Interdisciplinary relations between Information Science and Law: a study based on publications on the IBICT journal

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ABSTRACT

The present work aims to analyze themes, addressed in the area of Information Science, which are correlated with the area of Law. It is characterized, in terms of its approach, in qualitative and quantitative research. As for its objectives, it is characterized as exploratory field research, using an exploratory-descriptive procedure. To read and characterize the data, Social Network Analysis (ARS) is used. The results indicate that the works in the area of Information Science that maintain a thematic relationship with the area of Law, in the sample analyzed in this article, have more frequently addressed aspects related to “Copyright”, “Ethics”, “Internet”, “Intellectual Property” and “Open Access”. Finally, there is evidence of the potential of Information Science, as a field of knowledge, in maintaining interdisciplinary relationships with Law.

Keywords: law; information science; interdisciplinarity; knowledge areas; semantic networks.

INTRODUCTION

The aim of this paper is to analyze topics covered in Information Science that correlate with Law, in order to recognize the interdisciplinary relationships between these two areas of knowledge. It is based on a perspective of interdisciplinarity as an ongoing movement, representing a model of knowledge that is antagonistic to the process of fragmentation of knowledge, characteristic of the analytical proposal of contemporary science.

To this end, the keywords of works published in journal Information Science, of the Brazilian Institute of Information in Science and Technology (Ibict) were analyzed. These are considered to represent reference points from which the global meanings and central themes of a text are synthesized, and, from a methodological perspective, they offer the possibility of building networks as a way of presenting and representing results.

This research proposal emerged from the reading of article Mutations in Information Science and reflections in interdisciplinary mandalas (Pinheiro, 2018), which presents an epistemological and interdisciplinary perspective on the evolution and transformations of the scientific configuration of Information Science, in which the first epistemic configuration of the area, published in 1995, was entitled Diagram of the Interdisciplinarity of Information Science (Pinheiro; Lourenço, 1995); the second, Basic Core of disciplines, trends and interdisciplinary traits, in 2007 (Pinheiro, 2007); and the third Information Science, subareas and interdisciplinary areas (Pinheiro, 2018), in 2018.

A methodological approach to qualitative and quantitative research is adopted, characterized, in terms of its objectives, as an exploratory field research, using an exploratory-descriptive procedure. Descriptive statistics and social network analysis (SNA) are used as analysis techniques.

This paper, in addition to the introduction, is divided into four sections. In the second session, the relationships between Information Science and Law are addressed, in addition to the concept of interdisciplinarity. In the third session, the methodological procedures adopted are presented. In the fourth session, the research results are presented. At last, the final considerations and references that supported this study are presented.

The classification of Information Science and Law according to the CNPq Knowledge Area Table (KAT)

In the present study, the use of terms “Information Science” and “Law”, as areas of knowledge, is based on the classification proposed by the National Council for Scientific and Technological Development (CNPq), and adopted by the Coordination for the Improvement of Higher Education Personnel (CAPES), by means of the Knowledge Area Table (KAT),

as a political device of governmentality and from which government agencies organize and classify, "[...] em níveis hierárquicos, as possíveis *áreas* de conhecimento no país para fins de gestão e avaliação" (Sales; Murguia, 2015, p. 31-32)[1].

There are four classification levels presented in the KAT, the 1st level, called the Large Area, encompasses eight areas of knowledge due to the affinity of its objects, cognitive methods and instrumental resources; the 2nd level, called Area, brings together a set of 76 areas of knowledge, according to the nature of the object of research, "[...] com finalidades de ensino, pesquisa e aplicações práticas" (Sales; Murguia, 2015, p. 32)[2]. The 3rd level, called Subarea, which comprises 340 subareas and refers to a "[...] segmentação da área do conhecimento estabelecida em função do objeto de estudo e de procedimentos metodológicos [...]" (Sales; Murguia, 2015, p. 32)[3]; and, finally, the 4th level, called Specialty, which can be classified into different levels and is responsible for the "[...] caracterização temática da atividade de pesquisa e ensino" (Ministério da Educação, 2020; Sales; Murguia, 2015, p. 32)[4].

