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ICA年度雙語論文

從獨家壟斷到競爭性多頭主導的傳播學 國際化市場結構

祝建華

摘要

「傳播學國際化」指學術論文在國際間的生產、流通及消費。在本研究中,我們聚焦於上述過程中的流通環節(基於1980到2019年間的SSCI傳播學期刊論文),同時也會部分涉及生產環節(如合作研究)。國際化是傳播學研究中日益引入關注的問題,但歷來被視為一個地緣政治或社會階級問題。我們另闢蹊徑,將傳播學研究國際化界定為一個思想商品的市場問題(其間各國為物質利益而非理念影響而競爭)。為了驗證這一觀點,我們首先考察該市場是一國壟斷還是多國壟斷,並進一步分析市場主導國之間的關係以合作還是競爭為主。

我們的分析結果顯示傳播學國際化市場的規模在最近40年間不斷擴展,使得愈來愈多的國家可以參與其間。美國仍然是最大的生產國,但它的獨霸地位不斷衰退,說明「美國化」現象已經消逝。同時,英聯邦、北歐和東亞等三個地區性社團逐漸崛起與美國分享市場,從而催生了多國壟斷結構。然而,美國與歐洲國家分屬不同社區,相互之間並具

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明顯的競爭,因此挑戰了「西方化」的真實性。我們認為競爭性多頭壟 斷結構將會在今後相當一段時間內繼續主導國際化傳播學市場。

關鍵詞:傳播學國際化、傳播學美國化、傳播學西方化、競爭性多頭 壟斷、跨國合作論文 The Market Structure of the Internationalization of Communication Research

ICA Annual Bilingual Paper

The Market Structure of the Internationalization of Communication Research: From Monopoly to Competitive Oligopoly

Jonathan Jian-Hua ZHU

Abstract

"Internationalization of communication research" refers to the production, distribution, and consumption of scholarly works across national/regional borders. We focus in the current study on the distribution phase while covering some part of the production phase (e.g., coauthorship), based on publications in SSCI-Communication journals from 1980 to 2019. Internationalization has become an increasingly popular topic in communication research but been largely conceived as a geopolitical or social class issue. We depart from the tradition by considering internationalized communication publications as a marketplace of ideas, in which nations compete for materialistic gains rather than ideological influence. To test the argument, we first examine whether the market is dominated by a single nation (i.e., monopolistic structure) or by a group of nations (oligopolistic structure) and further assess whether the market leaders collaborate (to form a cooperative oligopoly) or compete (a competitive oligopoly).

The results show that the market of internationalized communication research has continuously expanded over the last four decades, which has enabled a growing number of nations to participate in the market. The U.S. has remained the most productive nation, but its dominance has steadily declined, suggesting the fall of Americanization. Meanwhile, three clusters of nations,

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including those from the Commonwealth, North Europe, and East Asia, respectively, have emerged to share the market with the U.S., giving rise to a multinational oligopoly. However, there is a visible division and competition between the U.S. and European nations, which challenges the validity of Westernization. We conclude that the internationalized communication research is likely to remain as a competitive oligopoly for some time to come.

Keywords: internationalization of communication research, Americanization of communication research, Westernization of communication research, competitive oligopoly, international coauthorship

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「傳播學國際化」指學術論文在國際間的生產、流通及消費。¹在本研究中,我們主要聚焦於上述過程中的流通環節(即論文發表),同時也會部分涉及生產環節(如合作研究)。國際化過程涉及了從個體學者到學術機構及所屬國家等不同層面的利益持份者(Smelser, 1991),但在屬於探索性研究的本文中,我們將分析單元限定為國家層面,以求其簡便之利。

進一步而言,我們決定以《社會科學引文與索引》系統所收錄的傳播學期刊(簡稱「SSCI傳播學期刊」)中的論文為研究對象,以檢驗傳播學國際化的程度。我們承認,相對於其他期刊、會議、書籍等學術空間,SSCI是一個更精英化的研究成果渠道。同時,眾所周知SSCI傳播學期刊對於來自英文母語(Gardner, 2018)或美國研究傳統(Wiedemann & Meyen, 2016)的研究更為友善。因此,SSCI期刊並非傳播研究國際化的一個全面或代表性樣本。

然而,SSCI傳播學期刊無疑是本學科的研究議程、學術理念、研究方法、研究發現等方面最有影響力的來源。因此,我們可以把SSCI傳播學期刊視為一個便捷的起始點,從中開始了解傳播學國際化的格局及趨勢。日後的研究可以擴展到更廣泛的文獻中去,並與本研究結果做比較。

有關國際化的爭論

傳播研究國際化並非一個新話題。但在媒體全球化、社會網絡化和學術市場化(如學術成果的國際化直接影響到大學的排名,進而影響到學生的來源、資源的分配等)的今天,該話題變得日益重要。國際傳播學會(ICA)前任主席之一的Gardner (2018, p. 2)曾將ICA的國際化定義為「更好地代表非西方、非北方和非精英的學者」。如此定義的國際化,本質是一個政治地緣和/或社會階級的概念。

美國獨霸問題

我們曾在一項探索性的研究(祝建華,2002)中發現,六份SSCI大 眾傳播學期刊²從1990至2001的12年間發表的研究論文(即不包括書

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評、社論及其他補充性文章)中的89%為美國作者所寫。Lauf (2005)在分析了43份SSCI傳播學期刊從1998年到2002年間的論文之後,發現美國的獨霸地位有所下降,但仍然佔了傳播學論文的大部分(70%)。他據此批評傳播學研究根本不是一個「國際」學術界,而是一個由少數英語國家(尤其是美國)所掌控的小圈子。他甚至還發現一個反常的現象:那些號稱走國際化道路的期刊(如擁有非美國的主編、非美國的編委、或非美國的主辦機構等等),國際化作者事實上並沒有發表更多的論文。同時,Lauf也發現了一些可喜的跡象,如新辦的期刊或公開聲明其國際化取向的期刊對來自非英美國家的作者更為開放。因此,他呼籲更多的期刊走國際化道路、更多地扶助非英語國家的作者。

近年來,SSCI傳播學類顯著增加收錄了一大批新期刊。然而, SSCI傳播學期刊的擴展究竟是增強還是削弱了美國的獨霸地位,尚且 不得而知。可能存在三種局面:其一,擁有世界上最良好訓練及最豐 富資源的美國學者成為傳播學期刊擴展機會的最大獲利者,從而進一 步強化了美國獨霸的地位;其二,美國學者因其論文生產能力的提升 落後於新期刊的擴充速度而導致美國獨霸地位的消弱;其三,美國學 者的學術產能與SSCI傳播學期刊同步擴展,以致美國獨霸地位保持不 變。這三者似乎均有可能,需要通過實證研究來找到答案。

從美國化到西方化

有些學者可能會說,即使美國不再獨霸,其留下的空缺早已被其他西方國家所填補。因此,我們需要比美國化更擔心西方化 (Waisbord & Mellado, 2014)。這就涉及到什麼是「西方化」的問題了。在傳播學文獻中,西方化這一概念常被提到,但罕有清晰定義。Lauf (2005) 給定了一個明確但狹小的範圍:盎格魯一撒克遜 (即英美兩國)。我們的前期研究 (祝建華,2002) 中發現美國及英聯盟的三個核心成員 (即英國、加拿大、澳大利亞) 因其母語優勢而統領了英文主導的 SSCI 傳播學期刊。在 SSCI 傳播學期刊快速增長的今天,很有必要用最新的實證數據來驗證或更新傳播學西方化的現狀。

「金磚五國」的崛起

金磚五國(包括巴西、俄羅斯、印度、中國和南非)近來年來的發展,無疑是對現有國際政治一經濟秩序的最大挑戰之一。那麼,這一變化是否也給傳播學研究國際化帶來了類似的變化呢?我們也許能看到很多相關的跡象。如中國(香港特區)和南非分別有了一份SSCI傳播學期刊;巴西、俄羅斯和印度也更積極向SSCI傳播學期刊以及國際會議投稿。這些發展甚至導致有些學者提出了一個「中印現象」(Chindia),認為是在傳播研究中「去美國化」的途徑之一(Thussu, 2013)。上述日常觀察,是否已成規律,需要經由系統收集與分析的實證數據加以檢驗。

思想市場

綜上所述,文獻中有關傳播研究國際化的爭論,主要基於政治地緣或文化價值而進行的。在本研究中,我們旨在另闢蹊徑,通過引入以「市場」為中心的一系列概念,來豐富這個長年爭論的話題。我們從「思想市場」(marketplace of ideas) 開始。McCombs和Shaw (1993) 以及其他學者曾用這個概念將傳播學比喻為一個學者個體、研究團隊、學術機構、學術流派等等直接競爭推銷各自產品 (即著作)的市場。我們也曾做過類似的嘗試 (Peng & Zhu, 2012)。本研究中,我們打算將這個比喻進一步發展成一個可以操作化的學術概念。具體而言,我們試圖通過分析傳播學研究的「市場結構」來幫助理解有關國際化的政治性爭議背後的科學知識問題。

市場結構 (market structure) 是個經濟學概念,指單個或一批公司對某生產或流通領域的控制程度。經濟學家們通常認為市場結構是一個集中度概念,其取值在壟斷 (即單一公司控制市場的100%) 與完全競爭 (由所有公司平均分享市場份額) 之間變化 (Tabner, 2007)。當然,這兩種極端情況在現實生活中都很罕見。更常見的是部分壟斷與部分競爭之間的混合體。其中之一是所謂的「多頭壟斷」(oligopoly),即由幾個(而非單一) 公司控制市場的絕大部分 (如80%或更多) 份額。另一種結構為競爭性壟斷 (competitive monopoly),即由更多一些公司分享類似程度的市場份額。

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當我們把市場結構概念用來分析思想市場(如傳播學研究及論文發表)時,有必要對上述測量指標體系做些調整。具體而言,我們覺得需要把「競爭」看作與集中度相交的一個獨立概念。事實上,在經濟學的相關文獻中,有些學者是將多頭壟斷進一步分為「競爭性多頭」和「合作性多頭」兩種形式的。前者指多頭之間以競爭對抗為主而後者則以合作(如聯手定價)為主。學術國際化市場的結果也許相似,既有合作也有競爭。因此,我們可以用一個兩維空間(壟斷或分散、競爭或合作)來描述和理解傳播學研究的市場結構(表一)。

表一 學術市場結構的兩維框架

競爭程度	集中程度			
規 尹程及	低	高		
低	合作性多頭壟斷	單頭壟斷		
高	完全競爭	競爭性多頭壟斷		

簡言之,我們將傳播學研究看作是一個思想市場,旨在強調所謂國際化的終極本質:國際化不僅僅是一個符合象徵問題(如霸權或強勢),而是對有關國家、機構、個人均有直接物質利益的問題。因此,國際化本質上必然是個競爭的過程。即,沒有任何國家、機構或個人會因為文化或意識觀念認同而輕易地放棄其在這個思想市場上所佔的份額(如互相競爭的西方國家之間為了維持「西方化」而團結合謀)。當然,有時為了贏取競爭也會合作。所以,合作與競爭之間的界限不是一成不變,也許更像一個隨時而變的動態遊戲。

研究問題

基於表一中的兩維框架,本研究將圍繞以下研究問題而展開:

- 1 市場規模:傳播學國際化市場規模的增長是否足夠迅速以致 於即使不是所有、也是大批國家能夠參與發表?
- 2 市場集中:美國是否繼續在傳播學國際化市場上維持著壟斷 地位?如果不是,哪個或哪些國家崛起而與美國分享著多頭 壟斷地位?傳播學國際化市場是否仍然為西方國家所主導?

