



# **“Of hopes, villains, and Trojan horses: Open Access academic publishing and its battlefields”**

Public defence of the doctoral thesis

Elena Šimukovič  
8 September 2023

University of Vienna, Department of Science and Technology Studies  
Universitätsstraße 7 (NIG), staircase 2, 6<sup>th</sup> floor (seminar room)

# Open Access and its basic idea(l)s

“An **old tradition** and a **new technology** have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge. The new technology is the internet. The **public good** they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds.

Removing access barriers to this literature will accelerate research, enrich education, share the learning of the rich with the poor and the poor with the rich, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge. <...>

While we endorse the two strategies just outlined [i.e. self-archiving and new open access journals], we also encourage experimentation with further ways to make *the transition* from the present methods of dissemination to open access. Flexibility, experimentation, and adaptation to local circumstances are the best ways to assure that progress in diverse settings will be rapid, secure, and long-lived.” [emphases added]

Budapest Open Access Initiative (BOAI) declaration, February 2002



# Open Access and its basic idea(l)s (cont.)

“An old tradition and a new technology have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge. The new technology is the internet. The public good they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds.

Removing access barriers to this literature will accelerate research, enrich education, share the learning of **the rich with the poor and the poor with the rich**, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge. <...>

While we endorse the two strategies just outlined [i.e. self-archiving and new open access journals], we also encourage experimentation with further ways to make *the transition* from the present methods of dissemination to open access. Flexibility, experimentation, and adaptation to local circumstances are the best ways to assure that progress in diverse settings will be rapid, secure, and long-lived.” [emphases added]

Budapest Open Access Initiative (BOAI) declaration, February 2002



# Open Access and its basic idea(l)s (cont.)

“An old tradition and a new technology have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge. The new technology is the internet. The public good they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds.

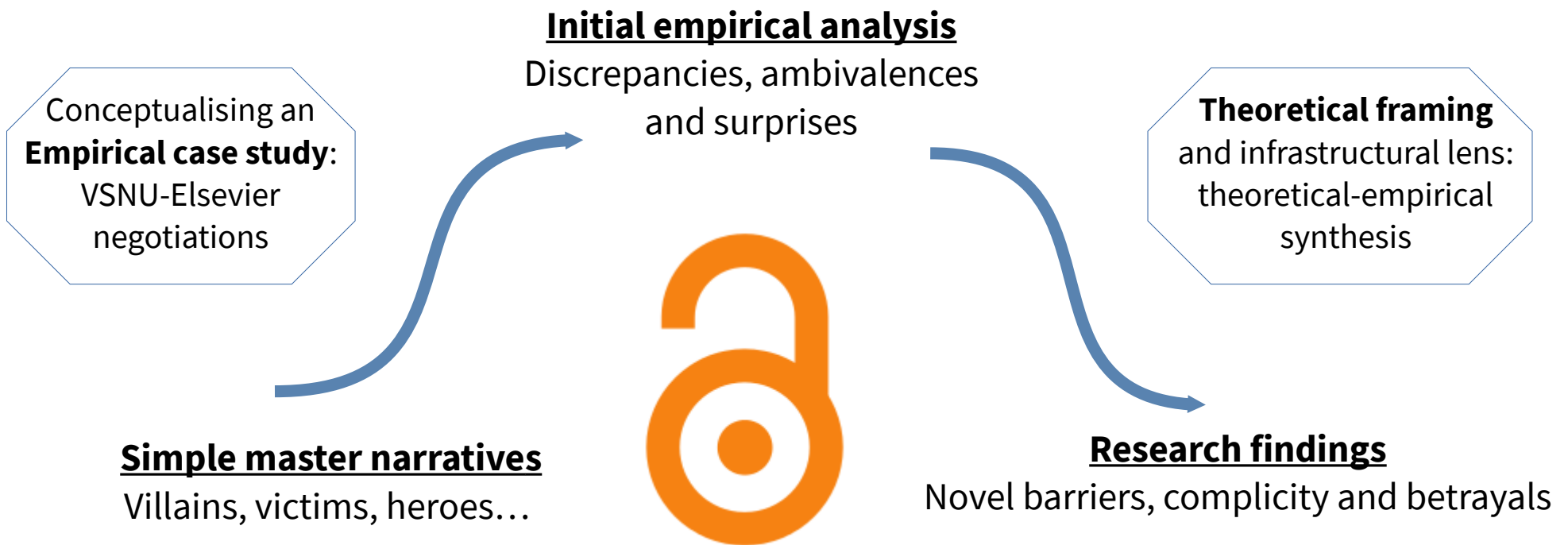
Removing access barriers to this literature will accelerate research, enrich education, share the learning of the rich with the poor and the poor with the rich, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge. <...>