Despite there being no consensus within the scientific community as to whether the divisions presented in the KAT reflect the reality of the areas of knowledge from the perspective of tradition, which, for some, causes political interference in the scientific fields[5], this is considered, although not perfect, a relevant management tool, the development of which represents a major step forward in terms of agency and the promotion of national scientific knowledge.

Therefore, it is from the perspective of the CNPq and CAPES that, for the purposes of this study, Information Science and Law are considered areas of knowledge, linked to the broad area of Applied Social Sciences, and constituted by a set of inter-related and systematized knowledge, which can maintain some type of interdisciplinary relationship among themselves by means of the sharing of objects of research, in the sense of a convergence of perspectives (Pombo, 2008, p. 14).

A meaning for interdisciplinarity

With regard to establishing the meaning of the concept of "interdisciplinarity", the definition of which is frequently addressed in the context of epistemological discussions, it appears that there is no single proposal in the literature, or no higher standard that favors the adoption of one to the detriment of others (Japiassu, 1976; Pombo, 2008).

In fact, the main point of convergence between those who approach theme interdisciplinarity lies precisely within the wide variety of definitions proposed by various

1 Translation: "[...] at hierarchical levels, the possible areas of knowledge in the country for management and evaluation purposes" (Sales; Murguia, 2015, p. 31-32, editorial translation).
2 Translation: "[...] for the purposes of teaching, research and practical applications" (Sales; Murguia, 2015, p. 32, editorial translation).
3 Translation: "[...] segmentation of the area of knowledge established according to the object of study and methodological procedures [...]" (Sales; Murguia, 2015, p. 32, editorial translation).
4 Translation: "[...] thematic characterization of the research and teaching activity" (Ministério da Educação, 2020; Sales; Murguia, 2015, p. 32, editorial translation).
5 For further details on this discussion: Sales and Murguia, 2015, p. 32-33.

scholars, in the frequent instability of the contexts in which the term is used and in the insufficiency of concepts necessary to express what is referred to as “interdisciplinarity” (Japiassu, 1976, p. 71-72; Pombo, 2008, p. 10).

Below is a synthesis of the definition proposals expressed by Japiassu (1976) and Pombo (2008), although, as already mentioned, they are not the only ones available in the literature. The choice is justified by the fact that it is considered that the perspectives presented in the aforementioned texts are sufficient to achieve the purposes proposed by this study.

Japiassu (1976)[6] starts, first, from an attempt to define radical “disciplinarity”, which makes up term “interdisciplinarity”. According to him, “discipline” has the same meaning as “science”. “Disciplinarity”, therefore, corresponds to a “[…] conjunto sistemático e organizado de conhecimentos que apresentam características próprias nos planos do ensino, da formação, dos métodos e das matérias”[7].

Japiassu (1976, p. 73)[8] proposes a departure from terms “interdisciplinary” and “pluridisciplinary”, which, according to him, “[…] realizam apenas um agrupamento, intencional ou não, [de] certos ‘módulos disciplinares’, sem relação entre as disciplinas (o primeiro) ou com algumas relações (o segundo)”, with term “interdisciplinarity”, the main particularity of which lies in its epistemological horizon, that “can be nothing but the unitary field of knowledge”, in order

> [...] a religar as fronteiras que haviam sido estabelecidas anteriormente entre as disciplinas com o objetivo preciso de assegurar a cada uma seu caráter propriamente positivo, segundo modos particulares e com resultados específicos (Japiassu, 1976, p. 75)[9].

In short, from this perspective, the distinctive principle is always the intensity of exchanges between experts and the degree of real interaction between disciplines within the scope of specific research projects.

Pombo (2008, p. 13)[10], on the other hand, although his perspective converges with the thought of Japiassu (1976), considers that the attempt to define the common radical, that is, the word “discipline”, makes the work even more difficult and complex, given the variety of contexts in which such word is used. It can be used to refer to a branch of knowledge, a curricular component or a “[...] conjunto de normas ou leis que regulam uma determinada atividade ou o comportamento de um determinado grupo [...]”.

6 Translation: “[…] systematic and organized set of knowledge that presents its own characteristics in terms of teaching, training, methods and subjects” (Japiassu, 1976, editorial translation).

