an *expression* defined for this study are the following:

- title of the *expression*
- form of expression
- date of expression
- language of expression
- other distinguishing characteristic
- extensibility of expression
- revisability of expression
- extent of the expression
- summarization of content

context for the expression
critical response to the expression
use restrictions on the expression
sequencing pattern (serial)
expected regularity of issue (serial)
expected frequency of issue (serial)
type of score (musical notation)
medium of performance (musical notation or recorded sound)
scale (cartographic image/object)
projection (cartographic image/object)
presentation technique (cartographic image/object)
representation of relief (cartographic image/object)
geodetic, grid, and vertical measurement (cartographic image/object)
recording technique (remote sensing image)
special characteristic (remote sensing image)
technique (graphic or projected image)

4.3.1 Title of the Expression

Title of the *expression* is a word, phrase, or group of characters naming the expression. There may be one or more titles associated with an *expression*. The title of an *expression* that forms part of a larger *expression* may consist solely of a number or other generic designation that is dependent on the title of the larger *expression*.

4.3.2 Form of Expression

The form of *expression* is the means by which the *work* is realized (e.g., through alphanumeric notation, musical notation, spoken word, musical sound, cartographic image, photographic image, sculpture, dance, mime, etc.).

4.3.3 Date of Expression

The date of *expression* is the date the *expression* was created (e.g., the date the particular text of a *work* was written or revised, the date a song was performed, etc.). The date may be a single date or a range of dates. In the absence of an ascertainable date of *expression*, the date of the *expression* may be associated with the date of its publication or release.

4.3.4 Language of Expression

The language of the *expression* is the language in which the *work* is expressed.

The language of the *expression* may comprise a number of languages, each pertaining to an individual component of the *expression*.

4.3.5 Other Distinguishing Characteristic

A distinguishing characteristic is any characteristic of the *expression* that serves to differentiate the *expression* from another *expression* of the same *work* (e.g., the names used to differentiate the various versions of the English text of the Bible, or an “edition” or version designation relating to the intellectual content of the expression such as “2nd revision”).

4.3.6 Extensibility of Expression

Extensibility reflects the expectation that the *expression* will have additional intellectual or artistic content added to it (e.g., an *expression* that is completed one part at a time, segment by segment, issue by issue, etc.).

4.3.7 Revisability of Expression

Revisability reflects the expectation that the intellectual or artistic content of the *expression* will be revised (e.g., a draft or interim report, a directory that is expected to be updated periodically).

4.3.8 Extent of the Expression

The extent of an *expression* is a quantification of the intellectual content of the *expression* (e.g., number of words in a text, statements in a computer program, images in a comic strip, etc.). For *works* expressed as sound and/or motion the extent may be a measure of duration (e.g., playing time).

4.3.9 Summarization of Content

A summarization of the content of an *expression* is an abstract, summary, synopsis, etc., or a list of chapter headings, songs, parts, etc. included in the *expression*.

4.3.10 Context for the Expression

Context is the historical, social, intellectual, artistic, or other context within which the *expression* was realized (e.g., the Art Deco period, etc.).

4.3.11 Critical Response to the Expression

Critical response is the reception given to the *expression* by reviewers, critics, etc., as encapsulated in an annotation (e.g., “Critically acclaimed for its use of...”).

4.3.12 Use Restrictions on the Expression

Use restrictions are restrictions on access to and use of an *expression*. Use restrictions may be based in copyright, or they may extend beyond the protections guaranteed in law to the owner of the copyright.

4.3.13 Sequencing Pattern (Serial)

Sequencing pattern for an *expression* issued as a serial is the form anticipated to be used in designating volumes/issues, etc. and/or dates for the individual units of the serial (e.g. Volume ..., number ...).

4.3.14 Expected Regularity of Issue (Serial)

Expected regularity of issue of an *expression* issued as a serial is the anticipated regularity of release of individual issues (i.e., whether the release is expected to be regular or irregular).

4.3.15 Expected Frequency of Issue (Serial)

Expected frequency of issue for an *expression* issued as a serial is the interval at which individual issues of the serial are anticipated to be released (e.g., weekly, monthly, quarterly, annually, etc.).

