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TEXT AND IMAGE ARE THE SAME

– or Close Enough at Least. Reflections on Expanding an Ontology for Intertextual Relations Towards Intermediality

Bernhard Oberreither, LTW/ACDH-CH

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SEMANTIC WEB & ONTOLOGIES FOR HUMANISTS

'Rich Data' through "the modeling of complex human interpretations of data through formal languages"

"[F]ormal modeling is inside the hermeneutic process and [...] we are expected to modify and adapt it, must formalize it ad infinitum."

(Ciotti 2014, pp. 8 & 11)

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(Ciotti 2014, pp. 8 & 11)

Theory and data modelling as deeply intertwined practices: No theory that's not a model, no model without inherent theoretical assumptions.

SEMANTIC WEB & ONTOLOGIES FOR HUMANISTS

A cautious assumption: Humanities' data models don't match domain theories' complexity …

… because of, naturally, feasibility, and interoperability.

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"Model of" vs. "Model for"

(McCarty 2008, Pierazzo 2019)

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"Model of" vs. "Model for"

(McCarty 2008, Pierazzo 2019)

Result: A double orientation (double bind?) for data models in DH.

INTRO – The intertextual, interpictorial, and intermedial relations ontology

- wide notion of text

- wide notion of intertextuality

- CIDOC CRM & LRM aligned

- Web Annotation Ontology aligned

- different degrees of complexity

- different degrees of granularity

- multiple modelling options

- theory-agnostic

- several interfaces to external vocabularies

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INTRO – The intertextual, interpictor[...] intermedial relations ontology

"It's about time that some Commissioner of the Republic of Letters impose on us coherent terminology."

– Gérard Genette

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'THEORY INTEGRATION'

1. Compression
2. Common denominators
3. Modularity

INCOMPATIBLE THEORIES OF INTERTEXTUALITY

INCOMPATIBLE THEORIES OF INTERTEXTUALITY
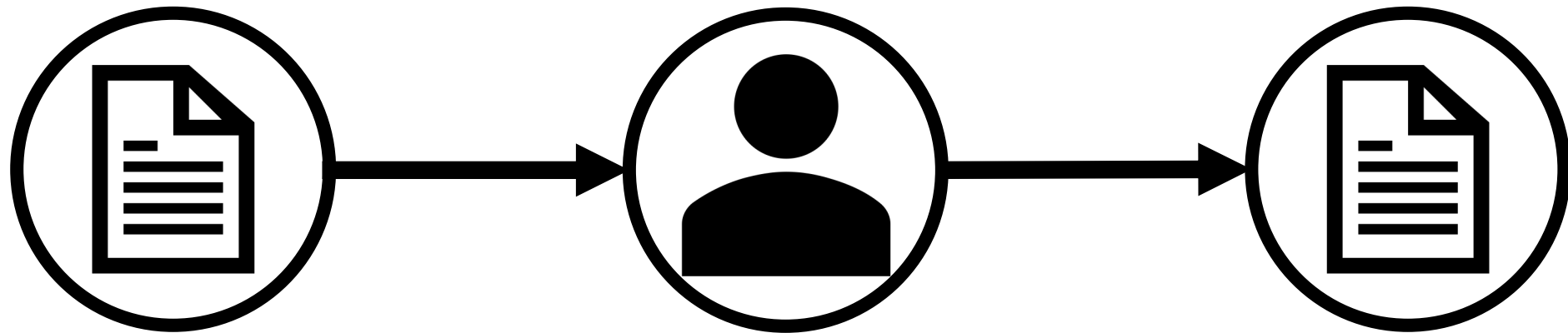
Text influences Author, Author writes Text
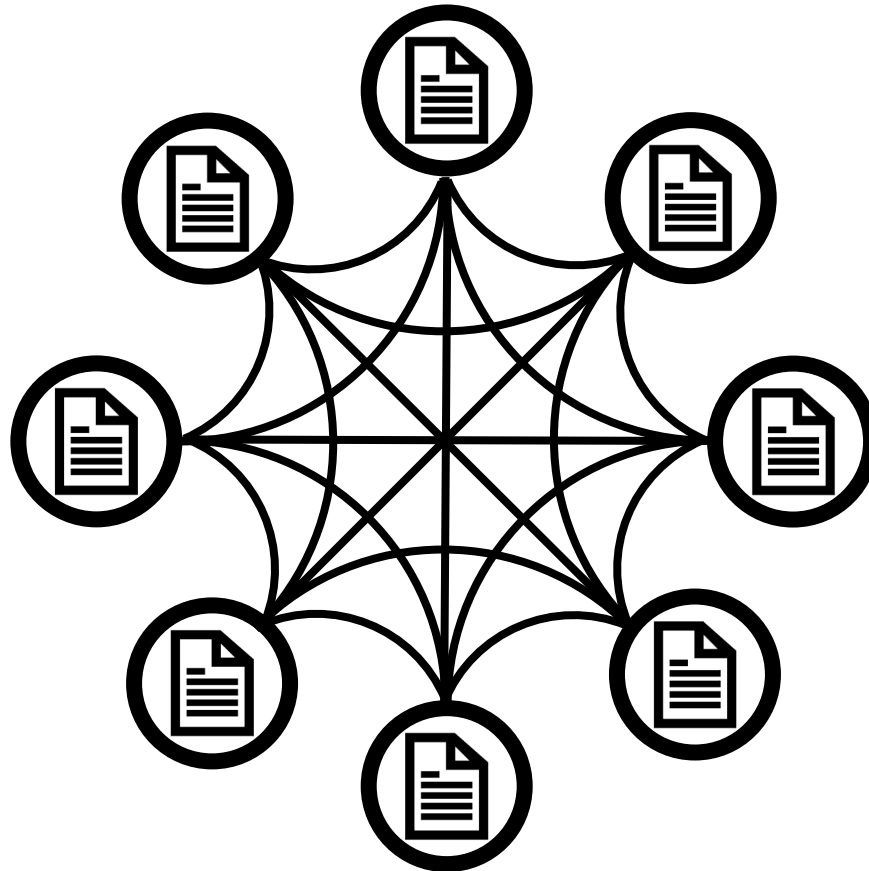(Classical theories of influence)

