Mapping the Literature on Digital Humanities: A Bibliometric Study Using Scopus Data

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ABSTRACT

Digital humanities (DH) has become a hot topic among both humanities scholars and library and information services (LIS) professionals. To conduct this research, researchers searched Scopus database for articles published between 2006 and 2020, as of March 2021 which brought out a set of 2643 publications. MS-Excel, R-programming language and VosViewer were used to analysis the collected data. The significant increase of publications in DH over last six years (2015-2020) is observed. The annual percentage of growth rate is 34.91. It is found that the average authors per document are 1.8 and the collaborative index is 2.53 in this study. USA, UK and Germany emerged as the major research contributor. In the co-occurrence network of keywords, the value of clustering coefficient is 0.072. This study gives a better knowledge of collaborative processes in the digital humanities. The findings of this study will raise the profile of DH among researchers who are unfamiliar with it in anticipating future.

Keywords: Digital humanities; Humanities computing; Scopus; Bibliometrics; Co-authorship networks; Co-occurrence network; Co-citation analysis

1. INTRODUCTION

Having inherited its name from humanities computing in the early 21st century, digital humanities (DH) has become a hot topic among both humanities scholars and library and information services (LIS) professionals (Hockey, 2004)[1]. According to data accessed from Scopus[2] revealed that the bulk of articles were in the fields of computer science and engineering (29 %) during the first decade of this century. However, it was also noted that social sciences (30 %) become the leading field after that. The contributions from Arts & Humanities fields were also remarkable (25 %) during this period. Chris Alen Sula[3] says, "A search for 'digital humanities' within Library and Information Science (LIS) literature reveals a steady increase in publications since 2005 . . . It is remarkable that publications on digital humanities have nearly doubled in 2012." The first article regarding DH as reflected in Scopus was "Delivering electronic texts over the web: The current and planned practices of the oxford text archive" authored by A Morrison of University of Oxford, published in 1999. Since then, digital humanities discussed in many ways by many scholars. Kirschenbaum[4] discussed the mutual relationship between computing and the disciplines of the humanities and suggests a double inclusion of the field, i.e., the application of digital technology and resources in humanities inquiries, and the study of digital media through humanistic methodologies.

Digital humanities (DH) is a new interdisciplinary research field that applies modern computer and network technologies to the traditional fields of humanities research and education[5]. Digital humanities is a branch of study that focuses on the confluence between computing and several humanities disciplines. On "What is humanities computing?" McCarty[6] stated that "it is methodological in nature and interdisciplinary in scope…focusing both on the pragmatic issues of how computing assists scholarship and teaching in the disciplines and on the theoretical problems of shift in perspective brought about by computing".

According to Library and Information Science Abstract (LISA), the first time the term "digital humanities" in library science literature used by David Green[7] in the article entitled 'The National Initiative for a Networked Cultural Heritage' appeared in LIS literature is in the June 1998 issue of Information Technology & Libraries, in a two-page report on The National Initiative for a Networked Cultural Heritage.

Bibliometrics has been used during the past quarter of a century to refer to mathematical and statistical analyses of patterns that arise in the publication and use of documents[8]. It could be considered as a mean of quantitative studies of socio-cultural evolution through data derived from the bibliographic records. The main purpose of the study is to understand the nature of research in the domain of digital humanities quantitatively.

In systematic reviews, it is crucial that a literature search be thorough and exhaustive. Researchers first identify a significant number of studies by abstracting database searches and then used predetermined criteria such as digital humanities platforms, affiliation with library, quantitative study of DH,

etc. to pick out the ones those are pertinent and ought to be included in the review.

In recent years, there has been an increasing interest in the area of digital humanities among the scholars of several disciplines. Some digital humanities platforms have been successfully built to enable digital humanities research for humanists, owing to the rapid development of digital humanities. Chen & Chang[9] presented a Chinese ancient books digital humanities research platform (CABDHRP) which provides two novel functions that can more effectively support digital humanities research, including an automatic text annotation system (ATAS) for interpreting texts and a character social network relationship map tool (CSNRMT) for exploring characters' social network relationships. Mihram & Fletcher (2019)[10] reported on USC Digital Voltaire, a digital, multimodal critical edition of autograph letters, aims to combine the traditional scope of humanities inquiry with the affordances and methodologies of digital scholarship. Neatrour, Callaway, & Cummings[11] highlighted the utility of topic modeling in digital humanities area. In another study, Morgan[12] examined the utility of some of the most popular DH tools.

