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Domains, fields and new forms of knowledge production: an interdisciplinary approach based on a socio-anthropology of information

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Abstract: The aim of this article is to develop an interdisciplinary approach to knowledge domains through dialogues between domain analysis, the sociology of knowledge and the socio-anthropological approach to information. Among the eleven topics of investigation of the domains formulated by Birgen Hjørland, those whose theoretical and methodological approach more directly contemplates the cultural, social and historical dimensions of knowledge were selected. Based on this selection, it recovers a trajectory of research in which a comprehensive outlook that bridges different areas of knowledge was used in studies of multiples domains, showing the themes, questions and objects that led to the complementary approach between the three theoretical and methodological perspectives. Three thematic strands form the foundation of this analysis: (a) the social and historical conditions of knowledge production; (b) the relative autonomy of the scientific field and its domains; (c) the reflexivity in research practices. From a contextual and empirical point of view, we start from the assumption that, along with the new media and technologies, the scientific field and its domains will increasingly need to open up paths of collaboration between different discursive communities or social fields and their multiple knowledges (scientific, social, historical, popular) in a context of disinformation and scientific denialism. It is also a question of rethinking the role of knowledge domains in the face of the epistemological, social, climatic and health injustices that exist in today's world.

Keywords: domains of knowledge; scientific field; culture and information; science, knowledge and society; Birger Hjørland; Pierre Bourdieu

1 Introduction

This article seeks to develop an interdisciplinary perspective on knowledge domains, through dialogues between the theories of Domain Analysis, the Sociology of Knowledge and the Socioanthropology of Information. It hopes to contribute to the construction of a theoretical framework that will allow us to analyse the new forms of knowledge production and use in complex and constantly changing contexts.

The covid-19 pandemic that occurred between 2020 and 2021 serves as an exemplary case, since it has brought to light the accelerated production of knowledge, the need for its validation and communication among peers and dissemination to society, in addition to the urgent social, digital and informational mediations between different forms of knowledge, demanding new means of analysing and understanding the epistemological, scientific and social framework. On the other hand, the pandemic has also given rise to new challenges, as in other different health crises that have plagued humanity over the centuries, such as the proliferation of false information and the need to combat disinformation, now enhanced by the new digital media.

Both the health crisis caused by the covid-19 pandemic and the various climatic, political, cultural and social crises that are plaguing the world today demand a rethink of how science is done and how knowledge is produced and disseminated. The acceleration in the pace of research, digitalisation and the opening up of science, as well as society's questioning and scientific denialism, are trends that are likely to consolidate in the coming years, transforming the way knowledge is produced and shared.

Our hypothesis posits that, alongside new media and technologies, the production of scientific knowledge must increasingly foster collaboration among diverse societal spheres and their myriad knowledge systems (scientific, social, historical, and popular). This necessitates a re-evaluation of the role of knowledge domains in the face of global epistemological and social inequities, particularly amidst disinformation and waning trust in science, especially during crises. The proposed hypothesis invites a profound reflection on the production of scientific knowledge in an increasingly interconnected and complex world. By asserting

that scientific knowledge production must facilitate collaboration across societal sectors, the hypothesis underscores the urgent need to reimagine science and its relationship with society.

This initial scenario provides the contextual foundation for an interdisciplinary theoretical-conceptual analysis, building upon our ongoing research of the past few years. It allows us to integrate the complementary perspectives of Domain Analysis, Sociology of Knowledge, and the Socio-anthropological Approach to Information.

Hjørland (2002) lists eleven theoretical and methodological approaches to carrying out a domain analysis. While recognising the interdependence between the different approaches, critical and epistemological studies, historical studies and studies on the structures and institutions of scientific communication were privileged.

A retrospective analysis of research, conducted through a theoretical-methodological triangulation of different perspectives on understanding knowledge domains, reveals key points of convergence with Domain Analysis. Starting from the Socio-anthropological Approach to Information, this analysis highlights: the principle of interdisciplinarity; the use of a relational approach to study objects; and the importance of self-reflexivity in relation to theories, methods, and research practices.