4.3.16 Type of Score (Musical Notation)

Type of score is the format used to represent a musical composition (e.g., short score, full score, condensed score, close score, etc.).

4.3.17 Medium of Performance (Musical Notation or Recorded Sound)

Medium of performance is the instrumental and/or vocal medium of performance represented in the *expression* of a musical *work* (e.g., two pianos, soprano and alto, etc.). The instruments and/or voices represented in a particular *expression* of a *work* (e.g., in a transcription, in an arrangement, or in a performance) may differ from the medium of performance for which the *work* was originally intended. Cf., 4.2.8 Medium of Performance (Musical Work).

4.3.18 Scale (Cartographic Image/Object)

Scale is the ratio of distances in a cartographic *expression* to the actual distances they represent. Scale may apply to horizontal, vertical, angular, and/or other distances represented in the *expression*.

4.3.19 Projection (Cartographic Image/Object)

Projection is the method or system used to represent the surface of the Earth or of a celestial sphere on a plane (e.g., transverse Mercator, azimuthal equidistant, etc.).

4.3.20 Presentation Technique (Cartographic Image/Object)

Presentation technique is the method used to represent geographic or other features in a cartographic image (e.g., anaglyphic, diagrammatic, pictorial, etc.).

4.3.21 Representation of Relief (Cartographic Image/Object)

Representation of relief is the technique used to depict the elevations or the inequalities of a land surface or of the bed of a body of water in a cartographic image (e.g., contours, shading, hachures, spot heights, bathymetric tints, etc.).

4.3.22 Geodetic, Grid, and Vertical Measurement (Cartographic Image/Object)

Geodetic, grid, and vertical measurements include information on the spheroid used to construct the cartographic image, the grid or referencing systems used in the image, horizontal datum, vertical datum, mathematical data on contour intervals, bathymetric intervals, etc.

4.3.23 Recording Technique (Remote Sensing Image)

Recording technique is the technique used to capture an image through remote sensing (e.g., multispectral photography, infrared line scanning, SLAR, passive microwave mapping, etc.).

4.3.24 Special Characteristic (Remote Sensing Image)

A special characteristic of a remote sensing image or an image produced through aerial photography is the altitude and attitude of the sensor, the position of the platform, the category and name of the satellite, the number of spectral bands involved, the quality of the image, the extent of cloud cover, or the mean value of the ground resolution.

4.3.25 Technique (Graphic or Projected Image)

Technique is the method used to create a graphic image (e.g., engraving, etc.) or to realize motion in a projected image (e.g., animation, live action, computer generation, 3D, etc.).

4.4 Attributes of a Manifestation

The logical attributes of a *manifestation* defined for this study are the following:

- title of the *manifestation*
- statement of responsibility
- edition/issue designation
- place of publication/distribution
- publisher/distributor
- date of publication/distribution
- fabricator/manufacturer
- series statement
- form of carrier
- extent of the carrier
- physical medium
- capture mode
- dimensions of the carrier
- manifestation* identifier
- source for acquisition/access authorization
- terms of availability
- access restrictions on the *manifestation*
- typeface (printed book)
- type size (printed book)
- foliation (hand-printed book)
- collation (hand-printed book)
- publication status (serial)
- numbering (serial)
- playing speed (sound recording)
- groove width (sound recording)
- kind of cutting (sound recording)
- tape configuration (sound recording)
- kind of sound (sound recording)
- special reproduction characteristic (sound recording)
- colour (image)
- reduction ratio (microform)
- polarity (microform or visual projection)
- generation (microform or visual projection)
- presentation format (visual projection)

system requirements (electronic resource)
file characteristics (electronic resource)
mode of access (remote access electronic resource)
access address (remote access electronic resource)

4.4.1 Title of the Manifestation

The title of the *manifestation* is the word, phrase, or group of characters naming the *manifestation*. There may be one or more titles associated with a *manifestation*. Titles associated with a *manifestation* include all those that appear in the *manifestation* itself (e.g., the title on the title page, title frame, etc., a cover title, added title-page title, caption title, running title, spine title, etc., the title in a colophon, explicit, etc., the title on a container, on a microfiche header, etc.), as well as those that have been assigned to the *manifestation* for purposes of bibliographic control (e.g., key title, expanded title, translated title, supplied title, etc.).

