

The French HSS Community Speaks Out on Open Science: A Top-Down and Bottom-Up Taxonomy Approach

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Abstract: This article presents a thematic, taxonomy-based analysis that reveals a turn by French Humanities and Social Sciences (HSS) scholars toward criticism of the French national Open Science policy. By examining their argumentation, we better understand how far official discourse on OS fails to take into account the specificities of HSS disciplines, methodologies, and research practices. To achieve this, we developed a five-step research design: (1) compilation of a corpus of peer-reviewed papers critical of the national Open Science policy, (2) extraction of quotations containing arguments justifying the criticism, (3) Top-Down indexing of these arguments, (4) construction of a Bottom-Up taxonomy of researchers' criticisms of Open Science based on an iterative thematic analysis of their arguments, and (5) cross-referencing the two taxonomies. Our results show that criticism of Open Science accompanied the publication of the two national plans, in 2018 and 2021. The Bottom-Up taxonomy shows that the largest share of the criticism expressed by researchers focuses on *Open Research Data* and that this facet cuts across argument categories to the greatest degree, representing the majority of legal/ethical (91.7%), praxis-based (70.0%), and epistemological (68.2%) arguments. The article's original contribution lies in the dialogue it raises about a broader view of Open Science when it comes to HSS. It also provides unprecedented analysis of the categories of argument employed by French HSS scholars to justify their criticism of national French Open Science policy.

Keywords: Open Science, Open Access, Open Research Data, Taxonomy, Open Research, HSS.

Introduction and Background

After years of advocacy for Open Access (OA), France joined the broader European movement toward Open Science with the adoption of the Loi pour une République numérique (Law for a Digital Republic) in 2016, which established a national framework for legitimizing and recognizing openness and its dedicated infrastructures. This law represented a turning point for the development of a national Open Science policy agenda.

Since then, France has launched two National Plans for Open Science (PNSO), the first in 2018 (PNSO 1; see MESR 2018) and the second in 2021 (PNSO 2; see MESR 2021). With a new Strategic Plan for Open Science expected soon, French researchers in the Humanities and Social Sciences (HSS) are increasingly voicing their concerns and questions, with some expressing disagreement with the way official and normative frameworks for Open Science fail to account for the specificities of their disciplines and research topics.

Signs of these concerns were evident even before the two national plans. An initial worry was etymological: the French term for “data,” *donnée*, literally means “given,” implicitly suggesting that it has already been acquired (Fayet 2013). Dominique Cotte (2016) built on this line of thinking in an article on the social construction of data in HSS, a process that requires considerable time and effort. He highlighted the wide variety of data types (e.g., sampling, description, encapsulation, extraction, and tagging) potentially used in these fields and how their processing can transform research. Building on the recommendations and prescriptions for open data in the CNRS White Book¹ and the Amsterdam Call for Action on Open Science (Netherlands EU Presidency 2016), he emphasized the importance of reorienting the normative objective of openness toward more epistemological issues by asking which data should be open and what researchers would like to do with their own data. This debate was by no means specific to France, echoing others in Europe (in Germany, e.g.; see Kaden 2019).

As early as 2018, papers by individual researchers or collectives described why and how French OS policy overlooked key aspects of their research practices and the specific nature and status of their multifaceted data. These voices are growing louder (Laboulais 2023), finding expression in the scientific literature, including full special issues of peer-reviewed journals on the failure of the official discourse about OS to reconsider its theoretical assumptions in the context of HSS, particularly regarding questions of data (Cintéro 2022). This scientific debate aligns with earlier research highlighting the need for a more inclusive and nuanced approach to OS when applied to HSS (Knöchelmann

1. <https://www.science-ouverte.cnrs.fr/wp-content/uploads/2019/07/White-Paper-Open-Science-March-2016.pdf>

2019; Moore 2019). It calls for an approach that takes into consideration, for epistemological reasons, cultures of research and debate within HSS and the approaches and methodologies of specific fields (Leonelli 2023).

Beyond the academic literature, there has been lively debate in the French HSS research community, visible through blog posts on the specialist platform *Hypotheses*² (Mahé and Prime-Clavierie 2017), disciplinary conferences (identified using *Isidore*),³ and opinion pieces in the publications of academic trade unions (Favier and Pacteau 2021). A report published in March 2022 by the Parliamentary Office for the Evaluation of Scientific and Technological Choices (OPECST) highlights concerns about the threat that OS poses to academic freedom, arguing that it “must not be implemented indiscriminately or at any cost” (Sénat 2023).

The debate reached its peak in October 2024, when the media reported on the decision by Nantes University to revoke its mandatory archiving policy for its institutional repository (Scherer 2024). This decision followed a successful legal challenge brought at the Administrative Court of Nantes in 2021 by a literature professor, supported by his learned society and the French Publishers Association (SNE). At the same time, a PhD thesis (Zurbach 2024) in Information and Communication Sciences, defended at Avignon University in November 2024, discussed among other topics how Open Science policies are perceived as a new configuration for subordinating HSS to regulations arising from Science, Technology, Engineering, and Medicine (STEM) fields.

These events are anchored in wider historical concerns about the autonomy of HSS as a research field (Bourdieu 2001) and in more recent concerns about the “subordination” of HSS to the positivist assumptions of STEM disciplines. The emblematic example is the way HSS disciplines have been subjected to quantitative research evaluation methods and the relentless principle of “publish or perish” (Knöchelmann 2024). This has played an important role in disrupting publishing practices, leading researchers to publish more papers in high-ranked journals and to pay less attention to books (Adema and Hall 2013; Sénat 2023). Research by and debates among scholars and national bodies—such as the Alliance Athéna, the Conseil National des Universités (CNU), and the Académie des Sciences—reflect similar phenomena and concerns in Italy (Bonaccorsi 2018) and the United Kingdom (Pardo-Guerra 2022), shedding light on the globalized regulations that led to depictions of HSS as “outdated” (Thibault and Streliski 2021) and, most importantly, epistemologically dominated by STEM disciplines (Soulé 2022).

There has been no analysis to date of the categories of arguments used by researchers to articulate their criticism of OS. Nonetheless, the increasing number of these

2. See <https://fr.hypotheses.org>.

3. *Isidore* is a search engine that provides access to digital data in the HSS: <https://isidore.science>.

criticisms, the strength of their arguments, and their editorial forms allow us to interpret them as a collective critique of OS on the part of French HSS scholars. From this perspective, our goal is to describe the argumentative mechanisms underlying criticism of OS. In this article, which is exploratory in nature, our research questions aim to identify the shape of this collective critique:

1. What categories of arguments do researchers employ? (RQ1)
2. Can we observe a development in these arguments between 2018 and 2024, particularly between PNSO 1 and PNSO 2? (RQ2)

Our aim is to provide a thematic analysis that reveals and explains the current critical turn expressed by French HSS scholars regarding the national official framework and the institutionalization of OS represented by PNSO 1 and PNSO 2.

Research Design

To address our research questions, we provide an analysis of the collective critique of OS by French HSS scholars and develop a taxonomy to characterize and classify the categories of arguments used to justify it. One key function of a taxonomy is to build structures that may shape new forms of knowledge. In the Social Sciences, taxonomies are relevant approaches, allowing us to ensure objectivity in the way we address social research objects with unstable boundaries that present “moving targets” (Hodgson 2019; Moore 2017). They are useful heuristic tools for avoiding value and/or moral judgments. They have been used for digital platforms (da Silva Neto and Chiarini 2023) and scientific labor (Larivière et al. 2021) but have also revealed their relevance for OS as a domain, offering a way to organize the many arguments raised and identifying the characteristics that distinguish one group of arguments from another (Hodgson 2019).

The first taxonomy of OS was provided in 2015, as a Top-Down process, aimed at defining how openness should be presented and understood (Pontika et al. 2015). A new version, proposed by Peter Baumgartner (2019), used a broader definition of OS, including new components of the taxonomy (e.g., Citations, Licenses) appearing at the first level. We use the most recent and most comprehensive OS taxonomy, developed by Lúcia da Silveira et al. (2023), which builds on previous work (Pontika et al. 2015) and incorporates a broader range of characteristics to propose the most extensive taxonomy to date.

To achieve our research objectives, we followed a five-step research design. First, we collected a corpus of peer-reviewed articles in French that were critical of French institutional discourse about OS (1). Second, we extracted quotes containing the authors’

arguments justifying this criticism (2). Third, we indexed these arguments against the OS taxonomy in da Silveira et al. (2023) (3). Finally, and conversely, we constructed a taxonomy of OS researchers' criticisms based on an iterative thematic analysis of their arguments (4). This allowed us to undertake a cross-analysis of the arguments using both taxonomies, offering a dual perspective on how OS is contested (5).

Step 1: Identification and selection of relevant references. The period covered in this article extends from 2018 (launch of PNSO 1) to 2024 (end of PNSO 2), which corresponds to the emergence of criticism by French authors toward the official discourse on OS. For our bibliographic research, we used specialized French resources (e.g., Cairn, OpenEdition, Isidore, and HAL) and the academic search engine Google Scholar, as French scientific literature is underrepresented in international databases (Maddi et al. 2025). In addition, we selected gray literature through recognized academic blogs, particularly those hosted on the hypotheses.org platform (OpenEdition, Digital resources in HSS). We used French and English keywords (e.g., "Open Access" for English, "Libre Accès" for French), as both are current in France, in both oral discussions and publications. As a result, our queries were mixed (monolingual and bilingual).

We applied the PRISMA methodology (Moher et al. 2010) to guide the iterative selection of the corpus (see figure 1). During this process, three references were excluded for not meeting inclusion criteria. The selected references respected HSS disciplinary representativeness. The final corpus consisted of 45 references (see Appendix, Table 1 and see dataset on Zenodo: 10.5281/zenodo.18484510).

Step 2: Quotation extraction and argument categorization. The 45 references were organized in a collaborative Zotero collection, annotated using a tagging system, and then centralized in a shared spreadsheet using Framacalc.⁴ This tool supported the initial selection phase while simultaneously allowing us to check inclusion criteria. The full texts were stored on the IR*Huma-Num infrastructure (ShareDocs),⁵ with curation and analysis performed using Grist.⁶ The latter enabled us to create relational tables between our tables, as well as initial visualizations for further analysis using Python. The disciplinary classification for the references was based on that of the French National University Council (Conseil National des Universités, CNU).⁷

Step 3: Quotation indexing using OS taxonomy categories (Top-Down). Having collected and organized the corpus, we carried out a thorough reading of the

4. Framacalc is an online open source collaborative spreadsheet, based on the free software Ethercalc: <https://docs.framasoft.org/fr/ethercalc/>.