With the aim of contributing to the expansion and consolidation of interdisciplinary approaches to the analysis of domains in Information Science, three thematic axes are finally recovered from the theoretical constructions of Birgen Hjørland on domains and of Pierre Bourdieu on social fields: the social and historical construction of knowledge; the relative autonomy of the scientific field; and the reflexivity in the production of knowledge. The deepening of these three theoretical perspectives should take into account both their epistemological dimension and their contextual and empirical dimension, considering the cultural, social, political, and economic issues in the production, diffusion, and appropriation of knowledge.

This article, based on an intervention carried out on the occasion of the ISKO 2024[1] Panel, aims to contribute to a theoretical and contextual reflection,

with an interdisciplinary approach, around Domain Analysis, in order to generate new questions and hypotheses for future studies.

2 The domains, their structure and diversity

In the field of information studies, we adopt a socio-anthropological perspective to analyse collective subjects, their cultures and information practices in specific historical and social contexts. Recognising the historical and epistemological insertion of information studies within the scope of the Social and Human Sciences, the analysis of informational behaviour is subject to an analysis of cultural dynamics. Thus, it is necessary to shift from a view that places historical and socio-cultural conditions as external factors to information systems and products, to a new approach that wants these conditions to be part of the initial conditions for the generation and use of information and knowledge (Marteleto, 2002; Silva, 2008; Nóbrega, 2002).

From this perspective, we sought inspiration from the domain analysis approach in order to build bridges between Information Science (IS) and the Sociology of Culture and Knowledge, to study the socio-academic networks involved in the production, circulation and appropriation of information in different fields, and the socio-cultural and historical conditions of knowledge construction.

The domains or fields studied to date in research projects, doctoral theses and publications are as follows: public health, architecture, human genetics, water governance. In each of these projects, interdisciplinary perspectives are being developed on the knowledge generated in relation to the practices and structure of the domains, inspired by domain analysis (Hjørland; Albrechtsen, 1995), the sociology of knowledge (Bourdieu; Chamboredon; Passeron, 1983) and the socio-anthropological approach to information. The epistemologies of the domains to which the studies are applied are also added, in order to triangulate theories and analytical and interpretative methods.

Cartographies of socio-academic networks in the field of health, by adopting an interdisciplinary analysis perspective to study the domains, have proved fundamental to understanding the complex processes of production,

circulation and appropriation of scientific knowledge. The results of these studies indicate that, despite the discourses produced in the field of health emphasising the importance of infocommunication practices, an instrumental and unidirectional view of these processes still prevails. Analysing the interactions between actors and institutions involved in the production of knowledge reveals the need to transcend instrumental and unidirectional views of infocommunication practices, seeking a deeper understanding of the social and cultural dimensions that shape these processes. In this sense, the promotion of interdisciplinary approaches is fundamental to the development of scientific communication and dissemination strategies in health that favour the active participation of non-academic actors in the construction and appropriation of knowledge in a dialogical and emancipatory way (Marteleto, 2007; Marteleto; Silva, 2015).

In an article published in 2015 in the journal *Knowledge Organisation*, we brought together domain analysis, as proposed by Birger Hjørland and collaborators, and the theory of social fields, developed by Pierre Bourdieu. This bridge between the two theories aimed to identify the commonalities and differences between these two approaches, seeking a critical understanding of the structures and modes of operation of knowledge domains, with a particular focus on the field of health. The results of this analysis revealed that both approaches offer important contributions to analysing complex domains such as health. By combining elements from both perspectives, it is possible to develop a more comprehensive and critical theoretical understanding of the relationships between knowledge, power and social institutions, which has important implications for research, training, science policy, organization and information practices in the health field (Marteleto; Carvalho, 2015).

Still in the field of health, we studied the new configurations of information and communication in this field of knowledge in Brazil, due to the interplay of two concomitant factors: the increasingly powerful increase in technical mediations in the digital environment; and the health crisis caused by the pandemic of the new coronavirus – SARS-CoV-2. We started with a theoretical treatment of the social, cultural and cognitive approach of Domain

Analysis, and then addressed the new modalities of scientific info-communication in the era of E-science and the pandemic. The results of analysing a sample of the 'Ágoras Abrasco', webinars promoted by the scientific society in the area of Collective Health during the health crisis, show that the intensive use of digital devices and the accelerated pace of scientific knowledge production demand reflections on the domain of health that take into account the very way in which the scientific field works, the status of researchers and health professionals, the processes of production, mediation, dissemination and appropriation of knowledge, the modes of information and communication between peers and between peers and society (Marteleto, 2022).