4.4.2 Statement of Responsibility

A statement of responsibility is a statement appearing in the *manifestation* (normally in conjunction with the title) that names one or more individuals or groups responsible for the creation or realization of the intellectual or artistic content embodied in the *manifestation*. An individual or group named may be directly responsible for the *work* embodied in the *manifestation* (e.g., the author, composer, etc.), or indirectly responsible (e.g., the author of a novel on which a film script is based). Other individuals or groups named in the statement may include those responsible for the *expression* of the *work* contained in the *manifestation* (e.g., translators, performers, etc.), or those responsible for the compilation of *works* contained in the *manifestation* (e.g., the editor, compiler, etc.). A statement of responsibility may name an organization responsible for sponsoring or issuing the *work* contained in the *manifestation*. The statement may also indicate the role or function performed by each of the individuals, groups, or organizations responsible. The names appearing in the statement of responsibility in the *manifestation* may or may not be those of the *persons* and *corporate bodies* actually responsible for the creation or realization of the intellectual or artistic content embodied in the *manifestation*. Similarly, the stated functions may or may not reflect the actual relationship that exists between the individuals and groups named and the intellectual or artistic content.

4.4.3 Edition/Issue Designation

The edition or issue designation of the *manifestation* is a word or phrase appearing in the *manifestation* that normally indicates a difference in either content or form between the *manifestation* and a related *manifestation* previously issued by the same publisher/distributor (e.g., second edition, version 2.0, etc.), or simultaneously issued by either the same publisher/distributor or another publisher/distributor (e.g., large print edition, British edition, etc.). The edition/issue designation pertains to all copies of a

manifestation produced from substantially the same master and issued by the same publisher/distributor or group of publishers/distributors.

4.4.4 Place of Publication/Distribution

The place of publication/distribution of the *manifestation* is the city, town, or other locality associated in the *manifestation* with the name of the publisher/distributor. The place of publication may comprise the name of the state, province, territory, and/or country as well as the local place name. A *manifestation* may be associated with one or more places of publication/distribution.

4.4.5 Publisher/Distributor

The publisher/distributor of the *manifestation* is the individual, group, or organization named in the *manifestation* as being responsible for the publication, distribution, issuing, or release of the *manifestation*. A *manifestation* may be associated with one or more publishers or distributors.

4.4.6 Date of Publication/Distribution

The date of publication/distribution of the *manifestation* is the date (normally a year) of public release of the *manifestation*. The date may be a single date of publication or release, or a range of dates (e.g., in the case of a serial publication).

In the absence of a date designated as the date of publication or release, a copyright date or a date of printing or manufacture may serve as a substitute.

4.4.7 Fabricator/Manufacturer

The fabricator/manufacturer of the *manifestation* is the individual, group, or organization named in the *manifestation* as being responsible for the fabrication or manufacture of the *manifestation*. A *manifestation* may be associated with one or more fabricators or manufacturers.

4.4.8 Series Statement

A series statement is the word, phrase, or group of characters appearing in the *manifestation* naming the series to which the *manifestation* belongs. A series statement may also include a number designating the sequential position of the *manifestation* within the series. There may be one or more series and/or subseries named in the *manifestation*.

4.4.9 Form of Carrier

The form of carrier is the specific class of material to which the physical carrier of the *manifestation* belongs (e.g., sound cassette, videodisc, microfilm cartridge, transparency, etc.). The carrier for a *manifestation* comprising multiple physical components may include more than one form (e.g., a filmstrip with an accompanying booklet, a separate sound disc carrying the sound track for a film, etc.).

4.4.10 Extent of the Carrier

The extent of the carrier is a quantification of the number of physical units making up the carrier (e.g., number of sheets, discs, reels, etc.).