7 Translation: “[...] “ ‘disciplinarity’ means the specialized scientific exploration of a certain homogeneous domain of study [...]” (Japiassu, 1976, p. 72).

8 Translation: “[…] they only group, intentionally or not, certain ‘disciplinary modules’, of no relationship between the disciplines (the first) or some relationship (the second)” (Japiassu,1976, p. 73, editorial translation).

9 Translation: “[...] to reconnect the boundaries that had previously been established between disciplines with the precise aim of ensuring each one has its properly positive character, in particular ways and with specific results” (Japiassu, 1976, p. 75, editorial translation).

10 Translation: “[...] set of rules or laws that regulate a certain activity or the behavior of a certain group [...]”. (Pombo, 2008, p. 13, editorial translation).

Pombo (2008, p. 13)[11] then proposes a definition based on the etymology of the prefixes that precede the word “discipline”. This way, “pluri” or “multi” disciplinarity presupposes “[...] o pôr em conjunto, o estabelecer algum tipo de coordenação, numa perspectiva de mero paralelismo de pontos de vista”.

In turn, “interdisciplinarity” is achieved as one goes beyond the dimension of pure parallelism and mere coordination, “[...] e se avança no sentido de uma combinação, de uma convergência, de uma complementaridade [...]”[12] of perspectives. Therefore, this paper adopts an interdisciplinarity perspective as an ongoing movement, which seeks to establish a model of epistemological configuration of knowledge that allows the development of a point of view, regarding a given object, based on technical elements and conceptual aspects of different specialties, thus seeking to build a unitary field of knowledge and expand perspectives.

This proposal, therefore, presents itself as antagonistic to the model of modern analytical science, where knowledge is increasingly fragmented, in which relationships between different disciplines, when established, take place only in the sense of coordination.

Epistemological configurations between Information Science and Law

According to Pinheiro (2018), the first representation of the epistemological configuration of Information Science was outlined within the scope of the Postgraduate Program in Information Science (PPGCI/IBICT-UFRJ), in 1995 and, subsequently, improved and published, under title *Diagram of the Interdisciplinarity of Information Science* (Pinheiro, 1995).

In this epistemological configuration proposed by Pinheiro (2018), the existence of relationships between Information Science and Law was not found. Only after a second study on the topic, conducted years later, the results of which gave rise to the second epistemological configuration, published in 2007, was this relationship confirmed.

The second proposal for an epistemological configuration, published under title *Basic core of disciplines, trends and interdisciplinary traits* (Pinheiro, 2007), was the result of an analysis of the themes of 481 review articles published in *Annual Review for Information Science and Technology* between 1996 and 2004. In it, Law appears, along with Administration, Political Science, Economics, Statistics, Education and Ethics, correlated to Information Science by means of the following topics: “Information Policy” and “Training and Professional Aspects”, both, at the time, considered by Pinheiro (2018) disciplines undergoing consolidation.

One of the findings also presented was that the disciplinary core of Information Science at that time was predominantly concentrated in Information Systems, with 43 published articles in total, and in Information Technology, the second largest in absolute numbers, which amounted to 28 articles published.

11 Translation: “[...] bringing together, establishing some kind of coordination, from a perspective of mere parallelism of points of view” (Pombo, 2008, p. 13, editorial translation).

12 Translation: “[...] and moves towards a combination, a convergence, a complementarity [...]” (Pombo, 2008, p. 13, editorial translation).

Regarding the content of disciplines Information Policies and Professional Aspects, Pinheiro (2007, p. 85-86)[13] notes that, in the first "[...] tanto os programas e projetos nacionais quanto internacionais, aspectos jurídicos como copyright, questões de democracia e privacidade da informação"; appeared; while, in the second, "[…] estão incluídas questões profissionais, englobando ética, além de educação e treinamentos"[14].

Silva and Pinheiro (2011, p. 1631)[15] note that information policies are the result of sociocultural phenomena, neither spontaneous nor free, the definition of which, within the scope of Information Science, varies according to social and historical phenomena of power, and propose a definition of the concept as the "[...] conjunto de ações e/ou regras para obtenção e/ou direção/ produção/ divulgação e fluxo de informação em um determinado contexto".