In the domain of architecture, a PhD research project studied the social relations of the subjects within it, as elements for understanding information as a social practice. Among other aspects, it used an approach to information from a socio-cultural perspective, to constitute the information practices of the discursive communities of the knowledge domain based on their information structures. The theoretical-methodological approach uses resources from Birger Hjørland's domain analysis and Pierre Bourdieu's sociology of knowledge and social fields to understand the positions and functions of academic actors and professionals in shaping the scientific domain and the social field of architecture in a given socio-historical context (Nascimento, 2005; Nascimento; Marteleto, 2008). The conclusions show that both the objects and subjects of a domain of knowledge, inserted in social fields, are expressions of informational practices.

In the field of Human Genetics, another PhD research project examined the structure of a scientific domain and network centered around an actor-ego. The study was grounded in the understanding that researchers social capital within this field mobilizes political, social, and economic resources, contributing to the formation of discursive communities. These communities are shaped by the nature of the connections between actors and the information they exchange. The theoretical framework is based on Pierre Bourdieu's concept of scientific field and Birger Hjørland's concept of domains of knowledge. It concludes that the production of knowledge in human genetics mobilises cultural, social, political and economic resources. Researchers in this field share information with each

other around research objects manifested in the form of genome projects. The formation of social capital involves the scientist's political engagement, participation in industry and the university, as a means of mobilising the resources needed to form research networks in human genetics (Carvalho, 2014; Carvalho; Marteleto, 2018).

A third PhD thesis studied the dynamics of knowledge production and sharing in research groups in the knowledge domain and scientific field of Water Governance, by analysing researchers' social networks. It is based on an understanding of water governance as a complex, inter- and trans-disciplinary theoretical-practical field, which requires the integrated participation of various disciplines in the reflection of water management issues, as well as actors and organisations from different social spaces. It concludes that the theoretical and methodological approaches of studies in this field should transcend the disciplinary boundaries of the organisation of knowledge as an alternative in the critical approach to complex phenomena such as water management (Zattar, 2017; Zattar; Marteleto, 2019).

Originating from our participation in the ISKO 2024 panel, this article continues our research into the structure and dynamics of knowledge domains from an interdisciplinary perspective. By combining elements of domain analysis, social field theory and the socio-anthropological approach to information, we seek to deepen our understanding of the complex interactions between the social, cognitive and institutional aspects that shape these domains. This is an increasingly interdisciplinary field of study, which seeks to integrate diverse theoretical and methodological perspectives in order to deal with the complexity of information and knowledge phenomena in the contemporary world, from the perspective of Information Science.

3 Domain analysis in the socio-anthropological approach to information

In research guided by the socio-anthropological approach to information phenomena, the analytical-interpretive focus is concentrated on the interactions and actions of cultural subjects, and therefore collectives, in social and historical

spaces. This epistemological perspective initially imposes two challenges for the construction of research objects and the corresponding theoretical and methodological tools. The first is the necessary practice of interdisciplinarity, bringing together different fields or domains of the social sciences to study the issue of information; the second, arising from the previous one, is the risk of moving away from the epistemological core of Information Science, which has been guided since the field was formed by issues relating to the organisation, retrieval and use of knowledge in its documentary and institutional materiality, with a focus on information systems and devices.

Awareness of these challenges, combined with our shared understanding of knowledge as a social product, led us to adopt the cultural approach to domain analysis, in addition to other theoretical contributions, from an interdisciplinary perspective. This approach, pioneered by Hjørland and Albrechtsen, emphasises the importance of context and the collective in the construction of knowledge, in a vision that integrates social and cognitive aspects (Hjørland; Albrechtsen, 1995; Hjørland, 2017). The contextualised perspective would allow for a more comprehensive understanding of the processes of knowledge production, which transcend the limits of a domain or an isolated discipline.

Context, in this case, would not be something external to the domain, as it refers to the social, historical and epistemological conditions of knowledge construction, both in the domains themselves and in different discursive communities in other social and institutional spheres. The former would be defined in terms of social knowledge as an object, while the latter from the angle of subjects and their social activities (Wang; Qiu, 2021). In this way, the processes of knowledge production go beyond the limits of the scientific field itself.

