



IX Eurasian Academic Libraries Conference “Alive to Changes: Engage. Embrace. Ensure”
30 September - 2 October | 2020

Digital Humanities Studies in Academic Libraries

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Outline

- Libraries' Roles
- Digital Contents
- Digital Archives
- Digital Humanities
- Digital Scholarship
- Digital "Humanities"

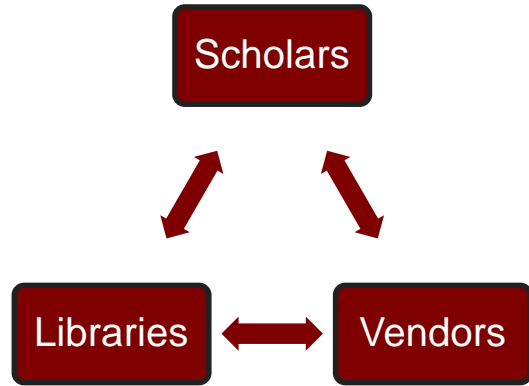
Premise of Digital Humanities (DH) Studies

- The materials on which we focused have to be digitized or born digital.
- Although it is not impossible that researchers carry out digitalization task for themselves, it costs a lot.

DH Researches is Symbiotic

- Some scholars or institutions are engaged in the establishment of databases or text collections
- Some scholars or institutions are engaged in the research and development of tools or system platforms for data mining and text analysis
- Some scholars or institutions use analytical tools to explore various possible research topics based on established databases and collections.

Cyberinfrastructure for Historical China Studies



Organizers

China Biographical Database Project

Chinese Text Project

Peking University Center for Research
on Ancient Chinese History



International Conference on Cyberinfrastructure for Historical China Studies

「中國歷史研究的網絡基礎設施」
國際研討會

March 14th --- 16th, 2018
Harvard Center, Shanghai

Content Providers

- **Second level content provider**
 - Acquire contents from the first level content providers
 - Elsevier
 - Wiley
 - Springer
 - ...
 - Provide services to access acquired collections
- **First level content provider**
 - Digitize their own contents
 - Provide services to access digitized collections

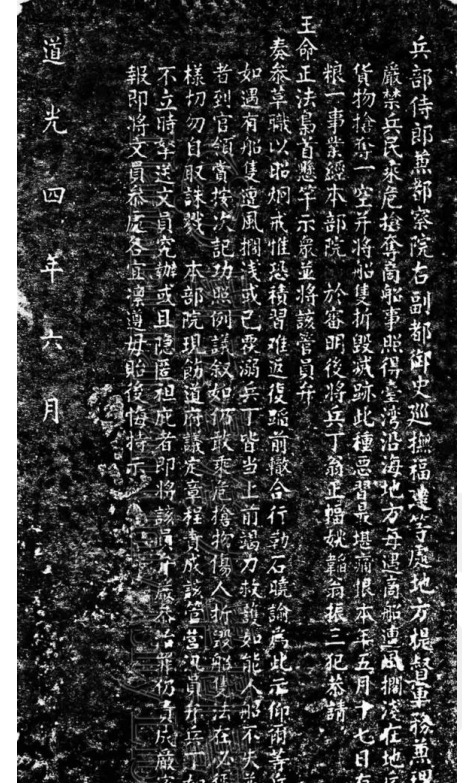
As a First Content Provider

- **Create digital archives**
 - Fulfill the premise of DH studies
- **Strategies**
 - Digitize unique collections
 - Digitize valuable collections
 - Digitize topical items selected from various sources
 - Collaborate with other institutions or private collectors
 - Preserve born digital resources

Digitize Valuable Collections

-- Second Approach

- Rubbings of Taiwan Cultural Relics
 - There are 189 items in the collection of Rubbings of Taiwan Cultural Relics.
 - Because many of the original steles have been destroyed, these remaining rubbings are invaluable for the study of Taiwan history



Stele prohibiting soldiers from robbing merchant ships / 嚴禁兵民搶奪商船碑記

Digitize Topical Items of Various Sources -- Third Approach

- Extract photos and statistics from old books published during the Japanese colonial period (1895-1945).