5. ShareDocs is an institutional file manager: <https://documentation.huma-num.fr/sharedocs-stockage/>.

6. Grist is a no code, open source relational spreadsheet-database recommended by the French government for public officials: <https://docs.getgrist.com/tVjYx6474th4/jep-ad33/p/10>.

7. <https://conseil-national-des-universites.fr/cnu>

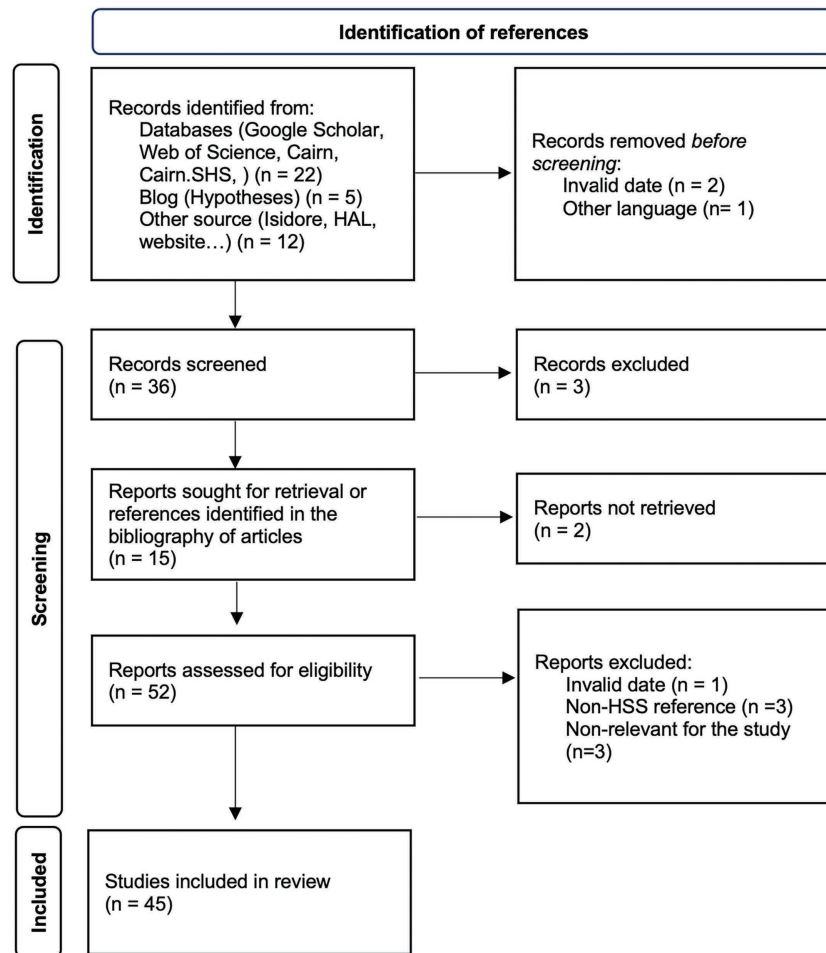


Figure 1. PRISMA flowchart of selection procedure of the corpus

documents, systematically extracting quotations from each reference that contained explicit arguments against facets of OS; 250 quotations were then indexed according to the 10 facets in da Silveira et al.'s (2023) taxonomy, in order to identify the specific area of OS they belong to. We then conducted a quantitative analysis to determine their relative frequency.

Step 4: Building a taxonomy of critical arguments against OS (Bottom-Up).

Here, we aimed to construct a taxonomy based on researchers' critiques of OS. This is to some extent a Bottom-Up recessed construction process, shaped by how authors themselves understand and critique OS. The collective labeling of quotations with corresponding themes was useful for shedding light on the structure of these authors' wording. We created a second table, organized by themes and arguments. Each entry was linked to a specific category, gathering the arguments justifying the authors' critique. These categories were then quantified and represented visually.

Step 5: Cross-referencing the Bottom-Up and the Top-Down taxonomies. The final step was to cross-reference the Top-Down and Bottom-Up analyses to examine more deeply where and to what extent the OS facets identified in the first approach matched our taxonomy of arguments extracted in the second approach.

Results

1. Corpus characteristics (step 1)

The French and francophone academic corpus we collected is heterogeneous, characterized by a wide range of disciplines, authors, and editorial formats. Fifteen disciplines are represented, with sociology/demography (22%; $n = 9$) and political science (14.6%; $n = 6$) being particularly active (see Appendix, table 2).

Development. The first explicit reference appears in 2018, and the number of references has been increasing, with an expected drop in 2020 because of the COVID-19 pandemic. However, it should be noted that since 2021, the scientific community has continuously spoken out on the topic, as shown in figure 2. We also observe that the publication of each PNSO has resulted in more papers by HSS authors, as observed in figure 2.

Authorship. Within the corpus, 41 first authors, mainly tenured and experienced researchers, including professors, assistant professors, and research directors,⁸ dominate the debate, representing roughly 80% (see Appendix, table 3). In contrast, only 20% of

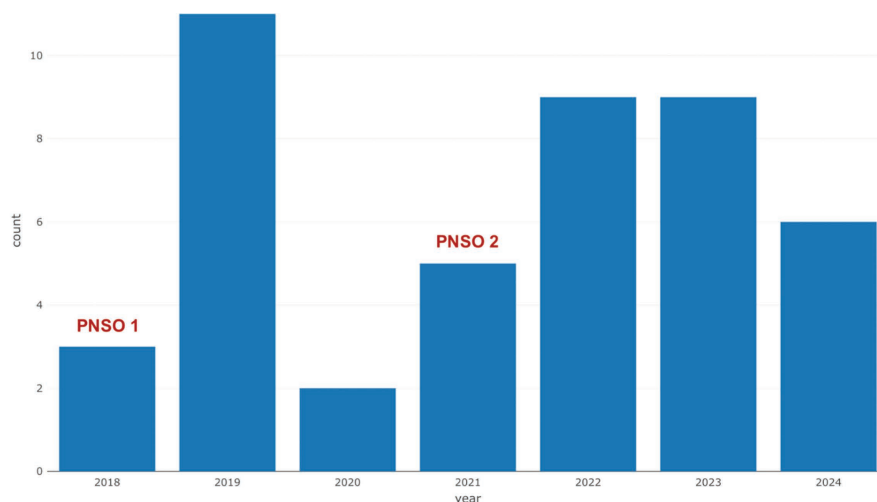


Figure 2. Changes in the number of references collected (2018–2024)

8. For the institutional categories of the French academic system, see figure 3 of Angermüller (2017).

those involved were support staff (research officers, digital collection officers, research engineers, and research processing and digital dissemination officers).

Editorial formats and forms of expression. Our corpus reveals a wide variety of editorial formats (see Appendix, table 4). This shared concern with OS is expressed through various forms of writing (nine different formats) and intellectual statuses (10 identified). Document length varied substantially, from two to 25 pages, while the reports were as long as 70 pages. Notably, 35.6% of documents ($n = 16$) were published in special journal issues on OS. Additionally, 18 documents across the entire corpus adopt a critical analytical approach.

2. Top-Down analysis (steps 2 & 3)

Figure 3 illustrates the distribution of the 250 quotations, as indexed according to the 10 OS facets of da Silveira et al.'s (2023) taxonomy. The figure shows that only eight of 10 facets are represented. The most important is *Open Research Data*, representing 61.2% of quotations, highlighting the intensity of researchers' critiques. The second most represented facet is *policy, declarations and guidelines*, at 17.2%. In contrast, *open reproducible research* and *Open Access* are less frequently addressed, representing 8% and 7.6% of quotations, respectively.

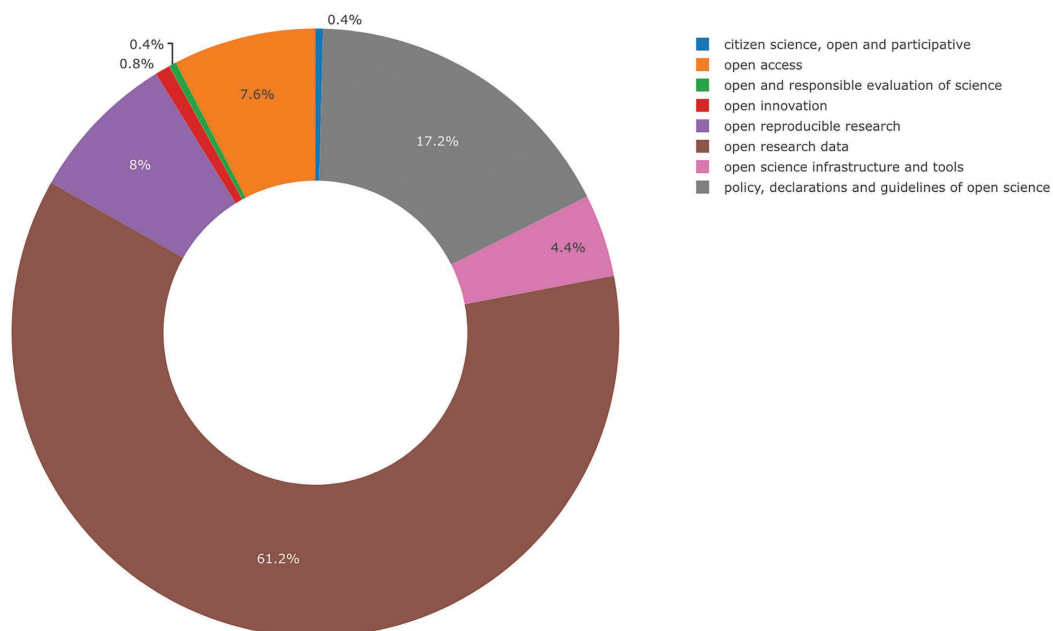


Figure 3. Distribution of (250) corpus arguments according to the OS taxonomy

3. Bottom-Up analysis

Through an iterative thematic analysis, the 250 quotations were first extracted and classified into 24 themes, structured into seven arguments. We used this Bottom-Up analysis to construct a taxonomy of arguments contextualized on the corpus. Based on these seven categories, we developed a taxonomy organizing and classifying the critical arguments raised by authors. The taxonomy, represented in figure 4, serves two key purposes. First, it provides a structured, hierarchical framework for classifying arguments according to different levels and dimensions of critique. Second, it allows for the quantification of the main themes that emerge from the corpus.