4.4.11 Physical Medium

Physical medium is the type of material from which the carrier is produced (e.g., paper, wood, plastic, metal, etc.). The physical medium may include in addition to the base material any material that is applied to the base (e.g., oil paint applied to canvas, a chemical emulsion applied to a film base, etc.). Each component of a *manifestation* comprising multiple physical components may be produced from a different type of material.

4.4.12 Capture mode

Capture mode is the means used to record notation, sound, or images in the production of a *manifestation* (e.g., analogue, acoustic, electric, digital, optical etc.).

4.4.13 Dimensions of the Carrier

The dimensions of the carrier are the measurements of the physical components and/or the container of the *manifestation*. The dimensions may comprise measurements of height (e.g., 18 cm bound volume), width (e.g., 8mm film), height x width (e.g., 5 x 5 cm slide), height x width x depth (e.g., 9 x 30 x 20 cm model), or diameter (e.g., 30 cm disc).

4.4.14 Manifestation Identifier

The *manifestation* identifier is a number or code uniquely associated with the *manifestation* that serves to differentiate that *manifestation* from any other *manifestation*. A *manifestation* may have one or more identifiers associated with it. The identifier may be assigned as part of an international numbering or coding system (e.g., ISBN, etc.), as part of a national system (e.g., legal deposit number), or it may be assigned independently by the publisher or distributor of the *manifestation* (e.g., government publication number, music publisher's number, clearinghouse inventory number, etc.). A *manifestation*

identifier may also be assigned by a bibliographer, musicologist, etc. The *manifestation* identifier may comprise both a numeric component and a textual or coded component identifying the system under which it was assigned and/or the agency or individual that assigned the number, so as to render the identifier unique to the *manifestation*.

4.4.15 Source for Acquisition/Access Authorization

The source for acquisition or access authorization of a *manifestation* is the name of a publisher, distributor, etc. indicated in the *manifestation* as the source from which the *manifestation* may be acquired or through whom access may be authorized. The source for acquisition/access authorization will normally also include an address for the publisher, distributor, etc. A *manifestation* may be associated with one or more sources.

4.4.16 Terms of Availability

Terms of availability are the terms indicated in the *manifestation* under which the supplier (i.e., the source for acquisition/access authorization) will normally make the *manifestation* available (e.g., free to members of a particular association), or the price for which the *manifestation* sells.

4.4.17 Access Restrictions on the Manifestation

Access restrictions are restrictions on access to and use of a *manifestation*. Access restrictions may be based in copyright, or they may extend beyond the protections guaranteed in law to the owner of the copyright.

4.4.18 Typeface (Printed Book)

Typeface is the style of type used to print a book (e.g., Baskerville, Times New Roman, etc.)

4.4.19 Type Size (Printed Book)

Type size is the size of the characters in a printed book (e.g., 10 point).

4.4.20 Foliation (Hand-Printed Book)

The foliation of a hand-printed book reflects the number of folds made in a printed sheet to form a gathering of leaves (e.g., a sheet folded twice to form a quarto, three times to form an octavo, etc.)

4.4.21 Collation (Hand-Printed Book)

Collation reflects the sequence of gatherings in a book as indicated by signatures on each gathering (e.g., four gatherings bearing signatures A through D).

4.4.22 Publication Status (Serial)

Publication status for a *manifestation* issued as a serial is the status of the serial with respect to its continuing publication (i.e., whether it is currently published or has ceased publication).

4.4.23 Numbering (Serial)

Numbering for a *manifestation* issued as a serial is the designation of volume/issue, etc. and/or date appearing in the *manifestation*. The numbering may comprise a numeric, alphabetic and/or a date component (e.g., Volume 1, number 1 (January 1971)).

4.4.24 Playing Speed (Sound Recording)

Playing speed for a sound recording is the speed at which the carrier must be operated to produce the sound intended (e.g., 33 1/3 rpm, 19 cm/s, etc.)

4.4.25 Groove Width (Sound Recording)

Groove width is indicative of the number of grooves per inch cut on a disc or cylinder (e.g., microgroove--i.e., 200 grooves per inch).