To outline how libraries may assist digital humanities (DH) research by using existing library values and strengths to provide preservation and access, as well as physical and digital places for scholars and communities, with a particular focus on cultural heritage holdings, some noteworthy contributions in this aspect are: Isuster & Greene[13] examined the websites of Canadian academic research libraries and focused on the present state of digital humanities and digital scholarship research guides and their content. Wang, *et. al.*[14] observed the methods used by digital humanists in Chinese libraries, focused on the key issues facing DH in those institutions, and attempted to offer a numerical solution plan that will aid in the growth of DH. Gibson[15] discussed the role of librarians play in supporting digital humanities research in college and university libraries and also described the potentiality of Virtual Research Environment (VRE), a multidisciplinary, collaborative DH project in order to involve librarians in participatory techniques like crowdsourcing. Lucky & Harkema[16] studied the role of research libraries to facilitate the growth of collections of digital cultural heritage and DH research. Yaroshenko & Chukanova[17] evaluated the most advanced cultural heritage digitization initiatives in Ukraine in addition to looking at various applications of the global digital humanities idea at Kansas University. Wong[18] highlighted how libraries can contribute to the digital humanities research. Zhang, Liu & Mathews[19] identified the role of LIS to assist DH scholarship, especially by creating digital library elements, such as content, technology, and services for digital humanists. Posner[20] outlined some library-based digital humanities programs. Vandegrift & Varner[21] described the effective methods libraries can use to participate in DH and the research librarian's role in resource accessibility and project development.

Efforts to use various bibliometric indicators like co-citation, co-words, bibliographic coupling, etc. to analysis the domain of digital humanities had been made in the recent past, such as Su, Zhang, & Immel[22] on examine the structure, patterns and themes of interdisciplinary collaborations in the digital humanities (DH) research through the application of social network analysis and visualization tools based on the Web of Science Core Collection. Tang, Cheng, & Chen[23] studied the degree of intellectual cohesion in DH. Leydesdorff & Salah (2010)[24] map the DH research based on A&HCI collection and Wang & Inaba[25] performed a correspondence analysis and a co-word analysis in DH.

Despite the fact that several articles have discussed the role of libraries in the digital humanities, digital humanities platform, but quantitative studies on digital humanities have got little attention. Only four studies have been carried out in the line of bibliometric study, but comprehensive bibliometric analysis, however, was not covered by any studies. Additionally, it was revealed that there had only been 7 publications published in the DH field up to 2005. In the last decade or so, DH seems to have become one of the most highly funded areas in humanities research and practice[26]. It is well known that the bibliometric analysis of the social and natural sciences has garnered greater credibility recently than comparable studies of the humanities.

All these issues served as further impetus for the present study. The literature review suggests that there is a need for a thorough bibliometric study on digital humanities; the present work aims to meet that need. As DH attracts research interests and expertise from a variety of academic fields, the outcome of the present study could be utilize by academia of several disciplines.

2. OBJECTIVES OF THE STUDY

The purpose of this paper is to analysis recent research in the field of digital humanities as reflected in the research output of Scopus database during 2006–2020.

The major objectives are:
- To determine the volume of research activity throughout the study period;
- To identify the document type wise publications pattern;
- To find out the authorship pattern;
- To recognize the most prolific researchers;
- To study the geographical distribution of publications;
- To identify the most prominent institutions;
- To reveal the trend of co-authorship amongst countries;
- To explore the diversity of research topics through analysis of co-occurrence of keywords;
- To visualize the co-citation pattern among sources.

3. METHODOLOGY

The data set was gathered and assessed in accordance with the objectives of this study.

3.1 Data Source and Retrieval Methods

To conduct this research, researchers searched the international database Scopus for articles published between 2006 and 2020. The title, abstract, or keywords were only searched for using the terms "digital humanities". As far as we are aware, 2000 documents can only be exported in Scopus at a time. We have downloaded two files refined by year, publication stage and language that contain information on bibliographic, citation, and keyword data for less than 2000 results. After that, all of these files were combined into a single file with 2643

results. Because English is the most widely used language in the Scopus database, it was decided to select articles in this language only. Comma-separated values (CSV) formatted data were imported from the corresponding database (March 17, 2021). Scopus is a source-neutral abstract and citation database began operations in November 2004. It provides access to 25,000 Science, Technology & Medical (STM) and Social science journal articles from 5000 international publishers, as well as the references in those papers[2]. Searching multiple databases is an extensive process due to the structure of search algorithms varies depending on the database. That's why the present study restricted on to only Scopus database. It is a curated database assuring thorough, complete, and accurate coverage of the serial content all over the world.

3.2 Data Analysis and Visualization

Simple frequency and descriptive statistics were used to quantitatively analyse the data. First of all, evaluative techniques like volume of research activity, document type and authorship pattern related analyses were calculated. Secondly, relational techniques such as co-authorship pattern, co-occurrence of keywords and co-citation network were detected and visualized. Data are statistically analysed and graphically presented with the aid of MS-Excel. To create and visualise bibliometric maps, Nees Jan van Eck and Ludo Waltman's VOSviewer programme was employed[27]. R software, especially Bibliometrix package was also used to determine the nature of citations, authorship pattern, country-wise productivity and co-word mapping[28].