3 市場競爭:傳播學國際化市場中國家間的競爭是變得日益激烈 還是日益緩和?哪些國家之間相互合作、哪些之間相互競爭?

研究方法

數據收集

我們從 Web of Science 系統下屬的兩個數據庫中獲取數據。其一是 SSCI庫中傳播學期刊論文的發表記錄(以下簡稱「SSCI論文數據」)、其 二是 Journal Citation Reports 中 SSCI傳播學期刊的排名記錄(以下簡稱「JCR期刊數據」)。 SSCI數據提供了本研究的主要信息,而 JCR 數據則 使得我們能夠將傳播學與社會科學的其他學科作比較。

I. SSCI 論文數據

它提供了SSCI傳播學期刊在1970-2019年間所有研究論文的文獻學信息(如發表年份、作者及其所屬機構、摘要、引用數等)。由於1970年代的論文數量少,而且記錄不全,我們只保留了1980年以後的數據。此外,為了與其他相關研究作比較,本研究剔除了書評、社論、評論以及其他補充性文件,僅涉及研究性論文。

II. JCR期刊論文

它提供了58個基於SSCI定義的社會科學「學科」內所有期刊的文獻學信息(如影響因子、學科內排名等)。從本質上說,SSCI與JCR是同源數據,但是JCR的時間跨度更短,目前只涵蓋1997-2018年。因此,我們在下文中使用了兩個不同的時間窗口;1980-2019年描述論文情況、1997-2018年描述期刊。

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變量

I. 分析單元

如前所述,本研究的分析單元為國家或地區。因此,所有下文涉及的期刊層面、作者層面和論文層面的變量,都被匯總成國家層面的 數據,如「所屬國家」、「全國論文產量」、「國際合作率」等。

II. 所屬國家

我們根據每篇論文中作者單位的地址來確定該論文的國別。因此,本文中的國家只是一個居住地理概念,與作者的國籍、種族或其他身份標識無關。如任一作者提供了多個單位地址,我們用下述的按比計算 (prorated calculation) 方法將論文歸屬國分配到所有相關國家 (詳見附錄一)。

III. 按比計算的合作論文數

假定一個國家有10個作者,每人在某年單獨發表了一篇論文,那 麼該國家該年度的論文總數為10,很容易計算。然而SSCI傳播學期刊 的論文經常涉及多位合作者;而且這些合作者往往來自不同國家,使 得如何計算跨國合作論文中每個國家的論文數,不再是一個簡單的問 題,其結果又直接影響到本研究對國際化程度的評估質量。如何計算 合作者在相關文獻中主要有三種計算方法:最為常見的是只計第一作 者(「首作」); 其次是所有作者人人有份、各計一次,也較常用(如 Web of Science 本身就是如此統計各國論文的分佈情況);第三是按論文作者 的比例而計(prorated)。只計首作的方法簡單易做,但有偏差,在國際 化合作論文的場景中往往由留學生的導師或跨國團隊的主持人擔任首 作,從而過高估計他們國家的論文數。人人有份的方法也容易操作, 但誇大了國際合作的實際論文數而存在更大的偏差。按比計算的方法 技術上較為複雜,但對單獨作者和合作作者的論文一視同仁而合理地 計算了每個作者及其國家的實際貢獻,所以是三種方法中偏差最小的 (Uzun, 2004)。因此,我們在本研究中採用了這一按比計算的方法(詳 見附錄一)。

IV. 市場份額

市場份額指當事國在SSCI傳播學期刊中發表論文的佔比(%)(參 見附錄一)。

V. 市場結構

如果少數論文大國的市場佔比合計超過80%,該市場即被認為存在高度集中化結構。具體的集中化結構又可以按論文大國的個數(記為 k值)而分為以下四種類型:

表二 市場結構類型

k 值	市場結構	
k = 1	獨家壟斷 (Monopoly)	
$1 \le k \le 5$	強多頭壟斷 (Strong Oligopoly)	
$6 \le k \le 10$	中度多頭壟斷 (Moderate Oligopoly)	
$11 \le k \le 15$	弱多頭壟斷 (Weak Oligopoly)	

VI. 國際合作

我們以兩個國家i和j之間的合作論文數(按比計算)來定義該兩國之間的合作度(記為 IC_{ij}),並在此基礎上衍生了一系列的變量,以更準確地估計國際合作的實際情況,其中包括國際合作率(ICR_{ij})、國際加權合作率($WICR_{ii}$)、國際平均合作率($MICR_{ii}$)等,詳見附錄一。

VII. 合作性或競爭性多頭結構 (Cooperative or Competitive Oligopoly)

如果多頭壟斷國之內的任兩家*i*和*j*之間的*WICR_{ij}*大於所有合作國之間的*MICR*,我們就認為該兩國之間存在合作關係;反之,它們之間是競爭關係。以此推論,如果大多數(半數以上)的多頭壟斷國家之間為合作關係、那麼傳播學研究的國際市場是一個合作性的多頭壟斷結構;反之,則是一個競爭性的多頭壟斷結構。

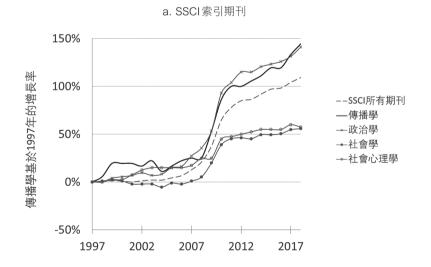
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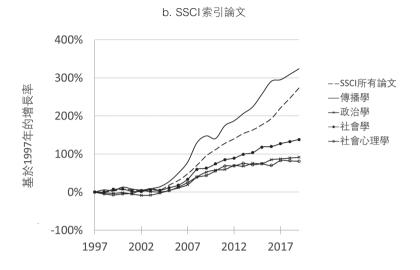
研究結果

不斷擴展的市場規模

傳播學國際化市場最突出的一個特徵無疑是 SSCI 傳播學期刊的快速擴展。該市場規模可以用兩個指標來測量:一是 SSCI 傳播學期刊的份數、二是上述期刊中發表的論文數量。這兩個指標自然相關,但是它們在傳播學科中並非呈現綫性關係。 SSCI 傳播學期刊從 1997 年的36份增加到 2018 年的88份,³ 即這 21 年間的總增長率為 144% (年均增長率為 4.3%)。而同一時期的論文數量從 1997 年的 972 篇增加到 2018 年的4,003 篇,即總增長率為 324% (年均增長率為 7.0%)。兩個原因導致了期刊增長率與論文增長率之間的差別:第一,有些期刊在上述年間增加了出版頻率 (如從每年四次的季刊改為每年六次的雙月刊);第二,新期刊發表的論文數量平均而言高於舊期刊。

圖一 SSCI期刊數與論文數的增長率





資料來源:基於JCR 1997-2018,增長率定義見附錄一

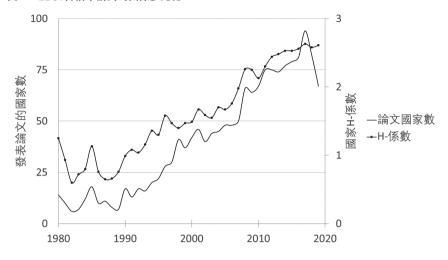
比較一下傳播學與社會科學其他學科之間的 SSCI 期刊和論文的增長率,有助於我們解讀上述結果。如圖一a所示,傳播學期刊的增長率 (144%) 高於社會科學其他50個學科的平均增長率 (104%)。 4傳播學期刊的增長率也超過通常用作比較對象的「三大相鄰學科」,如社會學 (55%)、政治學 (132%) 和社會心理學 (60%)。

SSCI傳播學期刊發表的論文數量也多於社會科學其他科學的期刊。如圖一b所示,傳播學期刊的論文數增長率(324%)顯著高於社會科學其他50個學科的平均增長率(274%),其中包括社會學(138%)、政治學(92%)、社會心理學(81%)等三大相鄰學科。

總之,我們認為已有足夠的證據來認定傳播學是整個社會科學中 增長最快的學科之一。在此大發展的環境之下,傳播學研究的國際化 似乎是一個「人人皆贏」的遊戲,其中即使不是所有、也有絕大多數的 國家都獲得了不斷擴大的參與機會。圖二正好證明了這個事實。

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註:論文國家數為SSCI傳播學期刊上發表論文的國家個數;H-係數的定義見附錄一

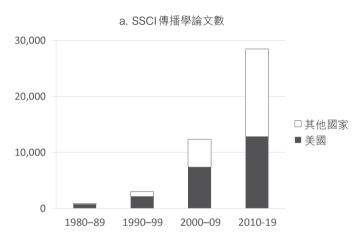
圖二顯示了參與SSCI傳播學期刊發表的國家數在最近的40年間逐年遞增。即從1980年代的每年平均10個國家,增加到1990年代的30個、2000年代的50個、2010年代的80個(其中以2017年為頂峰,共有94個國家)。在1980到2019年間,累計共有129個國家曾在SSCI傳播學期刊上發表過論文。如果把這些國家在第一個10年(1980年代)發表的論文數與最後一個10年(2010年代)的論文數做比較,那麼117個國家(即91%)是有增長的,八個國家沒有變化,四個國家略有下降(詳見附件一)。5當然,129個國家只佔全世界國家總數的一半左右,但是傳播學研究國際化在這些年間的走向及步伐確是顯而易見的。

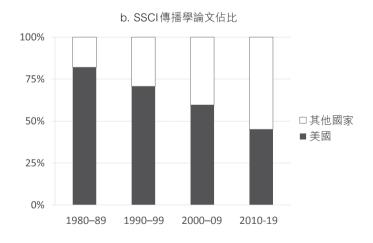
我們還可以用 Shannon-Weaver (1949) 的熵指數 (也常稱 H-係數) 來描述傳播學研究的國際多元化 (參見附錄一)。對本研究而言,H-係數一方面統計了有多少國家參與發表,另一方面又考慮了這些國家之間的論文數量是否均匀分佈。因此,H-係數與國家數量之間並不一定相關。然而,這兩者在本研究中的趨勢倒還是高度相似,即參與國數量在不斷增加、各國論文數量之間的分佈也日益平均 (見圖二)。總之,上述兩個指標 (參與國的絕對數與多元化的 H-統計量) 相互印證了過去40年間傳播學研究中發生的國際多元化趨勢。

美國壟斷地位的終結

上述結果有可能高估或低估了常被前人發現和批評的美國壟斷格局(如Lauf, 2005)。有鑒於此,我們用兩種方法來比較美國與世界其他國家在SSCI傳播學期刊上的佔比(圖三)。這兩種比較基於同樣的數據,但揭示了不同(甚至相反)的情形。因此,有必要將兩者同時展現在同一圖表中(圖三)。圖三a重複了前面提到的「人人皆贏」的故事,即美國和其他國家都從SSCI傳播學期刊急劇及持續的擴展中受益,然而美國據此而維持了其在學科中的龍頭老大地位。

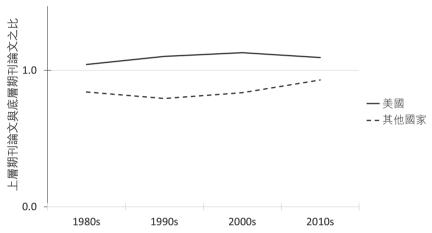
圖三 SSCI傳播學期刊中的美國壟斷地位之變化





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然而,圖三b講了一個很不同的故事。圖三b將原始數據轉換成了100%的相對數,從而顯示了美國的壟斷地位已經消逝,即其佔有的市場份額從1980年代的82%,先後下降到1990年代的71%、2000年代的60%、2010年代的45%,最低為2018年的43%。如前所述,我們基於經濟學的慣例(Tabner, 2007),以一國的市場佔比超過80%為壟斷結構的標誌。據此可見1980年代的傳播學研究市場確為美國所壟斷,但這種結構自1990年代以來已經被打破。自那以來,美國雖然還是SSCI傳播學期刊上的最大發表國,但其主導地位卻在逐年減弱。