INCOMPATIBLE THEORIES OF INTERTEXTUALITY
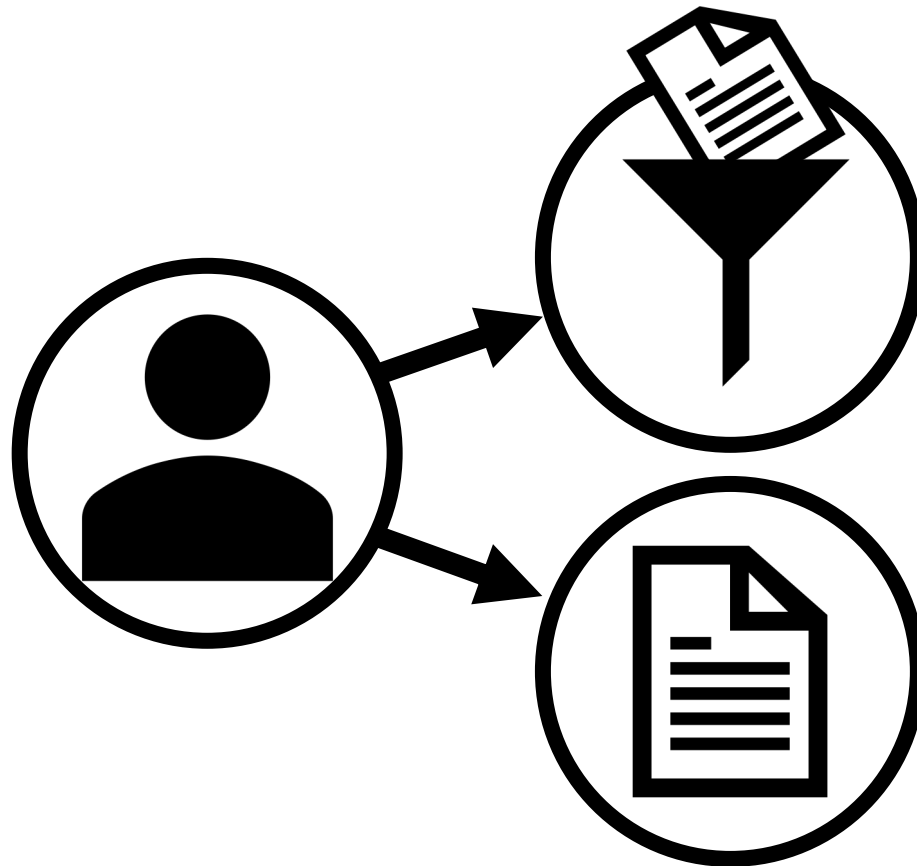
Author fears Influence, writes Text
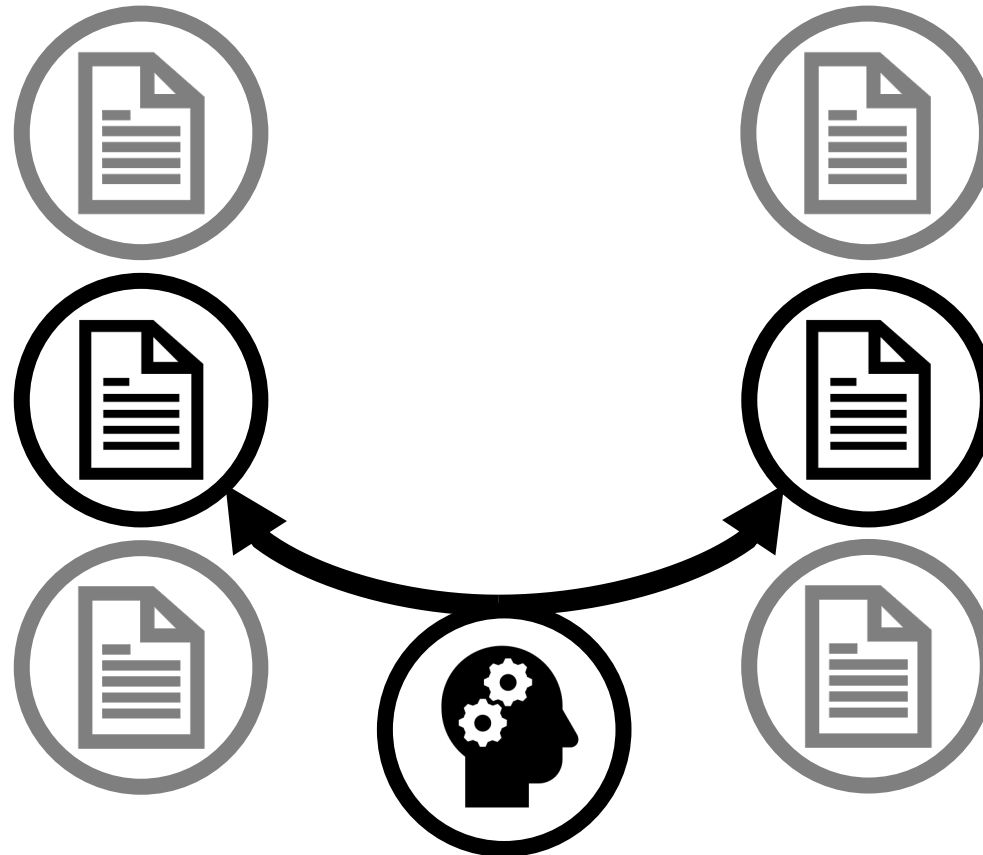
(‚Anxiety of Influence', Bloom 1973)

INCOMPATIBLE THEORIES OF INTERTEXTUALITY

Every text as „absorption and transformation of other texts" in „space of intertextuality"
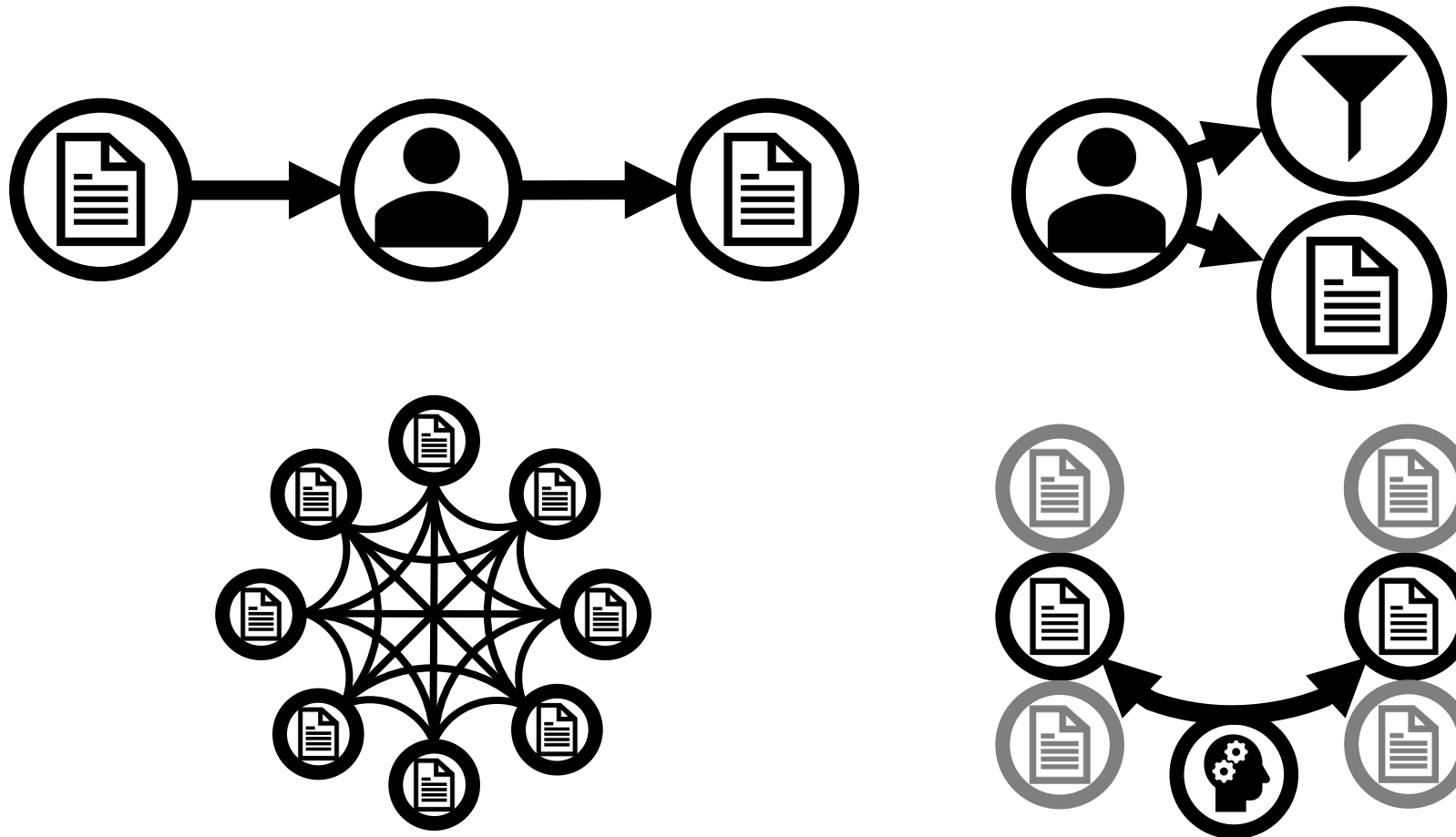
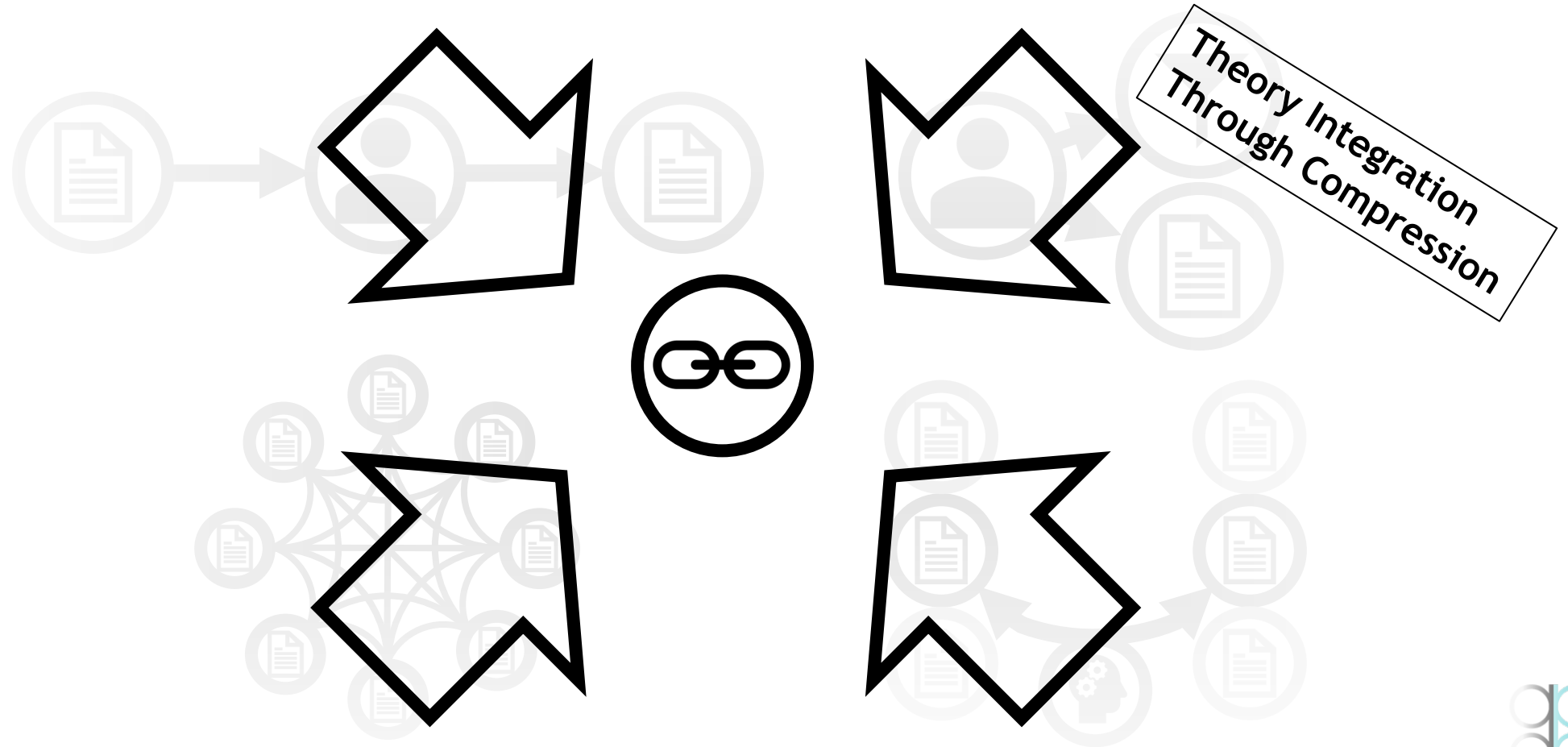(Kristeva 1967)