Co-authorship analysis, also known as author collaboration, can reflect the social structure and social relationships of the scientific domain[29]. Co-word analysis reveals patterns and trends in a specific discipline by measuring the association strengths of terms representative of relevant publications produced in this area[25].

4. ANALYSIS AND DISCUSSION
4.1 Quantum of Research Productivity

It can be seen from Fig.1 that the publication pattern has been steadily increasing from 2010 to 2013, then a marked drop off in 2014; and significant increases from 2015 onwards.
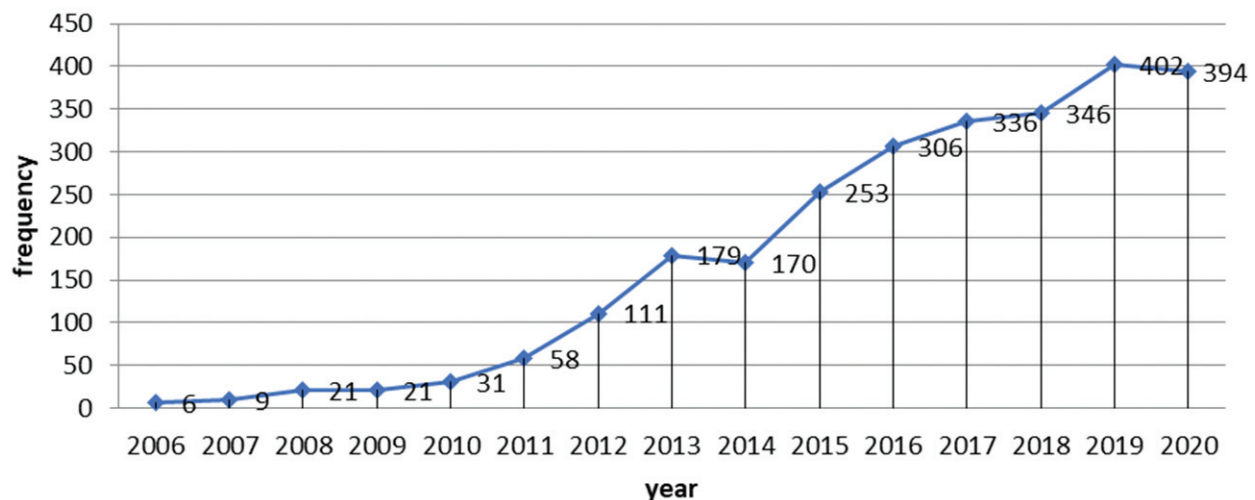
The period 2016-2020 appears to be a period of stability with a steady number of publications for each year. The annual percentage of growth rate is 34.91. The quinquennial dispersion of publications illustrates that almost 3 percent (~ 3.32) papers were published in the first quarter and about 29 percent (~29.17) were in the second quarter respectively. However, the last quarter saw a remarkable increase of publications accounting with about 67 percent (~67.49) papers.

There were fewer than 50 publications during the first five years of this period: 6 in 2006, 9 in 2007, 21 each in 2008 & 2009, 31 in 2010. The number of papers surpassed 100 for the first time in 2012 (n = 111). From 2015 to 2020, there was an increase in interest in DH, and 77% of all papers were published during this time. The year 2019 (n = 402, 15.21%) had the most publications published during the period under study.

There are two peaks: 2007 and 2014. After reaching a peak of more than 15 citations in 2007, the trend shows a sudden drop in 2008 and then continues a consistent growth upto 2013. After 2014, there has been a steady decline in the average number of citations per year (Fig. 2). The average citations per document are 4.206, calculated by means of dividing the total number of citations by the total number of papers. And the average citations per year per document are 0.6437, calculated by dividing the total number of citations received by a paper by the number of years.

4.2 Distribution by Document Types

As can be seen from the Fig. 3, in the field of digital humanities, journal articles (41.2 %) are the most popular form of publication for scholars, followed by conference papers (33.5 %), book chapters (9 %) and so on. It is reported that the majority of publications throughout the first ten years of DH research were scattered over conference proceedings (37 %). But during the second decade, journal articles (42 %) overtook conference proceedings (36 %) as the form that was most widely used[2].