圖四 SSCI傳播學期刊的上層與底層之比例

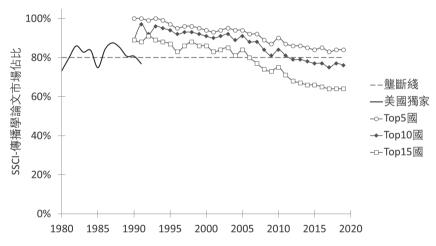
註:上下層期刊之比的定義見附錄一

圖三比較的是美國與其他國家在SSCI傳播學論文整體市場上的佔比,而圖四則將整體市場劃分成「上層」(即Q1和Q2期刊)與「底層」(Q3和Q4期刊)(參見附錄一),以比較美國與其他國家所發表的論文在質量上的區別。如圖四所示,美國作者的上下層之比(圖中的實綫)一直高於1.0,即美國的上層期刊論文數總是多於同期底層期刊論文數。相反,其他國家的作者的上下層之比(圖中的虛綫)一直低於1.0,即他們的上層期刊論文均少於同期底層期刊論文數。這些發現提醒我們,美國強勢問題的多面複雜性——儘管其在整體市場上的佔比逐年下降,它在高端市場上還是非常強大。

多頭壟斷格局的興起

美國壟斷終結之後的SSCI傳播學論文是何種市場結構?是否被西方諸國的壟斷所代替(Waisbord & Mellado, 2014)?我們的數據顯示,美國獨家壟斷確實被多國壟斷所取代。然而,多頭壟斷的強度也在不斷變化。如圖五所示,SSCI傳播學論文市場從1991年(即美國失去80%的壟斷份額之時)到2006年之間是一個強度多頭壟斷(即由五個國家分享80%的市場份額),轉為2007-2012年間的中度多頭壟斷(改由10個國家合佔市場的80%),最後變成2013-2019年間的弱度多頭壟斷(分攤到由15個國家合佔80%)。由此可見,SSCI傳播學論文市場至今仍為少數國家所壟斷,然而壟斷集團成員數量的持續擴大清楚地揭示了這個學科集中程度的不斷減弱和多元程度的不斷增強。

圖五 多頭壟斷的演化



註: Top 5國、Top 10國和Top 15國的成員見表三

哪些國家構成了多頭壟斷集團?如表三所示,最近30年間的多頭壟斷「精英俱樂部」先後有過20個成員先後出現在「Top 15國」的名單中。強多頭時代的五個成員一直是美國、英國、澳大利亞、荷蘭和加拿大等西方國家(表三第一列)。但其後不再是西方獨佔了。中度多頭時代的10個成員,除了上述五國之外,還加上了西方的德國和西班牙以及亞洲的以色列、香港和韓國(表三第二列)。同樣,弱多頭時代的

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表三 多國壟斷集團成員

年份	前5名	前6-10名	前11-15名
1990–1999	美國、英國、加拿大、	德國、哥倫比亞、	新西蘭、比利時、
	澳大利亞、荷蘭	以色列、香港、日本	愛爾蘭、瑞典、韓國
2000–2009	美國、英國、澳大利亞、	德國、西班牙、以色列、	比利時、新西蘭、芬蘭、
	荷蘭、加拿大	香港、韓國	台灣、瑞典
2010–2019	美國、英國、澳大利亞、	德國、西班牙、韓國、	以色列、中國、香港、
	荷蘭、加拿大	瑞典、比利時	丹麥、芬蘭

15國中,除了上述10國外,還包括了北歐的瑞典、比利時、丹麥、芬蘭和亞洲的中國。

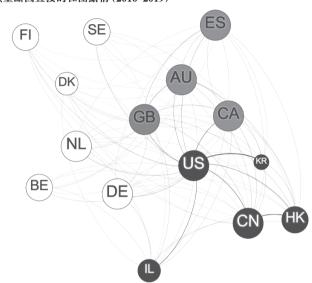
簡言之,我們可以把五國合成的強多頭壟斷看成是由西方化接替了美國化的市場結構,但是10國中度多頭壟斷和15國弱多頭壟斷均不再是西方獨佔,而是西方為主、亞洲為輔的混合市場了。由此可見,如本研究所示,傳播學研究西方化之假設,曾經發生過,但現已不復存在。

多國壟斷內部的競爭

在對傳播學研究的美國化或西方化的種種擔憂背後,存在著一個未曾公開討論過的假定,即佔據壟斷地位的西方國家之間合作無間,從而導致了整個學科的同聲共氣。這些擔憂事實上是可以被實證檢驗的。如前所述,我們構建了一組國際合作(IC)指標(附錄一),可以用來測量多頭壟斷國之間的合作一競爭程度。鑒於多頭壟斷集團的成員數量不斷擴大,我們這裡僅用最近10年間佔據市場份額最大的15個國家/地區之間的合作率數據來檢驗上述假定。

基於國際合作率數據,我們在多頭壟斷結構中發現了三個內部緊密合作的群體(即網絡分析中的communities或「社團」)。就SSCI傳播學論文而言,每個社團的各個國家之間相互合作發表論文的概率過於其與在Top 15國中的其他社團國家的合作概率。如圖六所示,這三個社團之間似乎以地域、歷史或學術淵源為區分邊界。其中一個社團由美國與亞洲四國/地區(以色列、韓國、中國和香港)所組成,我們稱

之為「泛太平洋社團」(當然,以色列並非為太平洋國家),他們之間的合作大體上是以美國導師及其亞裔留學生為基礎(如美國導師與中韓學生之間的合作)。英國、澳大利亞、加拿大和西班牙構成了一個「英聯邦社團」(當然西班牙並非英聯邦成員)。最後,荷蘭、德國、瑞典、比利時、丹麥和芬蘭組成了一個高度同質的「北歐社團」。



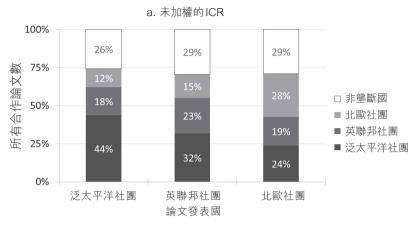
圖六 多頭壟斷國直接的社團結構(2010-2019)

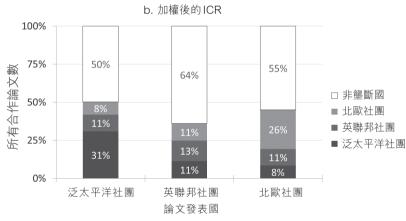
註:黑色代表泛太平洋社團;灰色代表英聯邦社團;白色代表北歐社團。各國的圓圈大小反映了各自在2010年代的合作國數量多少,而連綫粗細則代表了每兩國家之間的合作次數(參見附錄一)

多頭壟斷集團內部存在著三個相對獨立社團的這一事實,說明了多頭壟斷內部並非鐵板一塊,而僅是一種鬆散的結構。當然,圖六僅為初步證據。圖七顯示的是各國的合作夥伴分佈情況,從而進一步展顯了多頭壟斷集團內外的具體合作關係。圖七a顯示的是三個社團各自國際合作率的原始值。其中,泛太平洋社團共計有31%的論文是與其他社團國家合作的(與英聯邦社團或北歐社團的合作率分別為18%或12%)。而英聯邦社團與其他社團國家的合作率總計為47%、北歐社團與其他社團國家的合作率總計為47%、北歐社團與其他社團國家的合作率總計為45%。也就是說,三個社團之間的合作率都不到總數的一半。

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圖七 Top 15國內部及對外的合作率





註:未加權和加權後的ICR的定義分別在附錄一

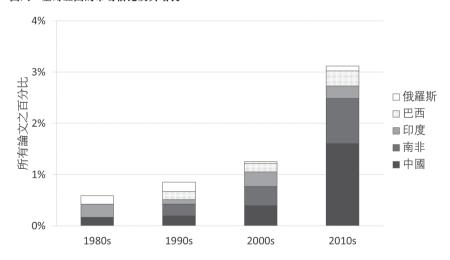
如前所述,國際合作率的原始值高估了論文大國(即Top 15國)的國際合作程度、低估了論文小國的國際合作程度。也就是說,圖七a所顯示的存有偏差。因此,我們應該根據各國的論文總數而對其國際合作率進行加權(附錄一)。圖七b就是圖七a的加權結果。如圖七b所顯示,多頭壟斷集團中的三個社團之間的合作程度更低(只在19-23%之間)。我們據此而推斷,多頭壟斷社團之間的關係以競爭為主、合作為輔。事實上,所有三個社團之間的合作率,都低於各自與非壟斷國之間的合作率。

以上分析以社團而非國家為單元。為了防止整合過程中可能造成的假象,我們一一檢查了Top 15 國家/地區各自的國際合作率。無論以合作率的原始值還是加權值為例,除了一個例外,⁷所有國家與Top 15 國家之間的合作率均低於與非壟斷國之間的合作率。尤其是美國與英國之間,儘管長久存在於歷史、政治和文化等方面的連接,兩國之間的合作率並不高。⁸ 由此我們更有依據地說,雖然 SSCI 傳播學論文市場仍為少數國家 (N = 15 個) 所主導,該多頭壟斷的市場並非是一個同聲共氣的結構,而是競爭多於合作的結構。

金磚五國崛起了嗎?

如圖八所示,金磚五國在SSCI傳播學論文市場上開始引人關注, 其市場佔比從1980年代的0.6%逐漸上升的1990年代的0.9%、2000年 代的1.2%和2010年代的3.1%。五國之中,中國最為活躍,不僅市場佔 比最高(2010年代為1.6%),而且增長率最快。南非緊隨其後,其增長 率雖然略低,但也很快速(2010年代的市場佔比為0.9%)。印度、巴西 和俄羅斯三國則明顯地落後一截。

圖八 金磚五國的市場佔比及其增長



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以質量而言,金磚五國的上層期刊論文數一直遠遠少於其底層期刊論文數。其上下層之比平均為0.55(即發表每一篇上層論文就相應地發表三篇底層論文)。該比例在五國之中最低的是南非(0.36,即每一篇上層論文相對應三篇底層論文)、最高的是印度和巴西(分別為0.99和0.96,即上下層論文數量幾乎相等)。金磚五國上下層之比的均值(0.55)不僅遠遠低於Top 15國(1.03),也明顯低於其他110個國家(0.88)。

最後,金磚五國並非一個緊密合作的社團。五國之間的平均合作率(均值為0.008、中位數為0.018),低於同期其他所有國家之間的平均合作率(均值為0.012、中位數為0.072)。當然,金磚五國之間也有個別密切合作的對子。如巴西與俄羅斯的合作率高於全球均值的三倍,而中國與印度的合作率也在全球均值之上。總之,金磚五國至今還是一個鬆散的標籤,而非一個有效的傳播學研究聯盟。儘管五國近年來已經成功進駐SSCI傳播學市場,其還有待十年甚至更長時間而崛起成為一個主角。

結論

我們在本研究中,為傳播學國際化引入了思想市場的概念、設計和定制了一系列相關的測量指標,並收集了SSCI傳播學期刊1980-2019年間45,000多篇研究型論文,以及其他社會科學學科的對比數據。經分析後的數據顯示了傳播學研究國際化的一系列趨勢和形態,其中既有意料之中的發現,也有預計之外的驚喜。首先,傳播學研究的論文市場,在過去40年間都經歷了持續不斷的擴張。無論是期刊數還是論文數,傳播學的發展規模都明顯大於50多個社會科學學科的平均水平,也超過社會學、政治學和社會心理學等三大相鄰學科。幾乎所有參與發表SSCI傳播學論文的國家/地區都從這個市場的擴展中獲利。因此,傳播學研究國際化在數量上可謂是一場人人皆贏的游戲。