Another point of approximation between the socio-anthropological approach and the principles of domain analysis would be the premise of interdisciplinarity, one of its most relevant aspects. When studying a domain, the IS researcher is faced with diversity and needs to mobilise theories and methodological tools from various disciplines, such as philosophy, anthropology, sociology and cognitive psychology, among others. Hjørland and Hartel (2003) state that it is necessary to define domains based on ontological, epistemological

and sociological dimensions, in order to uncover the complex relationships that are established between subjects, objects, cultures, languages, social and institutional practices within discursive communities. As such, Domain Analysis is not limited to a mere description of a field of knowledge, but involves an in-depth investigation of the cognitive, social and institutional structures that shape the construction, organisation and appropriation of knowledge (López-Huertas, 2015).

Another aspect of common interest between domain analysis and the socio-anthropology of information is the use of a relational approach to their objects of study. Both approaches recognise the importance of social interactions, constructions of meaning and power dynamics in the production of knowledge, highlighting its relational and contextualised nature. In this sense, the relational approach to domain analysis emphasises that knowledge does not exist in isolated spheres, but rather in complex networks of relationships. Smiraglia (2012), for example, extending the definition of domains from a relational perspective, distinguishes between domains, discourse communities and invisible colleges, stating that in each of these conceptions there are active social networks between the participants. The concept of domain emphasises intellectual boundaries; the concept of discourse community focuses on the active interaction of information; the invisible college designates the intellectual community and discursive action: "These concepts share the same characteristic of a social network in academic fields" (Wang; Qiu, 2021, p. 4).

Therefore, while not exhausting the possibilities of complementarity among different approaches, Domain Analysis invites reflexivity regarding its theories, methods, and research practices. Hjørland and Hartel (2003) suggested that three dimensions interact in the constitution of domains: (a) ontological theories and concepts about the objects of human activity; (b) epistemological theories and concepts about knowledge and the ways of acquiring it, implying methodological principles about the ways of investigating objects; and (c) sociological concepts about the groups of people involved with the objects. In Hjørland's (2017) understanding, the definition of "domain" needs to consider both the social and cognitive dimensions of discursive communities.

In this way, Domain Analysis would demonstrate the potential to form an integrative framework for Information Science, providing a methodological and theoretical basis for both the analysis of the cultural, social, and cognitive processes that guide the production of knowledge and for a self-analysis of its own research tools.

4 Social and historical construction of domains, relative autonomy of the scientific field and reflexivity in the production of knowledge

The production and circulation of knowledge are complex and dynamic phenomena, shaped by interactions between various elements. Domain analysis and the socio-anthropology of information in Information Science, and the sociology of culture and knowledge offer different and complementary perspectives for analysing these interactions, especially with regard to social fields or discursive communities, including the scientific field.

In 2004, in the article *Domain analysis: A Socio-Cognitive Orientation for Information Science Research* published in the Bulletin of the American Society for Information Science and Technology (ASIS&T), Hjørland addressed the role of Information Science in the "humanisation of information technology". Despite being strongly linked to technologies, it would be up to IS to dedicate itself to "[…] the quality of information and the social perspective related to the intermediation of information. The aim is to enable users to make informed choices about how they are informed" (Hjørland, 2004, p. 17). Reflecting on the changes in the socio-cognitive approach, from an individual-centred perspective to a culturally-oriented view, he states that the latter approach "[…] emphasises the internalisation of culturally produced signs and symbols and the way cognitive processes are mediated by culturally, historically and socially constructed meanings" (Hjørland, 2004, p. 17).

In several of his publications on the subject, the author and his peers underline the social foundation of the methods and meta-theories of Domain Analysis by relating it to social constructivism, to affirm that human search behaviour changes along with culture and context, whether physically or cognitively, since it is shaped by culture.

On the other hand, throughout his extensive scientific and intellectual output, Pierre Bourdieu dedicated himself to analysing how scientific knowledge is produced and how the scientific field is structured. In three specific moments of his work, he addresses this central theme in an even more direct and detailed way, offering fundamental contributions to understanding the social dynamics that mould scientific production.