4.3 Authorship Pattern

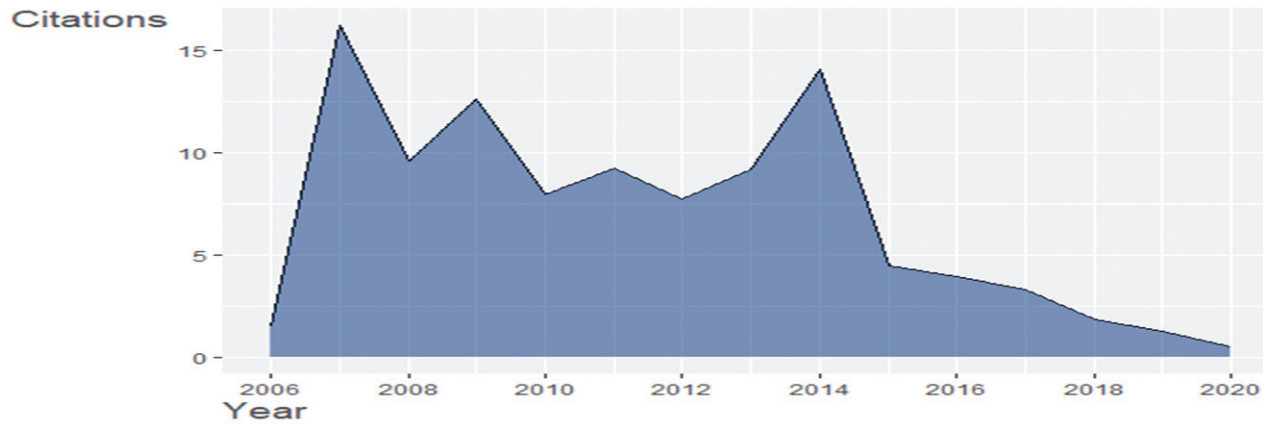The measurement of authorship patterns is one of the descriptive bibliometric indicators that can be used to determine

Figure 1. Year wise distribution profile.

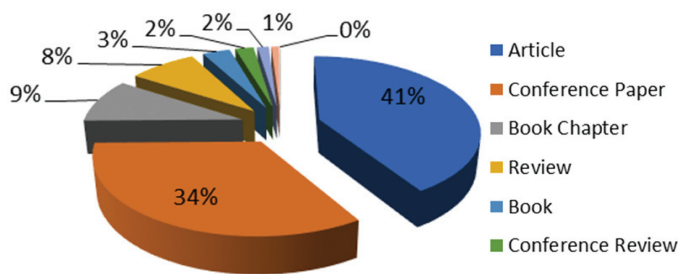**Figure 2. Average total citations per year.**

Figure 3. Document categories.

and clarify the roles that authors play in the production of research output.

Table 1 exhibits the authorship pattern in the field of digital humanities on the basis of collected data during the study. The average authors per document i.e., the ratio between the total number of authors and the total number of articles are 1.8 and the collaboration index[30] i.e., calculated as Total Authors of Multi-Authored Articles/Total Multi-Authored Articles .is 2.53 in this case. The co-authors per documents index is calculated as the average number of co-authors per article. There are about 3.2 authors per publication that has been coauthored.

Table 1. Authorship pattern

Types	Frequency
Authors	4761
Documents per author	0.556
Authors per document	1.8
Co-Authors per documents	2.43
Collaboration index	2.53

As can be seen from the analysis that research outputs with one author contributed to the most of any research output ever in terms of numbers which accounted for about 40 per cent of the total publications, distantly followed by research output with two authors (22.6 %), three authors (14.5 %), four authors (9.4 %) and five authors (5.1 %) respectively. The research output with ten authors was the least common pattern, with just 5 papers making up 0.2% of the total research output created over the course of the study. Another very interesting thing was that about 2 per cent publications had no authorship identity. This study clearly supports the idea that digital

humanities are frequently related with collaboration. Multiple authors contribute to about 58 percent (~ 57.5) of works in the field of digital humanities.

Table 2 lists the researchers who have published at least 10 papers in DH field over the period under study.

The researcher who has been most productive is E. Hyvonen, Finland who authored or co-authored 20 papers, followed by M. Terras, United Kingdom (N=16), J. Tuominen, Finland (N = 14), E. Wandl-Vogt, Austria (N = 14) and so on. As can be seen from Table 2, M. Terras(CPP = 9) become the most prolific researcher according to average citations per paper, followed by P. Leskinen of Aalto University, Austria(CPP = 7.41) and J. Tuominen(CPP = 6.78) respectively. The 'straight' procedure of counting has been applied in order to calculating the raw data. These ten authors together contributed 128 papers (with 4.84 per cent share) in the total cumulative research output with an average of 12.8 papers per author. The average citation recorded by these ten authors was 66.9 during 2006-2020.

4.4 Country Wise Productivity Scenario

The top 20 countries that are actively conducting research on the DH subject are listed in Table 3. USA has added 417 publications, followed by UK (135), Germany (80), Canada (55), Italy (54) and so on.

Single country publications (SCP) in which all authors belong to the same country and such publications represent intra-country collaboration; and multiple country publications (MCP) in which authors belong to different countries and such publications represent inter-country collaboration i.e., international collaboration[31].

There is a slight variation in ranking of the productive countries when researchers conduct analysis according to the collaboration status. Here, USA (34), UK (22), Germany (15), Italy (13) and Canada (9) took the apex position in terms of collaboration standing respectively. This extremely prolific core was predominantly made up of European nations, with fifteen of the top twenty nations in terms of productivity.