在過去的40年間,傳播學研究不但市場規模持續擴大,而且市場結構不斷變化。1980年代,美國獨佔市場的80%以上而獨霸壟斷地位。在隨後的30年間,美國的獨霸地位為多國壟斷所取代。1990年代由美英澳加荷的五個西方國家分享80%以上的市場份額而組成了一個

強多頭壟斷。在2000年代,五國強多頭改為10國中度多頭,其中既有 西方國家也有亞洲國家/地區。到了當下的2010年代,多頭壟斷又進 一步弱化為15國分享的格局。雖然這個多頭壟斷市場仍由西方國家為 主、亞洲國家/地區為輔,傳播學研究國際化的市場不斷開放和多元化 則已是不爭之趨勢。

基於多頭壟斷國(即Top 15國)之間、以及壟斷國與非壟斷國之間的合作率數據,我們發現傳播學論文市場以競爭為主、合作為輔,國際合作網也具有相高的開放性。總之,傳播學論文市場持續不斷地國際化、去集中化、以及西方與非西方國家之間的合作程度日益加強。

討論

基於現有文獻中匱乏研究傳播學市場結構的先例,我們有意將本研究定位為一項具有下述特徵的探索性研究:第一、方法導向(以創建相關可操作性指標)而非理論導向;第二、描述性而非解釋性(如通過時間序列分析來檢驗哪些因素導致美國壟斷地位的衰落及競爭性多頭壟斷的興起);第三、國家層面而非學者個體層面的分析。

為了便於回應傳播學研究國際化辯論中的一些普遍疑惑,我們作出了上述決定。比如,作者本人曾在2019年國際傳播學會(ICA)年會期間受邀參與了一場政治傳播國際化的專題論壇。由於該題目的流行度,那場論壇吸引了很多聽眾。在場的七位討論者中有四位是若干SSCI傳播學核心期刊(如Journal of Communication、Public Opinion Quarterly和International Journal of Communication)的前任或現任主編。這現象似乎驗證了本文開始時提到的一個觀點:SSCI傳播學期刊論文是本學科國際化過程中的最核心問題。然而,那場論壇的討論者之間以及與聽眾的互動之間充分展現出大家嚴重高估了這個學科的美國化或西方化,從而形成了一系列的不準或不實觀念。為此,我們有意將本研究的首要任務定義為收集和分析SSCI傳播學期刊上各國佔比的準確、完整和最新的描述性數據。

有鑒於國家層面的數據最為易分析和理解,我們將國家作為本研究的分析單元。當然,正如其他整體單元分析一樣,我們的國家層面

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分析也有可能包含著常見的「生態謬誤」(Robinson, 1950)。如,本研究中統計的國家之間的合作率實際上是由學者個體之間完成的。所以,我們有必要從個體層面上去考察國際合作率,比如導師與留學生之間的合作、提供經費的作者與提供數據的作者之間的合作、訪問作者與接待機構作者之間的合作等等。各種不同類型的合作也許包含了不同的知識創造機制以及不同的權力關係組合。因此,個體作者層面及機構層面的分析不僅可以驗證我們在國家層面得到的發現,也能夠為傳播學研究國際化的生產與消費帶來新的洞察。

最後,本研究尚未考慮SSCI傳播學論文的文字內容。今後的研究 應該納入傳播學學科內外的文本分析,以進一步揭示各國的合作和競 爭、壟斷與多元之動態關係。

註釋

- 1 本文中的「地區」(region)一詞專指國際性機構認可的獨立統計、交易或結算的政治、經濟、法律或財務體系。為簡便起見,我們下文中提及「國家或地區」,有時會省略「地區」一詞。
- 2 這六份期刊包括 Journal of Communication、Journalism and Mass Communication Quarterly、Journal of Broadcast and Electronic Media、Critical Studies in Mass Communication、Public Opinion Quarterly及International Journal of Public Opinion Research.
- 3 JCR公佈的最新數據為2018年。事實上,SSCI傳播學期刊數量還在繼續增長,如2019年為90份。
- 4 2018年的 JCR 中共有 58 個社會科學科學分類,但是並非所有分類都有 1997-2018年期刊數量的完整信息。因此,我們在這裡剔除了數據不完整 的七個學科分類。
- 5 其中最明顯的[犧牲者|是哥倫比亞,但具體分析其原因則超出本文之範疇。
- 6 Cortiñas-Rovira及Escribà-Sales (2013)報告了相似的發現:西班牙作者與拉丁美洲作者的合作遠遠多於其與歐洲或北美作者的合作。
- 7 該例外是加拿大。按原始值計,加拿大與泛太平洋社團(主要是美國)的 合作率高於其與英聯邦及非Top 15國的合作之和。然而,加權之後,加 拿大與泛太平洋的合作率變得低於其與英聯邦的合作率了。
- 8 在美國的合作者中,英國排在南韓、加拿大、中國和以色列之後的第五位。

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附錄一 主要變量的技術定義

變量	分析單元	説明	測量方法
所屬國家	論文層面	用以代表每篇論文(記 為 a)所歸屬的國家(記 為 i)。	基於該論文作者提供的單位地址。如果該 論文涉及多個作者,則用下述按比計算方 法處理。
按比計算的 論文量 (PA _{a,i})	論文層面	基於論文a中作者佔比 而計其所屬i國應得的 論文量。	1. 如論文 a 只有一個作者,其所屬 i 國得1分,即 $PA_{a,i}=1$ 。 2. 如論文 a 含有 k (> 1) 個作者但全部來自 i 國,其結果如上,即 $PA_{a,i}=1$ 。 3. 如果 k 個作者來自不同國家 (如 k_i 個作者來自國 1 、 k_2 個作者來自國 2 、等等),那麼各國分別按其作者佔比而得到一個相應的分數 (如, $PA_{a,i}=\frac{k_i}{k}$, $PA_{a,2}=\frac{k_i}{k}$,等等)。 4. 在上述各種場景中,任一作者如果注明具有多個單位而且分屬不同國家,均參照按比計算方法處理。
全國論文產 量 (<i>NP_i</i>)	國家層面	基於按比計算的 <i>i</i> 國論 文總量。	$NP_i = \sum_{a=1}^{m} P_{a,i}$,其中 a 為每篇論文, m 為SSCI 傳播學的所有論文數。
國際論文合 作量 (<i>IC_{ij}</i>)	國家層面	基於按比計算的每對國家 <i>i</i> 和 <i>j(i</i> 不等於 <i>j</i>)之間的論文合作量。	$IC_{ij} = NP_i \cup NP_j (i \neq j)$,其中 $NP_i \cup NP_j$ 是 NP_i 和 NP_j 的並集。由於 NP_i 和 NP_j 都是按比計算的,所以用此公式歷算所有兩兩國家之對時不會導致論文總數的虛漲。
國際合作率 (ICR _{ij})	國間層面 (即一對 國家為一 個單元)	IC _i 描述的是兩國合作的絕對值,而 ICR _i 則反映了該對國家合作的相對程度,以消除兩國各自論文產量的影響。	$ICR_{ij} = \frac{PP_i}{INP_iNP_i} (i \neq j)$,其中 NP_i 和 NP_j 分別是兩國的論文產量(定義見上),分母中的根號用來消除 NP_i 乘以 NP_i 而人為造成的放大效果。
國際加權合 作率 (WICR _{ij})	國間層面	ICR _{ij} 消除兩國各自論 文產量的影響,但是 由於有些國家從未國 際合作,所以國際合 作率。為此,WICR _{ij} 中以所有合作論文數 為分母。	$WICR_{ij} = \frac{IC_{ij}}{\int \Sigma^{*}_{a} JC_{ij} \Sigma^{*}_{a} JC_{ij}}$,其中 IC_{ix} 是 i 國與 x 國之間的所有合作論文量(按比計算), x 是一個除了 i 但包括 j 的所有其他國家之集合,即 $x = \{x \in n \mid x \neq j\}$; IC_{jx} 是 j 國與 x 國之間的所有合作論文量(按比計算), x 是一個除了 j 但包括 i 的所有其他國家之集合,即 $x = \{x \in n \mid x \neq i\}$ 。
國際平均合 作率 (MICRi)	國家層面 (即一個 國家為一 個單元)	用以描述 <i>i</i> 國與其他國 家的合作率。	$MICR_{ij} = \frac{\sum_{i=1}^{n} IC_{li}}{n-1}$,其中 $\sum_{x=1}^{n} IC_{li}$ 的定義見上, n 是數據中的所有具有國際合作關係的國家。
增長率 (GR _{i,to-t})	國家層面	用以描述 <i>i</i> 國從基準年 到當前年之間產量的 整體增長率。	$GR_{i,t_0-t} = \frac{NP_{i,t}}{NP_{i,0}} - 1$, 其中 $NP_{i,t}$ 和 $NP_{i,t}$ 分別為 i 國在基準年 (t_0) 和當前年 (t) 的論文產量。
年均增長率 (AGR _{i,to-l})	國家層面	用以描述 <i>i</i> 國從基準年 到當前年之間論文產 量的年均增長率。	$AGR_{i,t_0,t} = [(\frac{NP_{it}}{NP_{i,0}})^{1/((t-t_0)}] - 1$, 其中 $\frac{1}{t-t_0}$ 用於扣除每年的復利影響。

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變量	分析單元	説明	測量方法
市場佔有率 (<i>NS_i</i>)	國家層面	用以描述i國從在SSCI 傳播學論文市場的 佔比。	$NS_i = \frac{NP_i}{\sum_{i=1}^{n} NP_i}$
市場多元化 (<i>MD</i>)	全球層面 (所有國 家為一 單元)	用以描述各國市場佔 有率之間的均匀度或 同質性。	基於 Shannon-Weaver 的 H -index = $\tau \Sigma_i$ NS_i $\log NS_i$,其中 NS_i 分別是 i 國的市場佔有率 (見上文)。
上層市場與 底層市場	全球層面	將論文市場分成「上層」和「底層」兩部分以 代表其中論文的質量。	上層 = Web of Science 排序中的前 50%期 刊所刊論文;底層 = Web of Science 排序后 50%的期刊論文。

附錄二 SSCI傳播學期刊作者國家/地區列表 (1980-2019年數據)

編號	名稱	論文產量*	排名**	增長趨勢***
US	美國	23,114.2	1	
GB	英國	3,603.7	2	
AU	澳大利亞	2,430.8	3	
NL	荷蘭	1,563.6	4	
CA	加拿大	1,377.0	5	
DE	德國	1,186.2	6	· /
ES	西班牙	1,018.6	7	
IL	以色列	717.1	8	
KR	韓國	685.5	9	
BE	比利時	654.4	10	
SE	瑞典	644.7	11	/
HK	香港	599.0	12	
CN	中國	512.1	13	/
DK	丹麥	458.4	14	
FI	芬蘭	437.7	15	
NZ	新西蘭	431.9	16	· /
TW	台灣	412.7	17	· /
SG	新加坡	384.3	18	-
IT	意大利	372.5	19	-
СН	瑞士	360.4	20	
NO	挪威	345.3	21	