Our taxonomy answers our first research question (RQ1) and can be read in both directions. From right to left, it reflects the Bottom-Up categorization process: Quotes were extracted from the references, with themes assigned based on their content, and were then grouped into broader argument categories. From left to right, it represents the distribution of argument categories by percentage, based on the 250 quotations extracted from the corpus, along with their associated sub-themes.

Each of the seven principal categories was further refined into sub-themes (see Appendix, table 5), inductively derived from the extracted textual content of the corpus. These

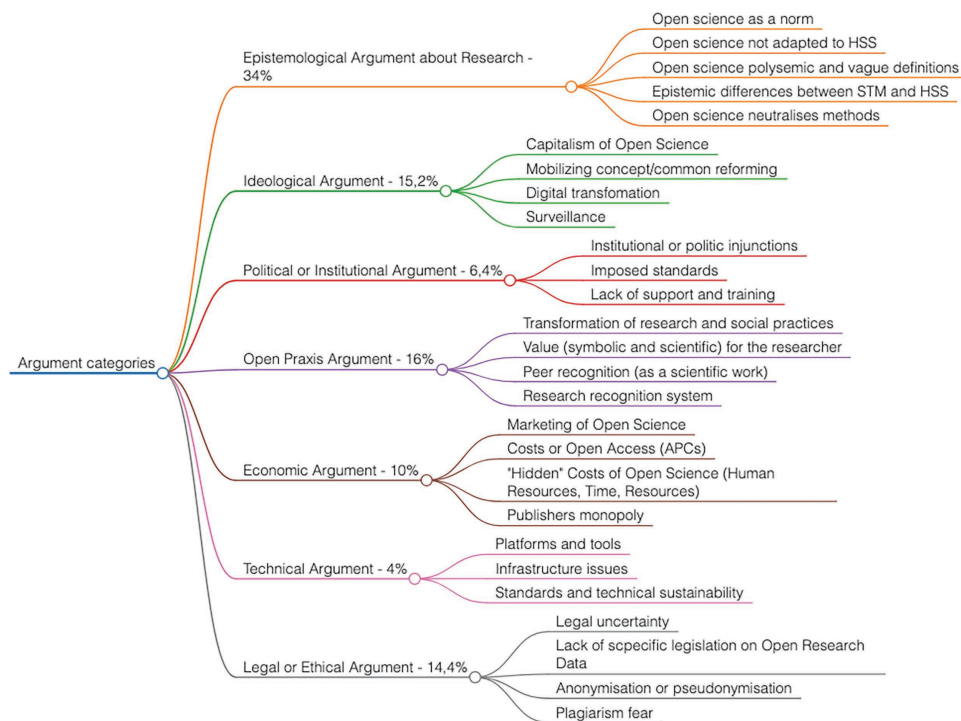


Figure 4. Bottom-Up taxonomy, based on author's argument categories / French taxonomy of Open Science authors' critiques addressed to OS

sub-themes capture recurring patterns within these authors' discourse, enabling a more granular understanding of their criticisms. By doing this, we preserved as far as possible the authors' vocabulary and concerns (see Appendix, table 6). The distribution of the categories derived from the Bottom-Up analysis, extracted directly from the authors' own words (see Appendix 6), reveals patterns of critical engagement with OS policy.

The Epistemological Argument About Research category emerges as the most prominent, constituting 34% of identified arguments and reflecting authors' direct engagement with knowledge production practices, particularly within HSS contexts under French OS policy. It is worth noting that these arguments were raised within the community as early as 2013 (Cotte 2016) and fuel four sub-themes: the definition of Open Science, its adaptation to HSS, differences between HSS and STEM fields, and methods. A full professor reflected (see Appendix, table 6, quotation 123) on the conceptual ambiguity and lack of consensus on OS, especially within "research data" (*Open Science polysemic and vague definitions*).

This latter sub-theme was particularly prevalent, accounting for 35 of 85 citations, indicating substantial consensus among corpus authors regarding critiques of OS as a normative and prescriptive model of scientific production (*Open Science as a norm*). Besides, as an associate professor emphasizes (see Appendix, table 6, quotation 80), there is also the issue of misalignment between OS and the specific epistemic and methodological conditions of HSS research (*Open Science not adapted to HSS*).

A further category foregrounds structural disparities in knowledge production between STEM and HSS fields (see Appendix, table 6, quotation 110), particularly concerning data conceptualization, methodological approaches, and publication practices (*epistemic differences between STEM and HSS*).

Other professional categories (e.g., librarians) took up the argument (see Appendix, table 6, quotation 84), addressing the disparities that underscore the existence of different research cultures across disciplinary boundaries. They also have concerns about the standardization effects of OS policies on research diversity and epistemological pluralism (*Open Science neutralizes method*).

The Open Praxis Argument category (16%) encompasses critiques and perspectives concerning OS in scientific practices for French HSS researchers. Four sub-themes emerge within this category: transformation, value, peer recognition, and research recognition. As a full professor argues, *transformation of research and social practices* is only rhetorical (see Appendix, table 6, quotation 103). Meanwhile, a scholar at the CNRS questions the *value (symbolic and scientific) for the researcher*, expressing skepticism about the real benefit of OS contributions in terms of symbolic capital and career advancement (see Appendix, table 6, quotation 199). A supervising researcher at INED highlighted the persistent lack of recognition accorded to OS activities (see Appendix, table 6, quotation 15) as legitimate scholarly work (*peer recognition (as a scientific work)*),

while the fourth sub-theme critiques existing evaluation frameworks that inadequately acknowledge or incentivize OS-related labor (*research recognition system*).

The Ideological Argument (15.2%) category has four sub-themes, among them two provide critiques of the economic and neoliberal logics that underpin certain aspects of OS (*capitalism of Open Science*). An assistant professor elaborated on the links between OS and capitalism (see Appendix, table 6, quotation 178). Arguments about state intervention in research autonomy and freedom through administrative oversight and monitoring mechanisms (*surveillance*) are also present in the corpus. Additional arguments reinforce this Ideological category, particularly those identifying OS as a discursive instrument used for political, strategic, or institutional purposes, one that is frequently disconnected from researchers' actual practices (*mobilizing concept/common sense of reforming*). Furthermore, authors question the technological framing of OS and its implications for research autonomy and working conditions (*digital transformation*).

The Legal or Ethical Argument category follows (14.4%) and is organized into four sub-themes. The predominant sub-theme concerns critiques of data *anonymization or pseudonymization* practices, arising primarily from tensions between the data sharing imperatives and data protection regulations (e.g., contradictions between GDPR requirements and the CNIL's guidelines) (see Appendix, table 6, quotation 62). As one librarian illustrates (see Appendix, table 6, quotation 115), a second sub-theme addresses the absence of dedicated legal provisions for handling, sharing, and protecting HSS research data (*lack of specific legislation on Open Research Data*). A third sub-theme highlights the lack of clarity around the legal frameworks applicable primarily to research data (*legal uncertainty*). Finally, the least prominent sub-theme captures researchers' apprehensions about heightened risks of data or intellectual appropriation resulting from open publication practices (*plagiarism fear*).

Subsequent categories demonstrate lower representation within the corpus arguments. The Economic Argument category accounts for 10% of arguments identified, with two highly represented sub-themes (18 of 25 citations): references to temporal demands (particularly for data documentation and dissemination), labor, and infrastructure demands that are frequently underestimated or not institutionally recognized (*"hidden costs" of Open Science (human resources, ime, resources)*). This was identified very clearly by a researcher from the CNRS (see Appendix, table 6, quotation 74). As a quotation from a full professor allows us to see (see Appendix, table 6, quotation 116), there are also concerns about the persistent dominance of major publishing groups even under an OA model, potentially reinforcing inequalities (*publishers monopoly*).

The Political or Institutional Argument category (6.4%) encompasses criticism of the political and institutional dimensions of French OS policy. This category has three sub-themes: *institutional or political injunctions, imposed standards, and lack of support and training*. Typically, as mentioned by a researcher from INED, top-down policy

implementation has been perceived as coercive (see Appendix, table 6, quotation 193) (*institutional or political injunctions*). The two other sub-themes are the rejection of uniform political or institutional standards seen as incompatible with disciplinary diversity (*imposed standards*) and highlighting the insufficient institutional support and concerns about lack of training for implementing OS in everyday research activities (*lack of support and training*).

Technical Argument, representing only 4% of arguments, involves critiques of the technical or infrastructural dimensions of research practice in relation to French OS requirements. Two sub-themes emerge within this category: *platforms and tools* and *infrastructure issues and sustainability*. First, researchers reflect (see Appendix, table 6, quotation 128) on the dependencies created by specific digital platforms and software, including issues of usability and control (*platforms and tools*). Second, authors are critical of inadequate, non-interoperable, and unsustainable institutional infrastructures supporting OS implementation (*infrastructure issues and sustainability*). Together, these technical arguments reveal that infrastructural deficiencies constitute practical barriers to OS adoption in HSS fields.

4. Crossing the taxonomies: Top-Down and Bottom-Up

Here, we compare the initial Top-Down analysis undertaken using da Silveira et al.'s (2023) taxonomy with our own taxonomy built from the Bottom-Up arguments categorization. This allows us to examine which specific facets of OS are targeted by the arguments of these authors. By analyzing the distribution of arguments across different facets of OS, we can identify which ones are mentioned, which are most frequently raised, and which cut across multiple categories.