SCP and MCP are shown in Fig. 4, exclusively for the 20 nations that have made the largest contributions to global DH research productivity. The bars show how many SCP and MCP there are in total for each nation.

Table 2. Prolific researchers

Author	Affiliation	Frequency (N)	% of share	Average citations per paper (CPP)
Hyvonen, E.	Aalto University, Austria	20	0.75	5.75
Terras, M.	University of Edinburgh, United Kingdom	16	0.61	9
Tuominen, J.	Aalto University, Austria	14	0.52	6.78
Wandl-Vogt, E.	Austrian Academy of Science, Austria	14	0.52	2.21
Leskinen, P.	Aalto University, Austria	12	0.45	7.41
Koho, M.	Aalto University, Austria	11	0.41	5.09
Nyhan, J.	University College of London, United Kingdom	11	0.41	4.27
Agosti, M.	University of Podua, Italy	10	0.37	3.1
Conlan, O.	Trinity College, Ireland	10	0.37	3.9
Dorn, A.	Austrian Academy of Science, Austria	10	0.37	2.2

Table 3. Performance of countries

Country	Frequency	Share (%)	SCP	MCP	MCP_Ratio
USA	417	0.34577	383	34	0.0815
UNITED KINGDOM (UK)	135	0.11194	113	22	0.163
GERMANY	80	0.06633	65	15	0.1875
CANADA	55	0.04561	46	9	0.1636
ITALY	54	0.04478	41	13	0.2407
NETHERLANDS	46	0.03814	41	5	0.1087
SPAIN	42	0.03483	36	6	0.1429
FRANCE	39	0.03234	32	7	0.1795
CHINA	37	0.03068	37	0	0
FINLAND	24	0.0199	22	2	0.0833
AUSTRALIA	23	0.01907	21	2	0.087
IRELAND	23	0.01907	17	6	0.2609
PORTUGAL	18	0.01493	17	1	0.0556
AUSTRIA	17	0.0141	13	4	0.2353
SWEDEN	17	0.0141	13	4	0.2353
KOREA	15	0.01244	13	2	0.1333
SWITZERLAND	15	0.01244	11	4	0.2667
BELGIUM	14	0.01161	8	6	0.4286
DENMARK	10	0.00829	9	1	0.1
JAPAN	10	0.00829	9	1	0.1

4.5 Most Prominent Institutions

Table 4 shows the top ten most prominent institutions in terms of number of publications. The findings indicated that King's College, London, UK (n = 62, 2.34 %) is the most prolific institution, followed by University College London, UK (n = 42, 1.58 %), Helsingin Yliopisto, Finland (n = 40, 1.51 %), Universiteit Utrecht, Netherlands (n = 35, 1.32 %) and Vrije Universiteit Amsterdam, Netherlands (n = 32, 1.21 %) respectively.

It is noticeable that the ten most productive institutions published almost 14 % (~ 13.58) papers cumulatively. Among the most productive institutions, majority of the institutions are located in Europe.
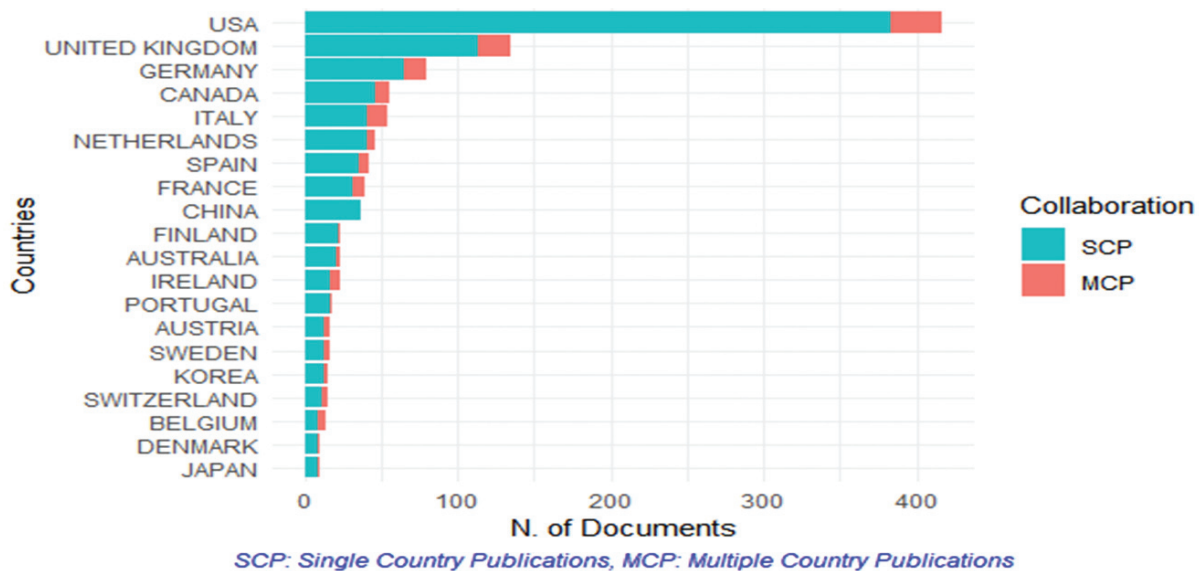
Figure 4. Most productive countries.