	名稱	論文產量*	排名**	增長趨勢***
ZA	南非	305.3	22	
FR	法國	293.4	23	
JP	日本	248.7	24	
AT	奧地利	248.6	25	
IE	愛爾蘭	194.2	26	
SI	斯洛文尼亞	154.0	27	
PT	葡萄牙	149.3	28	
TR	土耳其	142.3	29	
GR	希臘	121.4	30	
CL	智利	114.5	31	/
IN	印度	110.0	32	
BR	巴西	108.7	33	
PL	波蘭	87.7	35	/
MY	馬來西亞	82.5	36	
MX	墨西哥	79.8	37	
NG	尼日利亞	53.7	38	
AR	阿根廷	51.8	39	
CZ	捷克	50.7	40	/
HU	匈牙利	46.3	41	/
MA	摩洛哥	40.5	42	
RU	俄羅斯	37.4	43	/
QA	卡塔爾	35.2	44	/
IR	伊朗	34.8	45	/
CY	塞浦路斯	32.3	46	
EE	愛沙尼亞	30.2	47	
RO	羅馬尼亞	29.0	48	/
HR	克羅地亞	26.3	49	/
TH	泰國	24.4	50	
EG	埃及	23.5	51	
PH	菲律賓	23.5	52	
KE	肯尼亞	21.8	53	
AE	阿聯酋	21.5	54	
ID	印度尼西亞	20.5	55	
PK	巴基斯坦	19.7	56	
RS	塞爾維亞	18.8	57	/
GH	加納	18.3	58	
JO	約旦	17.2	59	

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名稱	論文產量*	排名**	增長趨勢***
黎巴嫩	14.7	60	
沙特阿拉伯	14.6	61	
秘魯	13.8	62	
盧森堡	12.8	63	
科威特	12.2	64	
津巴布韋	11.7	65	
烏干達	10.5	66	
斐濟	9.2	67	
厄瓜多爾	9.1	68	
阿曼	8.2	69	
突尼斯	7.7	70	
委內瑞拉	7.6	71	
博茨瓦納	6.2	72	
孟加拉	5.6	73	
坦桑尼亞	5.5	74	
拉脱維亞	5.4	75	
保加利亞	5.3	76	
越南	5.2	77	
埃塞俄比亞	4.7	78	
冰島	4.7	79	
斯里蘭卡	4.5	80	
烏拉圭	4.0	81	
立陶宛	3.6	83	
贊比亞	3.5	84	
馬耳他	3.4	85	
盧旺達	3.2	86	
馬拉維	3.1	87	
文萊達魯薩蘭國	2.5	89	
哥斯達黎加	2.3	90	
尼泊爾	2.3	91	
多米尼加	2.0	92	
危地馬拉	2.0	92	
黑山	2.0	92	/
伊拉克	1.8	95	
塞拉利昂	1.8	96	
烏克蘭	1.7	97	/
阿米尼亞	1.5	98	
	黎特秘盧科門 是 医 医 医 医 医 医 医 医 医 医 医 医 医 医 医 医 医 医	黎巴嫩 14.7 沙特阿拉伯 14.6 秘魯 13.8 盧森堡 12.8 科威特 12.2 津巴布韋 11.7 烏干達 10.5 斐濟 9.2 厄瓜多爾 9.1 阿曼 8.2 突尼斯 7.7 委內瑞拉 7.6 博茨瓦納 6.2 孟加拉 5.6 坦桑尼亞 5.5 拉脱維亞 5.4 保加利亞 5.3 越南 5.2 埃塞俄比亞 4.7 斯里蘭卡 4.5 烏拉圭 4.0 立陶宛 3.6 贊比亞 3.5 馬耳他 3.4 盧旺達 3.2 馬拉維 3.1 文萊達魯薩蘭國 2.5 哥斯達黎加 2.3 多米尼加 2.0 伊拉克 1.8 塞拉利昂 1.8 烏克蘭 1.7	黎巴嫩 14.7 60 沙特阿拉伯 14.6 61 秘魯 13.8 62 盧森堡 12.8 63 科威特 12.2 64 津巴布韋 11.7 65 烏干達 10.5 66 斐濟 9.2 67 厄瓜多爾 9.1 68 阿曼 8.2 69 突尼斯 7.7 70 委內瑞拉 7.6 71 博茨瓦納 6.2 72 孟加拉 5.6 73 坦桑尼亞 5.5 74 拉脱維亞 5.4 75 保加利亞 5.3 76 越南 5.2 77 埃塞俄比亞 4.7 78 冰島 4.7 79 斯里蘭卡 4.5 80 烏拉圭 4.0 81 立陶宛 3.6 83 贊比亞 3.5 84 馬耳他 3.4 85 盧田達 3.2 86 馬拉維 3.1 87 文萊達魯薩蘭國 2.5 89 哥斯達黎加 2.3 90 尼泊爾 2.3 91 多米尼加 2.0 92

編號	名稱	論文產量*	排名**	增長趨勢***
SN	塞內加爾	1.5	98	
CM	喀麥隆	1.3	100	
LR	利比亞	1.2	101	
AL	阿爾巴尼亞	1.2	103	
SK	斯洛伐克	1.1	104	
BB	巴巴多斯	1.0	105	
ВН	巴林	1.0	105	
BY	白俄羅斯	1.0	105	
CI	象牙海岸	1.0	105	/
GL	格陵蘭	1.0	105	/
JE	澤西	1.0	105	
KZ	哈薩克	1.0	105	
SY	敘利亞	1.0	105	
PA	巴拿馬	0.7	113	/
ВО	玻利維亞	0.6	114	
AO	安哥拉	0.5	115	
ΑZ	阿塞拜疆	0.5	115	
ВТ	不丹	0.5	115	
GN	幾內亞	0.5	115	
Ю	英屬印度洋領地	0.5	115	
WS	薩摩亞	0.5	115	/
CU	古巴	0.5	121	/
MZ	莫桑比克	0.4	122	
PY	巴拉圭	0.3	123	
MN	蒙古	0.3	124	
SD	蘇丹	0.2	125	
SV	薩爾瓦多	0.1	126	
CG	剛果	0.1	127	
LA	老撾	0.1	127	
MC	摩納哥	0.1	129	
СО	哥倫比亞	104.9	34	
JM	牙買加	4.0	81	
ML	馬里	2.9	88	
DZ	阿爾及利亞	1.2	102	

註:*按比計算的SSCI傳播學期刊1980-2019年間的論文量;**基於按比計算的各國論文產量的排序;***增長趨勢曲綫中的每個點代表了該時間序列的一個最小值

Communication & Society, 50 (2019)

The Market Structure of the Internationalization of Communication Research: From Monopoly to Competitive Oligopoly

Jonathan Jian-Hua ZHU

The term "internationalization of communication research" refers to the production, distribution, and consumption of scholarly works across national/regional borders. In the current study, we primarily focus on the distribution (i.e., publication) phase of the process while covering some parts of the production phase (e.g., collaborative research). The internationalization process involves different levels of stakeholders ranging from individual scholars through academic units to overseeing nations (Smelser, 1991). We use nations as the unit of analysis for the ease of data collection and analysis in this largely exploratory study.

Furthermore, we choose journal articles indexed in Social Science Citations and Index Communication Category (called "SSCI-Communication journals" hereafter) to assess the degree of internationalization of communication research. Admittedly, SSCI is an "elite" outlet for research outputs, as compared to other journals, conferences, books, and online posts. In addition, SSCI-Communication journals have known biases in favor of English language (Gardner, 2018) and U.S. research traditions (Wiedemann & Meyen, 2016). Therefore, SSCI-Communication journals are by no means a comprehensive nor a representative sample of internationalized communication research. Nevertheless, SSCI-Communication journals represent arguably the most influential sources of research agenda, perspectives, methodology, and findings. Therefore, SSCI-Communication journals serve a convenient start point to examine the patterns and trends of internationalization of communication research, against which future studies based on broader coverage of research outputs can be conducted and compared.

Previous Debates on Internationalization

Internationalization of communication research is not a new topic, but it has become increasingly popular in the age of media globalization, networked

The Market Structure of the Internationalization of Communication Research

digitalization, and scholarly marketization (e.g., the impact of internationalized publications on university ranking, which affects in turn student recruitment, resource allocation, and other matters). Gardner (2018), a former president of International Communication Association (ICA), defined the efforts to "internationalize" ICA as "better representing non-Western, non-Northern, and non-elite scholars" (p. 2). As such, internationalization is conceived essentially as geopolitical and/or social class issues.

The U.S. Dominance

In an exploratory study (Zhu, 2002), we found that 89% of the research articles (i.e., exclusive of book reviews, editorials, and other supplementary materials), published in six journals of mass communication research over 12 years between 1990 and 2001,² were authored by U.S. scholars. Lauf (2005) reported a reduced but still formidable U.S. dominance (70%) from 43 journals indexed in SSCI-Communication category from 1998 to 2002. Based on the findings, he criticized that communication research was not an "international" field because the major publications were dominated by scholars from English-speaking countries in general and the U.S. in particular. Surprisingly, he found that journals with international flavors, such as international editors, editorial board members, or organization affiliations, did not publish more works by international authors. Meanwhile, Lauf found some encouraging signs that journals with a shorter history or a stated international mission were more receptive to non-Anglo-Saxon authors. Consequently, he called for more international journals and stronger support for non-English speaking authors.

It is easily observable that there have been a significantly greater number of new journals in SSCI-Communication category. However, it is difficult to guess that the U.S. dominance has been positively or negatively affected by the growth of SSCI-Communication journals. Three possibilities exist: (i) the U.S. dominance has been enhanced because U.S. scholars, who are presumably the best trained and have the most resources in the world, benefit more than anyone else from the expansion of publication opportunities; (ii) the U.S. dominance has been undermined because U.S. scholars find their research capacity is outpaced by the increased publication opportunities; and (iii) the U.S. dominance has remained unchanged because U.S. scholars accelerate their research capacity at the

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same rate of the growth of SSCI-Communication journals. Each of the scenarios seems plausible. An empirical study is therefore in order.

From Americanization to Westernization

One may argue that, even if the U.S. dominance was on decline, the vacancy might have been taken up by other Western countries. Therefore, we should be more concerned about Westernization than Americanization (Waisbord & Mellado, 2014). What is "Westernization"? The term has been frequently used without clearly defined. Lauf (2005) thought a much smaller target: only two, i.e., Anglo-Saxon (i.e., U.S.-U.K.). In our earlier study (Zhu, 2002), we found that the U.S. plus three key members of the Commonwealth (U.K., Canada, and Australia) enjoyed language advantages in the English-dominant SSCI-Communication journals. It is both necessary and informative to update the debate with the latest empirical evidence.

The Emergence of BRICS

The rise of BRICS (i.e., Brazil, Russia, India, China, and South Africa) is arguably one of the most important changes in the global politico-economic order in recent years. Has the change brought about similar effects on the internationalization of communication research? Anecdotal evidence abounds. For example, China (including Hong Kong) and South Africa have each published an SSCI-Communication journal; Brazilian, Russian, and Indian scholars have become more visible in SSCI publications and international conferences. The development of BRICS has led some scholars to argue the rise of "Chindia" as a way to de-Americanize communication research (Thussu, 2013). It is again necessary and informative to collect and analyze empirical evidence to verify the casual observation-based argument.

Marketplace of Ideas

We depart from the previous studies by introducing two related concepts, called "marketplace of ideas" and "market structure," respectively, to the

The Market Structure of the Internationalization of Communication Research

long-standing debate. Marketplace of ideas was used by McCombs and Shaw (1993), among others, to describe communication research in which individual scholars, research teams, academic units, schools of thought, etc. compete to sell products (i.e., publications). We echoed their metaphor elsewhere (Peng & Zhu, 2012). In the current study, we aim to advance the metaphor a step further, to develop it to an operationalizable concept. We aim to illustrate how the analysis of market structure can help understand both salient and hidden knowledge underlying a political controversial issue.