While we endorse the two strategies just outlined [i.e. self-archiving and new open access journals], we also encourage experimentation with further ways **to make the transition from the present methods of dissemination to open access**. Flexibility, experimentation, and adaptation to local circumstances are the best ways to assure that progress in diverse settings will be rapid, secure, and long-lived.” [emphases added]

Budapest Open Access Initiative (BOAI) declaration, February 2002



# PhD thesis project: A narrative overview



# Open Access as my research topic



- Approaching Open Access and its multiplicity:
  - A proposition that scholarly literature should be **freely available online**, especially if it results from public funding (BOAI, 2002);
  - A set of publishing practices that encompass **different models and labels** (Green, Golden, hybrid, Diamond / Platinum Open Access...);
  - A prominent topic on many science policy agendas and (inter-)national strategies, including Open Access **transition plans**;
  - **Affects everyone** in this room as authors, readers and/or infrastructure providers in academic publishing.

See also chapter 1. Introduction – On choosing Open Access as a research topic and sub-chapter 5.2 Defining Open Access and its many (sub-)species in the thesis.



# Research questions



- › Main research question:

**How is the shift towards full Open Access re-ordering the academic publishing system?**

- › Sub-questions:

- › What expectations towards science and the academic publishing system are expressed through the shift to Open Access?
- › How is Open Access imagined by different actors?
- › How does the shift to Open Access affect actual publication practices?



# PhD thesis project: Simple master narratives





# Master narratives in Open Access debates

- Taking inspiration from Ulrike Felt et al. (2007, pp. 74-76), where:
  - “master narratives serve simultaneously as prior framing, starting-point, justification, and mode of sense-making for the policy domain” and
  - “each narrative offers **its own heroes, villains and victims**, and its own lasting moral prescriptions for confronting other crises” (emphasis added).



# Master narratives in Open Access debates (cont.)

- › Taking inspiration from Felt et al. (2007, pp. 74-76), where:
  - › “master narratives serve simultaneously as prior framing, starting-point, justification, and mode of sense-making for the policy domain” and
  - › “each narrative offers its own *heroes*, *villains* and *victims*, and its own lasting moral prescriptions for confronting other crises” (emphasis added).
- › When applied to the Open Access case:
  - › **Villains** – major commercial publishers who lock up scientific publications behind subscription paywalls,
  - › **Victims** – researchers, libraries, and broader society who cannot access the latest publications and/or need to pay exorbitant fees,
  - › **Heroes** – science policy-makers or engaged researchers who aim to change the workings of the academic publishing system.

See also sub-chapter 1.2 *VSNU-Elsevier negotiations as an exemplary empirical case* in the thesis.



# PhD thesis project: Empirical case study



# Empirical case study: VSNU-Elsevier negotiations



- Ambitious target of Dutch state secretary S. Dekker to reach 100% Open Access in ten years, by 2024
- Negotiations between the university association VSNU and Top 8 scientific publishers focused on Big Deals:
  - VSNU-Elsevier negotiations (mid-2014 to spring 2016)
  - “Pilot Gold Open Access” agreement for 2016–2018
- Testing novel negotiation principles and the invention of “The Dutch Approach” (4 success factors)
- Spreading experiences from the Netherlands as *a test case* for other countries to follow suit
- Significant impact on numerous follow-up negotiations (“Read & Publish” or “transformative” agreements)