Table 4. Most prominent institutions

Affiliation	Frequency	% of contribution
King's College London, UK	62	2.34
University College London, UK	42	1.58
Helsingin Yliopisto, Finland	40	1.51
Universiteit Utrecht, Netherlands	35	1.32
Vrije Universiteit Amsterdam, Netherlands	32	1.21
Aalto University, Finland	31	1.17
University of Illinois Urbana-Champaign, USA	30	1.13
Universiteit van Amsterdam, Netherlands	29	1.09
Osterreichische Akademie Der Wissenschaften, Austria	29	1.09
CNRS Centre National de la Recherche Scientifique, France	29	1.09

4.6 Co-authorship Network

Co-authorship of a paper can be thought of as documenting a collaboration between two or more authors, and these collaborations form a "co-authorship network," in which the network nodes represent authors, and two authors are connected by a line if they have coauthored one or more papers[32].

4.6.1 Co-authorship Collaboration (Country)

The importance of any research for its growth is acknowledged by every country, and programmes are initiated which will make researchers more interactive with other researchers, nationally as well as internationally.

After we have set the "minimum number of documents of a country" to 10 in VOSviewer software, we obtained the countries co-authorship network. 35 out of 131 countries have met this threshold. A more detailed study of the co-authorship network shows that a number of clusters exited in terms of international collaborations. The largest cluster is the collective effort of eight countries like Germany, Netherlands, Finland, etc. The second one has six countries like Denmark, Slovania, Norway, etc. The third one has the five countries like Spain, Austria, Hungary, etc. The fourth one has the countries like France, Switzerland, Ireland, etc. The next one has possessed
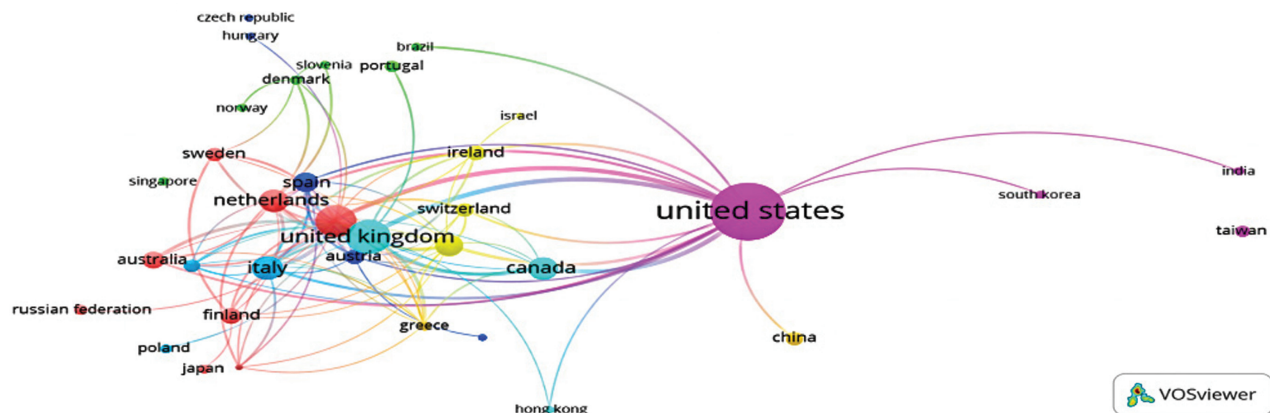

Figure 5. Co-authorship collaboration (Country).

four countries like USA, South Korea, India, etc. The next one has composed of three countries namely UK, Canada and Hong Kong. The seventh cluster is made up of Italy, Belgium and Poland. The last one is made up of two countries only, Greece and China. As observed in Fig. 5, the edge (link strength = 32) between the United States and the United Kingdom is significantly thicker than any other edges. The almost similar kind of collaborations (link strength = 26) are visible in case of relation of USA with Germany and Canada. These are all example of how closely the two nations work together and publish research together.

4.7 Diversity of Research Topics

Table 5 documents the most frequently reported subject keywords and their occurrence number. The content of a paper or research can be presented in the subject keywords assigned by authors or creators of databases.