Market structure is an economic concept, referring to the degree of control over production or distribution. Economists generally consider market structure as a unidimensional continuum, along with the degree of concentration that varies from monopoly (in which a single firm exclusively occupies 100% of the market) to perfect competition (in which all existing firms share an equal share of the market) (Tabner, 2007). Between the two extremes that are both rare in the real life, there are several configurations that mix monopoly and competition with a varying ratio. For example, oligopoly is a structure in which a few firms, rather than a single one, collectively control an overwhelming majority share (e.g., 80%) of the market. Competitive monopoly is another structure in which even more firms, rather than a few, collectively maintain a similar dominance of the market.

Applied to the marketplace of ideas (i.e., scholarly research in general and communication in specific), the concentration-defined measure may need to be expanded to include, at least, another dimension—the degree of competition. Even in the economics literature, oligopoly is recognized to have competitive or cooperative forms, with market leaders to compete in the former structure or cooperate (e.g., collude to set price) in the latter. The market structure of scholarly research is likely to be the case mixed with competition and collaboration. Therefore, it is not only necessary but also informative to include cooperation/collaboration as an additional dimension in the conceptualization and operationalization of communication research.

Table 1 A 2-Dimensional Framework of Academic Market Structure

C	Concentration			
Competition	Low	High		
Low	Collaborative Oligopoly	Monopoly		
High	Perfect Competition	Competitive Oligopoly		

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In summary, we conceive communication research as a marketplace of ideas to underscore the bottom-line nature of internationalization—it goes far beyond symbolic meanings (e.g., hegemony or influence), with immediate materialistic consequences for individuals, institutions, and nations. As such, the process of internationalization is fundamentally competitive. That is, no individual, institution, or nation would give away their fair share of the market merely for cultural or ideological affinity (e.g., to maintain "Westernization" among U.S./European nations that are essentially competitive). Of course, collaboration is often formed to win the competition. Therefore, the line between collaborators and competitors is not permanently fixed, but is likely to change dynamically.

Research Questions

Based on the above discussions, we formulate the following research questions to guide the current study:

- Market Size: Has the market size of internationalized communication publications grown fast enough to accommodate a large number of nations, if not all, to participate?
- 2. Market Concentration: Has the U.S. continuously maintained a monopolistic dominance over the marketplace of communication research? If not, who else has risen to share with the U.S. an oligopolistic dominance? Has the marketplace of communication research continued to be Westernized?
- 3. Market Competition: Has the market become more or less competitive? Who collaborates with whom, and who competes with whom?

Method

Data Collection

We collected two datasets, both from the *Web of Science* databases. One is the publication records of the articles in SSCI-Communication journals (called SSCI hereafter) and the other is the ranking records of all SSCI journals in *Journal Citation Reports* (*JCR*). The SSCI data provide the primary source of information for the study whereas the *JCR* allow us to compare communication with other disciplines of the social sciences.

I. SSCI Article Dataset

It contains bibliographic information of all research articles published in SSCI-Communication journals from 1970 to the present. However, we selected only the articles published from 1980 onwards because the records of the preceding years are both small and incomplete to be reliable or useful. To be comparable with most other relevant studies, we included only research articles (exclusive of book reviews, editorials, commentaries, and other supplementary documents) for the current study.

II. JCR Journal Dataset

It consists of bibliographic information at journal-level, such as the number of journals and the ranking of the journals (based on their citations), for each of the 58 disciplines of social sciences defined by *Web of Science*. While SSCI and *JCR* are inherently linked, *JCR* has a shorter time span (from 1997 to 2018 as the time of this writing). Therefore, we will report findings in two different time windows, i.e., 1980–2019 for articles and 1997–2018 for journals.

Measures

I. Unit of Analysis

As stated earlier, we use nations as the unit of analysis for the current study. Therefore, all journal-, author-, and article-level measures are aggregated to the national-level measures such as National Affiliation, National Productivity, and International Coauthorship.

II. National Affiliation

We determine the national affiliation of each article based on the author's institutional location as indicated in the article. As such, national affiliation is merely a residential concept, rather than nationality, ethnicity, and other identifies. If an author provides multiple institutional addresses in different nations, we use the prorated calculation method (see next) to distribute his/her authorship credit to all relevant nations (see Appendix 1 for details).

III. Prorated Coauthorship

In the simplest case, if a nation has 10 scholars, each publishing an article as a single author in a year, the number of total publications for the nation is 10. In reality, however, many articles are published by multiple authors. Furthermore, if the coauthors come from different nations, it poses challenges to counting fairly multi-authored publications, which bears important implications for the current study on internationalization. There are generally three approaches to counting coauthorship: (i) only the first author gets the full credit, which has been used by many previous studies; (ii) all authors are given a full credit, which is used by Web of Science in reporting national contributions; and (iii) each author gets a fractional credit (i.e., prorated). The first author approach is the easiest but biased, i.e., likely inflating the contributions of advisors of foreign students or leaders of international teams who tend to serve first authors more often. The multiplecounting approach is also easy but (more) biased, overestimating the productivity of international teams. The prorated approach is technically more complex but the least biased, giving each author of a coauthored article a fair share of the credit while treating all articles equally, single-authored or coauthored (Uzun, 2004). We have chosen the prorated approach by crediting each author an equal fraction (see Appendix 1 for more details).

IV. Market Share

It is simply the proportion (%) of all articles published in SSCI-Communication journals by a single nation i (see Appendix 1).

V. Market Structure

The market is considered to have a concentrated structure if a small

number (denoted as k) of most productive nations jointly share 80% or more of the market. Depending on the size of k, the concentrated structure can further take the following four classes:

Table 2 Four Classes of Market Structures

k-value	Market Structure
k = 1	Monopoly
$1 \le k \le 5$	Strong Oligopoly
$6 \le k \le 10$	Moderate Oligopoly
$11 \le k \le 15$	Weak Oligopoly

VI. International Collaboration

We measure the degree of collaboration between each pair of nations based on the prorated number of coauthored articles (called International Coauthorship or IC_{ij}), based on which several measures are further derived to estimate more accurately the actual collaboration. The set of measures include International Coauthorship Rate (ICR_{ij}), Weighted International Coauthorship Rate ($WICR_{ij}$), and Mean International Coauthorship Rate ($MICR_{ij}$). More details about the measures can be found in Appendix 1.

VII. Cooperative or Competitive Oligopoly

We consider a pair of nations (i and j) to be cooperative if $WICR_{ij}$ exceeds $MICR_{ij}$ for all collaborating pairs. Otherwise, the pair of i and j are said to be competitive. It follows that members of an oligopoly are cooperative if the majority of them coauthor publications at a rate greater than the average.

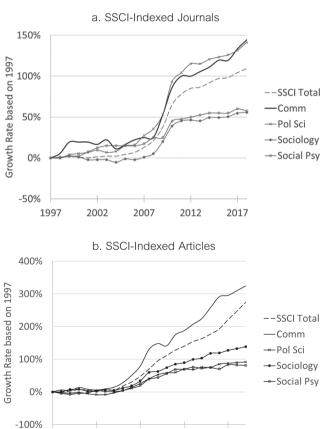
Findings

The Expansive Marketplace

The most salient characteristic of the marketplace for communication research is undoubtedly the rapid expansion of SSCI-indexed publications, measured by two metrics of (i) the number of SSCI-Communication journals, and (ii) the number of articles published in the journals. Although the two metrics are naturally related, they are not linearly correlated in the

field of communication. While the number of SSCI-Communication journals has increased from 36 in 1997 to 88 in 2018 (i.e., a growth rate of 144% or an annual growth rate of 4.3%) during the 21 years, the number of articles published in the journals has increased from 972 in 1997 to 4,003 in 2018 (a growth rate of 324% or an annual growth rate of 7.0%) during the same period. Two factors account for the differential rates of growth. First, some journals have published more issues (e.g., from quarterly to bimonthly) per year. Second, the newer journals have on average published more articles per issue than have the older journals done so.

Figure 1 Growth Rate of SSCI Publications



Source: Based on *JCR 1997–2018*

Note: Growth rate is defined in Appendix 1

1997

2002

2007

2012

2017

It is informative to compare the growth rate of SSCI-Communication publications with other social science disciplines. As shown in Figure 1a, the growth rate (144%) of SSCI-Communication journals has exceeded the average rate (104%) of 50 SSCI disciplines. Communication journals have also outgrown the three "neighboring disciplines" that are often used as a more relevant reference of comparison, including sociology (55%), political science (132%), and social psychology (60%).

The carrying capacity of SSCI-Communication journals has expanded at a greater rate. As shown in Figure 1b, the growth rate (324%) of communication articles has been significantly higher than that of the average (274%) of 50 social science disciplines as a whole, or three neighboring disciplines such as sociology (138%), political science (92%), and social psychology (81%), respectively, during the same period.

In short, there is adequate evidence to argue that communication has been one of the fastest growing disciplines in the social sciences. Therefore, the internationalization of communication research during this great expansion era appears to be a win-win game in which most (if not all) nations get a constantly increased chance to participate. As shown in Figure 2, this has indeed been the case.

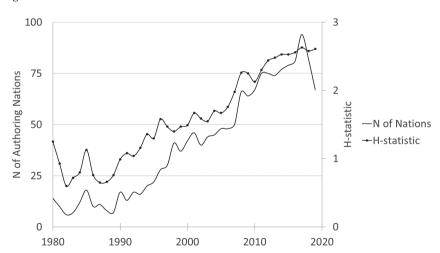


Figure 2 International Diversification of SSCI-Communication Publications

Note: N of nations refers to the number of nations publishing singly or jointly in SSCI communication journals in a given year. H-statistic is defined in Appendix 1

The number of nations publishing in SSCI-Communication journals was about 10 per year during the 1980s, but steadily grew to 30 in the 1990s, 50 in the 2000s, and 80 in the 2010s, reaching the peak (94) in 2017. Cumulatively, 129 nations have participated in SSCI-Communication publications throughout the 40 years from 1980 to 2019. When comparing the number of articles per nation between the first decade (1980s) and the last decade (2010s), 117 (or 91%) nations have made gains, 8 no change, and 4 declined slightly (Appendix 1). Although 129 nations account for only about half of the nations in the world, the direction and pace of internationalization of communication research over the last four decades is certainly evident.

Another measure of the international diversity is Shannon-Weaver's entropy (1949), also known as H-statistic (see Appendix 1). The measure takes into account not only how many nations participate in SSCI journal publications, but also how evenly (or otherwise) the contributions are across the nations. As such, H-statistic is not necessarily correlated with the sheer number of participating nations as reported above. It turns out, however, that the H-statistic goes up (i.e., showing an increasingly even distribution of publications across the nations) along with the number of participating nations in the current data (Figure 2). Altogether, the quantity measure (N of nations) and the diversity (or equality) measure (H-statistic) corroborate each other to illustrate a consistent trend of international diversification in communication over the last four decades.

The Fall of U.S. Monopoly

The above findings may have over- or under-estimated the dominance by the U.S. as previously identified and criticized (Lauf, 2005). Figure 3 shows a comparison of SSCI-Communication publications between the U.S. and the rest of the world in two ways. Both ways are based on the same data, but reveal different, even opposing, patterns. Therefore, it is necessary to see both sides of the same coin simultaneously in a graphic frame. Figure 3a reiterates the win-win story (as mentioned above) that both the U.S. and all others have benefited from the continuous expansion of SSCI-Communication journals, which has effectively enabled the U.S. to sustain its dominance (i.e., being the number one) in the discipline.

a. Number of SSCI-Communication Articles

20,000

10,000

USA

2000-09

2010-19

1990-99

Figure 3 Changes in U.S. Monopoly of SSCI-Communication Publications

1980-89

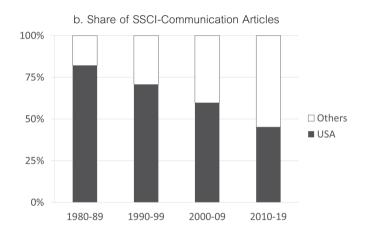


Figure 3b tells a different story, however. By normalizing the data into a 100%-scale, Figure 3b shows that the U.S. dominance has been on the decline, from 82% in the 1980s, 71% in the 1990s, 60% in the 2000s, and 45% in the 2010s, reaching the bottom (43%) in 2018. By our criterion, adopted from economics (Tabner, 2007), for monopoly (80% or more of the market share), the findings confirm that there was indeed a monopolistic market structure of communication research in the 1980s. However, the monopoly by the U.S has gone since the 1990s. The U.S. remains to be the most dominant producer of SSCI-Communication publications in the world, but its dominance has become continuously weakening.