4.4.26 Kind of Cutting (Sound Recording)

Kind of cutting is the direction in which the grooves are cut on a disc or cylinder (e.g., lateral, vertical, etc.).

4.4.27 Tape Configuration (Sound Recording)

Tape configuration is the number of tracks on a sound tape (e.g., eight track, twelve track).

4.4.28 Kind of Sound (Sound Recording)

The kind of sound reflects the number of sound channels used to make the recording (monaural, stereophonic, quadraphonic, etc.).

4.4.29 Special Reproduction Characteristic (Sound Recording)

A special reproduction characteristic is the equalization system, noise reduction system, etc. used in making the recording (e.g., NAB, DBX, Dolby, etc.).

4.4.30 Colour (Image)

Colour is the colour(s), tone(s), etc. (including black and white) used in the production of an image.

4.4.31 Reduction Ratio (Microform)

Reduction ratio is the degree to which a text or image has been reduced in the process of microfilming (e.g., 42x, etc.). Reduction ratio may also be indicated as a range (e.g., very high reduction indicates a reduction in the range of 61x to 90x).

4.4.32 Polarity (Microform or Visual Projection)

Polarity is the relationship of the colours and tones in an image on film to the colours and tones of the object filmed. When the colours and tones in the film image reflect directly the colour and tones of the object filmed, the polarity is positive. When they are the reverse of the object the polarity is negative. The polarity of images in a *manifestation* comprising more than one image may be mixed.

4.4.33 Generation (Microform or Visual Projection)

Generation is a reflection of the number of times an image on film has been transferred from one carrier to another (e.g., a first generation camera master, a second generation printing master, a third generation service copy, etc.).

4.4.34 Presentation Format (Visual Projection)

Presentation format is the format used in the production of a projected image (e.g., wide screen, Beta, VHS, etc.).

4.4.35 System Requirements (Electronic Resource)

System requirements for an electronic resource include requirements related to hardware (e.g. machine make and model, RAM capacity, etc.), software (e.g., operating systems, programming language, supporting software, etc.), and peripherals (monitor, printer, mouse, etc.)

4.4.36 File Characteristics (Electronic Resource)

File characteristics for an electronic resource include standards or schemes used to encode the file (e.g., ASCII, SGML, etc.), physical characteristics of the file (e.g., recording density, parity, blocking, etc.), and other characteristics that have a bearing on how the file can be processed.

4.4.37 Mode of Access (Remote Access Electronic Resource)

Mode of access is the means of accessing a remote electronic resource (e.g., Internet, World Wide Web, etc.).

4.4.38 Access Address (Remote Access Electronic Resource)

Access address is an alpha-numeric code (e.g., universal resource locator - URL) used to facilitate remote access to an electronic resource.

4.5 Attributes of an Item

The logical attributes of an *item* defined for this study are the following:

- item* identifier
- fingerprint
- provenance of the *item*
- marks/inscriptions
- exhibition history
- condition of the *item*
- treatment history
- scheduled treatment
- access restrictions on the *item*

Note: The attributes defined for the purposes of this study do not include those associated with transactions of an ephemeral nature such as the circulation or processing of an *item*.

4.5.1 Item Identifier

The *item* identifier is a number or code that is uniquely associated with the *item*, and serves to differentiate that *item* from any other *item* in the same collection and/or institution (e.g., call number, accession number, bar code, etc.). The number is normally assigned by the institution that holds the *item*. The *item* identifier may also include a name or code identifying the institution or repository in which the *item* is housed, and a

name or code identifying a particular collection or sub-unit within the institution (e.g., a rare book collection, a branch library, etc.).

4.5.2 Fingerprint

A fingerprint is an identifier constructed by combining groups of characters transcribed from specified pages of a printed *item*. The technique is used primarily to signal differences between individual copies of early printed books. There are various formulae for constructing the fingerprint (e.g., the one specified in *Fingerprints = Empreintes = Impronte*, published by the Institut de Recherche et d'Histoire des Textes in Paris).

4.5.3 Provenance of the Item

The provenance of an *item* is a record of previous ownership or custodianship of the *item*.