From figure 5, we can observe that the most wide-reaching and frequently mentioned OS facet across all arguments is *Open Research Data*. It is clearly the dominating facet when comparing the seven argument categories: it represents 48.0% of Economic Arguments; 68.2% of Epistemological Arguments; 39.5% of Ideological Arguments; 91.7% of Legal and Ethical Arguments; and 70.0% of Open Praxis Arguments. The Legal and Ethical Argument category contains the highest concentration of references to *Open Research Data* (91.7%). These arguments primarily address legal uncertainties and concerns related to data anonymization and pseudonymization, issues that specifically pertain to research data. Of 36 arguments in this category, 33 are directly related to *Open Research Data*. By contrast, we also observe that *Open Innovation* as a facet appears only in the Economic Argument, with 8.0% in the category. The *Citizen Science* facet appears only in the Political and Institutional Argument, with only 6.2%. Conversely, the *Open Access* facet is represented at a surprisingly low rate and in

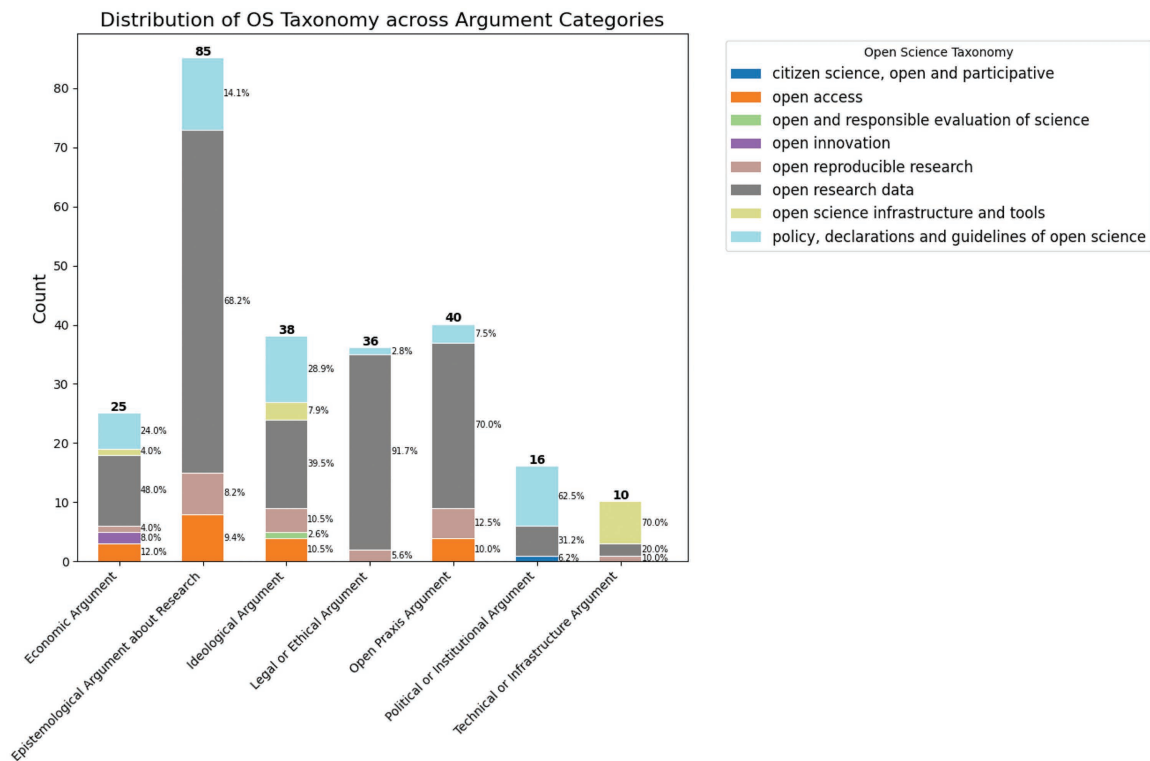


Figure 5. Distribution of OS Taxonomy across identified categories of critical arguments (based on the 250 arguments)

only four categories of arguments (Economic Arguments, Epistemological Arguments About Research, Ideological Arguments, and Open Praxis Arguments).

Discussion

The aim of the article was to analyze the nature and categories of arguments by which French HSS scholars express disagreement with the institutional discourse of OS, over a seven-year period between 2018 (PNSO 1) and 2024 (PNSO 2). Our taxonomic approach allowed us to extract and thematically analyze the arguments identified in the 45 references in our corpus, with two objectives. The first was to understand, using a Top-Down approach, how the arguments expressed matched up with the OS facets of da Silveira et al.'s (2023) taxonomy. The second was to produce, using a Bottom-Up approach, a taxonomy of the criticisms expressed by researchers regarding the institutional French approach to OS. The taxonomic approach represents a powerful heuristic tool for producing a morphology of these authors' argumentation. Our results allowed us to answer RQ1 by observing the quantitative evolution of the corpus and

the diversification of its editorial formats over the selected period. They also allowed us to answer RQ2, as taxonomic analysis sheds light on the categories of arguments raised by researchers and the way they justify their concerns about French OS policy.

Who is talking?

The results show that these critiques are mainly expressed by tenured researchers (from universities and research organizations such as the CNRS) who are visible and identified in their communities: Professors, Assistant Professors, and Researchers Supervising Researchers. This is the category of academics responsible for research design and the definition of methodological and data production frameworks (Angermuller 2017). Research support members are less represented, confirming previous analyses (Zurbach 2024).

Criticism is expressed exclusively in French, in a variety of editorial forms. The contributions reflect both individual and collective voices, notably with eight articles by the multidisciplinary collective of researchers belonging to RogueESR,⁹ which has been campaigning for academic freedom and against higher education reform policies since 2007. It regularly intervenes in public and academic debates under the collective name of Camille Noûs (2019). The heterogeneity of these publications, and their shared language and subject, shows the vigilant, active (only the pandemic year showed a decrease), and spontaneous nature of a critique whose initial goal is to make itself heard.

The corpus highlights a double movement of expression. On the one hand, authors turn to free expression in shorter editorial formats (4.44%) to express their critical point of view, sometimes vehemently (Laboulais 2023). On the other, they turn to collective expression (35.6%) through special journal issues on OS that gather experiments or critical analyses centered on discipline-specific issues. Furthermore, 15% ($n = 6$) of documents in the corpus are written by authors from interdisciplinary collectives. There is, therefore, a common concern for HSS, expressed individually or collectively, in opinion pieces or very critical pieces.

Open Research Data in the OS critique

The results make clear that research data is the facet most targeted by these scholars' critiques. Interestingly, Open Access does not seem to be a concern. Our results show

9. <https://roguesr.fr>

that the evolution of the arguments between 2018 and 2024 is concentrated on *Open Research Data*, with the bigger number of quotations and arguments. This provides a direct answer to RQ2. Figures 4 and 5 clearly reveal that the principle of data openness is contested through a number of Ethical-Legal, Epistemological, and Praxis Arguments. These have a direct bearing on the socio-symbolic dimension, related to freedom and autonomy in their research practices. These findings show that OS has reconfigured HSS scholars' concern with the autonomy of their research (Bourdieu 2001) and the way they build credibility (Knöchelmann 2019). They also corroborate previous analyses showing the complex and blurred relationships between the ideal of openness and the OS political agenda (Moore 2017; Knöchelmann 2019). The importance and breadth of the arguments indicate the need to consider the specificities of HSS disciplines and the diverse, heterogeneous nature of their data (small data, non-digital, trivial, confidential, etc.), which cannot be appraised in generic, positivist, and normative terms. Principles such as "as open as possible, as closed as necessary" are either too much or too little and are viewed as top-down injunctions that do not resonate with their interpretative and inductive approaches and lack the necessary institutional support (financial and human) to enable researchers to implement them effectively.

At the heart of the critique, authors' arguments

Figure 4 illustrates the variety of argument categories involved. The Epistemological category is the most important (34%), in line with previous analyses of the normative effects of openness on research work, without a specific attention to HSS characteristics that among other aspects rely on subjective interpretation of phenomena (Cotte 2016; Knöchelmann 2019; Zurbach 2024). The Ideological category (15.2%) shows that researchers' understanding of OS is bound up with their view of the neoliberal logics that regulate higher education. The close relationship between these two logics, which has already been recognized (Kansa 2014; Moore 2019) and which feeds a sharp critique of OS's instrumental objectives (Mirowski 2018), also represents a concern.

Of equal importance (16%), the Praxis of OS is made up of themes that question the recognition of the work of openness as research work and its value for peers (Bordignon and Boukacem-Zeghmouri 2023). This argument particularly echoes the challenges of research evaluation and initiatives such as Coalition on Advancing Research Assessment (CoARA).¹⁰ The Legal and Ethical Argument is equally important (14.4%), covering issues such as confusion between anonymization, pseudonymization,

10. <https://coara.fr>

confidentiality, legal uncertainty, and the lack of specific legislation on Open Research Data. The Economic Argument (10%) highlights the “hidden” costs of OS, which require financial and human resources that should support official prescriptions. This resonates with arguments about the burden of OS in the literature (Hostler 2023) and what Cotte (2016) described as its “cognitive cost.” The Technical Argument plays only a minor role (4%) in the criticism, partly explained by the fact that authors are not always in direct contact with OS infrastructures.

Missing links in Open Science

The results in figure 3 show that not all the OS facets in the taxonomy of da Silveira et al. (2023) are active in the arguments raised by authors: *Open Education* and *Open Dialogue with Other Knowledge Systems* (CARE principles, Diversity, Equity) are missing. These two facets are the least developed in the two PNSO. The second missed facet raises arguments that have been addressed for decades in institutional policies but not linked to OS. While the concerns expressed by these authors do not represent all HSS communities in France, they do show that the arguments used to criticize OS are those that are most supported by the national policy.

How Open Science should be Open in HSS

These researchers’ critique is not a full rejection of openness as a principle, but a questioning of the excessively generic and normative terms in which the policy and official discourse are framed, without contextualizing the policies for HSS. This has also been observed in the literature (Kaden 2019). It still provides insights and suggestions that can be considered in a reconfiguration of the OS agenda as applied to HSS. While OA is less targeted by critics and only in terms of the confusion of its many business models (Hocquet 2024), the data once again suggests a more adapted, more flexible, more inclusive OS agenda, one that is more “open” to HSS epistemic autonomy and creativity and capable of consolidating trust in methodological choices and research results.

Above all, the authors in our corpus call for a definition of openness that is adapted to the specific character of HSS research work and the diversity of their research objects and methods (Hocquet 2024). They propose an evolution of OS HSS policies, based on the recognition of the specificity and reality of research practices in these fields. Another proposal made by our corpus authors is that the principle of openness should provide an opportunity to question the nature and definition of data in HSS, without being subject to credibility and normative mechanisms. This proposal unites the

authors who expressed it around ethical and legal issues, in particular the question of data anonymization and pseudonymization and sustainable archiving.

Limitations of the study

The corpus composed of peer-reviewed documents by no means exhausts the criticisms expressed by HSS scholars. Other editorial forms, such as conferences, videos of talks, mainstream press, magazines, and non-academic blogs, which were not included in our selection criteria, may contain other arguments, including those from unrepresented disciplines. To ensure methodological coherence (corpus constitution and analysis) of our exploratory research, we did not include them. Similarly, the study did not analyze the reception or circulation of these arguments among HSS scholars, either in the academic or media spheres. These two limitations, which stem from the exploratory nature of our study, may represent new research objectives for further exploration of researchers' discourse on OS, using other methods such as media discourse analysis, semi-structured interviews, and focus groups.