- Taiwanese Old Photos Collection
臺灣舊照片資料庫

- Taiwan Colonial Statistics database
日治時期統計資料庫



Collaborate with Other Sectors

-- Fourth Approach

- Taiwan Democracy Archives held by the Chilin Foundation/慈林教育基金會典藏臺灣社運史料資料庫
- KMT Party History Database/中國國民黨史料資料庫
- Taiwan Colonial Court Records Archives/日治法院檔案資料庫
- Taiwan Old Deeds/古契書

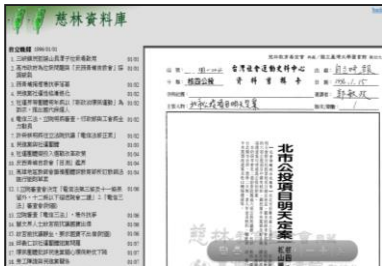
Collection Holders

Other Sectors' Collectors

Digitization Process

National Taiwan University Library

Win-Win!



Preserve Born Digital Resources

-- Fifth Approach

■ NTU Institutional Repository



臺灣大學機構典藏 NTU INSTITUTIONAL REPOSITORY

English | 正體中文 | 簡體中文 | 全文庫數/總筆數: 85120/222537 (38%)
 查詢人次: 18726649 線上人數: 404

RC Version 7.0 © Powered By DSpace, MIT. Enhanced by NTU Library IR team

搜尋範圍: 全館NTUR 搜尋 登錄

登入 · 上傳 · 說明 · 關於NTUR · 管理

瀏覽全部
 社群與類別
 姓名
 作者
 日期
 資料類型

臺灣機構典藏 NTUR > 主頁

文學院 [4177/16211]	工學院 [15929/31842]
理學院 [14072/27030]	生物資源暨農學院 [7286/22314]
社會科學院 [3548/12148]	管理學院 [5023/10541]
醫學院 [6970/37435]	公共衛生學院 [3169/7192]
醫學院附設醫院 [2286/11086]	電機資訊學院 [15552/22588]
牙醫專業學院 [558/2059]	法律學院 [1517/11090]
獸醫專業學院 [482/1933]	生命科學院 [5506/11926]
	其他校內單位 [674/2339]

統計資料 | 上傳排行 | 下載排行

近3年內發表的文件:
4317(1.94%)

含全文筆數: 85120(38.25%)

文件下載次數統計

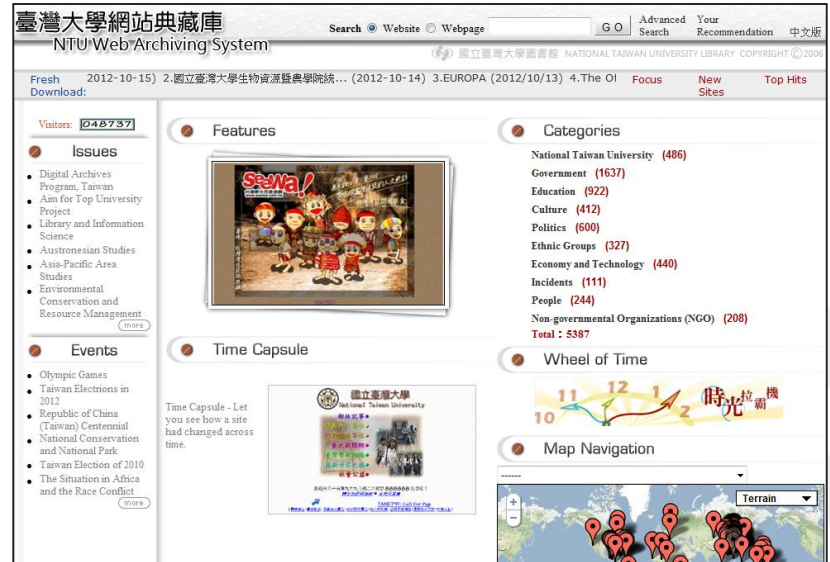
- 下載大小0次: 85103(99.98%)
- 下載大小100+次: 71008(83.42%)
- 檔案下載總次數: 41131624