From the perspective of public information policies, a subject that derives from debates on information policies, Jardim (2008, p. 7)[16] considers that this concept is related to the

> [...] conjunto de premissas, decisões e ações, – produzidas pelo Estado e inseridas nas agendas governamentais em nome do interesse social – que contemplam os diversos aspectos [...] relativos à produção, uso e preservação da informação arquivística de natureza pública e privada.

According to Jardim (2008, p. 4)[17], the topic is fundamentally addressed in Information Science due to its contribution "sobre a informação enquanto fenômeno social", although it relies on collaborations from areas such as Archival Science, Administration, Law, History, Sociology, IT, Political Science, among others.

Professional aspects, in turn, are often related to discussions about information professionals. The debates address issues such as the training, paradigms, profile and skills of this professional, as well as changes in the market.

Almeida Júnior (2017, p. 421)[18], in this sense, presents a perspective on the composition of the set called "profissionais da Informação", especially to librarians, archivists and museologists, a topic that generates controversy among researchers. In this regard, the author proposes a comprehensive understanding of information professionals as all those "que se interessam e trabalham com a informação, independentemente de sua formação básica"[19] and, after analyzing the profile of higher education courses in Library Science, Archival Science and Museology, he considers that information professionals have as ultimate goal the appropriation of information.

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13 Translation: "[...] both national and international programs and projects, legal aspects such as copyright, issues of democracy and information privacy [...]" (Pinheiro, 2007, p. 85-86, editorial translation).

14 Translation: "[...] professional issues are included, encompassing ethics, as well as education and training[...] " (Pinheiro, 2007, p. 85-86, editorial translation).

15 Translation: "[...] set of actions and/or rules for obtaining and/or directing/ producing/ disseminating and the flow of information in a given context" (Silva e Pinheiro, 2011, p. 1631, editorial translation).

16 Translation: [...] set of premises, decisions and actions,–produced by the State and inserted into government agendas in the name of social interest–that contemplate the various aspects [...] relating to the production, use and preservation of archival information of a public and private nature. (Jardim, 2008, p. 7, editorial translation).

17 Translation: "about information as a social phenomenon" (Jardim, 2008, p. 4, editorial translation).

18 Translation: "Information professionals" (Almeida Júnior, 2017, p. 421, editorial translation).

19 Translation: "who are interested in and work with information, regardless of their basic training" (Almeida Júnior, 2017, p. 421, editorial translation).

From this perspective, Rubi and collaborators (2006, p. 82)[20] consider that in the context of the so-called Information Society, in which information becomes an indispensable input for any activity, as well as in view of the large amount of information made available, the role of this professional becomes indispensable, as such professional is a "[...] profissional capacitado a filtrar informação, organizar, analisar e disseminar [...]".

The most recent epistemological configuration, which sought to represent the epistemological configuration of Information Science, was published in 2018. The main source of the study was a research developed by Pinheiro (2018), published in Ibict Information Science journal, from which it was possible to have a view of the epistemic panorama of the area, as well as the research developed by the author for the Brazilian Science Thesaurus of Information, which was based on a classification of the area, with a theoretical approach, the result of almost 40 years of studies.

In this third epistemological configuration, called Information Science, subareas and interdisciplinary areas, Information Science appears related to Law, together with other areas, such as Economics, Communication, Library Science, Sociology, Computer Science, Political Science, Philosophy of Science and Philosophy, through open access to scientific information; Information policies; Open Science and research data, and Information ethics.

Pinheiro (2018) notes the emergence of new subareas in the field of Information Science, such as: Open access to scientific information and Open Science and research data, which "[...] são decorrentes das mudanças de paradigmas na Ciência, sobretudo na relação com a sociedade, e dos avanços e disponibilidade das tecnologias da informação e comunicação [...]" (Pinheiro, 2018, p. 127)[21].

METHODS

In terms of its approach, this research is a qualitative and quantitative research. Regarding its objectives, it is an exploratory field research, using an exploratory-descriptive procedure to collect and analyze information.