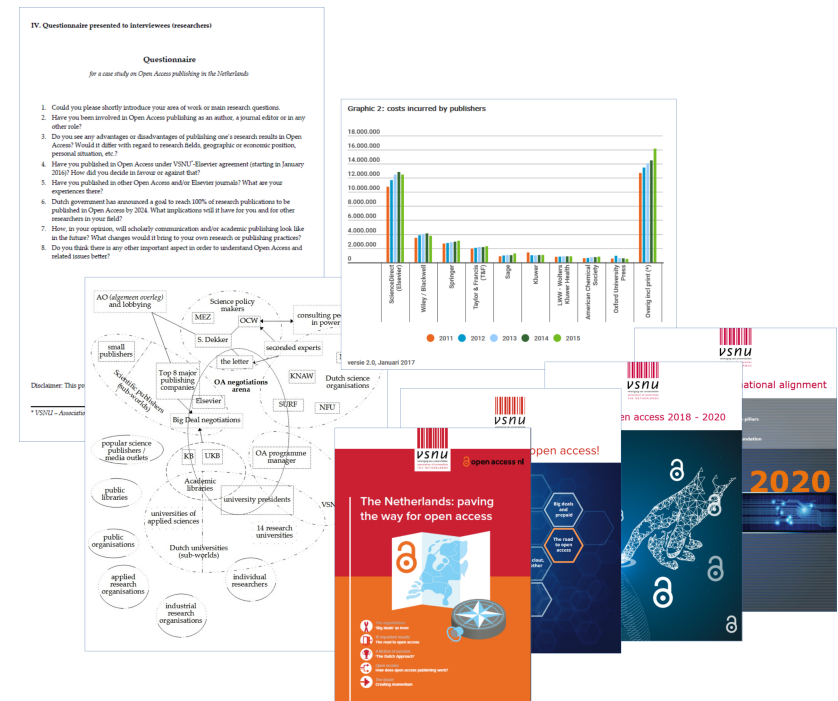
Image source: <http://www.magazine-on-the-spot.nl/openaccess/eng/index.html> (March 2016)



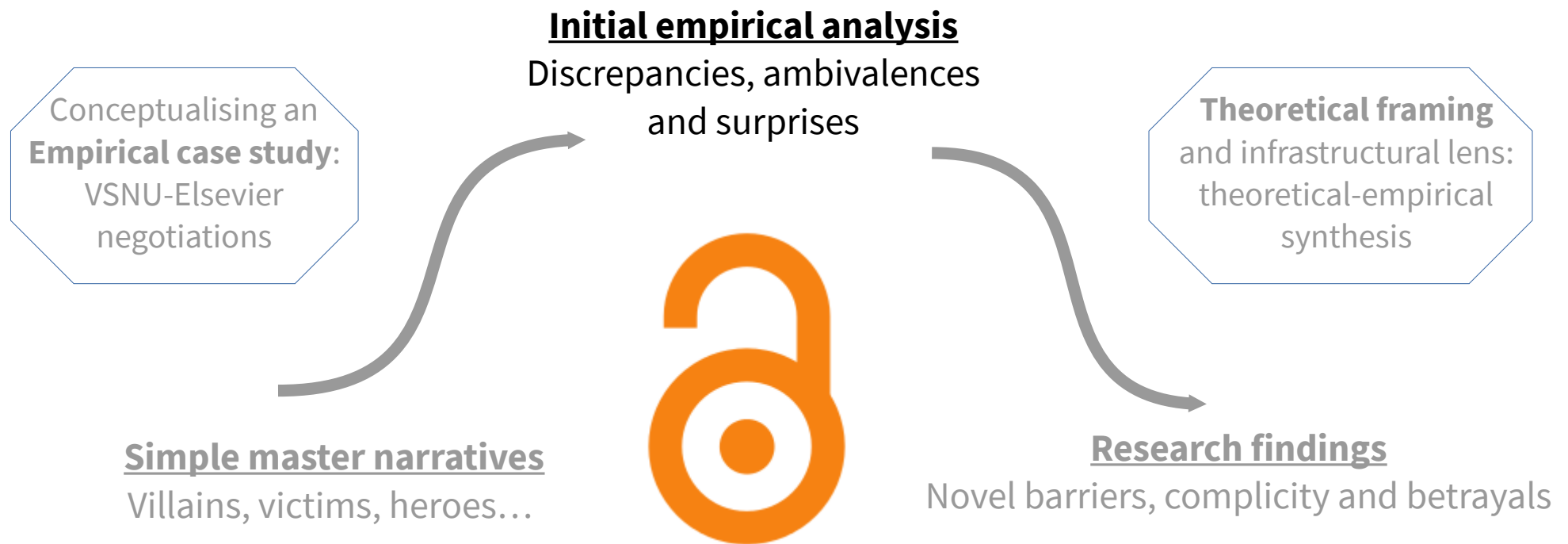
# Empirical case study: Materials and methods

- Studying the VSNU-Elsevier negotiations as an exemplary empirical case:
  - *Letter* by state secretary S. Dekker to the Dutch Parliament (November 2013);
  - Semi-structured *interviews* with: VSNU-Elsevier negotiation team members, the letter-writer, researchers from various areas and institutions in the Netherlands (30+ in total);
  - Scanned copy of VSNU-Elsevier *contract* for 2016-2018 and its later amendments;
  - Open Access monitoring statistics, press releases, public presentations etc.
- Constructionist *Grounded Theory* and *Situational Analysis*:  
Theoretical sampling, situational maps, emerging analytical categories (Charmaz, 2006; Clarke, 2005).