最後更新時間: 2018-03-04 00:00

相關連結

- 機構典藏計畫網站
- 臺灣學術機構典藏(TAIR)
- 臺大學術庫 (NTU Academic Hub)
- ROAR
- OpenDOAR

■ NTU Web Archiving System



臺灣大學網站典藏庫 NTU Web Archiving System

Search Website Webpage G.O. Advanced Search Your Recommendation 中文版

國立臺灣大學圖書館 NATIONAL TAIWAN UNIVERSITY LIBRARY COPYRIGHT © 2005

Fresh Download: 2012-10-15 2. 國立臺灣大學生物資源暨農學院... (2012-10-14) 3. EUROPA (2012/10/13) 4. The OI Focus New Sites Top Hits

Visitors: 048737

Issues

- Digital Archives Program, Taiwan
- Aim for Top University Project
- Library and Information Science
- Austronesian Studies
- Asia-Pacific Area Studies
- Environmental Conservation and Resource Management

Events

- Olympic Games
- Taiwan Elections in 2012
- Republic of China (Taiwan) Centennial National Conservation and National Park
- Taiwan Election of 2010
- The Situation in Africa and the Race Conflict

Features

Categories

- National Taiwan University (486)
- Government (1637)
- Education (922)
- Culture (412)
- Politics (600)
- Ethnic Groups (327)
- Economy and Technology (440)
- Incidents (111)
- People (244)
- Non-governmental Organizations (NGO) (208)
- Total: 5387

Time Capsule

Wheel of Time

Map Navigation

From Digital Archives To Digital Humanities

Digital Archives vs. Digital Humanities

- Researches of Digital Humanities are NOT just based on digital contents.
- Open is important but not means free
- Available or usable
- Standard content format makes tools sharable
- Standard message format makes platforms interoperable

System Platforms and Tools

- Text-base with features for analysis
- Platforms with features for analysis
- Tools for text analysis

Taiwan History Digital Library (THDL)

台灣歷史數位圖書館

Taiwan History Digital Library (THDL)

全文資料庫

「台灣歷史數位圖書館」為集合台灣史一手史料之資料庫，提供全文檢索、詮釋資料 (metadata) 檢索等功能。本資料庫目前包含「淡新檔案」、「明清臺灣行政檔案」與「古契書」三文獻集，有全文資料逾十萬筆。 [Go>> 進入使用](#) [使用說明](#)

研究工具集

研究工具集內提供三種不同類別的工具：參考工具，將研究者常查閱的工具書數位化，便於線上查索；檢索分析工具，針對THDL內的資料，提供進階的功能及更深入的觀察；關係探勘工具，利用自動方式重建文件之間的關係。 [Go>> 進入使用](#)

引用格式

如您在研究過程中曾使用本系統，請於引用書目中列明：

台灣歷史數位圖書館 (<http://thdl.ntu.edu.tw/>)

或於文章中具引以下論文：

項潔、陳詩沛、杜協昌，〈台灣古契約文書全文資料庫的建置〉，《第三屆台灣古文書與歷史研究學術研討會論文集》（臺中：逢甲大學出版社，2009），頁243-269。[PDF下載]

研究參考工具

- [臺灣史常用中西曆日期對照查詢](#)
- [臺灣清代官職表\(文言\)](#)
- [蘇州碼轉換器](#)
- New!
[度量衡單位換算系統](#)

致謝

感謝以下單位提供古契書全文資料授權

- [宜蘭縣縣史館](#)
- [宜蘭縣羅東鎮公所](#)
- [南投縣竹山鎮公所](#)
- [國史館](#)
- [國史館臺灣文獻館](#)
- [國立臺灣大學人類學系](#)
- [彰化縣彰化市公所](#)
- [彰化縣永靖鄉公所](#)

DocuSky
Allow users to
upload their own
contents



DocuSky 數位人文學術研究平台是一個符合人文學者研究需要，進行個人化材料整理與分析的網路平台。

目前，DocuSky 數位人文學術研究平台仍持續發展中，暫時僅能處理文字性文本，並請於 **Firefox/Chrome** 上操作。

DocuSky 數位人文學術研究平台 服務與使用規範

歡迎您的使用，如有任何問題與建議，敬請聯繫
Email : docusky.contact@gmail.com 謝謝!