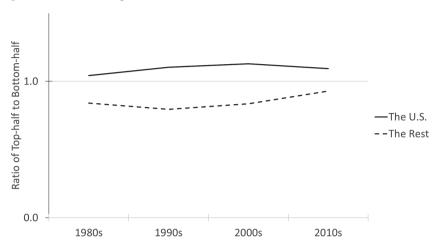


Figure 4 The Ratio of Top-Half to Bottom-Half Journals

Note: The ratio of top-half market to bottom-half market is defined in Appendix 1

While Figure 3 shows the shares of the total market (i.e., all SSCI-Communication publications) between the U.S. and the rest nations, Figure 4 divides the market into two halves—the top-half (i.e., Q1 and Q2 journals) and the bottom-half (Q3 and Q4 journals, as defined in Appendix 1) to illustrate the quality of publications that the U.S. and other nations have produced respectively. As shown in Figure 4, U.S. authors have continuously published more frequently in the top-half market than in the bottom-half, as shown by the solid line always above 1.0 throughout the decades. In contrast, authors in other nations have published more frequently in the bottom-half than in the top-half, as the dash line always below 1.0. The findings remind us of the complex nature of U.S. dominance, i.e., the U.S. has remained to be more influential in the upscale sector of the market despite its steady decline in the total market.

The Rise of Multinational Oligopoly

What has happened to the market structure of SSCI-Communication publications in the post-U.S. monopoly? In particular, has the Americanization been replaced the Westernization (Waisbord & Mellado, 2014)? The data show that, as expected, the U.S. monopoly has been replaced by a multinational oligopoly, defined in three levels of concentration varying from

strong (with Top 5 nations controlling 80% or more of the market), moderate (with Top 10 nations controlling 80% or more), and weak (with Top 15 nations controlling 80% or more). As shown in Figure 5, the marketplace of SSCI-Communication publications was dominated by a strong oligopoly from 1991 (when the market share by the U.S. fell below 80%) to 2006 (when the share by Top 5 nations fell below 80%), then changed to a moderate oligopoly from 2007 to 2012 (when the share by Top 10 nations fell below 80%), and has since 2013 continued as a weak oligopoly with Top 15 nations jointly holding more than 80% of the market share. Although we still consider the market structure of communication research to be oligopolistic, the continuously expanded number of the oligopolistic nations clearly suggests that the discipline has become increasingly less concentrated and more diversified.

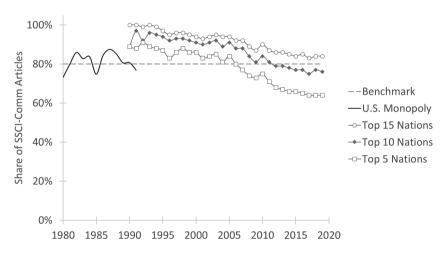


Figure 5 The Evolution of Multinational Oligopolies

Note: Membership of the Top 5, Top 10, and Top 15 Nations are provided in Table 3

Who form the multinational oligopoly? As shown in Table 3, 20 nations have appeared in the Top 15 list one time or another throughout the last three decades. The strong oligopoly always involved the same five Western nations, including the U.S., Britain, Australia, the Netherlands, and Canada (Column 1). However, the moderate oligopoly consisted of, in addition to the Top 5, a mix of two Western nations (Germany and Spain) and three Asian nations/regions (Israel, Hong Kong, and South Korea) (Column 2). The same mixed pattern applies to the weak oligopoly,

including additional Western nations (Sweden, Belgium, Denmark and Finland) and China (Column 3).

Table 3 Membership of Multinational Oligopoly*

Years	Top 1–5 Nations	Top 6–10 Nations	Top 11–15 Nations
1990-1999	US, GB, CA, AU, NL	DE, CO, IL, HK, JP	NZ, BE, IE, SE, KR
2000–2009	US, GB, AU, NL, CA	DE, ES, IL, HK, KR	BE, NZ, FI, TW, SE
2010–2019	US, GB, AU, NL, CA	DE, ES, KR, SE, BE	IL, CN, HK, DK, FI

Note: See Appendix 1 for a mapping list between national names and their abbreviations

In short, the strong oligopoly (by Top 5 nations) was an exclusive club of Western nations whereas the moderate oligopoly (Top 10) and the weak oligopoly (Top 15) have combined about half Western and half non-Western (mostly Asian) nations. As such, the claimed Westernization of communication research did exist about 20 years ago but has since no longer held.

The Competition within Oligopoly

An unspoken assumption underlying the concerns about Americanization or Westernization of communication research is that monopolistic or oligopolistic nations from the West cooperate each other to exert a hegemony over the discipline. Such concerns are in fact empirically testable. As stated earlier, we use International Coauthorship (*IC*) and derived measures (see Appendix 1) to operationalize the degree of coopetition (i.e., cooperation vs. competition) among elite members of the oligopoly. Since the size of oligopoly has continuously expanded, we focus on *ICR* of the Top 15 nations during the 2010s to assess the validity of such assumption in the present time.

Based on *ICR*, we have identified three subgroups (known as "communities" in network language) of collaborative nations within the oligopolistic structure. In the context of SSCI-Communication publications, a community involves a set of nations that have coauthored more articles, on average, among themselves than with anyone else within the Top 15 nations. As shown Figure 6, the division of three communities seems to follow geographic, historical, or intellectual connections. First, the U.S. and four Asian nations/regions (Israel, South Korea, mainland China, and Hong

Kong) form a "Trans-Pacific" community (although Israel is far away from the Pacific Ocean), presumably based on the connections between U.S. advisors and Asian graduate students. Britain, Australia, Canada, and Spain form a "Commonwealth" community (although Spain has never been part of Commonwealth). Finally, six North European nations (the Netherlands, Germany, Sweden, Belgium, Denmark, and Finland) form a geographically and intellectually close community.

FI SE AU ES NL BE DE CN HK

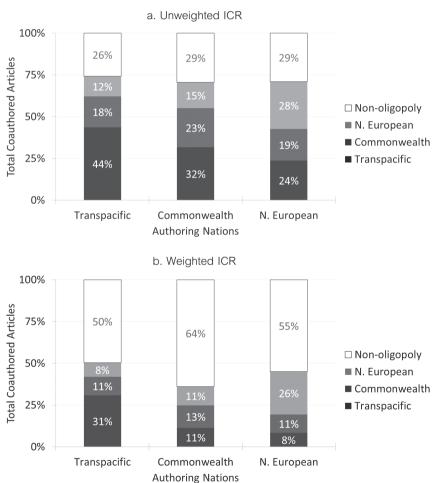
Figure 6 Communities among the Oligopolistic Nations (2010–2019)

Note: Dark Color: Trans-Pacific Community. Gray Color: Commonwealth Community. White Color: North European Community. The size of each nation is determined by the number of nations it has coauthored in the 2010s whereas the width of the edge between two nations is given by International Coauthorship between the pair as described in Appendix 1

The existence of three distinct communities provides some evidence, alphabet preliminary, that the oligopoly is not a tightly-knitted, but a loosely connected, structure. A closer look at the distribution of international coauthorship sources further reveals exactly who collaborates with whom

within and outside the oligopoly (Figure 7). Figure 7a shows the unweighted (i.e., original) *ICR* for each of the three communities. The Trans-Pacific allocate only 31% of the coauthored articles to members of the two other communities (18% to Commonwealth and 12% to North European, respectively). The Commonwealth and the North Europe allocate more (47% and 43%, respectively) to other communities within the Oligopolistic circle, which are still less than half.

Figure 7 Coauthorship within and outside Top 15 Nations



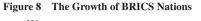
Note: Unweighted ICR and Weighted ICR are respectively defined in Appendix 1

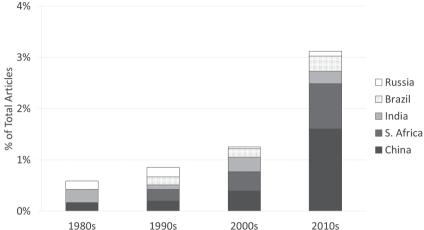
More importantly, as argued earlier, the original *ICR* overestimates the collaboration with nations with a larger number of coauthored articles (i.e., the Top 15 nations) whereas underestimating collaboration with nations with a smaller number of coauthored articles (non-Top 15 nations). Therefore, it is necessary to use the weighted *ICR* by taking into account the number of total coauthored articles published by each nation. Figure 7b is a weighted version of Figure 7a, which shows that all three communities devote an even smaller proportion (19–23%) to each other. As such, there is good reason to argue that the relationship among the oligopolistic communities is more competitive than cooperative. In fact, all the three communities collaborate more with outsiders (i.e., non-Top 15 nations) than with anyone of the Top 15 circle.

To avoid possible artifacts from aggregation of nations to communities, we have inspected the distribution of ICR for each nation individually. The patterns observed above hold for all 30 cases (= 15 nations in both unweighted and weighted versions) but one exception. In particular, despite all the historical, political, and cultural affinities between the U.S. and Britain, the two market leaders have maintained only a modest level of collaboration. Therefore, we conclude that, while marketplace of SSCI-Communication publications has been dominated by 15 nations over the last three decades, the oligopolistic structure is not necessarily a unified hegemony. Instead, the oligopoly is more competitive than cooperative.

The Emergence of BRICS?

As shown in Figure 8, the BRICS nations have become increasingly visible in the marketplace of SSCI-Communication publications, steadily growing from a total market share of 0.6% in the 1980s to 0.9% in the 1990s, 1.2% in the 2000s, and 3.1% in the 2010s. Among the five member nations, China has been the most active, leading not only with the largest share (1.6% in the 2010s) but also at the fastest growth rate. South Africa has followed a similar path with a less drastic but still impressive pace (sharing 0.9% of the market in the 2010s) whereas India, Brazil and Russia have trailed behind noticeably.





Quality-wise, the BRICS nations have published far less frequently in the top-half journals than in the bottom-half, with a top-to-bottom ratio of 0.55 (i.e., about 1 top-half article to 2 bottom-half articles). Of the five nations, the ratio is the lowest for South Africa (0.36, or about 1 top-half to 3 bottom-half articles) and the highest for India and Brazil (0.99 and 0.96, respectively, or top-half and bottom-half being about equal). The average ratio of BRICS (0.55) is significantly lower not only than that of Top 15 nations (1.03) but also than that of all other 110 nations (0.88).

Finally, the BRICS does not seem to be a well-connected community as the average rate of coauthorship among the five nations in the 2010s (mean = 0.008 and median = 0.018) is lower than that among all nations during the same period (mean = 0.012 and median = 0.072). Of the pairwise collaborations, the relationship between Brazil and Russia is about three times as high as the global average whereas the relationship between China and India is also above the global average. In summary, BRICS has remained a loose label, rather than a concerted alliance of communication research. While it has made impressive inroads into SSCI-Communication publication market, BRICS has yet become an emerging power player in the next decade or so.