See also chapters 2. *Research approach* and 3. *Working with Grounded Theory as a “theory/methods package”* in the thesis.



# PhD thesis project: Initial empirical analysis



# Initial empirical analysis

- Discrepancies, ambivalences and surprises:
  - **Mixed feelings** among numerous negotiators with respect to the VSNU-Elsevier agreement, despite the official success story:

“I’m not too happy with the Open Access arrangement, because if, initially, you compare [agreements with other publishers], it’s a very meagre result, but it’s Elsevier (...)”  
[int\_3:290-303] (see p. 171 in the thesis).

# Initial empirical analysis (cont.)

- Discrepancies, ambivalences and surprises:
  - **Mixed feelings** among numerous negotiators with respect to VSNU-Elsevier agreement, despite the official success story;
  - Increased costs and even **bigger “Big Deals”** with major publishers, despite declared aims to invent a “new” system and strengthen the bargaining power of research institutions;





# Initial empirical analysis (cont.)

- Discrepancies, ambivalences and surprises:
  - **Mixed feelings** among numerous negotiators with respect to VSNU-Elsevier agreement, despite the official success story;
  - Increased costs and even **bigger “Big Deals”** with major publishers, despite declared aims to invent a “new” system and strengthen the bargaining power of research institutions;
  - Limited interest among eligible researchers and **low uptake levels** of the Open Access arrangement in its first period in 2016-2018:



# Initial empirical analysis (cont.)

- Discrepancies, ambivalences and surprises:
  - **Mixed feelings** among numerous negotiators with respect to VSNU-Elsevier agreement, despite the official success story;
  - Increased costs and even **bigger “Big Deals”** with major publishers, despite declared aims to invent a “new” system and strengthen the bargaining power of research institutions;
  - Limited interest among eligible researchers and **low uptake levels** of the Open Access arrangement in its first period in 2016-2018:

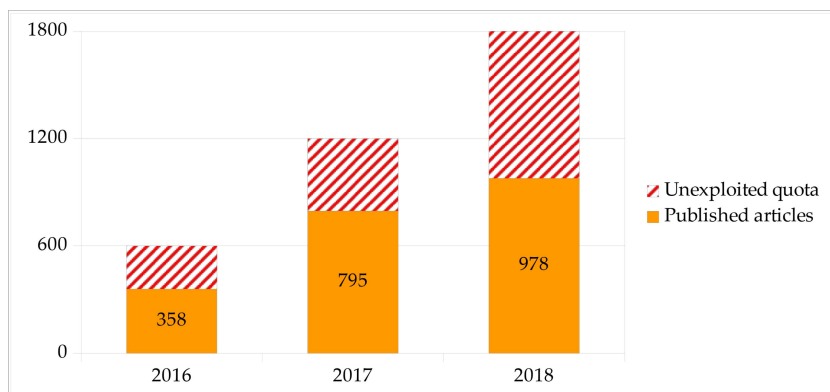


Figure 7: Number of Open Access publications under the VSNU-Elsevier agreement in 2016–2018

See *Figure 7* in the thesis (p. 196)

Based on data from the national Open Access monitor, available at <https://www.openaccess.nl/en/in-the-netherlands/monitor> [last checked on 15/08/2023].

# PhD thesis project: Theoretical framing



# Theoretical framing: Defining infrastructure

- 1) To productively analyse my empirical case, I propose conceptualising the academic publishing system as ***a socio-technical infrastructure***:



# Theoretical framing: Defining infrastructure

1) To productively analyse my empirical case, I propose conceptualising the academic publishing system as *a socio-technical infrastructure*:

➤ Recalling a basic definition by Susan Leigh Star:

- “People commonly envision infrastructure as a system of substrates – railroad lines, pipes and plumbing, electrical power plants, and wires. ***It is by definition invisible, part of the background for other kinds of work. It is ready-to-hand.*** This image holds up well enough for many purposes – turn on the faucet for a drink of water and you use a vast infrastructure of plumbing and water regulation without usually thinking much of it” (Star, 1999, p. 380; emphasis added).