Field research, according to Marconi and Lakatos (2003, p. 186)[22], corresponds to that with the objective of obtaining information "[...] acerca de um problema para o qual se procura [...] descobrir novos fenômenos ou as relações entre eles". The aim is, therefore, to analyze these facts and phenomena, "[...] tal como ocorrem espontaneamente, na coleta de dados a eles referentes e no registro de variáveis que se presume relevantes [...]"[23].

This way, exploratory-descriptive studies combine the objectives of exploratory research, which seeks "[...] proporcionar maior familiaridade com o problema, com vistas a

20 Translation: "[...] professional trained to filter information, organize, analyze and disseminate [...]".(Rubi e colaboradores, 2006, p. 82, editorial translation).

21 Translation: "[...] result from changes in paradigms in Science, especially in the relationship with society, and the advances and availability of information and communication technologies [...]" (Pinheiro, 2018, p. 127, p. 82, editorial translation).

22 Translation: "[...] about a problem for which one seeks [...] to discover new phenomena or the relationships between them". (Marconi e Lakatos, 2003, p. 186, editorial translation).

23 Translation: "[...] as they occur spontaneously, in the collection of data relating to them and in the recording of variables that are presumed relevant [...]". (Marconi e Lakatos, 2003, p. 186, editorial translation).

torná-lo mais explícito ou a constituir hipóteses" (Gerhardt; Silveira, 2009, p. 37)[24], with those referring to descriptive research, which "[...] pretende descrever os fatos e fenômenos de determinada realidade [...]" (Triviños, 1987 *apud* Gerhardt; Silveira, 2009, p. 35)[25].

The adoption of such methodological procedures is mainly due to their ability to accommodate "[...] tanto descrições quantitativas e/ou qualitativas quanto a acumulação de informações detalhadas como as obtidas por intermédio da observação participante", as well as the possibility of adopting flexible sampling procedures of an eminently representative and systematic nature (Marconi; Lakatos, 2003, p. 188)[26].

Therefore, the research universe is defined as scientific articles in Information Science the themes of which are related to Law. The presence of the term "law" is considered a relationship criterion, whether in the titles, abstracts or in the keywords of the corresponding works. The articles published in journal Information Science of the Brazilian Institute of Information in Science and Technology (Ibict) were adopted as an analysis sample, in which works published from 1993 to 2020 were collected.

Data was collected from October 13th to 20th, 2021. The term "law" was used as a search criterion, by means of the search tool available on the journal's website. Fifty-five articles were identified, from which the following information was collected: title, author(s), keywords, year of publication and abstract, being that the abstracts and keywords of four articles were not found, thus, these were not considered in the result analysis.

For this research, we chose to consider the keywords of the chosen articles as an analysis criterion, considering that these represent, in addition to the possibility of building networks, an important point of reference for the exposure of themes, and key relevant ideas within a given study, as, from these, the global meanings and central themes of a text are synthesized.

In order to present the data collected in the field research, we chose to build a semantic network of keywords, so as to represent the relationships or inter-relationships existing between the keywords and the concepts found. To this end, software *Gephi*was used, which processes the information through a spreadsheet with text format data.

Therefore, to create the semantic network, in order to correct variations caused by linguistic factors, a manual data formatting procedure was first used, using a controlled vocabulary to standardize keywords through general rules.

Thus, the graphic accents were removed. Words presented in a language other than Portuguese were kept as found, as were those presented in the plural. The letters were placed in lowercase format and the words of proper nouns composed of more than one term were joined, forming a single word – "information science", for example, is represented in the chart as "informationscience".

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24 Translation: "[...] provide greater familiarity with the problem, with a view to making it more explicit or constituting hypotheses" (Gerhardt; Silveira, 2009, p. 37, editorial translation).

25 Translation: "[...] intends to describe the facts and phenomena of a given reality [...]" (Triviños, 1987 *apud* Gerhardt; Silveira, 2009, p. 35, editorial translation).

26 Translation: "[...] both quantitative and/or qualitative descriptions and the accumulation of detailed information such as that obtained by means of participant observation." (Marconi; Lakatos, 2003, p. 188, editorial translation).

Semantic networks refer to a form of graphical representation composed of a set of nodes or vertices connected through edges or arcs. They are generally used to represent the relationships between a set of elements through a network of concepts. Thus, each node or vertex represents an object and the edges or arcs represent the relationships between them.