Table 5. Distribution of keywords

Author keywords	Occurrences
Digital libraries	48
Linked data	48
Cultural heritage	47
Collaboration	46
Semantic web	45
Visualization	40
Text mining	38
Digital history	37
Metadata	37
Archives	36
Machine learning	35
Crowdsourcing	33
Digital scholarship	33
Humanities	31
Data visualization	30
History	30
Big data	29
Digitization	29
Distant reading	27
Time	24

About 20 keywords have appeared more than 25 times in the database as per analysis of author assigned keywords. The keyword 'Digital humanities' obviously occupied the top position as the present study deals with this topic. However, the keywords like digital libraries (48), linked data (48), cultural heritage (47), collaboration (46), and semantic web (45) were appeared in the literature most frequently.

4.7.1 Mapping of Keywords

The co-occurrence network created through Bibliometrix package where the distance between nodes shows the similarity of the co-occurrence profiles is shown in Fig. 6. A keyword co-occurrence network (KCN) focuses on understanding the knowledge components and knowledge structure of a scientific/technical field by examining the links between keywords in the literature[33].

The density i.e., the proportion of all potential edges between vertices in the network is 0.005. The diameter and average path length of the network are 5 and 2.313 respectively. The value of clustering coefficient or transitivity i.e., the probability that adjacent nodes of a network are connected is 0.072 in this case. The degree of centralization i.e., the number of links held by each node is 0.787 for this network.

4.8 Co-citation Network

Co-citation happens when two or more authors, documents or journals are cited by another document simultaneously[8].

4.8.1 Sources

We used the VosViewer software to show the source co-citation network, with distance between nodes indicating how similar their co-citation characteristics are. Various colours are used to classify sources that are regularly cited. The threshold of 20 items was chosen since it yielded the maximum result of modularity. Co-citation analysis for most productive journals is shown in Fig. 7.

Journals with a minimum of 100 citations were included. Total four clusters were generated. Specialized interests in digital library, scientometrics and science in general are represented by the red cluster which consists of 8 items. The sources particularly devoted to digital humanities are represented by green clusters. Yellow was used to indicate sources having a strong focus on linguistic computing and digital scholarship. Although the blue group is more difficult
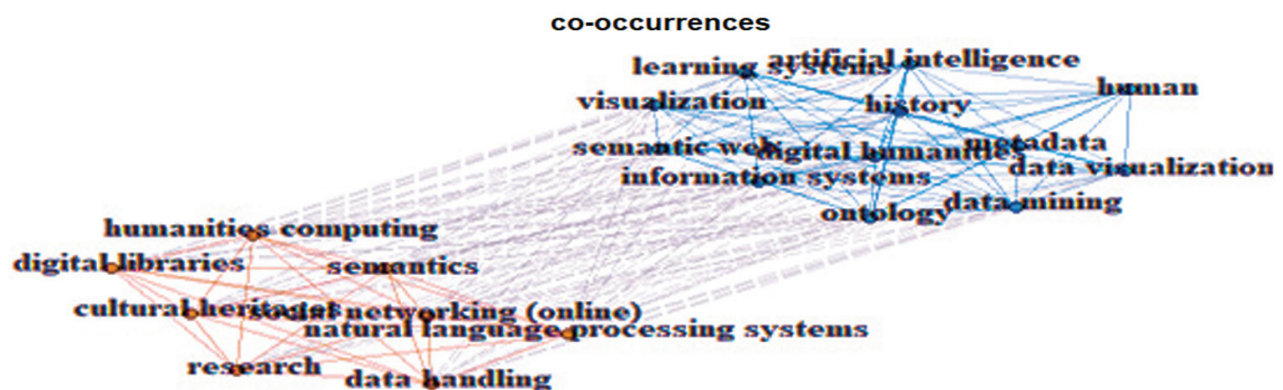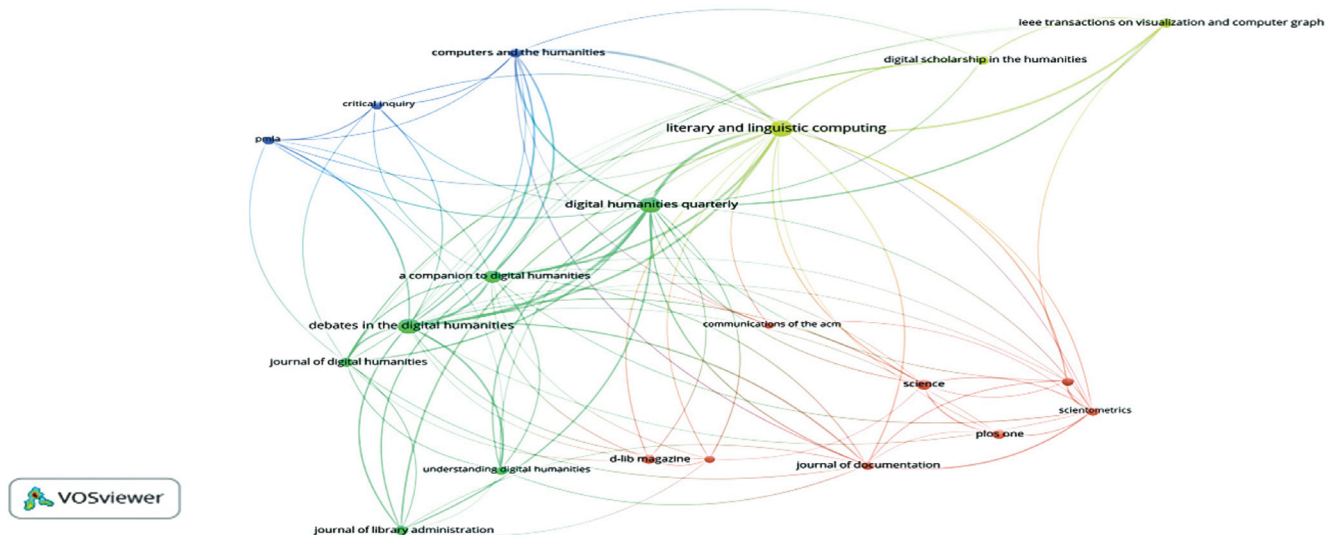