In the article *Le champ scientifique*, published in the journal Actes de la recherche en sciences sociales, Bourdieu (1976) addresses an issue that will be revisited several times in other studies: (a) the social conditions of knowledge production and the historicity of scientific reason; (b) the conformation and structure of the scientific field. The latter, ideally considered to be a pure and disinterested universe of science, is a social field like any other, with its relations of forces, monopolies, struggles, strategies and interests. Its distinction, on the other hand, is based on the social and historical granting of the production of reason (and truth), endorsed by the scientific field's own peers.

In order to understand the objective relations in the scientific field, Bourdieu refutes the interactionist idea of a 'scientific community' that is prevalent in studies of science and knowledge. Instead, he uses the notion of 'scientific authority' defined as 'technical capacity' and 'social power', or even 'scientific competence', in the sense of " […] the capacity to speak and act in a legitimate way, that is, in an authorised and authoritative way in matters of science" (Bourdieu, 1976, p. 89).

The scientific field is therefore a social space structured by a set of objective relationships that condition the actions of its members. These relationships are mediated by different types of capital, such as scientific capital, social capital and cultural capital. Scientific agents invest in these capitals to increase their prestige and chances of success in the field. On the other hand, the concept of habitus is fundamental to understanding how scientific actors incorporate the structures of the field, developing dispositions and perception schemes that guide their actions and the way they conduct their research.

In *Méditations pascaliennes* (1997, p. 137) Bourdieu states that the social sciences act against the Platonic fetishism that haunts all scholastic thought,

working to establish a genealogy of the objective structures of the scholastic fields, in particular the scientific field, as well as the cognitive structures that are both the product and the condition of their functioning.

In his criticism of the ways in which knowledge is produced and organised, Bourdieu considers scholasticism to be representative of a way of thinking that sought an absolute and universal truth, detached from historical and social contingencies, obscuring interests and power struggles. The author also refers to the alliances and contradictions between two basic notions of Greek philosophy that have historically guided Western thought regarding ways of knowing and the very notion of knowledge: sophia (wisdom, knowledge, philosophy, innate operation of the human spirit) and paideia (a body of knowledge acquired through education, a way of life, a way of being), a habitus, or even a defined body of knowledge.

In the chapter *Les trois formes de l'erreur scolastique* [The three forms of scholastic error], Bourdieu states that it is necessary to remember the social conditions of formation of the scholastic disposition, not as a kind of 'denunciation', because "It is not a question of judging this situation of retreat or withdrawal from an ethical or political point of view [...] or of denigrating or condemning the form of thought that it makes possible" (Bourdieu, 1997, p. 63). This is an epistemological questioning, according to the author, and not a political questioning, which leads the researcher to ask themselve about the practical reasons for constructing knowledge, in addition to their theoretical constructions.

In 2001, the lectures from his last course at the Collège de France were published under the title *Science de la science et réflexivité* (2001). In these lectures he takes a look back at the currents in the sociology of knowledge, whose guiding threads are the 'historicity of scientific reason' and the 'relative autonomy of the scientific field'.

In relation to historicity, he states that in his analyses he subjected science to a historical analysis, the aim of which was not to relativise and reduce knowledge to its historical conditions or situated and dated circumstances (Bourdieu, 2001). On the other hand, he challenges the primacy of theoretical reason in understanding the social and scientific world, when it leaves aside the

cultural, social and historical conditions of knowledge production. The conformation of the different social fields, including the scientific field, obeys the process of differentiation of the social world, which leads to the existence of autonomous fields: "[…] by differentiating itself, the social world produces the differentiation of ways of knowing the world; each of the fields corresponds to a fundamental point of view on the world that creates its own object and finds in itself the principle of understanding and explanation appropriate to that object" (Bourdieu, 1997, p. 119).

Regarding the relative autonomy of the scientific field, he reminds us that it is a field of forces, like any other, with a structure. Therefore, it is relatively independent in relation to the social universe in which it is inserted, which "[…] means that the system of forces that constitute the structure of the field (tension) is relatively independent of the forces that exert themselves on the field (pressure)" (Bourdieu, 2001, p. 5). He notes that in fields where the products of research are highly profitable, such as medicine, biotechnology (mainly in the agricultural field) and, in general, genetics and military research, there could be a submission to economic interests. On the other hand, particularly in the social sciences and humanities, it is important to question the relationship between scientificity and autonomy.