Conclusion and Research Perspectives

Open Science remains a new research framework, the success of which depends on the incentives, motivations, resistance, and obstacles encountered by those directly involved in its “making”—that is, the researchers themselves. In this article, we conducted exploratory empirical research to describe the view of HSS researchers on national OS policy (PNSO1 and PNSO2) in a variety of peer-reviewed editorial formats. The taxonomic approach we used allowed us to identify the facets of OS that are the focus of criticism and those that are entirely absent from this discourse. It also allowed us to consider the diversity of arguments while highlighting the confusion or vagueness that persists in the definition and understanding of OS and its goals. The corpus analysis also identified very few quotations or arguments from these authors' perspectives on what OS is, or should be, from their own experiences and perspectives of research, as anchored in their own research field and practice.

This is why we are dedicating our future research to exploring more deeply the missed opportunities and misunderstandings between official definitions of OS and formulations of openness in research practices, in order to better discuss their implications. To do so, we will take into account the “burden of Open Science” (Hostler 2023), rely on qualitative methods (semi-directed interviews), and employ a political economy theoretical frame. Our future work will explore HSS researchers' experience

and understanding of openness, how to produce it, and when it can be implemented in their research work. We conclude this exploratory article by highlighting the importance of addressing researchers' feedback and discourse on OS as a meta-scientific research topic at a time of increasing policy framing and reforms.

Open Peer Review Reports

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Appendix

Table 1. Final corpus

Amiel et al., 2020; Beauchemin et al., 2019; Beaud, 2024; Bendjaballah & Garcia, 2023; Benhamou-Suesser et al., 2023; Berkowitz, 2023; Berkowitz & Delacour, 2022; Bouchet, 2023; Bruillard, 2022b, 2022a; Cavallo & Noûs, 2019; Corre, 2023; De Lary Healy & Heintz, 2024; Dillaerts et al., 2018; Duchesne & Noûs, 2019; Duprat, 2019; Favier & Pacteau, 2021; Galonnier, 2021; Girard, 2021; Heintz et al., 2022; Herbet et al., 2023; Hocquet, 2018, 2020, 2024; Jacquemin et al., 2019; Jullien, 2021; Katz, 2022; Khan, 2022; Laboulais, 2023; Laurens, 2022; Levain et al., 2023; Malingre et al., 2019; Mekdjian, 2024; Mohammed, 2022; Oliveau, 2023; Ortiz Caria & Noûs, 2019; Pecqueux et al., 2020; Rabier & Noûs, 2019; Rioufreyt, 2021; Schöpfel, 2018; Silberman, 2024; Siméant-Germanos, 2022; Soulé, 2024; Stérin & Noûs, 2019; Tréguer & Noûs, 2019

Table 2. Proportion of disciplines represented in the corpus: classification based on 15 disciplines in the CNU classification of social sciences and humanities and multidisciplinary disciplines

Discipline (National University Council [CNU] classification)	Number	Distribution percentage (percentages have been rounded to two decimal places; totals may not sum to exactly 100% due to rounding)
01 - Droit privé et sciences criminelles	1	2.44
02 - Droit public	1	2.44
04 - Science politique	6	14.60
05 - Sciences économiques	1	2.44
06 - Sciences de gestion	1	2.44
07 - Sciences du langage: linguistique et phonétique générales	1	2.44
19 - Sociologie, démographie	9	22.00
20 - Anthropologie biologique, ethnologie, préhistoire	3	7.32
21 - Histoire, civilisation, archéologie et art des mondes anciens et médiévaux	1	2.44
22 - Histoire et civilisations: histoire des mondes modernes, histoire du monde contemporain, de l'art, de la musique	1	2.44
23 - Géographie physique, humaine, économique et régionale	3	7.32
70 - Sciences de l'éducation	1	2.44
71 - Sciences de l'information et de la communication	3	7.32
72 - Epistémologie, histoire des sciences et des techniques	2	4.88
74 - Sciences et techniques des activités physiques et sportives	1	2.44
Pluridisciplinaire	6	14.60
Total	41	100%

Table 3. Distribution of authors by status (authors considered for the study are the first author of the reference; there are only 41 and not 45 because some authors wrote more than one reference)

Professional Status	Number	Distribution percentage (%)
Professeur des Universités	10	24.4
Maitre de conférence	9	22.00
Chargé de recherche	6	14.6
Directeur de recherche	3	7.32
Conservateur des bibliothèques	3	7.32
Ingénieur de recherche	1	2.44
Post-doctorant	1	2.44
Subtotal	31	80
Juriste	2	4.88
Chargé de collections numériques	1	2.44
Chercheur associé	2	4.88
Directeur d'études	1	2.44
Doctorant	1	2.44
Responsable du traitement et de la diffusion numérique de la recherche	1	2.44
Subtotal	9	20
Total	41	100%

Table 4. Corpus distribution by editorial status

Editorial Status	Number	Distribution percentage
Journal article (Varia)	17	37.8
Special issue	16	35.6
Research reports	3	6.67
Press article	3	6.67
Editorial	2	4.44
Academic blog post	2	4.44
Book chapter	1	2.22
Total	45	100%

Table 5. Overview of argument categories and sub-themes

1. **Epistemological Argument About Research**, five sub-themes identified:
 - 1.1. *Open Science polysemic and vague definitions*: critical reflections on the conceptual ambiguity and lack of consensus on OS, especially within “research data” (e.g., quotation n°168, 123). This theme is the most represented in this category with 35 quotations out of 85.
 - 1.2. *Open Science not adapted to HSS*: arguments underlining the misalignment between Open Science and the specific epistemic and methodological conditions characterizing HSS research (e.g., quotation n°91, 80).
 - 1.3. *Open Science as a norm*: critiques of OS as a normative and prescriptive model of scientific production (e.g., quotation n° 239, 56).
 - 1.4. *Epistemic differences between STEM and HSS*: emphasis on the structural divergences in knowledge production between the STEM fields and the HSS, particularly in terms of data, methods, and publication practices (e.g., quotation n°71, 110).
 - 1.5. *Open Science neutralizes methods*: concerns regarding the standardization effects of OS policies on research diversity and epistemological pluralism (e.g., quotation n° 84–87).

(Continued)

Table 5. (Continued)

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2. **Open Praxis Argument**, four sub-themes identified:
- 2.1. *Transformation of research and social practices*: insights into how OS alters collaborative, disciplinary, and institutional dynamics in the daily life of researchers (e.g., quotation n° 103, 41).
 - 2.2. *Value (symbolic and scientific) for the researcher*: interrogations concerning the real benefit of OS contributions in terms of symbolic capital and career advancement (e.g., quotation n°199, 12).
 - 2.3. *Peer recognition (as a scientific work)*: reflecting on the fact that OS work is not valued as research work (e.g., quotation n°94, 120).
 - 2.4. *Research recognition system*: critiques of the evaluation systems that fail to appropriately value or reward OS-related efforts (e.g., quotation n°15, 24).
3. **Ideological Argument**, four sub-themes identified:
- 3.1. *Surveillance*: critical vision of state intervention on research autonomy and freedom, using administrative and monitoring processes (e.g., quotation n°102, 140).
 - 3.2. *Capitalism of Open Science*: critiques of the economic and neoliberal logics underpinning certain aspects of OS (e.g., platforms; quotation n°101, 178).
 - 3.3. *Mobilizing concept/common sense of reforming*: references to OS as a discursive tool mobilized for political, strategic, or institutional purposes, often detached from researchers' actual practices (e.g., quotation n° 56, 144).
 - 3.4. *Digital transformation*: critical reflections on the technological framing of OS and its consequences for research autonomy and working conditions (e.g., quotation n°160, 210).
4. **Legal or Ethical Argument**, four sub-themes identified:
- 4.1. *Anonymization or pseudonymization*: tensions between data sharing imperatives and data protection regulations (e.g., contradictions between GDPR and CNIL) (e.g., quotation n° 19, 62).
 - 4.2. *Legal uncertainty*: lack of clarity around the legal frameworks applicable to research outputs (e.g., quotation n°115, 212).
 - 4.3. *Lack of specific legislation on Open Research Data*: the absence of dedicated legal provisions for handling, sharing, and protecting research data in HSS (e.g., quotation n° 155, 213).
 - 4.4. *Plagiarism fear*: apprehension about increased risks of data or idea appropriation due to open dissemination (e.g., quotation n° 82, 95).
5. **Economic Argument**, two sub-themes identified:
- 5.1. *"Hidden" costs of Open Science (human resources, time, resources)*: references to time, labor, and infrastructure demands often underestimated or not institutionally recognized. This theme is the most represented in this category, representing 18 quotations out of 25 (e.g., quotation n° 74, 18).
 - 5.2. *Publishers monopoly*: concerns about the continued dominance of large publishing groups even under an OA model, potentially reinforcing inequalities (e.g., quotation n° 52, 116).
6. **Political or Institutional Argument**, three sub-themes identified:
- 6.1. *Institutional or political injunctions*: criticisms of the Top-Down implementation of OS policies perceived as mandatory or coercive (e.g., quotation n° 193, 221).
 - 6.2. *Imposed standards*: rejection of uniform standards seen as incompatible with disciplinary diversity (e.g., quotation n° 1180, 164).
 - 6.3. *Lack of support and training*: highlighting the insufficient institutional or training support provided to implement OS practices in everyday research (e.g., quotation n° 64, 67).
7. **Technical Argument**, two sub-themes identified:
- 7.1. *Platforms and tools*: reflections on the dependency on specific digital platforms and software, including issues of usability and control (e.g., quotation n° 194, 128).
 - 7.2. *Infrastructure issues and sustainability*: critiques of the lack of robust, interoperable, institutional, and sustainable infrastructures to support OS (e.g., quotation n° 220, 227).
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Table 6. Quotations example (quotation numbers refer to the Grist table data—references)