A social network analysis (SNA) approach was adopted as a theoretical framework for the interpretation and characterization of the results, defined by Wasserman and Faust (1994) and Grácio (2018) as the study that measures, describes and analyzes relational variables of a set of actors in order to represent the structure of a group.

In this approach, certain definitions and indices are used to characterize and express the meanings of networks. The indices used to analyze the results were: average degree, diameter, agglomeration coefficient, average minimum path and centrality, from which it was possible to infer considerations on the importance of concepts in networks, as well as the connections between them.

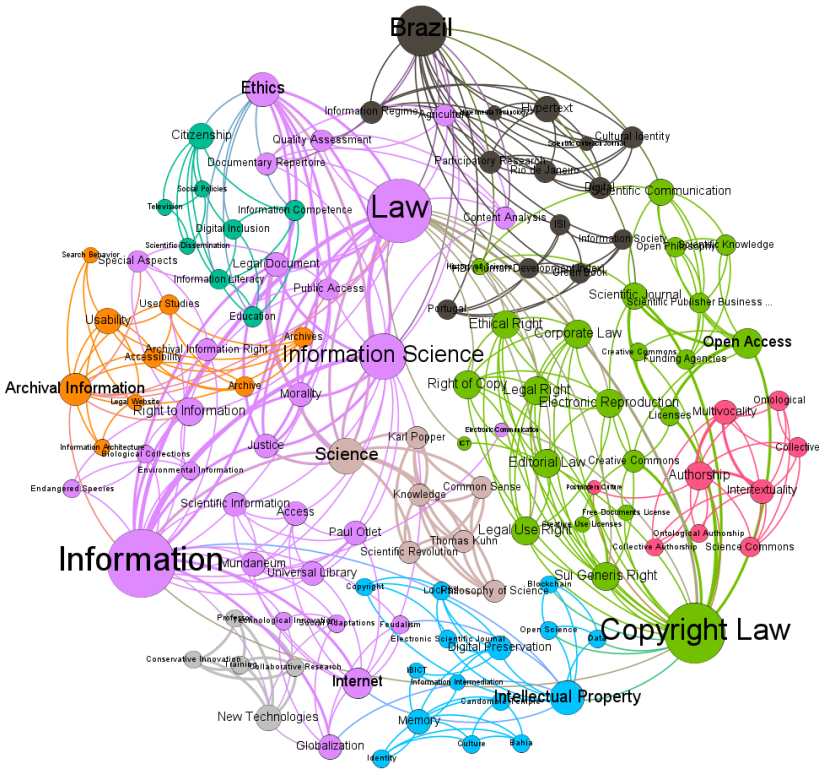
RESULT ANALYSIS AND DISCUSSION

Figure 1 shows the chart of the network of titles composed of the keywords of the works selected through field research. In order to build the network chart, the tool establishes links between words in the same article, linking them together.

If the words are found in both articles, the link between them is established. The size of the vertices is defined by the number of times the word it represents is repeated in the network, that is, by its degree. Therefore, the most frequent words are those whose vertices are larger in relation to the others.

Thus, it is noted that the largest vertices of the network, those that concentrate the highest degree, are: “law”; “information”; “science”; “informationscience”; “copyright”; “Brazil”; “intellectualproperty”; “ethics”; “archivalinformation” and “internet”.

Figure 1 – Semantic network of keywords



Source: Prepared by the authors (2022).

The modularity algorithm (*modularity class*) was used to identify what we call network communities, identified by colors and divided according to the degree of interaction between words.

It was found that the network is composed of nine communities, which were named according to the topics that compose them, resulting in the following titles: Intellectual Property, Identity, Memory, Preservation, Culture and Society (Blue color); Ethical Studies, Information, Law and Information Science (Lilac color); Copyright, Open Access and Scientific Knowledge (Green color); Information Society, Cultural Identity and Information Regime (Black color); Citizenship, Digital Inclusion, Education and Social Policies (Jade green color); Archival Information, Information Architecture, Accessibility and Archival Science (Orange color); Authorship, Intertextuality and Multivocality (Pink color); Collaboration, Training and Technologies (Gray color) and, finally, Scientific Knowledge and Scientific Revolution (Brown color).