The idea of reflexivity makes it possible to bring together some elements about knowledge, the fields in which it is constructed and the ways in which it is produced, with the aim of carrying out an analysis conducted by what the author calls "[…] objectifying the subject of objectification" (Bourdieu, 2001, p. 173). Especially in the social sciences, it is not a question of seeking a new form of 'absolute knowledge', but of exercising a specific form of 'epistemological vigilance' on a terrain where epistemological obstacles are mainly social obstacles: "Science that is more sensitive to social determinants can in fact find within itself the resources that, methodically practised as a critical device (and disposition), would allow it to limit the effects of historical and social determinisms" (Bourdieu, 2001, p. 274).

Bourdieu's sociological observations, based on the social and historical dimension of the fields, the relative autonomy of the scientific field and the

reflexivity of the sciences, especially the social sciences, are important for understanding scientific activities in the midst of rationalist and constructivist perspectives.

Through his formulations on the theory of social fields, Bourdieu developed a model for analysing scientific production that allows us to understand the logic of careers, selection and hiring procedures, and the dynamics of struggles for scientific legitimacy. This same model would also make it possible to identify the psychological implications of the social habitus acquired by academic actors, as well as the effect of coercive forces and social struggles on the forms and content of scientific productions themselves, indicating, for example, which social logics correspond to the references or footnotes of scientific articles, the choice of theoretical models or the empirical grounds selected for the application of studies (Olivesi, 2005; Marteleto; Pimenta, 2017).

Table 1, reproduced below, summarises the epistemological axes developed by Hjørland and Bourdieu, highlighting the thematic interests, the theoretical-methodological bases, the objects of common interest, as well as the diversity in the way of investigating issues related to modes of knowledge production.

Chart 1- Epistemological, thematic, conceptual and methodological axes of Hjørland and Bourdieu

Domains/Knowledge domains	**Social fields/Scientific field**
Global meta-theory of domains	General theory of fields
Pragmatism, cognitivism and social constructionism (C. Peirce; J. Dewey; W. James; R. Rorty; J. Shera; B. Derwin)	Objectivism - Structuralism (E. Durkheim; C. Lévi-Strauss) Subjectivism - Phenomenology (M.Weber; E.Husserl)
Approximation between approaches of I.S.	Construction of a unified social science
Domain-international order of work	Field-autonomization of spheres
Discoursive communities	System of social positions and dispositions
Discursive language associated with concepts	Language associated with symbolic power
Social and cultural awareness and responsibility	Reflexivity of researcher and research instruments
Historical dimension of domains	Historical conformation of the fields
Pragmatic approach	Theory of practice
Previous conditions of the knowledge process	*Habitus* and cultural capital
User	Social actor or agent

Source: Marteleto and Carvalho (2015).

Both domain analysis and social field theory emphasise the importance of the cultural, social and historical context in the production and circulation of knowledge, albeit with different emphases. In different and complementary ways, they allude to the relative autonomy of the scientific field, by relating each domain or field to the social structure, to power, from a relational perspective. On the other hand, domain analysis tends to focus more on cognitive structures and relationships between concepts, while social field theory emphasises power relations and symbolic struggles. These complementarities would make it possible to develop more comprehensive analytical models for analysing complex domains, integrating elements from both approaches in an interdisciplinary perspective. The analytical gains would have important implications for

understanding the social dynamics that shape the production, dissemination and appropriation of knowledge.

5 Challenges in the domains, fields, and sciences: final remarks

> Science, a distant satellite inhabited by scientists who, in the popular imagination, seem like aliens in laboratories, surrounded by tubes and computers, has become closer to the world of life and is now routinely in the news. Scientific entities are making headlines in major national and international media, in some cases being questioned for their scientific findings and methodological designs, pointing out that science is not infallible; and even being disregarded by political authorities who base their decisions on other logics (Pedrosa, 2021).

The health crisis caused by the covid-19 pandemic has posed numerous challenges for science and society, revealing both the strengths and weaknesses of scientific fields in terms of knowledge production, scientific communication, and public outreach. A new terminology and new content have begun to circulate in news and media articles, inducing an intense process of information mediation in networks of academic and non-academic actors, in order to counter misinformation and scientific denialism.

In the more than two years of the pandemic, approximately 500,000 studies on covid-19-related topics have been published as scientific articles or their preliminary versions, preprints, disseminated in public repositories and other digital databases and platforms (Marques, 2022). Scientific journals have accelerated their manuscript review processes to respond quickly to the health emergency.