INCOMPATIBLE THEORIES OF INTERTEXTUALITY

A reader's ‚cross mapping'
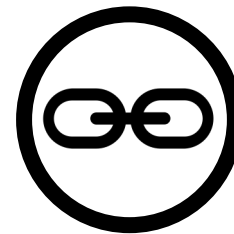of correlations as
intertextuality

(Bronfen 2002)

INCOMPATIBLE THEORIES OF INTERTEXTUALITY
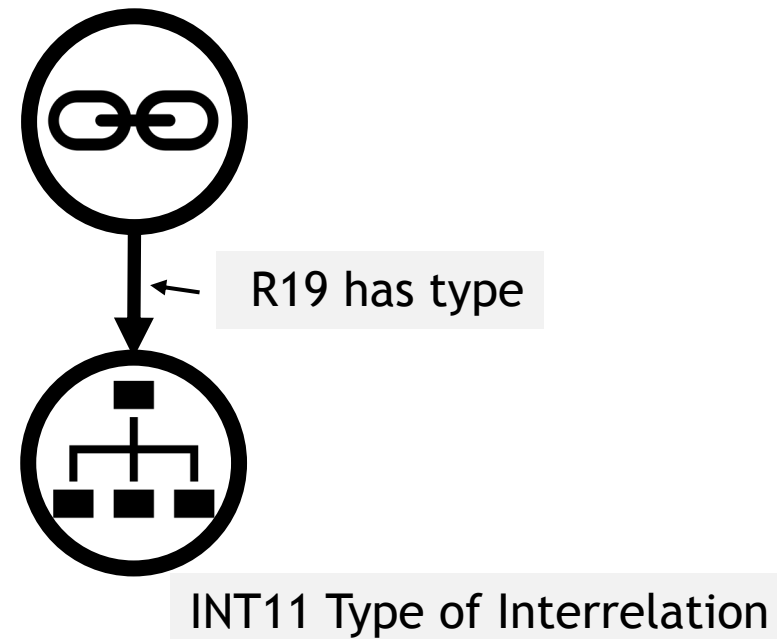
INCOMPATIBLE THEORIES OF INTERTEXTUALITY