The semantic network was built from keywords collected from 51 articles and is composed of 119 vertices and 385 edges. It has a density of 0.055. The density index measures the percentage of existing relationships in the chart, considering its maximum capacity, that is, it is the quotient between the existing relationships and the possible relationships[27] multiplied by 100: [D= ER / PR x 100].

27 The number of possible relationships is obtained by multiplying the total number of nodes by itself minus one: [PR = TNN x (TNN–1)].

The average degree of the network corresponds to 6.471. This can be understood as the arithmetic mean of the number of connections in each node, given that the result is obtained by dividing the number of connections existing in the network by the number of nodes. It has an agglomeration coefficient of 0.884. The agglomeration coefficient represents the tendency for two neighboring nodes of the same node to also be connected to each other. In other words, it measures the probability that two neighboring nodes that are related to a third node are also related to each other.

Furthermore, the network has average minimum path values of 3.435 and eight in diameter. The average shortest path corresponds to the arithmetic mean of the average shortest paths of each of its nodes. The path means the number of nodes that a given node relates to until it reaches another specific node. The minimum or shortest path, therefore, is the minimum number of nodes that an *X* node relates to until reaching a *Y*node. The diameter corresponds to the maximum distance, that is, the maximum number of nodes existing between two nodes. **Table 1** presents the keywords in the network with the highest percentages of centrality. This index corresponds to the percentage of direct connections between a keyword and others, revealing its ability to centralize information, which means that, for certain nodes to connect to others, they must go through the most central one that acts as an information intermediary.

Table 1 – Centrality of the highest degree vertices

Nodes/Vertices (concepts)	Node/vertex centrality (%)
information	0,874473
law	1
copyright	0,693819
brazil	0,423588
informationscience	0,667657
science	0,448322
intellectualproperty	0,282669
ethics	0,43001
openaccess	0,17399
internet	0,339237

Source: Prepared by the authors (2022).

The centrality index allows us to identify the main nodes in the network, which are not necessarily the most frequent–which have the highest degree, but rather those that establish the highest percentages of connections with their neighbors. When calculating the centrality of nodes, the degree is also taken into account, but it is now qualified by the number of connections it establishes with others, revealing its capacity as an information intermediary.

The term “law”, as it was used as a search criterion on the journal page, is that which concentrates the greatest centrality in the network, reaching the maximum centrality coefficient in the network. Likewise, terms such as “science”, “information”, “informationscience” and “brazil” also appear as central as they refer to the editorial line of the analyzed journal.

On the other hand, while analyzing the other terms, it is noted that, in the sample studied, works in Information Science that maintain a thematic relationship with Law more frequently address topics related to “copyright”, “ ethics”, the “internet”, “intellectualproperty” and “openaccess”.

Open access is part of the context of the open science movement, which refers to national and international social movements that propose changes in the forms of circulation, sharing and conditions of production of scientific knowledge, the aim of which is to allow free access to “[...] literatura científica, disponibilizada por periódicos científicos e repositórios digitais [...]” (Bandeira, 2017, p. 30)[28], under the argument that research funded with public resources must be accessible to the society that made its development possible by means of tax payment (Silva; Alcará, 2009).

Albagli (2015) presents a perspective of Open Science as something that is under construction, that is, as a process, mobilizing different interests and points of view, which allows multiple interpretations, and proposes a classification of this movement into two main aspects.

The first aspect refers to the regime of intellectual property rights protection, which is related to debates around the socialization or privatization of knowledge, information and culture, enhanced “[...] pelo desenvolvimento de sistemas eletrônicos e das plataformas digitais” (Albagli, 2015, p. 12)[29].

The second corresponds

> [...] à abrangência do próprio significado da ciência aberta”, que alcança a “[...] interlocução da ciência com outros tipos de saberes [...]”, provocando o “abalo de hierarquias, de fontes estabelecidas de autoridade e reputação”, ao propor a superação da “[...] perspectiva de pensar a ciência a partir da sua produtividade intrínseca”., evidenciando as relações entre “saber e poder (Albagli, 2015, p. 9-10)[30].