帳號登入

帳號申請

使用導引

請根據您手上的檔案型態，選擇使用工具：



表格類文件(.csv, .xlsx)



純文字檔(.txt)



線上資源庫



MARKUS file(.html)



DocuXML(.xml)

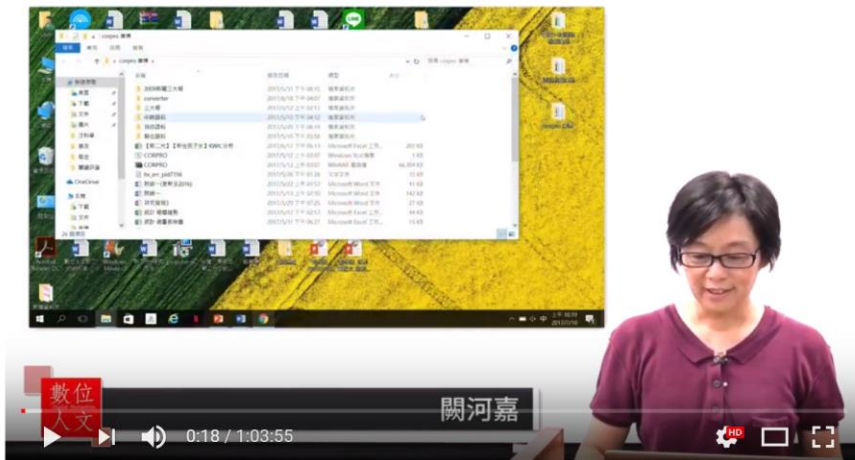
Platforms with Features for Analysis

Voyant

The screenshot displays the Voyant Tools interface for analyzing a text corpus. On the left, a word cloud highlights terms like 'hamlet', 'lord', 'king', 'polonius', and 'laertes'. The central text pane shows a scene from Hamlet: 'ACT I SCENE I. Elsinore. A platform before the ...'. On the right, a line graph plots 'Raw Frequencies' (0-80) against 'Document Segments' (1-10) for five characters: hamlet (blue), lord (green), king (magenta), horatio (purple), and claudius (yellow). Below the graph, a 'Contexts' table lists document segments with their surrounding text.

Document	Left	Term	Right
1) ACT ...	combat; in which our valiant	ha...	-- For so this side of
1) ACT ...	article design'd, His fell to	ha...	Now, sir, young Fortinbras, Of
1) ACT ...	seen to-night Unto young	ha...	; for, upon my life, This
1) ACT ...	Enter KING CLAUDIUS, QUEEN GERT...	ha...	, POLONIUS, LAERTES, VOLTIMAND...
1) ACT ...	KING CLAUDIUS Though yet of	ha...	our dear brother's death The
1) ACT ...	will! But now, my cousin	ha...	, and my son,-- HAMLET [Aside
1) ACT ...	cousin Hamlet, and my son,--	ha...	[Aside] A little more than
1) ACT ...	clouds still hang on you?	ha...	Not so, my lord; I
1) ACT ...	the sun. QUEEN GERTRUDE Good	ha...	, cast thy nighted colour off

https://upload.wikimedia.org/wikipedia/commons/a/aa/Shakespeare%27s_Hamlet_in_Voyant_Tools.png



8.庫博中文語料庫文本分析工具功能介紹

觀看次數：151



數位人文 數位人文概論國立臺灣大學圖書資訊學系
發佈日期：2017年8月31日

訂閱 (39)