Categories	Sub-theme	Quotations
1 Epistemological Argument About Research	1.1 Open Science polysemic and vague definitions	<p>quotation 168: “Le mot ‘donnée,’ la notion ne va pas de soi. L’article s’efforcera de montrer qu’elle fait l’objet d’une triple construction, épistémologique, intellectuelle et politique, dans les discours des chercheurs et des acteurs institutionnels, en tension avec les pratiques constatées sur le terrain.” (Malingre, 2019)</p> <p>“The term ‘données’ is not self-evident. This article will demonstrate that, in the discourse of researchers and institutional actors, it is the subject of a threefold construction—epistemological, intellectual, and political—which is at odds with practices observed in the field.”</p> <p>quotation 123: “L’open access est flou : peut-on parler d’open quand l’auteur paye pour publier dans une revue qui ouvre gratuitement l’accès à ses articles (gold open access) ? Quand une revue à abonnement payant propose aux chercheurs de payer pour que leur article soit en accès ouvert (hybrid open access) ? Quand une revue décide d’ouvrir l’accès seulement à une certaine tranche des articles (embargo) ? Ce flou est aussi le résultat de négociations ardues entre grands éditeurs et gouvernements : la transition, même accompagnée d’un volontarisme politique, va être longue.” (Hocquet, 2024)</p> <p>“The term ‘open access’ can be vague. For example, can we talk about open access when the author pays to publish in a journal that provides free access to its articles (gold open access)? Or when a subscription-based journal offers researchers the option of paying to make their article open access (hybrid open access)? Or when a journal makes only a certain portion of its articles open access (embargo)? This ambiguity is also the result of arduous negotiations between major publishers and governments, and the transition will be a long one, even with political will.”</p>
	1.2 Open Science not adapted to HSS	<p>quotation 91: “Le partage des données en SHS est un impensé, c’est une pratique venue des sciences exactes qui ne trouve pas son application dans le cas de données de la recherche plus qualitatives.” (Duprat, 2019)</p> <p>“Data sharing is unthought in the Humanities and Social Sciences; it is a practice that originated in the exact sciences and is not applicable to more qualitative research data.”</p> <p>quotation 80: “Les enjeux liés aux données de recherche sont les mêmes en SHS et STM en ce qui concerne la conservation, la curation, la diffusion, la réutilisation, etc. en général mais ce ne sont pas les mêmes quand on regarde l’aspect économique et politique.” (Dillaerts, 2018)</p> <p>“In terms of preservation, curation, dissemination, reuse, etc., the issues surrounding research data are the same in the Humanities and Social Sciences as they are in science, technology, and medicine. However, when we look at the economic and political aspects, they are not the same.”</p>
	1.3 Open Science as a norm	<p>quotation 239: “Pour peu que les données doivent être déposées et partagées, il faudra les rendre plus abstraites encore, et, c’est un problème souligné par les qualitatistes au sujet du FAIR (Duchesne et Nous 2019), ce sera au risque, après un processus chronophage d’anonymisation, de normalisation, de mots-clés . . . , que les autres chercheurs et chercheuses ne leur trouvent plus aucun intérêt—à part l’exploitation d’un corpus langagier. Il faudrait d’ailleurs se demander si le boom des exploitations de corpus textuels d’entretiens (à partir par exemple de logiciels comme Nvivo) n’a pas à voir avec la standardisation d’une forme de recherche qui se satisfera davantage d’entretiens courts et complètement anonymes, voire de focus groups, plutôt que de l’ancrage des matériaux langagiers dans leur substrat social. Sans compter que la mise en commun des données pourra précisément rendre plus difficile, sinon la répliquabilité, bien complexe de toute façon en sciences sociales, au moins la revisite ethnographique.” (Siméant-Germanos, 2022)</p>

(Continued)

Table 6. (Continued)

Categories	Sub-theme	Quotations
		<p>“If data must be archived and shared, it will need to be made even more vague or abstract. As qualitative researchers have pointed out regarding FAIR principles (Duchesne and Nous, 2019), after a time-consuming process of anonymization, standardization, keywording, etc., other researchers may lose interest in it, apart from the exploitation of a language corpus. It is also worth asking whether the increase in the use of interview text corpora (using software such as Nvivo, for example) is linked to the standardization of a research method that favors short, completely anonymous interviews or focus groups over the contextualization of language materials. Furthermore, pooling data may make it more difficult to replicate, which is challenging enough in the social sciences and may also make it more difficult to revisit ethnographically.”</p> <p>quotation 46: “La science ouverte est une sorte de modèle de la Science, dont la pratique et la communication se conformeraient à des standards internationaux qui en garantiraient autant l’intérêt que les résultats. Des textes, des données, des traitements qu’il faudrait partager, pour améliorer les pratiques scientifiques ou pour les contrôler et pour les valider ? Une science ouverte qui serait plus collaborative, et ainsi plus efficiente pour les chercheurs, plus crédible pour le public et les autorités politiques, plus innovante, de par des cycles courts plus facilement validables, en tout cas beaucoup mieux normée, mais en aucun cas plus universelle.” (Bruillard, 2022a)</p> <p>“Open Science is a model of scientific practice and communication that complies with international standards, thereby guaranteeing the interest and results of the science in question. In order to improve scientific practices or control and validation, texts, data, and processes should be shared. Open Science would be more collaborative and thus more efficient for researchers, more credible for the public and political authorities, and more innovative thanks to shorter, easier-to-validate cycles. However, it would not be more universal.”</p>
	1.4 Epistemic differences between STEM and HSS	<p>quotation 71: “Les questionnements propres à la discipline, la nature même des matériaux de terrain des anthropologues, semblent plutôt remettre en question les fondements du mouvement de la science ouverte.” (De Lary Healy, 2024)</p> <p>“The specific questions of the discipline and the nature of anthropologists’ field materials seem to call into question the foundations of the Open Science movement.”</p> <p>quotation 110: “En outre, dans les domaines les plus éloignés des sciences dites ‘exactes,’ l’absence d’autorité centralisatrice ou normative constitue un handicap sévère.” (Girard, 2021)</p> <p>“Furthermore, in fields furthest removed from the so-called ‘exact’ sciences, the absence of a centralizing or normative authority is a significant disadvantage.”</p>
	1.5 Open Science neutralizes methods	<p>quotation 84: “Ces opposant-e-s à l’analyse secondaire mettent tout particulièrement en avant la nécessité, pour analyser les données de façon pertinente, d’avoir contribué à les produire. Plus largement, c’est la possibilité même de dissocier données et contexte et d’autonomiser les premières qui est vraiment en cause.” (Duchesne, 2019)</p> <p>“Opponents of secondary analysis emphasize the importance of contributing to the production of data in order to analyze it meaningfully. More broadly, the very idea of dissociating data from its context and treating it as autonomous is what is really at issue.”</p> <p>quotation 87: “[. . .] Réanalyser des enquêtes conduites avec des méthodes qualitatives suppose un engagement avec le travail du ou des chercheur-s et chercheuse-s premières qui est au cœur de la nouvelle recherche.” (Duchesne, 2019)</p> <p>“When reanalyzing surveys conducted using qualitative methods, it is essential to engage with the original researcher(s)’ work, as this is central to the new research.”</p>

Table 6. (Continued)

Categories	Sub-theme	Quotations
2 Open Praxis Argument	2.1 Transformation of research and social practices	<p>quotation 103: “La ‘science ouverte’ nous confronte aux réalités à la fois communes et contrastées de la production des connaissances selon les disciplines scientifiques. La nature spécifique des matériaux de la recherche, et donc des méthodes pour les obtenir, ne peuvent permettre d’uniformiser la pratique scientifique, contrairement aux ‘bonnes pratiques’ sur lesquelles tous les scientifiques sont supposés s’aligner.” (Favier, 2021)</p> <p>“Open Science reveals the common yet contrasting realities of knowledge production across scientific disciplines. Unlike the ‘best practices’ that all scientists are expected to follow, the specific nature of research materials and the methods used to obtain them cannot allow for standardization of scientific practice.”</p> <p>quotation 41: “Rendre les produits de la recherche FAIR (que ce soient des données ou d’autres objets numériques) nécessite des changements de pratique et l’usage de technologies et d’infrastructures, comme le défend le rapport européen <i>Turning FAIR into reality</i>. En effet, rendre les données vraiment disponibles pour d’autres chercheurs est loin d’être une tâche aisée.” (Bruillard, 2022a)</p> <p>“Making research outputs FAIR (whether data or other digital objects) requires changes in practice, as well as the use of technologies and infrastructures. This is advocated in the European report <i>Turning FAIR into Reality</i>. Indeed, making data truly accessible to other researchers is no easy feat.”</p>
	2.2 Value (symbolic and scientific) for the researcher	<p>quotation 199: “Or ce travail supplémentaire ne s’accompagne pas toujours de la reconnaissance escomptée tandis que la mise à disposition des coulisses de leurs recherches les expose à des critiques sur leur manière de travailler.” (Pecqueux, 2020)</p> <p>“However, this additional work does not always receive the expected recognition. Furthermore, making the behind-the-scenes aspects of their research available exposes them to the criticism of their working methods.”</p> <p>quotation 12: “Le temps investi, disons les quatre ans mis à produire des données, est du temps qui n’est pas dédié à publier.” (Beauchemin, 2019)</p> <p>“The time invested in producing data—let’s say four years—is time not dedicated to publishing.”</p>
	2.3 Peer recognition (as a scientific work)	<p>quotation 94: “Certaines disciplines ont besoin de construire leur propre corpus pour être légitime en tant que scientifique.” (Duprat, 2019)</p> <p>“In order to be recognized as legitimate scientific fields, some disciplines need to develop their own corpora.”</p> <p>quotation 120: “Pourquoi les chercheurs sont-ils si peu nombreux à déposer leurs publications en archives ouvertes quand ils en ont la possibilité ? C’est que les scientifiques ne publient pas pour être lus. Ils publient pour être récompensés. La science en tant qu’institution fonctionne grâce à ce système de récompense qui est aussi un système d’évaluation.” (Hocquet, 2018)</p> <p>“Why do so few researchers deposit their publications in repositories when they have the opportunity to do so? It’s because scientists don’t publish to be read. They publish to be rewarded. The reward system, which is also an evaluation system, is what enables science as an institution to work.”</p>

(Continued)

Table 6. (Continued)

