Criteria to emancipate content providers from obsession with specifications for content preservation and propositions as guidelines on making content for easy reuse in the future

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The Present Situation

Many specifications have been proposed by institutions or authorities.
However, no specification has ensured content preservation for the last 70 years.

WHY?

①Naive Understanding of Preservation

Four Types of Preservation

1. Living Preservation
2. Functional Preservation
3. Appearance Preservation
4. Content Preservation
5. Existence Preservation

Too hard to implement

easy to implement

Which preservation is a target of the specification?

②Misunderstanding of Ontology

The phantom of a common ontology

∵ Difficulty of defining the conceptual world

e.g. “museum” 😂

∵ A definition of a concept varies in people, cultures, languages, and the days.

③Obscure Targets of Preservation

Existence of digital objects cannot be confirmed tangibly.

It must be confirmed categorically or conceptually.

A Category : Data Management Phases

i. raw data
ii. content factory
iii. public platform
iv. service platform

Which stage is a preservation target at ?

The Way to solve it

First of all, we accept this fact as scientists,
then we start to seek a new way to share digital content diachronically except in a normative, controlling, or prescriptive way.

an idea

No Silver Bullet(= No normative way)

In order to preserve digital objects diachronically, we have to convert them into a new one in the future.
We must make a digital object in paying close attention to future data conversion.

A Descriptive Way for Preservation

In the case of using a standard specification or defining original specifications, we should make decisions for a easy way to convert it into a new one according to the future requirements.
We cannot define the way as a rule (because it is not a normative way). However, we can make a list of propositions as stances, styles, or philosophy to making digital contents.

Q1. Preservation vs. Expressive Power

Usually, digital contents with highly expressive power is hard or almost impossible to preserve.
Should we give up preservation of such a content, e.g. digital exhibition ?
Or, should we stick to preservation of any kinds of digital contents?
Do we need an expressive power in digital contents at Museum?

Q2. Multiplicity of definitions is vice?

Standards have been sought to reduce a number of local definitions.
However, is multiplicity of definitions itself really bad or uncomfortable?
e.g.

a) A standard is a Procrustean bed.
b) A standard will be an obstacle to a new idea.
c) A standard will decay and be overcome by a new standard, the conversion of which is not usually considered in defining it.

Q3. Static vs. Dynamic Process

Digital objects conforming with a standard specification will be used as they are in the future without any conversion. Is it true?
Digital objects made up with original specifications for long-term preservation will be converted into other formats in the future.
Any digital objects will be converted into others’ in the future.
Which data is easy to convert into another format, data in standard or data made up with a consideration for preservation?

Propositions: for data preservation

P.1 Standard specification can be disregarded.
P.2 Check the type of preservation(1-5) and data management phases(i-iv).
P.3 Consider the reusability of digital contents as much as possible.
P.4 In the case of using a standard specification, the usability or the extent of easiness of data conversion must be checked.
P.5 As for a data structure, it should be simple or flat. For example, in the case of a tree structure, the structure should be flat as much as possible. The list of pair data(e.g. key-value) is the best.
P.6 A link structures is harm to data conversion. A so-called standoff-style data structure ensures only a uni-directional conversion.
P.7 Digital contents with highly expressive power devastates data preservation.
P.8 Make descriptive metadata as much as possible.

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