類別 教育

即將播放

自動播放



7.庫博中文語料庫文本分析工具-研究取徑與介紹
數位人文概論國立臺灣大學圖書資訊學系
觀看次數：76



13.社會網絡分析工具Gephi-分群
數位人文概論國立臺灣大學圖書資訊學系
觀看次數：121



15.資料視覺化的基本原則
數位人文概論國立臺灣大學圖書資訊學系
觀看次數：61



[PyConTW 2012] NLTK: Natural Language Toolkit Introduction
TJ Wei
觀看次數：2,151



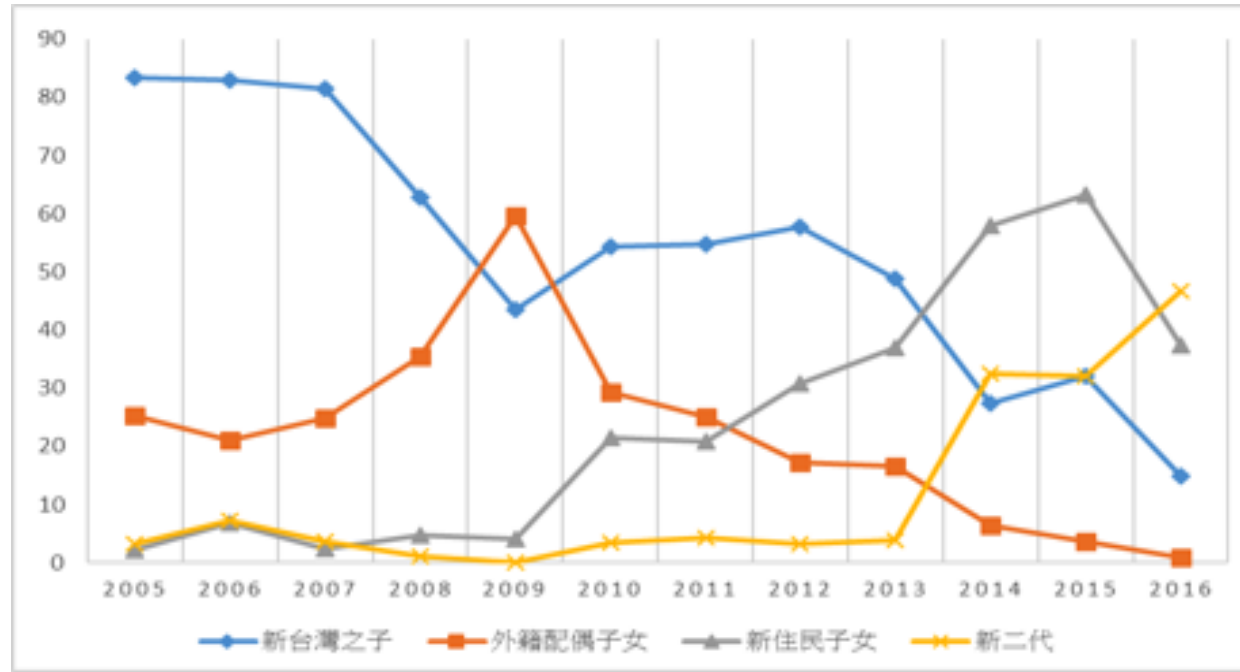
如何开发微信聊天机器人并集成深度人工智能应用【第四课】自然语言处理
Sam Gu
觀看次數：399

Current Research Patterns of DH

- Observe the trends or contexts of textual data based on frequency and temporal information
- Demonstrate the spatial contexts based on interactions of entities and Geoinfo
- Explore the structural contexts based on relationships among entities

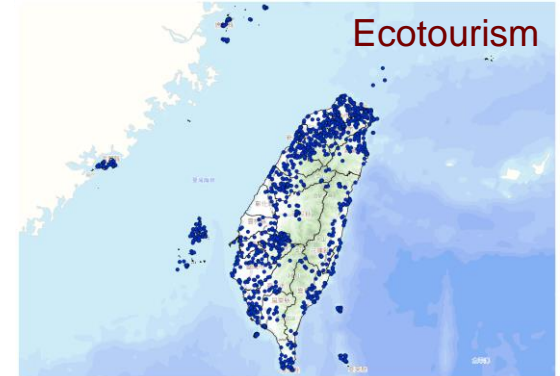
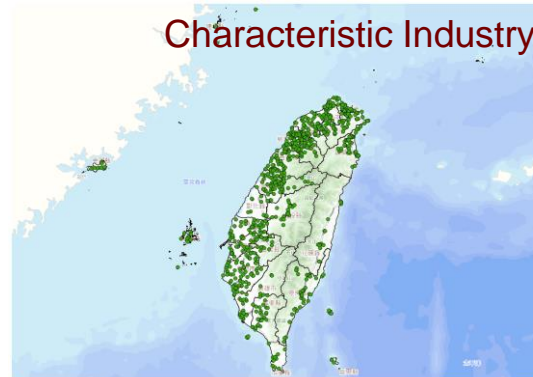
Transition of Terminology for Same Concept

The media shows much more friendly to second generation of immigrants



Purposes of Domestic Travels

Analysis for tourism records to figure out purposes of travels in different areas.