Theory Integration
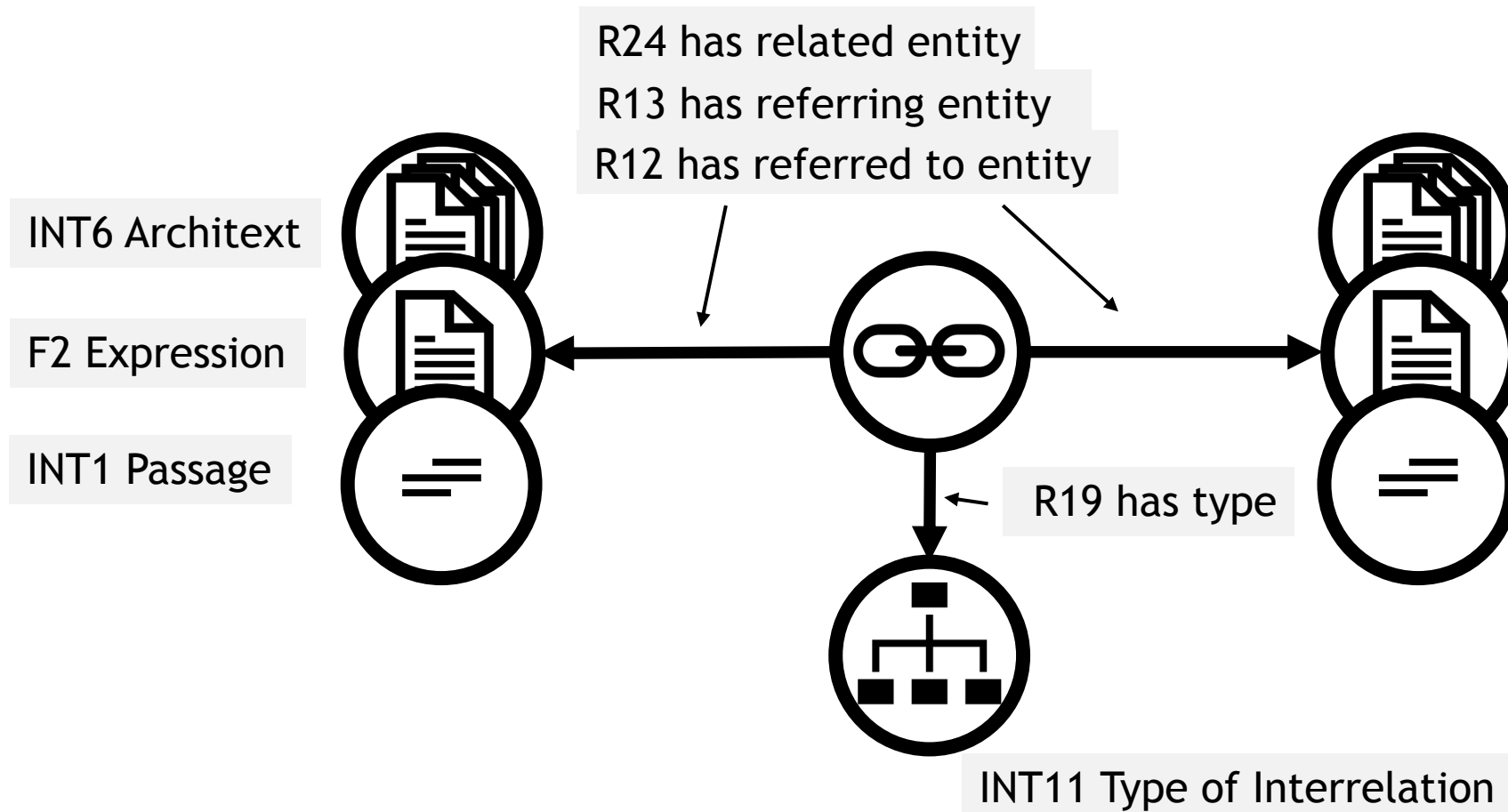Through Compression

INTRO – Central Classes

INT3 Interrelation

INTRO – Central Classes

R19 has type

INT11 Type of Interrelation

INTRO – Central Classes

INT6 Architext

F2 Expression

INT1 Passage

R24 has related entity
R13 has referring entity
R12 has referred to entity

R19 has type

INT11 Type of Interrelation
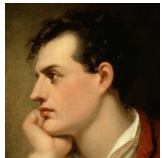
INTRO – Central Classes
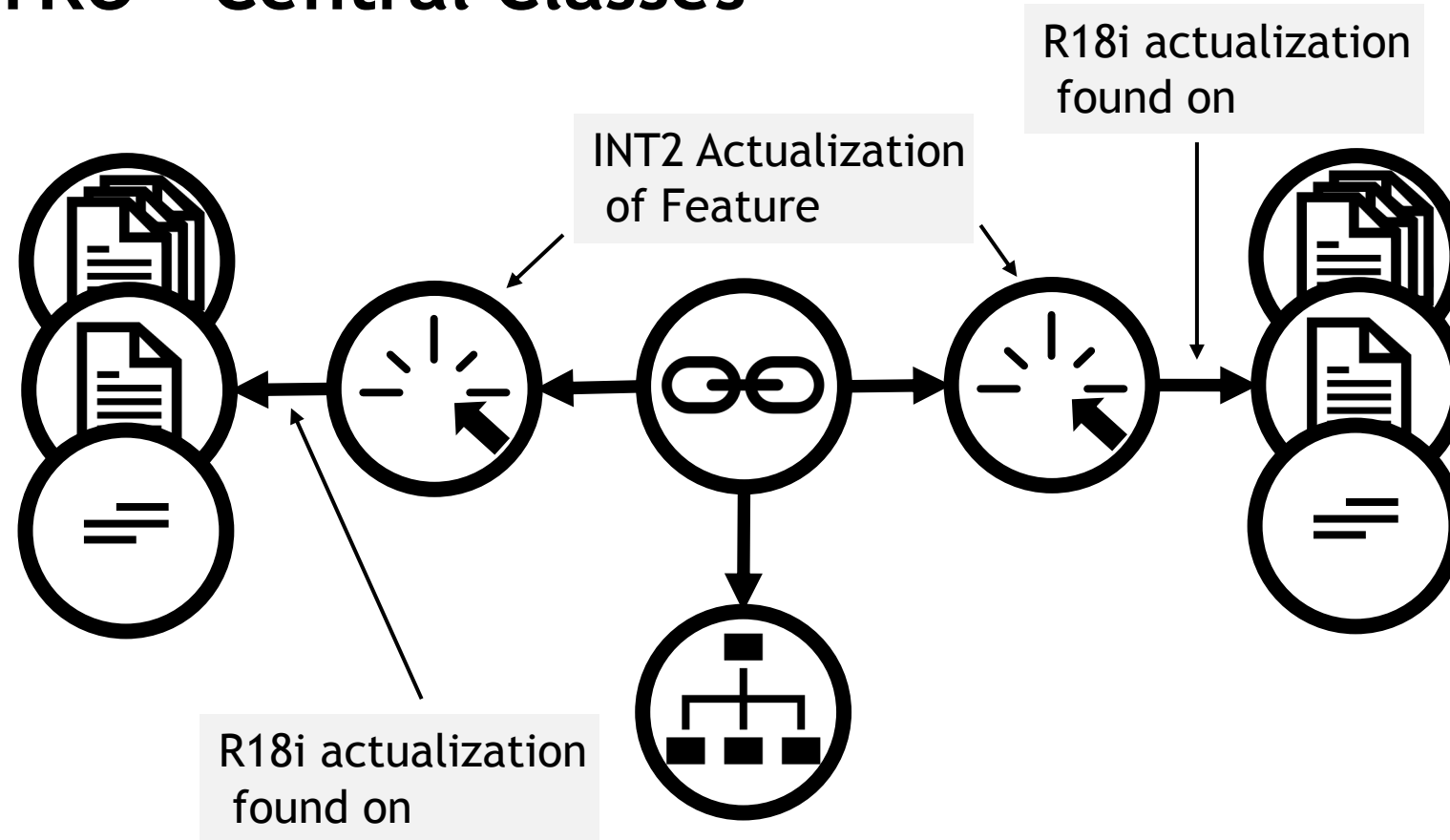
INTRO – IMPLEMENTATIONS

SemanticKraus – Connecting Kraus-Scholarship to the Semantic Web

semantickraus.acdh.oeaw.ac.at
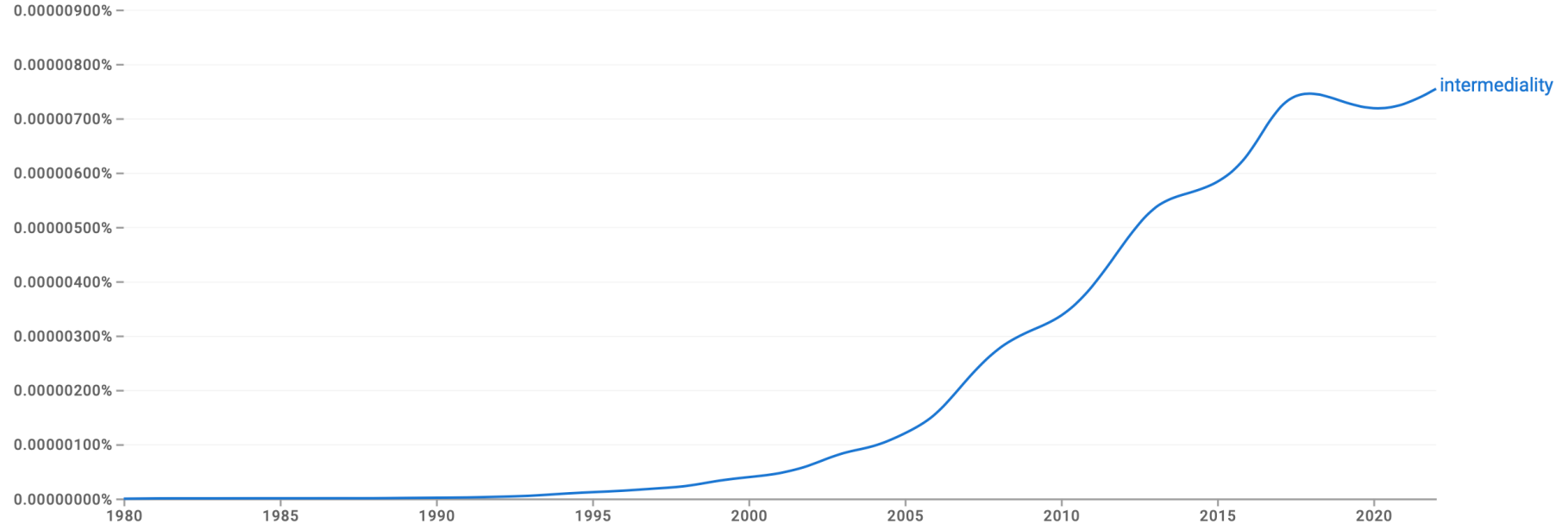
The Romantic Period Poetry Archive