# Theoretical framing: Defining infrastructure

1) To productively analyse my empirical case, I propose conceptualising the academic publishing system as ***a socio-technical infrastructure***:

➤ Recalling a basic definition by Susan Leigh Star:

➤ “People commonly envision infrastructure as a system of substrates – railroad lines, pipes and plumbing, electrical power plants, and wires. ***It is by definition invisible, part of the background for other kinds of work. It is ready-to-hand.*** This image holds up well enough for many purposes – turn on the faucet for a drink of water and you use a vast infrastructure of plumbing and water regulation without usually thinking much of it” (Star, 1999, p. 380; emphasis added).

➤ Acknowledging the salient features or dimensions of infrastructure:

• Embeddedness	• Embodiment of standards
• Transparency	• Built on an installed base
• Reach or scope	• Becomes visible upon breakdown
• Learned as part of membership	• Is fixed in modular increments, not all at once or globally
• Links with conventions of practice	

# Theoretical framing: Defining infrastructure

1) To productively analyse my empirical case, I propose conceptualising the academic publishing system as **a socio-technical infrastructure**:

› Recalling a basic definition by Susan Leigh Star:

› “p  
pl  
ot  
th  
wi  
Ackr

That – as a system of substrates – enables not only the communication of research findings (or the substance), but that is also an integral part of evaluation procedures for establishing individual reputational profiles necessary for academic career progression.

d for  
turn on  
n

See also chapter 4. *Theoretical framing* and the definition on p. 48 in the thesis.

- |                                      |   |
|--------------------------------------|---|
| • Reach or scope                     | • Becomes visible upon breakdown                              |
| • Learned as part of membership      | • Is fixed in modular increments, not all at once or globally |
| • Links with conventions of practice |   |

# Theoretical framing: Defining (re-)infrastructuring

- 1) To productively analyse my empirical case, I propose conceptualising the academic publishing system as *a socio-technical infrastructure*;
- 2) Taking a relational and processual perspective:
  - *Infrastructuring* – the processes involved in building, maintaining and/or adapting infrastructures (using the *-ing* gerund form);





# Theoretical framing: Defining (re-)infrastructuring

1) To productively analyse my empirical case, I propose conceptualising the academic publishing system as ***a socio-technical infrastructure***;

2) Taking a relational and processual perspective:

- *Infrastructuring* – the processes involved in building, maintaining and/or adapting infrastructures (using the *-ing* gerund form);
- *Re-infrastructuring* – as a particular occasion of infrastructuring that is driven by a political intervention and aims at
  - Adjusting or “turning” mature infrastructure according to new logics and directions,
  - Bringing novelty without being trapped in the existing arrangements or harming what is in place,
  - Maintaining embeddedness as one of the main design concerns and activities.

For more details, see Grisot & Vassilakopoulou (2017) and chapter 4. *Theoretical framing* in the thesis.



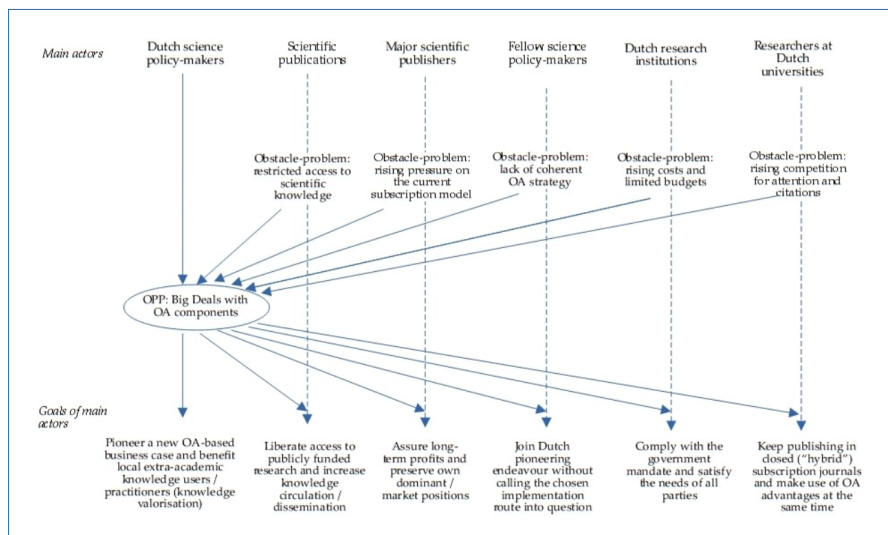
# Theoretical framing: Extending infrastructural lens