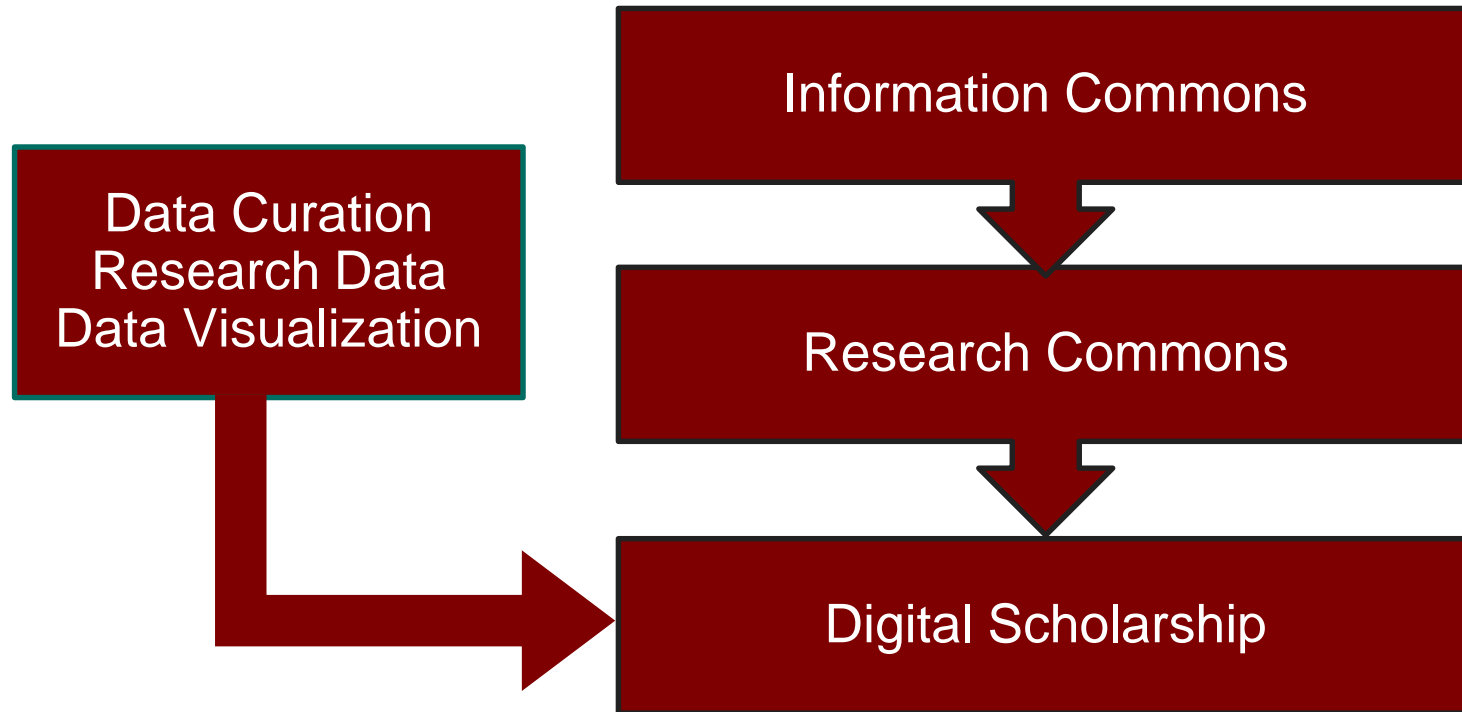


Digital Scholarship (DS)

Digital Scholarship vs. Digital Humanities

- What is Digital Scholarship?
- Digital Humanities is one part of Digital Scholarship?
- Do DH and DS have a little bit of overlap?
- Does DH equal to DS?

Evolution of Digital Scholarship



Definition of Digital Scholarship

Digital Scholarship is defined as any scholarly activity that makes extensive use of one or more of the new possibilities for teaching and research opened up by the unique affordances of digital media. These include, but are not limited to, new forms of collaboration, new forms of publication, and new methods for visualizing and analyzing data.