Categories	Sub-theme	Quotations
	2.4 Research recognition system	<p>quotation 15: “Un chercheur n’est pas un ingénieur de recherche : il n’a pas pour mission de produire des données mais d’apporter des savoirs sur la société. La production de données fait partie de ces savoirs, mais elle incorpore des compétences qui ne sont pas reconnues.” (Beauchemin, 2019)</p> <p>“A researcher’s role is not to produce data, but to contribute knowledge about society. While data production is part of this knowledge, it incorporates skills that are not widely recognized.”</p> <p>quotation 24: “La reproductibilité et la répliquabilité ne reçoivent pas la reconnaissance ni l’encouragement qu’elles méritent. Cela découle en grande partie des effets pervers [. . .] tels que les biais de publication et les hiérarchies de prestige des revues.” (Berkowitz, 2023)</p> <p>“Reproducibility and replicability do not receive the recognition or encouragement they deserve. This is largely due to the perverse effects of factors such as publication bias and journal prestige hierarchies.”</p>
3. Ideological Argument	3.1 Surveillance	<p>quotation 102: “Aucun cadre ne protège les chercheurs qui collectent des données jugées ‘sensibles.’ Archives et données peuvent devenir un prétexte à limiter, quand ce n’est pas menacer, la liberté académique et, par voie de conséquence, les chercheurs qui les exercent. Coexistent donc simultanément un mouvement d’ouverture de la recherche et la volonté affirmée d’un contrôle de celle-ci.” (Favier, 2021)</p> <p>“There is no framework in place to protect researchers who collect ‘sensitive’ data. Archives and data can be used as an excuse to limit, or even threaten, academic freedom and the researchers who exercise it. Consequently, a movement toward openness in research coexists with a clear desire to control it.”</p> <p>quotation 140: “Un ethnographe faisant face à une assignation se sent sur le moment probablement très seul. La couverture médiatique devrait également attirer l’attention des avocats spécialisés dans les questions liées au premier amendement et sensibiliser les milieux universitaires à l’hypocrisie institutionnelle que constitue l’impossible respect de la confidentialité que l’université exige en premier lieu.” (Katz, 2022)</p> <p>“An ethnographer facing a subpoena must feel very alone at that moment. Media coverage should attract the attention of lawyers specializing in First Amendment issues, raising awareness in academic circles of the institutional hypocrisy inherent in the university’s demand for absolute confidentiality.”</p>
	3.2 Capitalism of Open Science	<p>quotation 101: “Si l’importance de ces enjeux est bien partagée par les chercheurs et, le plus souvent, par leurs tutelles, ce mouvement masque le plus souvent les difficultés que doivent affronter les chercheurs. Elles sont, tout particulièrement, au cœur du développement des sciences humaines et sociales dont deux des sources principales de connaissance sont les archives et les enquêtes. Ces sources sont l’objet d’un mouvement contradictoire : l’un promouvant leur ouverture et leur réutilisation, l’autre entravant leur accès, comme en témoigne la réforme très contestée de l’accès aux archives. Un autre hiatus se retrouve dans le ‘marché des données,’ avec les secrets des secteurs industriel et commercial qui se nourrissent des données publiques.” (Favier, 2021)</p> <p>“Although researchers and their institutions generally recognize the importance of these issues, this often masks the difficulties they face. These difficulties are particularly acute in the development of the Humanities and Social Sciences, for which archives and surveys are two of the main sources of knowledge. These sources are subject to contradictory movements: one promoting their openness and reuse, and another hindering access to them. This is evidenced by the highly controversial reform of access to archives. A further issue lies in the ‘data market,’ where industrial and commercial secrets are based on public data.”</p>

Table 6. (Continued)

Categories	Sub-theme	Quotations
		quotation 178: “L’élargissement de l’accès et l’intensification de la circulation des travaux scientifiques, voulus par la science ouverte, participent au renforcement des processus capitalistes et propriétaires de production, accumulation et circulation des connaissances.” (Mekdjian, 2024)
		“The expansion of access to, and intensification of the circulation of, scientific works, as advocated by Open Science, contributes to the reinforcement of the capitalist and proprietary processes through which knowledge is produced, accumulated and circulated.”
	3.3 Mobilizing concept/ common sense of reforming	quotation 56: “Des définitions très positives de cette science ouverte sont proposées [. . .] Difficile d’être contre de tels idéaux scientifiques généraux et généreux ! Que d’améliorations en perspective !” (Bruillard, 2022b)
		“Some very positive definitions of Open Science have been proposed. It is difficult to oppose such general and generous scientific ideals! The future looks bright!”
		quotation 144: “Parmi les mythologies de l’Enseignement Supérieur et de la Recherche (ESR), la ‘science ouverte’ occupe une place de choix.” (Laboulais, 2023)
		“Open Science occupies a prominent place among the myths surrounding higher education and research (ESR).”
	3.4 Digital transformation	quotation 160: “Les ethnographes les plus expérimenté-e-s parmi nos enquêté-e-s peinent à croire à la pérennité des supports, formats, infrastructures qui se multiplient avec la généralisation de la gestion numérique des données de la recherche. L’arrivée des ordinateurs et du numérique a en effet affecté leur rigueur d’archivage, plutôt qu’elle ne l’a renforcée.” (Levain, 2023)
		“Even the most experienced of our respondents find it hard to believe in the longevity of media formats and infrastructures, which are proliferating as digital research data management becomes more widespread. In fact, the advent of computers and digital technology has affected the rigor of their archiving practices rather than strengthening them.”
		quotation 210: “La modernité numérique invite désormais à questionner le feuilletage temporel et matériel des archives de la recherche. Dans ce cadre, le DMP qui entend imposer par la contrainte financière une méticuleuse planification en amont de la collecte de données, suscite une réflexion pratique renouvelée sur ce qu’archiver veut dire. En ce sens, il s’agit d’une nouvelle étape dans l’effort de rationaliser et d’indexer l’archive ordinaire de la recherche, dont la nouveauté réside moins dans le matériau numérique que dans la reconfiguration des relations professionnelles, éthiques et techniques entre acteurs et actrices de la recherche et de la conservation.” (Rabier, 2019)
		“The advent of digital modernity invites us to reconsider the temporal and material structure of research archives. In this context, the Data Management Plan (DMP), which enforces meticulous planning before data collection by imposing financial constraints, encourages us to reconsider the practical implications of archiving. In this sense, the DMP represents a new stage in the effort to rationalize and index ordinary research archives. The novelty lies less in the digital material itself than in the reconfiguration of the professional, ethical, and technical relationships between those involved in research and conservation.”
4 Legal and Ethical Argument	4.1 Anonymization or pseudonymization	quotation 19: “Si le numérique offre des possibilités de dissémination vastes et donc augmente le potentiel de réutilisation de ces données à des fins de recherche ou d’enseignement, la dématérialisation de l’accès implique parallèlement une perte de contrôle sur les usages des fichiers. Les possibilités accrues de dissémination accentuent ainsi le risque de rupture de confidentialité. À cet égard, c’est l’option de l’anonymisation qui fait sans doute le plus débat, et qui sera largement traitée ici.” (Bendjaballah, 2023)

(Continued)

Table 6. (Continued)

Categories	Sub-theme	Quotations
		<p>“Although digital technology offers vast possibilities for disseminating data, thereby increasing its potential reuse for research or teaching purposes, dematerialized access also implies a loss of control over file usage. The increased dissemination possibilities thus accentuate the risk of confidentiality breaches. In this regard, anonymization is undoubtedly the most debated option and will be discussed at length here.”</p> <p>quotation 62: “Concrètement, le Règlement général sur la protection des données (RGPD) donne la responsabilité au producteur (chercheur) de se mettre en conformité avec l’anonymisation. Du côté de la Commission nationale de l’informatique et des libertés (Cnil), ces règles sont spécifiquement orientées sur l’anonymisation, alors que du côté des propriétaires des données sources, elles visent également à garder le monopole commercial. Il s’agit alors de transformer suffisamment la structure et les informations pour ne pas être accusé de vol de propriété.” (Le Corre, 2023)</p> <p>“In concrete terms, the General Data Protection Regulation (GDPR) holds the producer (i.e., the researcher) responsible for ensuring compliance with anonymization. The French Data Protection Authority (CNIL) specifically focuses on anonymization, while the owners of the source data also aim to maintain a commercial monopoly. The aim is therefore to transform the structure and information in such a way that accusations of property theft can be avoided.”</p>
	4.2 Legal uncertainty	<p>quotation 115: “À ces observations s’ajoute une préoccupation liée au traitement des données personnelles et au formalisme induit par l’application du règlement européen sur la protection des données. Si ce cadre éthique s’impose dans le cadre d’études cliniques et de données de patients, certains chercheurs s’interrogent néanmoins sur son incidence dans d’autres domaines de recherche, lorsque cette réglementation entrave la conduite de certains projets de recherche ayant recours aux méthodes d’enquêtes, à l’instar de la sociologie ou de la psychologie sociale, par exemple.” (Herbet, 2023)</p> <p>“In addition to these observations, concerns have been raised about the processing of personal data and the bureaucracy associated with the implementation of the European Data Protection Regulation. While this ethical framework is essential for clinical studies and medical data, some researchers nevertheless question its impact on other areas of research. These regulations can hinder research projects using survey methods in subjects such as sociology and social psychology.”</p> <p>quotation 212: “On voit d’ailleurs combien l’interprétation du RGPD varie d’un-e délégué-e à la protection des données (DPO) à l’autre, en fonction notamment de leur trajectoire professionnelle antérieure.” (Rioufreyt, 2021)</p>
	4.3 Lack of specific legislation on Open Research Data	<p>“We can also see how the interpretation of the GDPR varies from one data protection officer (DPO) to another, particularly depending on their previous career path.”</p> <p>quotation 155: “D’autre part, les règles de droit appuyant les politiques d’ORD sont formulées de façon très générale et le travail d’interprétation que leur bonne application requiert est considérable.” (Levain, 2023)</p> <p>“By contrast, the legal rules that underpin DSB policies are formulated in very general terms and require considerable interpretation to be applied properly.”</p> <p>quotation 213: “Les textes de loi encadrant la protection des données personnelles (comme la loi Informatique et libertés de 1978 et le Règlement général de protection des données de 2016) n’ont pas été pensés par et pour la recherche. La cible visée par ces textes n’était pas la recherche scientifique, mais l’État et les grandes entreprises.” (Rioufreyt, 2021)</p> <p>“The laws governing the protection of personal data (such as the French Data Protection Act of 1978 and the General Data Protection Regulation of 2016) were not designed for or by research. Rather than being aimed at scientific research, these laws were intended for the state and large companies.”</p>

Table 6. (Continued)