In June 2020, the year the covid-19 pandemic broke out, the journal Ciência & Saúde Coletiva published its first supplement on the topic. In its editorial, it already presented the challenges of the health, social, political, and economic scenario that was emerging at that time, and the need for the involvement of different fields, sectors, and areas of science in addressing the virus, such as the global situation; protocols for detecting the prevalence of infection in symptomatic and asymptomatic individuals; the effectiveness of social distancing when combined with increased cases and contact quarantine; the repercussions of isolation on social interaction, increased fear, anxiety, and other mental health problems; the financial consequences of job loss and income,

increased inequality, and social harm; the incalculable damage to children and young people in their schooling and socialization, particularly in low-income populations; and fake news and dubious opinions (Ciência & Saúde Coletiva, 2020).

In this context of health, climate, political, and cultural crises, the article proposes a interdisciplinary approach to Information Science, combining Domain Analysis, Sociology of Knowledge, and the Socio-anthropological Approach to Information. The first analyzes the structure, discourse, terminology, objects, epistemic communities, and practices of a knowledge domain; the second seeks to understand and interpret the social, cultural, and historical forms by which fields are shaped, correlating them with the processes of differentiation in the social world. The question is how social structures shape knowledge.The third observes how knowledge is generated and how information circulates in hybrid social networks composed of academic and non-academic actors, focusing on the fields and domains where diverse knowledge and cultural objects converge and conflict, for social transformation.

Despite its benefits, Domain Analysis also presents challenges, such as the complexity of objects and the need to integrate different theoretical perspectives. Moreover, the increasing production of knowledge and the rapid evolution of technologies require researchers to adapt and develop new tools and methodologies for the analysis of increasingly complex and dynamic domains. Artificial intelligence, for example, offers new possibilities for analyzing large volumes of data and identifying complex patterns. Additionally, the growing concern with social, health, and environmental issues is likely to drive the application of domain analysis in areas such as sustainability, health, and social inclusion. These are issues that need to be reflected upon in the light of a critical Information Science, which questions the symbolic power exercised by the media, the state, cultural institutions, and economic powers.

A multifaceted approach would allow for a more complete and in-depth analysis of the processes of construction, circulation, and use of knowledge in dynamic and complex social contexts. By integrating different theoretical perspectives, the intent of this article is to contribute to the development of more

appropriate theoretical frameworks and methodologies to address the challenges of information in contemporary society.

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Domínios, campos e novas formas de produção do conhecimento: abordagem interdisciplinar a partir de uma socioantropologia da informação

Resumo: O objetivo deste artigo é desenvolver uma abordagem interdisciplinar dos domínios do conhecimento por meio de diálogos entre a análise de domínio, a sociologia do conhecimento e a abordagem socioantropológica da informação. Entre os onze temas de investigação dos domínios formulados por Birger Hjørland, foram selecionados aqueles cuja abordagem teórica e metodológica contempla mais diretamente as dimensões culturais, sociais e históricas do conhecimento. Com base nessa seleção, recupera-se uma trajetória de pesquisa na qual um olhar abrangente, capaz de articular diferentes áreas do saber, foi utilizado em estudos de múltiplos domínios, evidenciando os temas, questões e objetos que levaram à aproximação complementar entre as três perspectivas teórico-metodológicas. Três eixos temáticos fundamentam essa análise: (a) as condições sociais e históricas de produção do conhecimento; (b) a autonomia relativa do campo científico e de seus domínios; (c) a reflexividade nas práticas de pesquisa. Do ponto de vista contextual e empírico, parte-se do pressuposto de que, juntamente com as novas mídias e tecnologias, o campo científico e seus domínios precisarão, cada vez mais, abrir caminhos de colaboração entre diferentes comunidades discursivas ou campos sociais e seus múltiplos saberes (científicos, sociais, históricos, populares), em um cenário marcado pela desinformação e pelo negacionismo científico. Trata-se, também, de repensar o papel dos domínios do conhecimento diante das injustiças epistemológicas, sociais, climáticas e sanitárias que marcam o mundo contemporâneo.

Palavras-chave: domínios do conhecimento; campo científico; cultura e informação; ciência, conhecimento e sociedade; Birger Hjørland; Pierre Bourdieu

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