UW Library

<http://www.lib.washington.edu/digitalscholarship/about>

Domain Network Analysis (DNA) Service

1. Co-words Analysis
2. Bibliographic Coupling Analysis
3. Co-Authorship Analysis
4. International Cooperations Analysis
5. Knowledge Sources Analysis
6. Research Impacts Analysis
7. Research Fronts Analysis

01 Co-words

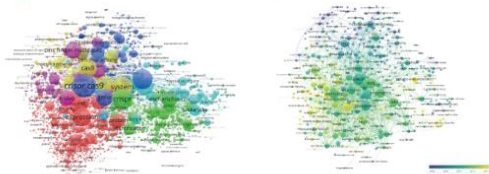
共現詞分析

兩篇文獻若使用相同的字詞，則產生共現詞關係 (co-occurrence words, 簡稱 co-words) ; 共現詞越多則主題關聯性越高!

Author Keywords / All Keywords

例 CRISPR 作者關鍵字

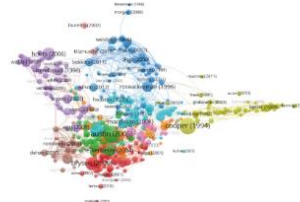
例 流預所共現詞的年代分布圖



02 Bibliographic coupling

書目耦合分析

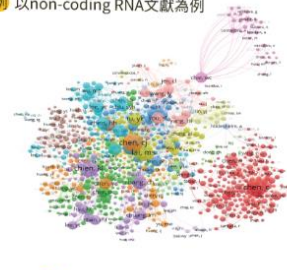
兩篇文獻若引用共同的參考文獻，則產生書目耦合關係。當兩篇文獻的相同參考文獻數量愈多時，則耦合強度愈高，主題愈相近。(於臺大網域內點選書目耦合節點，可直接連結到期刊本文)



03 Co-authorship

作者合著分析

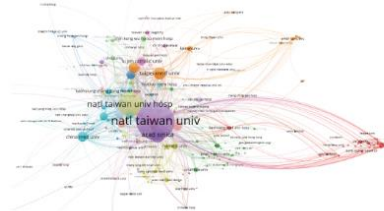
例 以 non-coding RNA 文獻為例



04 機構/國際合作分析

協助挖掘潛在合作團隊、了解競爭團隊研究走向!

例 流預所機構合作分布圖

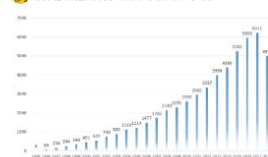


05 知識源分析

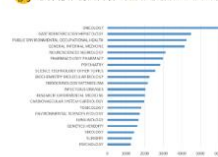
發表期刊出處—可做為參考投稿方向
引用文獻分群狀況—找到各分群最常被引用的文獻
引用作者分群狀況—找到各分群領域的學術泰斗

06 影響力分析

例 引用流預所文獻的發表年份



例 引用流預所文獻的發表領域



07 研究前沿分析

後續高被引文獻關鍵詞分群
近 2 年來引用特定文獻集，且在自身領域被高度引用的文章群，可推定為該文獻集所處領域目前最新且火熱的應用方向。

前10% Highly Cited Papers + 前0.1% Hot Papers

近1年高共頻作者關鍵字

排除高被引限制，聚焦近1-2年引用特定文獻集寫成之文章群之作者關鍵字分佈。可看出近 1 年內引用該文獻集的研究走向。

Report for Research Impacts

- Publish reports for research impacts
- Identify the stand of research institutes in the world



Research Impacts Report

國立臺灣大學學術研究力報告

地質科學系 2020 年版

Department of Geosciences
2020

National Taiwan University Library

國立臺灣大學圖書館

研究支援組

中華民國 109 年 4 月

Digital "Humanities"

- DH is not just for "Humanities"
- The texts in different genres could be analyzed using the same methodology
- Texts under Consideration
 - Historical Studies
 - Cultural Studies
 - Political Studies
 - Social Studies
 - Medical Studies
 - Physical Studies
 - ...

Identify Yourself

- Be a second-level content provider and provide friendly services to users
- Be a first-level content provider and focus on digital archives
- Be a platform provider
 - Feature basic functionalities
 - Feature advanced functionalities
 - Feature analytic functionalities
- Be a tool provider
- Be a part of ecosystem for researches of digital humanities



IX Eurasian Academic Libraries Conference “Alive to Changes: Engage. Embrace. Ensure”
30 September - 2 October | 2020

THANK YOU FOR LISTENING!

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