romanticperiodpoetry.org

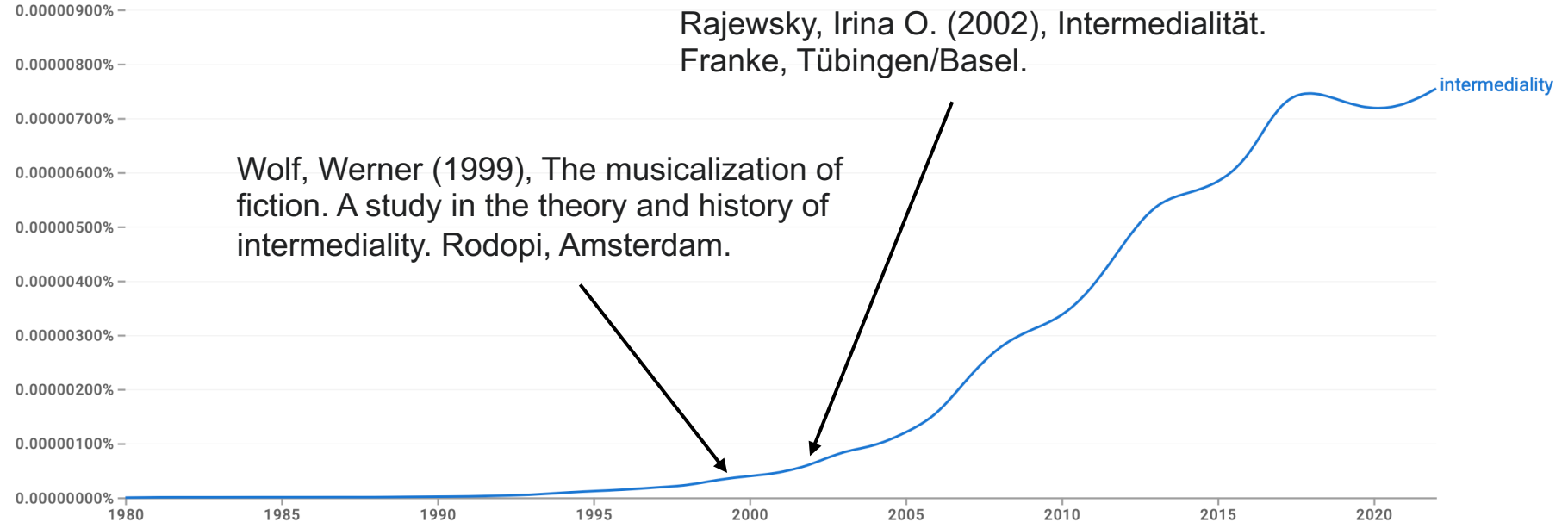"Die literarische Sappho-Rezeption im deutschsprachigen Raum"

sappho-digital.com

INTRO – INTERMEDIAL

https://books.google.com/ngrams/graph?content=intermediality&year_start=1980&year_end=2022&corpus=en&smoothing=3&case_insensitive=false

INTRO – INTERMEDIAL

Rajewsky, Irina O. (2002), Intermedialität.
Franke, Tübingen/Basel.

Wolf, Werner (1999), The musicalization of
fiction. A study in the theory and history of
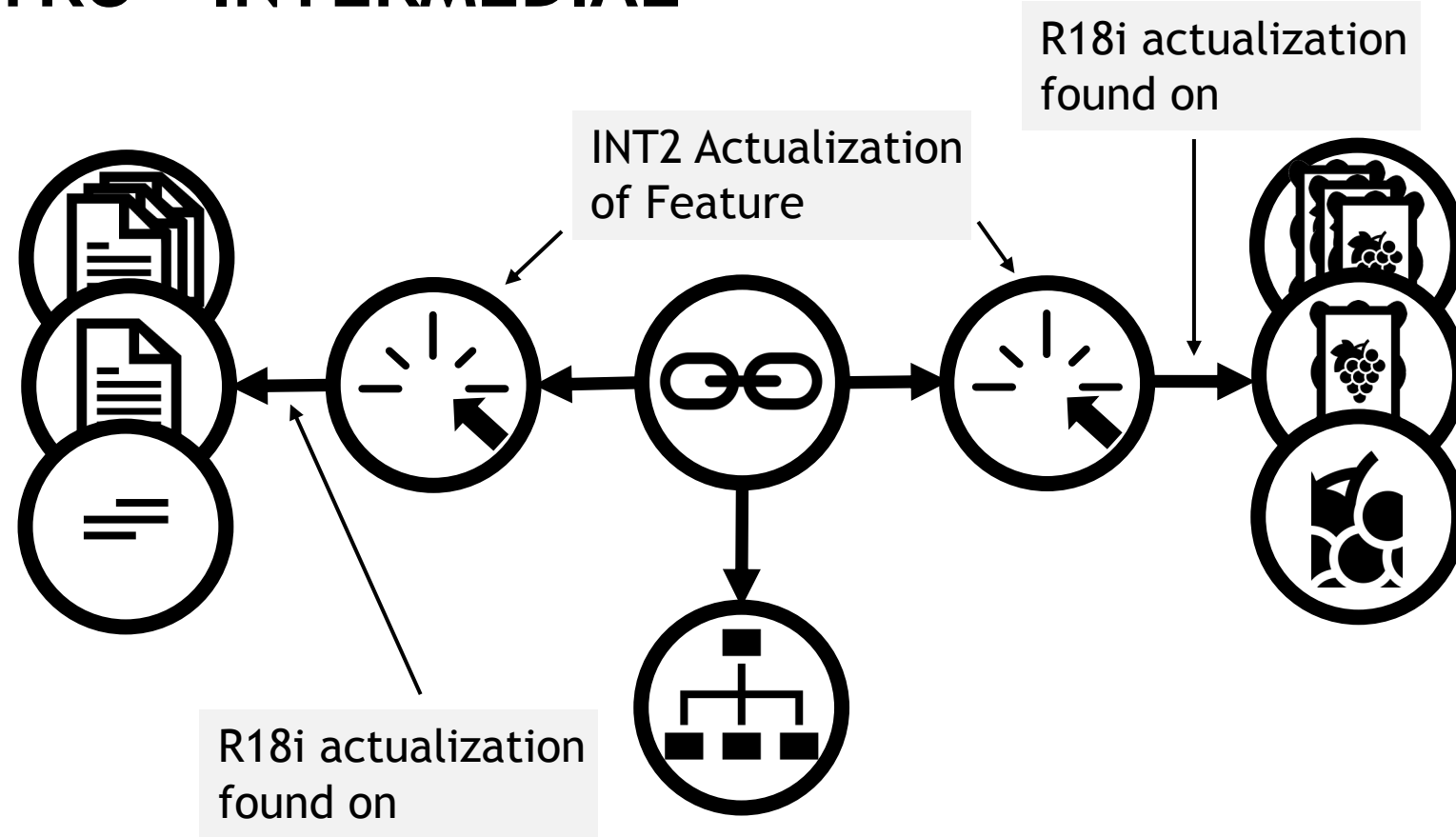intermediality. Rodopi, Amsterdam.

intermediality

https://books.google.com/ngrams/graph?content=intermediality&year_start=1980&year_end=2022&corpus=en&smoothing=3&case_insensitive=false

