

科技部人文社會科學研究中心
補助科技部跨領域研究計畫之前置規劃案結案報告

【以 AI 技術分析國會議員之議題關切及情緒反應的跨國嘗試
—以台灣及韓國為對象】

規劃案編號：MOST107-2420-H-002-007-MY3-PA10907

規劃案執行期間：109 年 9 月 1 日至 109 年 11 月 30 日執行機
構及系所：國立中山大學政治所

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中 華 民 國 109 年 12 月 8 日

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中文摘要及關鍵詞

AI 技術應用在人文社會科學領域已是近年趨勢，但在台灣的應用還不是很普及，本前置規劃計畫，乃欲結合AI資訊技術與政治學領域，並以國會議員的公共發言為主要對象做跨韓國及台灣的比較探索，關注焦點則是運用AI技術探索分析議員公共發言中的議題關切及情緒反應。

本前置規劃之提出背景，有兩大項，第一是政治學文獻上，AI 應用於國會相關資料的分析，有極大拓展空間；第二是本規劃案之召集人長期耕耘於資訊技術與國會研究的結合，但仍有三大缺憾：其一，以國會資料建置的數位資料庫，缺乏較普及之應用及延續；其二，也缺乏跨國比較；其三是缺乏跨政治及資訊領域互利共生的永續性。

針對這兩大背景，乃提出「以AI技術分析國會議員之議題關切及情緒反應的跨國嘗試—以台灣及韓國為對象」此一整合型計畫的前置規劃，以俾未來能填補文獻中 AI 與政治學研究結合的一些空缺，以及實際上所經歷過去努力的不足之處，並邀集資訊學者共同召集及相關年輕學者參與子計畫之規劃。

參與者經過三個月的互動，規劃出整合計畫「Using AI Techniques to Analyze National Legislators' Issue Concerns & Sentimental Expressions – A Comparison between Taiwan & South Korea」，並邀請政治大學韓國語文學系朴炳善老師為共同召集人，各子計畫為：

1. 廖達琪(召集人)：How Do Legislators Keep Their Campaign Promises in Legislative Arenas? A Comparison between Taiwan and South Korea(2012-2024) (中山政治所)
2. 黃三益(共同召集人)：A Research on the Design of Cross-lingual Text Mining Techniques in Support of Parliament Data Analysis of Taiwan and South Korea (中山資管系)
3. 劉正山：Moral Motivation of Policy Reasoning at the Elite Level: Explorative Observation about the Legislators in Taiwan and South Korea (中山政治所)
4. 陳至潔：Jostling between threat and opportunity: the social construction of China in Taiwan and South Korean politics (2008-2020) (中山政治所)
5. 陳宗巖：Where You Stand Depends on Where You Sit? Comparing Taiwan and South Korea's Legislative Politics in Economic Policies (中山政治所)
6. 張晉赫：The Sentimental Politicians: Emotion in Issue Representation in Taiwan and South Korea (中山政治所)
7. 陳月卿：Legislative Communication Styles: Comparison between Taiwan and South Korea (台科大機械工程系 3D 列印中心)

本計畫的召集人與共同召集人 2 人皆為中山大學的教授，且跨資訊與政治兩大領域，以中山大學為執行機構，並另邀五位年輕學者，目前為止歷經3個月共 6 次的定期會議與討論，並規劃兩次立法院資訊處的訪視、到政治大學拜訪韓國學者參與提子計畫，並邀請一名韓語學者到團隊進行演講，促進彼此了解，希望達功能互補之效。此一整合計畫與子計畫，預計於2021年1月1日項科技部提出申請。

關鍵字：AI、國會議員、文字探勘、情緒分析、台灣、韓國

英文摘要及關鍵詞

The application of AI technology in the humanities and social sciences has been a trend in recent years, but the application in Taiwan is not very popular. This pre-planning plan is to combine AI information technology with the political science field, and the public speeches of members of Congress are the main focus. The subjects did comparative explorations across South Korea and Taiwan, and the focus was on using AI technology to explore and analyze issues, concerns and emotional reactions in the public speeches of members.

There are two major items in the background of this pre-plan. The first is in the political literature. AI is applied to the analysis of relevant congressional data, which has great room for expansion; the second is that the convener of this plan has been working hard on information technology and There are still three major shortcomings in the integration of Congressional research: First, the digital database built with Congressional data lacks more popular applications and continuity; second, there is also a lack of cross-border comparison; third, there is a lack of mutual benefit across political and information fields The sustainability of symbiosis.

In view of these two backgrounds, the pre-planning of an integrated project, "A multinational attempt to analyze the issues, concerns and emotional responses of members of Congress using AI technology-targeting Taiwan and South Korea", is proposed to help fill the literature in the future. There are some vacancies in the combination of AI and political science research, as well as the shortcomings of the past efforts actually experienced, and information scholars are invited to convene and related young scholars to participate in the planning of the sub-project.

After three months of interaction, the participants planned an integrated plan "Using AI Techniques to Analyze National Legislators' Issue Concerns & Sentimental Expressions – A Comparison between Taiwan & South Korea", and invited Mr. Park Bingsun from the Department of Korean Language and Literature of Chengchi University as a joint Convener, the sub-projects are:

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1. Da Chi Liao: How Do Legislators Keep Their Campaign Promises in Legislative Arenas? A Comparison between Taiwan and South Korea

2. San Yih Hwang: A Research on the Design of Cross-lingual Text Mining Techniques in Support of Parliament Data Analysis of Taiwan and South Korea
3. Cheng Shan Liu: Moral Motivation of Policy Reasoning at the Elite Level: Explorative Observation about the Legislators in Taiwan and South Korea
4. Titus C. Chen: Jostling between threat and opportunity: the social construction of China in Taiwan and South Korean politics (2008-2020)
5. Ian Tsung-yen Chen: Where You Stand Depends on Where You Sit? Comparing Taiwan and South Korea's Legislative Politics in Economic Policies
6. Jinhyeok Jang (Korean): The Sentimental Politicians: Emotion in Issue Representation in Taiwan and South Korea
7. Yueh Ching Chen: Legislative Communication Styles: Comparison between Taiwan and South Korea

The convener and co-convener of this project are both professors of Sun Yat-sen University, and cross the two major fields of information and politics, with Sun Yat-sen University as the executive body, and five young scholars have been invited. So far, it has been 3 months in total. 6 regular meetings and discussions, and planned two visits to the Information Office of the Legislative Yuan, a visit to the National Chengchi University and a Korean scholar to participate in the proposal plan, and invited a Korean scholar to the team to give a speech to promote mutual understanding and hope that the functions complement each other. The effect. This integrated project and sub-projects are expected to be applied for by the Ministry of Science and Technology on January 1, 2021.

Keywords: AI, congressmen, text exploration, sentiment analysis, Taiwan, South Korea