- 1) To productively analyse my empirical case, I propose conceptualising the academic publishing system as *a socio-technical infrastructure*;
- 2) Taking a relational and processual perspective, or *re-infrastructure*ing;
- 3) Extending the main theoretical framework, where necessary:
  - Actor-Network Theory (ANT) and the “sociology of translation” (Callon, 1986);
  - Design scripts of a “technical object” (Akrich, 1992);
  - (Non-)users of technologies (Oudshoorn & Pinch, 2003; Wyatt, 2003);
  - Repair and maintenance studies (Jackson, 2014; Denis & Pontille, 2015).



# Results from my theoretical-empirical synthesis

- Constructing Big Deals with Open Access publishing quotas as an “**Obligatory Passage Point**” (Callon, 1986) through necessary alliances and detours in Dekker’s letter:



See Figure 4 in the thesis (p. 118)

Section 7.3.1.2 Linking big ambitions with Big Deals as “obligatory passage points”

# Results from my **theoretical-empirical synthesis**

- Constructing Big Deals with Open Access publishing quotas as an “**Obligatory Passage Point**” (Callon, 1986) through necessary alliances and detours in Dekker’s letter;
- Considering the Article Processing Charge (APC) model as a “**technical object**” (Akrich, 1992) and **de-scripting** the VSNU-Elsevier agreement, incl. the pilot Open Access arrangement;



# Results from my **theoretical-empirical synthesis**

- Constructing Big Deals with Open Access publishing quotas as an “**Obligatory Passage Point**” (Callon, 1986) through necessary alliances and detours in Dekker’s letter;
- Considering the Article Processing Charge (APC) model as a “**technical object**” (Akrich, 1992) and **de-scripting** the VSNU-Elsevier agreement, incl. the pilot Open Access arrangement;
- Categorising **users and non-users** of the Pilot Gold Open Access arrangement (Wyatt, 2003), e.g. switching from “involuntary non-users” to “voluntary users”:

	Usage	
Voluntariness	Voluntary users	Voluntary non-users
	Involuntary users	Involuntary non-users

See *Table 1* in the thesis (p. 267)

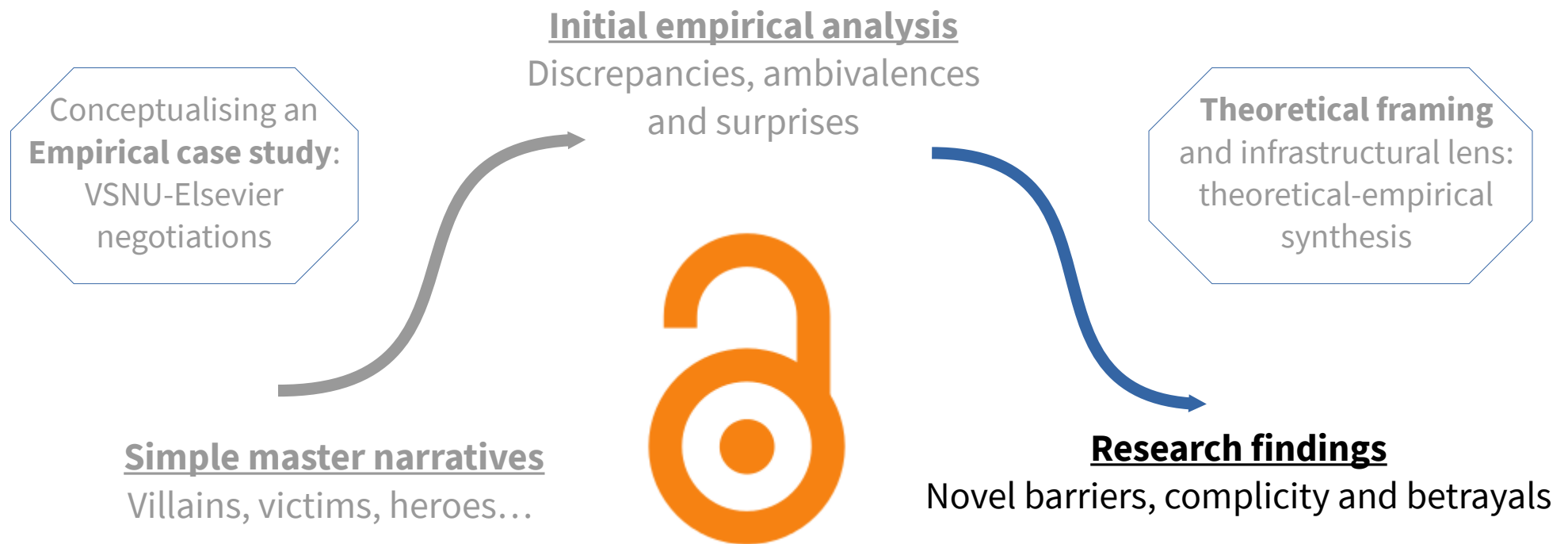
Section 9.4.3 Enacting closed-ness: On “home-made” exclusions and other blind spots