INTRO – INTERMEDIAL

R18i actualization
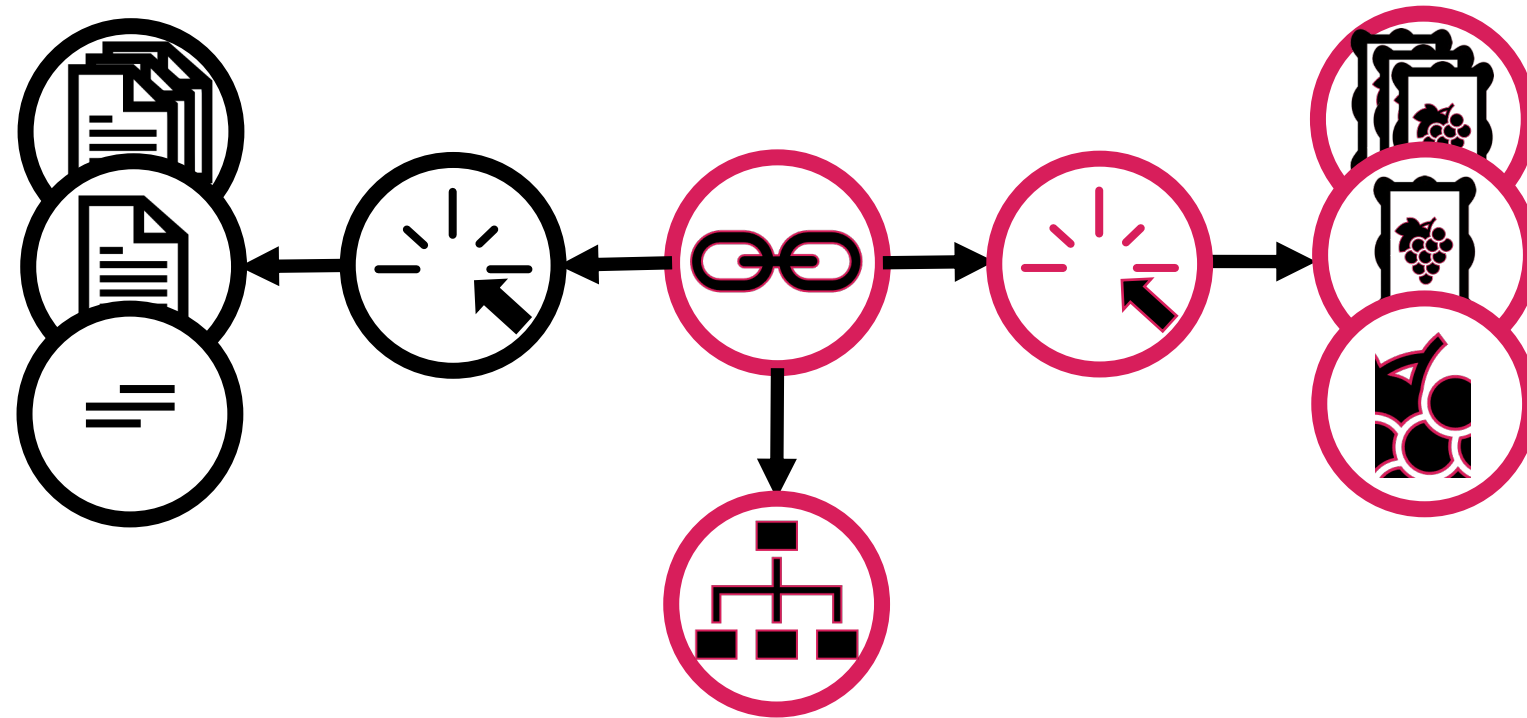found on

INT2 Actualization
of Feature

R18i actualization
found on

INTRO – INTERMEDIAL

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Possible obstacles:

- "Autographic" vs. "allographic" art forms (Goodman 1976)
(concerns level of, e. g., CIDOC or LRM)

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- Perception of images vs. of texts: Simultaneity vs. Linearity

LINEARITY AND SIMULTANEITY

- Arts in space vs. arts in time
(Lessing, *Laokoon*, 1766)

Reading as non-linear?
- 15% of saccades don't follow text flow (Rayner 1998)

Image perception as linear?
- Denis Diderot 1767: "line of liaison"
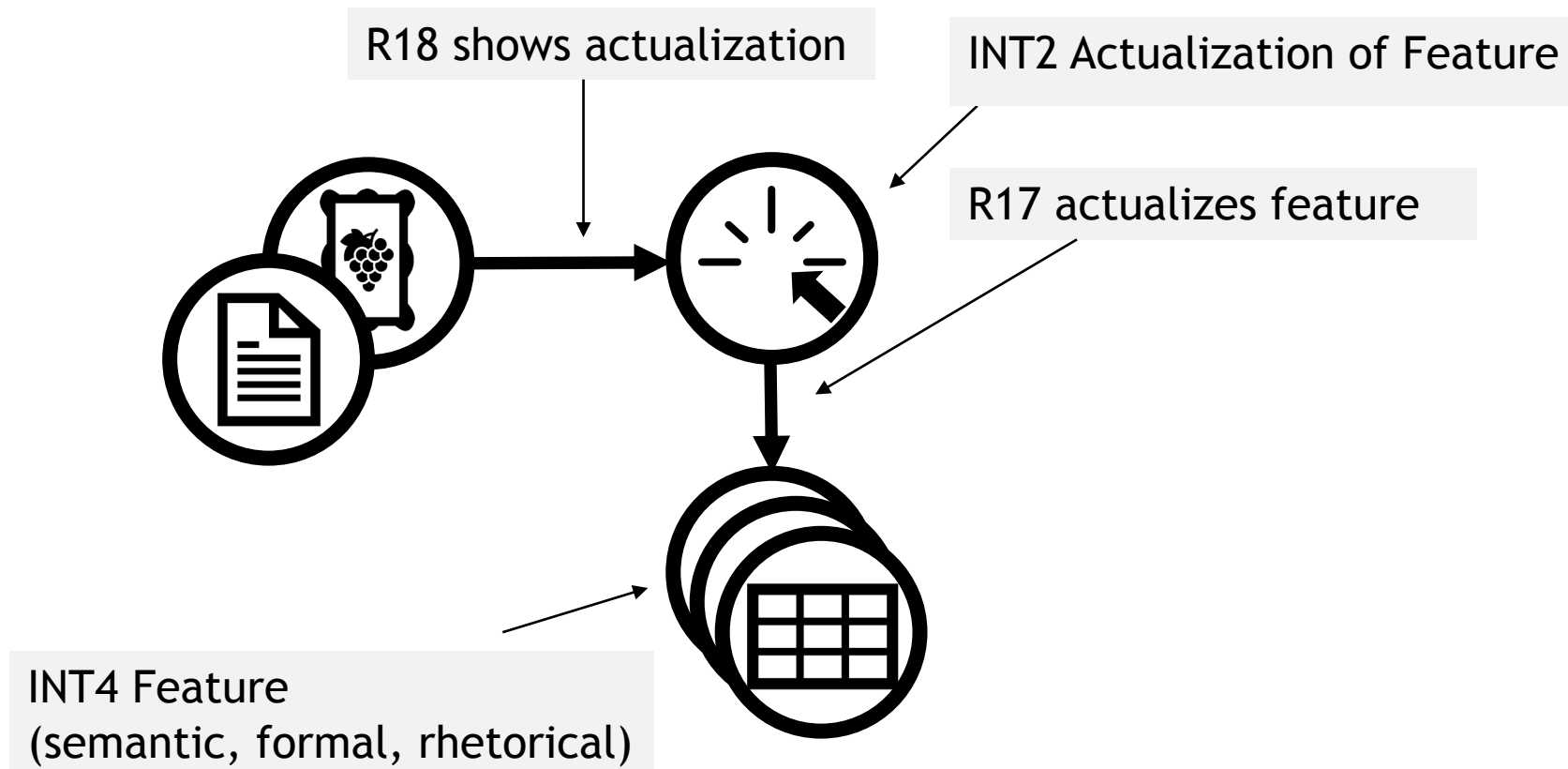- matched not in order, but in waypoints
(Rosenberg/Klein 2015)

(Image source: Rosenberg/Klein 2015)

INTRO – INTERMEDIAL

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- "Autographic" vs. "allographic" art forms (Goodman 1976)
                                                    (concerns level of, e. g., CIDOC or LRM)

- Perception of images vs. of texts: Simultaneity vs. Linearity

- What's in a picture? (Modelling image 'content')

WHAT'S IN A PICTURE?

R18 shows actualization

INT2 Actualization of Feature

R17 actualizes feature

INT4 Feature
(semantic, formal, rhetorical)

WHAT'S IN A PICTURE?

R18 shows actualization

INT2 Actualization of Feature

R17 actualizes feature

Parole (language as utterance)

Langue (language as system)

(Saussure 1916)

INT4 Feature
(semantic, formal, rhetorical)

WHAT'S IN A PICTURE?