Categories	Sub-theme	Quotations
	4.4 Plagiarism fear	<p>quotation 82: “Le partage des données suscite chez plusieurs enseignants-chercheurs en SHS beaucoup d’interrogations, de réserves, parfois de craintes, comme celle du plagiat. Une problématique souvent soulevée par les chercheurs en SHS est celle de la propriété intellectuelle sur les données, dans la mesure où celles-ci ont fait l’objet d’un travail d’élaboration, de construction, souvent très long.” (Dillaerts, 2018)</p> <p>“Data sharing raises many questions and concerns among teachers and researchers in the Humanities and Social Sciences, such as the risk of plagiarism. Researchers in these fields often raise the issue of intellectual property rights over data, given that it has often been developed and constructed over a very long period of time.”</p> <p>quotation 95: “Une première restriction posée à l’Open Access de manière quasi collective par les chercheurs a été de rappeler que le dépôt des données de la recherche en ligne ne pourrait s’effectuer qu’après publication ou à la fin du projet afin d’éviter toute tentative de plagiat (‘Donc ouvert au partage si cela intervient en bout de course, après une publication . . .’), soulignant également que ces corpus en ligne devaient être bien attribués afin que d’autres ne se réapproprient pas leur travail (‘Mais il faudrait qu’il y ait une structure qui permette de tracer’).” (Duprat, 2019)</p> <p>“One of the first restrictions imposed on Open Access by researchers, almost unanimously, was to stipulate that research data could only be deposited online after publication or at the end of the project in order to prevent any attempts at plagiarism (‘So open to sharing if it happens at the end of the process, after publication . . .’), also emphasizing that these datasets must be properly attributed so that others cannot appropriate their work (‘But there would need to be a structure in place to enable tracking’).”</p>
5 Economic Argument	5.1 “Hidden” costs of Open Science (human resources, time, resources)	<p>quotation 74: “La question de savoir qui prépare les données ethnographiques afin de permettre leur partage renvoie donc à une réalité brûlante aujourd’hui : le coût exorbitant, en moyens humains, techniques et financiers, de la préservation et du partage.” (De Larcy, 2024)</p> <p>“Therefore, the question of who prepares ethnographic data for sharing raises a pressing issue today: the exorbitant cost of preserving and sharing such data in terms of human, technical, and financial resources.”</p> <p>quotation 18: “Lever le voile sur les coulisses de l’ouverture révèle l’importance d’aspects organisationnels et économiques souvent sous-évalués dans les discours publics sur la science ouverte.” (Bendjaballah, 2023)</p> <p>“Lifting the veil on what goes on behind the scenes of Open Access reveals the organizational and economic aspects that are often underestimated in public discussions about Open Science.”</p>
	5.2 Publishers monopoly	<p>quotation 52: “Il s’agit de proposer de nouvelles plateformes avec un public qui mélange chercheurs et éditeurs (de journaux scientifiques ou plus largement de médias de communication), sociétés spécialisées, agences de financement. Ainsi, Scienceopen, une start-up indépendante basée à Berlin et à Boston, se présente comme un environnement interactif de découverte s’adressant aux chercheurs et aux éditeurs (publishers). [. . .] La science ouverte laisse-t-elle la porte ouverte au marketing ?” (Bruillard 2022)</p> <p>“The aim is to offer new platforms to an audience including researchers and publishers of scientific journals, as well as other communication media, specialized companies, and funding agencies. ScienceOpen, an independent start-up with offices in Berlin and Boston, presents itself as an interactive discovery environment for researchers and publishers. [. . .] But does Open Science leave the door open to marketing?”</p>

(Continued)

Table 6. (Continued)

Categories	Sub-theme	Quotations
6 Political or Institutional Argument	6.1 Institutional or political injunctions	quotation 116: “Ce flou est aussi le résultat de négociations ardues entre éditeurs et gouvernements : la situation actuelle est captée par les éditeurs et la transition, même accompagnée d’un volontarisme politique, va être longue.” (Hocquet, 2018) “This uncertainty is also the result of arduous negotiations between publishers and governments. Publishers understand the current situation, and even with political will, the transition will be a long one.”
		quotation 193: “Dans le nouveau champ institutionnel de l’enseignement supérieur et de la recherche, les « données » se voient attribuer une place de plus en plus centrale : de l’énergie leur est consacrée et des moyens sont alloués pour leur archivage (et ce alors même que des pans entiers du monde académique souffrent d’un manque criant de ressources).” (Pecqueux, 2020) “In the new institutional landscape of higher education and research, ‘data’ is being given an increasingly central role. Resources are being allocated to its archiving, even though entire sections of the academic world are suffering from a severe lack of resources.”
	6.2 Imposed standards	quotation 221: “Les institutions elles-mêmes sont larguées. Elles exigent des chercheur-se-s le respect de règles sans maîtriser toujours leurs enjeux ; une partie des personnes qui les dirigent sentent bien qu’il y a un écart entre les prescriptions et les pratiques.” (Rioufrey, 2021) “The institutions themselves are at a loss. They require researchers to comply with rules without always understanding the issues involved, and some of those who run the institutions are well aware of the discrepancy between requirements and practices.” quotation 180: “Ouvrir les ‘sciences humaines’ s’articule notamment aux injonctions de ‘sciences participatives’ ou encore de ‘sciences partagées’ ‘avec/dans la société.’ [. . .] La division ‘sciences’—‘société’ est reconduite, dans les gestes mêmes qui visent à la suturer.” (Mekdjian, 2024) “Opening up the ‘humanities’ is particularly linked to the principles of ‘citizen science’ or ‘shared sciences’ within society. However, the division between ‘science’ and ‘society’ is perpetuated by the very actions that aim to bridge it.” quotation 154: “Les politiques d’ORD définissent un cadre générique commun aux différentes disciplines scientifiques, instituant la disponibilité des données comme un critère de reconnaissance de la validité des savoirs produits. Or, le renforcement de ce cadre, ces dernières années, est saisi différemment suivant les disciplines et constitue un facteur de transformation des économies de la crédibilité à l’œuvre en leur sein.” (Levain, 2023) “Open Research Data policies establish a generic framework common to different scientific disciplines, defining data availability as a criterion for recognizing the validity of the knowledge produced. However, the strengthening of this framework in recent years has been interpreted differently across disciplines, thereby transforming the credibility economies within them.”
6.3 Lack of support and training	quotation 64: “Dans mon cas, je n’ai pas bénéficié de conseils juridiques auprès de mes tutelles, notamment en l’absence de contact avec un-e délégué-e à la protection des données (DPO) et car la documentaliste de rattachement, souvent plus à même de répondre aux interrogations dans ce domaine, quitta son poste au cours du projet. Ce manque d’interlocuteur-rices a engendré le sentiment d’être un peu isolé.” (Corre, 2023) “In my case, I did not receive any legal advice from my supervisors. This was particularly problematic as I had no contact with a data protection officer (DPO), and the assigned archivist—who would have been better placed to answer questions in this area—left her position during the project. This lack of contact made me feel somewhat isolated.”	

Table 6. (Continued)

Categories	Sub-theme	Quotations
7 Technical Argument	7.1 Platform and tools	<p>quotation 67: “Malgré un meilleur accompagnement pour l’open access et data sharing au sein des laboratoires depuis et l’obligation par l’Agence nationale de la recherche (ANR) de rédiger un Plan de gestion des données (PGD), en pratique, la diffusion de base de données mobilise, selon moi, toujours peu de personnels au sein d’un projet de recherche, et il est difficile d’obtenir des réponses à des questions précises et adaptées sur les méthodes de diffusion des données.” (Corre, 2023)</p> <p>“Although there has been an improvement in support for open access and data sharing within laboratories since then, and the French National Research Agency (ANR) now requires a Data Management Plan (DMP) to be drawn up, in practice, the dissemination of databases still involves few members of staff within a research project, and it is difficult to obtain answers to specific and relevant questions about data dissemination methods.”</p> <p>quotation 194: “La multiplication de ces infrastructures techniques vient matérialiser de façon très concrète ce moment ‘données’ et va, sans nul doute, orienter et contraindre les activités de recherche à venir (Jarrige, Le Courant et Paloque-Bergès, 2018).” (Pecqueux, 2020)</p> <p>“The proliferation of these technical infrastructures is bringing this ‘data moment’ to life and will undoubtedly influence future research activities.”</p> <p>quotation 128: “Il aurait été possible d’investir pour la communauté scientifique dans une solution libre garantie par une infrastructure nationale : à l’échelle d’un pays, le coût est faible. C’est même le rôle de Renater, le réseau national. De fait, Renater a depuis plusieurs années créé des services en ce sens basés sur des logiciels libres. Renater est basé sur Jitsi par exemple. Mais pour cela, encore faut-il que l’État donne des moyens à ses infrastructures nationales.” (Hocquet, 2024)</p> <p>“It would have been possible to invest in a free solution backed by national infrastructure for the scientific community. On a national scale, the cost would be low. This is precisely the remit of Renater, the national network. In fact, Renater has been developing services based on open-source software for several years. For example, Renater is based on Jitsi. However, for this to happen, the state must allocate resources to its national infrastructure.”</p>
	7.2 Infrastructure issues and sustainability	<p>quotation 220: “Les supports informatiques sont encore loin d’avoir démontré leur supériorité face au papier ou aux tablettes d’argile. Un archivage numérique pérenne implique de disposer de moyens humains et techniques conséquents et dans la durée pour garantir la lisibilité et l’intégrité des fichiers et de leurs formats—moyens que n’ont pas, à l’heure actuelle, la plupart des repositories.” (Rioufreyt, 2021)</p> <p>“Digital devices have yet to prove their superiority over paper or clay tablets. Long-term digital archiving requires substantial human and technical resources to ensure the readability and integrity of files and formats over time—something that most repositories currently lack.”</p> <p>quotation 227: “(1) La sécurité des données et des systèmes. Chaque entretien avec les enseignants-chercheurs le confirme : quand il s’agit de leurs données, la première préoccupation n’est pas la gestion en tant que telle, la conservation ou le partage, mais la sécurité des données et, dans un sens plus large, la sécurité des dispositifs utilisés pour leur stockage et leur analyse.” (Schöpfel, 2018)</p> <p>“Data and system security. Every interview with academic researchers confirms this: Their primary concern regarding their data is not its management, storage, or sharing per se, but its security and, more broadly, the security of the devices used for storage and analysis.”</p>