Figure 6. Mapping of keywords.

Figure 7. Co-citation network of sources.

to decipher, we may find some journals, particularly those linked to critical inquiry. These outcomes could be comparable to a previous study on digital humanities where two main co-citation clusters of journals were found, one composed of specialised journals focused on the use of computing in the humanities and the other was composed of publications in the field of library and information science that addressed the challenges of digitising archives and libraries[25].

5. FINDINGS AND CONCLUSIONS

Through examination of 2643 articles that have cited DH, the current study provided an outline of DH's intellectual growth. Literature acquired from the Scopus database was used to carry out the analysis. The results obtained showed that there was a dramatic increase in DH research outputs after first decade of 21st century. About 97 per cent outputs were produced during this period. The publication pattern has been steadily increasing from 2010 to 2013, and showed noteworthy increases from 2015 onwards. An interpretation that can be made from the above scenario is that the more and more infiltration of Information and Communication Technologies (ICTs) in every field of knowledge during this period could be the key factor. As the development of DH included literary and linguistic studies, philosophy, theology and religious studies, and history and extended its methods and applications in fields like sociology, computer science, law, art, and so on[34]. As can be seen from the findings journal articles become the most prominent form of publications for DH researchers. According to the research findings, multiple authors contribute to about 58 per cent of works in the field of digital humanities. Thus, the findings of this portion of the investigation are consistent with those of earlier studies in this field (Spiro[35]; Wong[18]) which also concluded that "collaborative authorship is more common in digital humanities" than in "traditional humanities." The findings also showed that the most prolific researcher was E. Hyvonen, Finland who authored or co-authored 20 papers and top ten researchers together contributed 4.84 per cent share in the total cumulative research output as well. Digital humanities has the worldwide trend, as seen by the vast range of geographic

dispersion in the present study. However, a small number of countries contribute a disproportionate amount to the global outputs. USA-based academics produced majority of the work, followed by UK-based academics during the period under study. Meanwhile, King's College, London and University College London were the most predominant research institutions. The findings obtained from the country's co-authorship network shows that USA and UK were the leading collaborative partner. The above results showed that there is a domination of North America and Europe based countries and academic institutions in DH research arena. The outcome is analogous to what *Wong[18]* found, who claimed that North America (primarily the United States) and Europe have taken the lead, Asia and Oceania are catching up. The structure of co-occurrence network focused into knowledge hierarchies and their temporal dynamics of DH field. The degree of centralization i.e., the number of links held by each node is 0.787 for the network under study. In the source co-citation network, it is very interesting to see that the journal 'Science' took a very prominent position. That means the facets of DH are very multidimensional in nature, which cover almost all major disciplines i.e., Arts & Humanities, Social Sciences and Science as well. The results of this investigational segment are consistent with one of the earlier studies (Leydesdorff & Salah[24]) on DH which asserted that there were two main co-citation clusters of journals, one group concerned with the use of computing in the humanities and the other addressed the challenges of digitalising archives and libraries.

Scopus was chosen as the data source for the present study; results from analyses of other databases, such as Web of Science, Google Scholar, Dimensions, etc., may differ from those of this study. It is very common that electronic databases that are regularly utilised in bibliometric studies undergo routine update. Publisher delays in releasing new material present a problem for bibliographic databases. The information for the current study was taken from Scopus on March 2021; if data were taken later in the year using the same search parameters, the number of articles could rise. The digital humanities have set the stage for a renaissance in humanities research in the twenty-first century. It could create a substantial

and metaphorical link between the past, present, and future. Therefore, there is a need for in-depth research into DH, and the academic community has to be aware of how this area of study is developing around the world. The present study landscapes the growth and development of digital humanities domain as a new mode of scholarship. Finally, it is believed that this study would serve in a better understanding of contemporary developments in digital humanities research and hopes that individuals working in the field would find it useful.

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