Common-denominator-approach
to theory integration

R18 shows actualization

P67 refers to

real-world referent

INT2 Actualization (of the feature "Reference")

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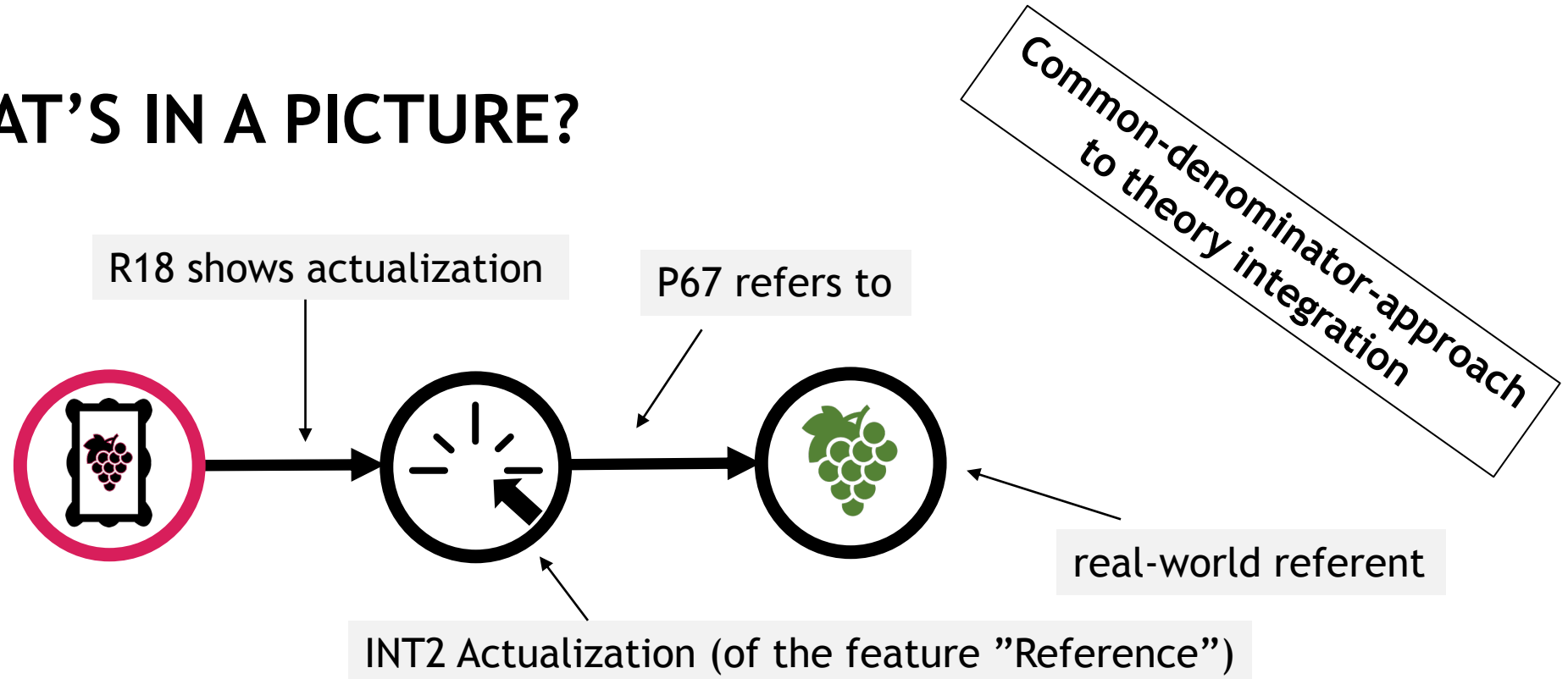
Mappable (but not identical) to: Sign → Interpretant → Object (C. S. Peirce)
Signifier → Signified → Reference (F. de Saussure)

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Signifier → Signified → Reference (F. de Saussure)
Image Carrier → Image → Sujet (E. Husserl)
…

IMAGE CONTENT IN CULTURAL HERITAGE DATA

Diadic and triadic approaches:

VRA Core („Visual Resources Association Core",
Library of Congress, XML Schema)
LIDO („Lightweight Information Describing Objects", XML
Schema)
DublinCore
Wikidata
CIDOC CRM

E24 Physical Human-Made Thing   P62 depicts   E1 CRM Entity

IMAGE CONTENT IN CULTURAL HERITAGE DATA

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    <u>E24 Physical Human-Made Thing</u>   <u>P62 depicts</u>   <u>E1 CRM Entity</u>

    short for

    <u>E24 Physical Human-Made Thing</u>   <u>P65 shows visual item</u>   <u>E36 Visual Item</u>   <u>P138 represents</u>   <u>E1 Entity</u>

IMAGE CONTENT IN CULTURAL HERITAGE DATA

Diadic and triadic approaches:

VRA Core („Visual Resources Association Core",
Library of Congress, XML Schema)
LIDO („Lightweight Information Describing Objects", XML
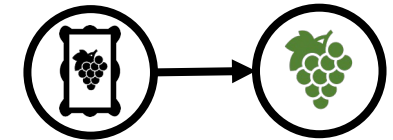Schema)
DublinCore
Wikidata
CIDOC CRM

    <u>E24 Physical Human-Made Thing</u> > <u>P62 depicts</u> > <u>E1 CRM Entity</u>

    short for

    <u>E24 Physical Human-Made Thing</u> > <u>P65 shows visual item</u> > <u>E36 Visual Item</u> > <u>P138 represents</u> > <u>E1 Entity</u>
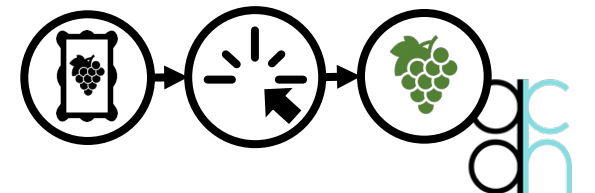
?

IMAGE CONTENT IN CULTURAL HERITAGE DATA

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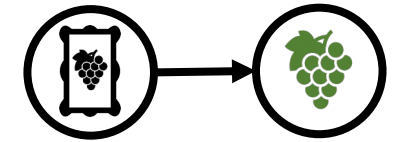Schema)
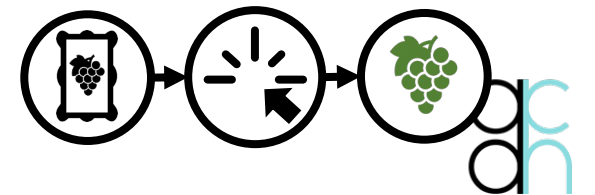**DublinCore**
Wikidata
CIDOC CRM

E24 Physical Human-Made Thing > P62 depicts > E1 CRM Entity

short for

E24 Physical Human-Made Thing > P65 shows visual item > E36
Visual Item > P138 represents > E1 Entity

!

WHAT'S IN A PICTURE?

Round 2: Some objections to the triadic model.
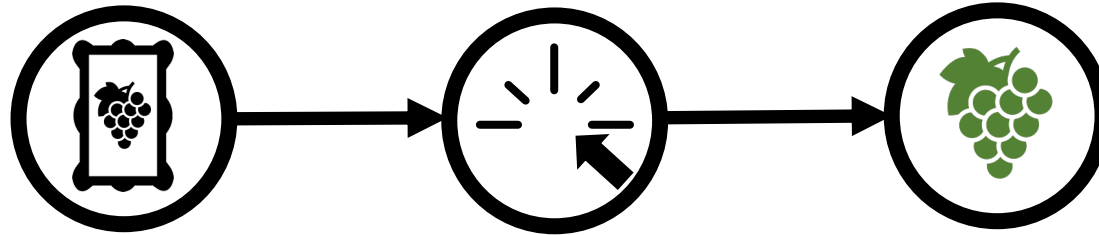

Image Carrier → Image → Sujet (E. Husserl)

WHAT'S IN A PICTURE?