This demonstrates a characteristic of Information Science, as area of knowledge, responsible for thinking about the collection, production, organization, dissemination and access to information in the field of science and technology.

Regarding *ethics*, it appears that, related to information, it is responsible for investigating

> [...] se as mudanças e a deflação normativa dos ciclos da informação desestabilizam ou ameaçam a legitimidade e as práticas de justificação de algumas das principais

28 Translation: “[...] scientific literature, made available by scientific journals and digital repositories [...]” (Bandeira, 2017, p. 30, editorial translation).

29 Translation: “[...] by the development of electronic systems and digital platforms” (Albagli, 2015, p. 12, editorial translation).

30 Translation: “[...] the scope of the very meaning of open science”, which achieves “[...] dialogue between science and other types of knowledge [...]”, causing the “shock of hierarchies, from established sources of authority and reputation”, by proposing the overcoming of the “[...] perspective of thinking about science from its intrinsic productivity”., highlighting the relationships between “knowledge and power” (Albagli, 2015, p. 9-10, editorial translation).

> expressões dos discursos públicos contemporâneos, como a comunicação científica, a comunicação política e as principais formas de comunicação social, podendo afetar a credibilidade, a confiabilidade e a tomada de decisão em toda e qualquer manifestação da atividade social, inclusive as cotidianas (Gomez, 2020, p. 24)[31].

This information ethics dialogues with other areas of knowledge, such as "[...] a Comunicação, a Administração, a Biblioteconomia, a Arquivologia, a Museologia, a Antropologia e o Direito [...]" (Gomez, 2020, p. 20)[32].

Still on this topic, Gomez (2020, p. 25)[33] considers that "[...] os problemas éticos que têm recebido a atenção dos estudos da informação [...]" arise from "[...] mudanças nos modos de produção do conhecimento"[34], involving main issues such as "integridade da pesquisa [...]; o processo de institucionalização de uma ética pública [...] e o complexo sistema de publicação científica [...][35]".

At last, it can also be considered that these topics are, in a way, related to the advent of the global communication network, the *Internet*, which has frequently been at the core of discussions related to copyright and intellectual property rights, which take place, above all, within the scope of the Open Science movement, in which debates are established on the socialization and privatization of scientific knowledge.

CONCLUSIONS

The analysis developed throughout this study sought to analyze topics covered in Information Science that have a correlation with Law, with the purpose of understanding how such areas have behaved in the face of the increasing process of fragmentation of knowledge resulting from the analytical model of contemporary science, which has as its antagonistic pole an interdisciplinary perspective of organization and configuration of knowledge, still little explored, but which has increasingly gained space in scientific, technological and academic discourses.

The results highlight the potential of Information Science, as a field of knowledge, in maintaining interdisciplinary relationships with Law, mainly in aspects relating to scientific communication, production and access to information.

It should also be noted that the methodological approach presented can still be improved and become an auxiliary model for the investigation of interdisciplinary themes and potential among other areas of knowledge, which, in a way, justifies the development of this work.

31 Translation: "[...] whether changes and normative deflation of information cycles destabilize or threaten the legitimacy and justification practices of some of the main expressions of contemporary public discourses, such as scientific communication, political communication and main forms of social communication, which can affect credibility, reliability and decision-making in any and all manifestations of social activity, including everyday manifestations" (Gomez, 2020, p. 24, editorial translation).

32 Translation: "[...] Communication, Administration, Library Science, Archival Science, Museology, Anthropology and Law [...]" (Gomez, 2020, p. 20, editorial translation).

33 Translation: "[...] the ethical problems that have received the attention of information studies [...]" (Gomez, 2020, p. 25, editorial translation).

34 Translation: "[...] changes in the knowledge production methods" (Gomez, 2020, p. 25, editorial translation).

35 Translation: "[...] research integrity [...]; the process of institutionalizing public ethics [...] and the complex system of scientific publication [...]" (Gomez, 2020, p. 25, editorial translation).

At last, it is considered that the analysis developed can be expanded both concerning the number of articles to be analyzed and the terms to be collected, such as: article titles, periodicals, among others.

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