4.5.4 Marks/inscriptions

Marks/inscriptions on an *item* include any signatures, numbering, annotations, etc. that have been applied uniquely to the *item* by the artist, fabricator, owner, etc.

4.5.5 Exhibition History

Exhibition history is a record of public exhibitions of an *item*, including dates, venues, etc.

4.5.6 Condition of the Item

Condition of an *item* is the physical condition of the *item*, particularly any variances between the physical makeup of the *item* and that of the *manifestation* it exemplifies (e.g., missing pages, plates, etc.). Condition may reflect other aspects of the physical condition of the *item* as well (e.g., brittleness, faded images, etc.).

4.5.7 Treatment History

The treatment history of an *item* is a record of the treatment the *item* has undergone (e.g., deacidification, restoration, etc.) Treatment history may also comprise details of the treatment process (e.g., chemical solutions used, techniques applied, etc.), the date the treatment was applied, etc.

4.5.8 Scheduled Treatment

The scheduled treatment of an *item* is a plan for future treatment of the *item* (e.g., chemical wash). Scheduled treatment may also comprise details of the planned treatment process and the scheduled date of application.

4.5.9 Access Restrictions on the Item

Access restrictions on an *item* are any limitations placed on physical access to the *item* (e.g., restricted to supervised on-site use, etc.).

4.6 Attributes of a Person

The logical attributes of a *person* defined for this study are the following:

- name of *person*
- dates of *person*
- title of *person*
- other designation associated with the *person*

4.6.1 Name of Person

The name of a *person* is the word, character, or group of words and/or characters by which the *person* is known (e.g., Donald Horne, A. A. Milne, Ellery Queen, etc.). A name may include one or more forenames (or given names), matronymics, patronymics, family names (or surnames), sobriquets, dynastic names, etc. A *person* may be known by more than one name, or by more than one form of the same name. A bibliographic agency normally selects one of those names as the uniform heading for purposes of consistency in naming and referencing the *person*. The other names or forms of name may be treated as variant names for the *person*. In some cases (e.g., in the case of a *person* who writes under more than one pseudonym, or a *person* who writes both in an official capacity and as an individual) the bibliographic agency may establish more than one uniform heading for the *person*.

4.6.2 Dates of Person

The dates associated with a *person* may include the precise or approximate date of the *person's* birth and/or death, or dates indicating the period in which the *person* was known to be active in a given field of endeavour.

4.6.3 Title of Person

The title of a *person* is a word or phrase indicative of rank, office, nobility, honour, etc. (e.g., Major, Premier, Duke, etc.), or a term of address (Sir, Mrs., etc.) associated with the *person*.

4.6.4 Other Designation Associated with the Person

A designation associated with a *person* is a numeral, word, or abbreviation indicating succession within a family or dynasty (e.g., III, Jr., etc.), or an epithet or other word or phrase associated with the *person* (e.g., the Brave, Professional Engineer, etc.).

4.7 Attributes of a Corporate Body

The logical attributes of a *corporate body* defined for this study are the following:

- name of the corporate body
- number associated with the corporate body
- place associated with the corporate body
- date associated with the corporate body
- other designation associated with the corporate body

4.7.1 Name of the Corporate Body

The name of a *corporate body* is the word, phrase, character, or group of words and/or characters by which the body is known (e.g., Royal Aeronautical Society, IBM, Séminaire européen sur la recherche en éducation, Friedrich Witte, etc.). A *corporate body* may be known by more than one name, or more than one form of the same name. A bibliographic agency normally selects one of those names as the uniform heading for purposes of consistency in naming and referencing the *corporate body*. The other names or forms of name may be treated as variant names for the *corporate body*. In some cases (e.g., in the case where a *corporate body* is known by different names at different periods in its history) the bibliographic agency may establish more than one uniform heading for the *corporate body*.

4.7.2 Number Associated with the Corporate Body

Number associated with the *corporate body* is the numerical designation sequencing a meeting, conference, exhibition, fair, etc. that constitutes one of a series of related meetings, conferences, exhibitions, fairs, etc., or any other numerical designation associated with a *corporate body*.