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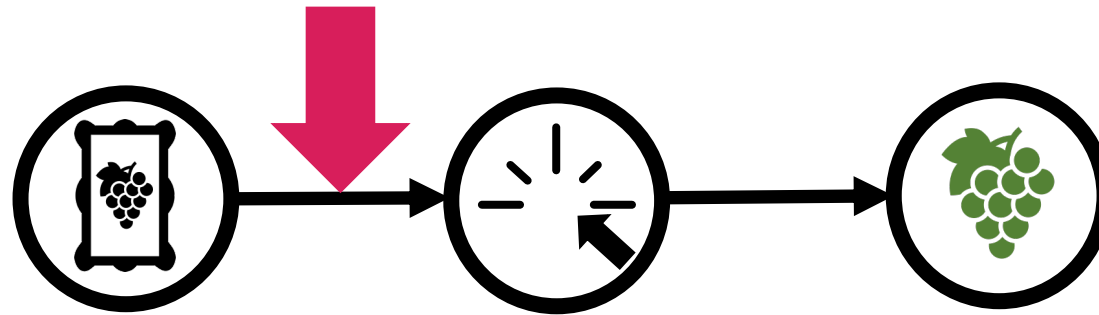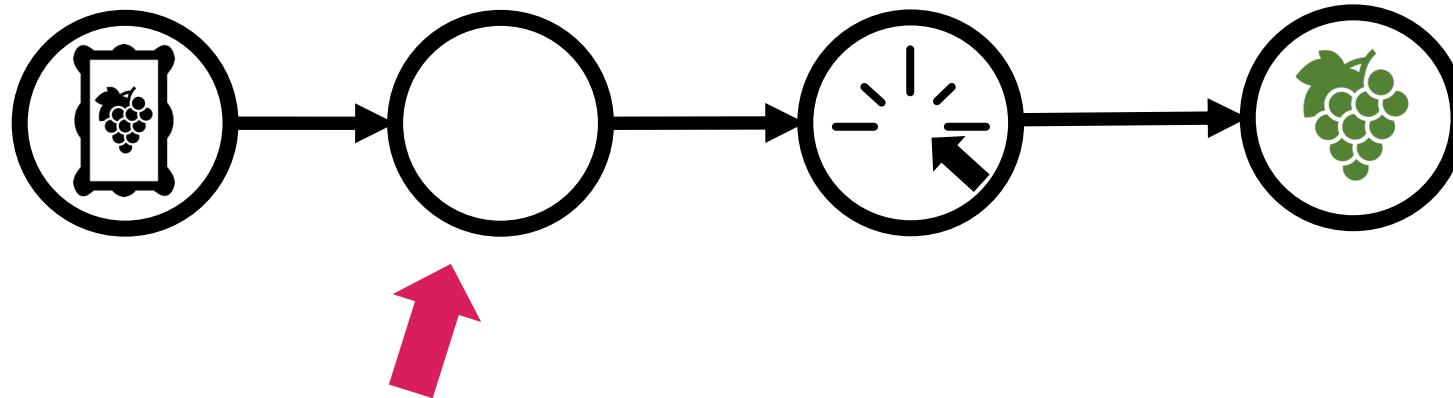

Image Carrier → Image → Sujet (E. Husserl)

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Round 2: Some objections to the triadic model.

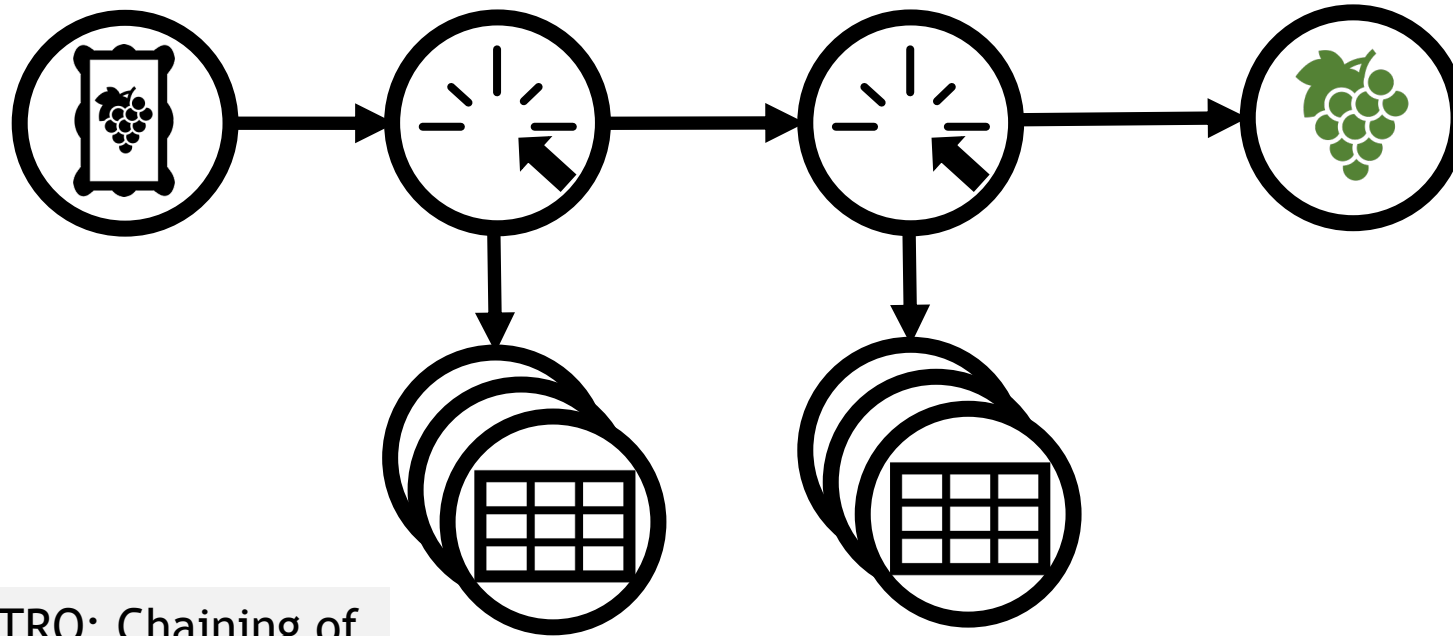A four-step-approach from item to referent (Wiesing 2005, Simon 2009, Nöth 2009)

WHAT'S IN A PICTURE?

Round 2: Some objections to the triadic model.

Modularity approach to theory integration

INTRO: Chaining of Actualizations

WHAT'S IN A PICTURE?

Round 2: Some objections to the triadic model.

Modularity approach to theory integration
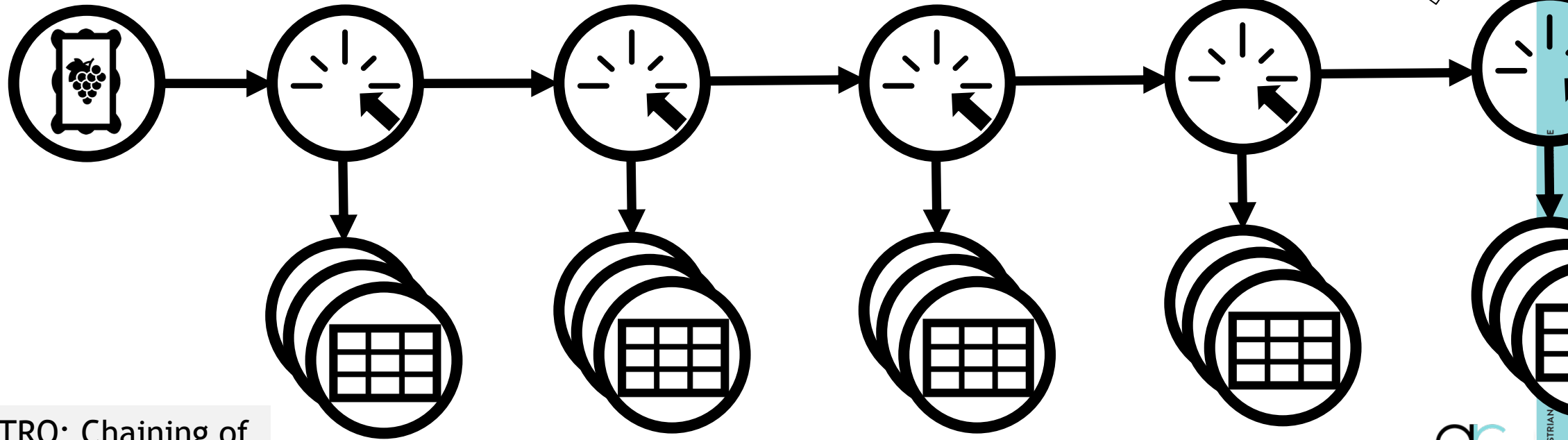
INTRO: Chaining of Actualizations

OUTLOOK

Future releases, pending work:

OUTLOOK

Future releases, pending work:

- Further Expansion of INTRO to include more media / artforms

- Enable more far-reaching inferencing

- Add negation mechanism
(currently possible via other ontologies, e. g. SIO, the SemanticScience Integration Ontology)

- Intermediality-focused implementation of INTRO

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THANKS FOR LISTENING!

INTRO on github: https://github.com/BOberreither/INTRO

INTRO documentation

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