# Results from my **theoretical-empirical synthesis**

- Constructing Big Deals with Open Access publishing quotas as an “**Obligatory Passage Point**” (Callon, 1986) through necessary alliances and detours in Dekker’s letter;
- Considering the Article Processing Charge (APC) model as a “**technical object**” (Akrich, 1992) and **de-scripting** the VSNU-Elsevier agreement, incl. the pilot Open Access arrangement;
- Categorising **users and non-users** of the Pilot Gold Open Access arrangement (Wyatt, 2003), e.g. switching from “involuntary non-users” to “voluntary users”:
- Considering librarians as **maintainers** of the academic publishing infrastructure, while performing an infrastructural inversion (Bowker, 1994; Star & Bowker, 2006).



# PhD thesis project: Research findings



# Major research findings

- **Novel barriers** when replacing subscription paywalls with APCs:
  - Shifting from a “pay-to-read” to a “pay-to-say” principle, even worse
  - Rich ↔ poor, or just rich → poor? (cf. BOAI, 2002)
  - Drawing boundaries between individual researchers, institutions, countries





# Major research findings (cont.)

- **Novel barriers** when replacing subscription paywalls with APCs;
- **Complicity** of many actors in the current state of academic publishing affairs:
  - Researchers, librarians, research funders, administrators, and policy-makers along with big commercial publishing companies
  - Big Deals with OA components as mainly motivated by self-interest (↑ own visibility, citations, ranking positions and knowledge valorisation)
  - Problematising common master narratives – not simply villains, victims, and heroes (cf. Felt et al., 2007)

# Major research findings (cont.)

- **Novel barriers** when replacing subscription paywalls with APCs,
- **Complicity** of many actors in the current state of academic publishing affairs,
- **Betrayals** of the initial Open Access idea(l)s:
  - Metamorphoses and mutations in recent Open Access initiatives
  - No one rightful definition, but what I term the “Open Access multiple”
  - Tracing betrayals in the practice of translation in this thesis (cf. Law, 2006)



# Major research findings (cont.)

- **Novel barriers** when replacing subscription paywalls with APCs,
- **Complicity** of many actors in the current state of academic publishing affairs,
- **Betrayals** of the initial Open Access idea(l)s.

Lastly,

“... all the controversies, ambivalences, discrepancies, paradoxes, and surprises **make perfect sense** when considering attempts to reform the academic publishing system through the conceptual lens of (re-)infrastructuring” (p. 335 in the thesis).

# Concluding remarks: *Or, How could be otherwise?*



- Key takeaway message from my thesis:

Combining Big Deals with Open Access publishing quotas is *the wrong pathway* to implement Open Access – instead, researchers, academic libraries, research institutions and their funders should choose publishing models that are in line with their overarching goals and missions.

For further discussion, see sub-chapters *12.1 Linking my research findings with the latest BOAI declaration* and *12.3 Final remarks and suggestions for future work* in the thesis.



# Discussion & further questions



## Thank you for your attention!

- › Full-text of the thesis, including all references, is available online:
  - › Šimukovič, E. (2023). *Of hopes, villains, and Trojan horses: Open Access academic publishing and its battlefields*. University of Vienna, Vienna. <https://doi.org/10.25365/thesis.73661>



## Concluding remarks (cont.) - *Additional slide*

- On the overarching aims of Situational Analysis:

In the end, as Clarke (2005, p. 293) notes,

a “good interpretive analysis of the situation of inquiry ideally produces new working sensitizing concepts or elaborates and refines old ones, integrates theoretical advances with grounded empirical work, and is explicitly located, situated, and historicized” (p. 32 in the thesis).