Conclusion

In the current study on the internationalization of communication research, we introduced a metaphor of marketplace of ideas and developed a set of operational measures to test it. We collected data on 45,000+ research articles in SSCI-Communication journals from 1980 to 2019, coupled with comparative data on other social science disciplines. The data reveal several expected or surprising trends/patterns about the internationalization of communication research. First, the marketplace of communication publications has continuously experienced a significant expansion throughout the four decades with both the growth rate of the number of journals and the number of articles have outpaced the average of 50+ social science disciplines as well as that of three neighboring disciplines such as sociology, political science, and social psychology. Almost all nations participating in SSCI-Communication publications have benefited from the continuous expansion of communication research market. As such, the internationalization of communication research has been a win-win game, in term of sheer quantity of publications, in term of sheer quantity of publications, for every participating nation.

Despite the ever-increased size, the market structure of communication research has undergone significant and continuous changes over the same four decades. The U.S. enjoyed an exclusive monopoly, sharing 80% or more of the market, during the 1980s. However, the U.S. monopoly faded out in the 1990s, replaced by a multinational oligopoly throughout the next three decades. Five nations from the West (including the U.S., Britain, Australia, the Netherland, and Canada) jointly shared 80% or more of the market to form a strong oligopoly during the 1990s. They were joined by another five nations, mixed of Western and non-Western, to form a moderate oligopoly during the 2000s. In the current decade (2010s), 15 nations have been required to maintain a weak oligopoly of the market. Although Western nations are playing the primary role with Asian counterparts as secondary in the existing oligopoly, the transition of the market structure from an exclusive monopoly by one nation through a strong oligopoly by five nations to a moderate oligopoly by 10 nations and finally a weak oligopoly by 15 nations has clearly indicated a continuous trend of openness and diversification of the communication research marketplace.

Based on the coauthorship among the oligopolistic nations and between them and non-oligopolistic nations, we found that the current structure tends to be more competitive than cooperative among the insiders (i.e., the Top 15 nations), and more opened to the outsiders (i.e., non-Top 15 nations). In summary, the marketplace of communication research has become continuously and increasingly internationalized, less concentrated, and more collaborative (not only among Western nations but also between the Western and other nations).

Discussion

Given the lack of benchmark studies in the literature, we have intentionally positioned the current study as a preliminary study with the following characteristics: i) methodologically oriented (to develop operational measures) rather than conceptually oriented, ii) descriptive rather than explanatory (e.g., running time series analysis to test causal hypotheses of what have contributed to the fall of U.S. monopoly and the rise of competitive oligopoly); and iii) national-level (with nations as the unit of analysis) rather than individual-level (with scholars as the unit of analysis).

The decision was made primarily in response to the widespread confusions of the internationalization of communication research. For example, the author was invited to participate in a panel discussion on the internationalization of political communication at the 2019 annual conference of International Communication Association (ICA), which attracted a roomful audience, reflecting the popularity of the topic among ICA members. Of the seven panelists, there were four former/current editors of leading SSCI-Communication journals such as Journal of Communication, Public Opinion Quarterly, and International Journal of Communication, which confirms the notion we have made at the beginning of this article that publications in SSCI-Communication journals are the most central issue of internationalization. However, the discussions among the panelists and with the audience clearly reveal misperceptions or misinformation about the degree of Americanization or Westernization of the discipline. The current study has therefore been designed to provide accurate, complete, and latest information, alphabet descriptive, about the national representation in SSCI-Communication publications.

We have adopted nations as the unit of analysis for the current study largely because the aggregate-level analysis is easier to start with. Like all other aggregate-level studies, however, our study is subject to ecological fallacy (Robinson, 1950). For example, the international collaborations under study are actually carried by individual scholars. It is therefore necessary and informative to unpack the international collaborations to individual collaborations, e.g., collaborations between advisors and graduate students, between scholars with funding resources and scholars with data access, between hosting scholars and visiting scholars, etc. The varying types of collaborations may involve different mechanisms of knowledge production as well as different configurations of power relations. As such, individual- (and institutional-) level of analysis will not only cross-validate the findings from the current study, but also provide insights on the production and consumption of internationalized communication research.

Finally, this line of research will also benefit from integrating semantic analysis of SSCI-Communication articles and comparing individual-level data with other social science disciplines.

Notes

- 1 The term "region" or "regional" refers to those political, economic, legal, financial entities that are recognized by international agencies as separate units for statistical, trade, and other practical purposes. For simplicity, we use "nation" to include both countries and the above-mentioned "regions" hereafter.
- 2. The six journals include Journal of Communication, Journalism and Mass Communication Quarterly, Journal of Broadcast and Electronic Media, Critical Studies in Mass Communication, Public Opinion Quarterly, and International Journal of Public Opinion Research.
- 3. This is the latest information provided by *Journal Citation Reports (JCR)*. The number of SSCI-Communication journals has in fact continued to grow, to 90 in 2019.
- 4 *JCR* includes 58 social science disciplines in the 2018 report, but not all the disciplines have complete information on the number of journals for the entire period of 1997–2018. We exclude seven disciplines without complete information from the calculation here.
- 5 The only noticeable "loser" is Columbia. Further exploration of the reason(s) goes beyond the scope of the current study.

- 6 Cortiñas-Rovira and Escribà-Sales (2013) reported a similar pattern that Spanish authors collaborated far more often with Latin Americans than Europeans or North Americans.
- 7 Canada collaborated more with Trans-Pacific (the U.S. in particular) more than the combination of Commonwealth and non-Top 15 nations based on the original ICR, but the ratio became reversed based on WICR.
- 8 For example, Britain is ranked only the 5th most frequent collaborator of the U.S., trailing after South Korea, Canada, China, and Israel.

References

Please refer to the reference list in Chinese version of the article.

Appendix 1 Technical Definitions of Key Variables

Variable	Unit of Analysis	Description	Measurement
National Affiliation	Article-level	Describing the nation to which article <i>a</i> is assigned.	Based on the author's institutional address as indicated in <i>a</i> . If multiple authors are present, the prorated method (see below) is used.
Prorated Authorship (PA _{a,i})	Article-level	Assigning a proportional point to nation <i>i</i> based on its respective share of the total authoring nations in <i>a</i> .	1. If article a has one author, his/her affiliated nation i gets 1 point, i.e., $PA_{a,i} = 1$. 2. If a has k (> 1) authors who are all from i , then $PA_{a,i} = 1$. 3. If the k authors are from different nations (e.g., kI authors from nation 1, $k2$ authors from nation 2, etc.), each of the nations gets a proportional point (e.g., $PA_{a,l} = \frac{k_1}{k}$, $PA_{a,2} = \frac{k_2}{k}$, etc.). 4. In all of the above cases, if any author indicates multiple institutions from different nations, the same prorated calculation is applied.
National Productivity (NP _i)	National- level	Quantifying the total (prorated) number of articles attributed to nation <i>i</i> .	$NP_i = \sum_{a=1}^{m} P_{a,i}$, where a represents each article and m is the total number of SSCI-Communication articles.
International Coauthorship (IC _{ij})	International- level (i.e., a pair of nations as a unit)	Quantifying the total (prorated) number of articles coauthored by a pair of nations i and j $(i \neq j)$.	$IC_{ij} = NP_i \cup NP_j (i \neq j)$, where $NP_i \cup NP_j$ is the union of NP_i and NP_j . When the formula is iterated for all pairs of nations, it will not inflate the total number of coauthored articles since NP_i and NP_j are prorated.
International Coauthorship Rate (ICR _{ij})	International-level	While IC_{ij} quantifies the absolute magnitude of coauthorship between nations i and j , ICR_{ij} quantifies the relative degree of coauthorship between the pair, to normalize the sheer size of National Productivity.	$ICR_{ij} = \frac{IC_{ij}}{JNP_iNP_j}$ $(i \neq j)$, where NP_i and NP_j are the prorated National Productivity for nations i and j , respectively, defined above. The square root in the denominator is to remove the (artificially) inflating effect of multiplication between NP_i and NP_i .
Weighted International Coauthorship Rate (WICR _{ij})	International- level	While ICR_{ij} removes the impact of National Productivity, it underestimates the real degree of international coauthorship because some nations have not collaborated with another one else. Therefore, $WICR_{ij}$ includes only internationally coauthored National Productivity as the denominator.	$WICR_{ij} = \frac{ICi_j}{\sum_{i=1}^n IC_{i,i}}$, where IC_{ix} is the prorated number of coauthored articles between i and x (which represents each of other nations, including j , i.e., $x = \{x \in n \mid x \neq j\}$ and IC_{jx} is the prorated number of coauthored articles between j and x (which represents each of other nations, including i, i.e., $x = \{x \in n \mid x \neq i\}$.

Variable	Unit of Analysis	Description	Measurement
Mean International Coauthorship Rate (MICR _i)	National- level	Quantifying the average degree of collaboration between nation <i>i</i> and anyone else.	$MICR_{ij} = \frac{\sum_{n=1}^{n} IC_{in}}{n-1}$, where $\sum_{n=1}^{n} IC_{in}$ is defined above and n is the total number of coauthoring nations in the data.
	National- level	Quantifying the rate of change in National Productivity for nation <i>i</i> from a base year to a current year.	$GR_{i,l_0-i} = \frac{NP_{i,i}}{NP_{i,0}} - 1$, where $NP_{i,t0}$ and $NP_{i,t}$ are National Productivity for nation i in the base year and the current year, respectively.
Annual Growth Rate (AGR _{i,t0-t})	National- level	Quantifying the average rate of change per year in National Productivity for nation i (NP_i) from a base year to a current year.	$AGR_{i,t_0-t} = \left[\left(\frac{NP_{i,t}}{NP_{i,o}} \right)^{V((t-t_0)} \right] - 1$, where $\frac{1}{t-t_0}$ is used to account for annually compounding effect.
National Share of the Market (NS _i)	National- level	Describing the proportion of SSCI-Communication articles published by nation <i>i</i> .	$NS_i = \frac{NP_i}{\sum_{i=1}^{n} NP_i}$
Market Diversity (MD)	Global- level (i.e., all nations as a unit)	Describing the equality or homogeneity of National Share across nations.	Calculated using Shannon-Weaver's <i>H</i> -index = $-\sum_{i=1}^{n} NS_i \log NS_i$, where NS_i is National Share of all articles by nation <i>i</i> , as defined above.
Top-Half and Bottom-Half Market	Global-level	Dividing the market into two halves (Top- half and Bottom-half) to represent the quality of articles.	Top-half = journals ranked by <i>Web of Science</i> in top 50%; Bottom-half = journals in bottom 50%.

Appendix 2 Nations/Regions Publishing in SSCI-Communication Journals, 1980–2019

US United States 23,114.2 1 GB United Kingdom 3,603.7 2 AU Australia 2,430.8 3 NL Netherlands 1,563.6 4 CA Canada 1,377.0 5 DE Germany 1,186.2 6 ES Spain 1,018.6 7	Code	Name	Productivity*	Rank**	Growth Trend***
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NL Netherlands 1,563.6 4 CA Canada 1,377.0 5 DE Germany 1,186.2 6	GB	United Kingdom	3,603.7	2	
CA Canada 1,377.0 5 DE Germany 1,186.2 6	AU	Australia	2,430.8	3	
DE Germany 1,186.2 6	NL	Netherlands	1,563.6	4	
	CA	Canada	1,377.0	5	
ES Spain 1,018.6 7	DE	Germany	1,186.2	6	
	ES	Spain	1,018.6	7	

IL	Code	Name	Productivity*	Rank**	Growth Trend***
BE Belgium 654.4 10 SE Sweden 644.7 11 HK Hong Kong 599.0 12 CN China 512.1 13 DK Denmark 458.4 14 FI Finland 437.7 15 NZ New Zealand 431.9 16 TW Taiwan 412.7 17 SG Singapore 384.3 18 IT Italy 372.5 19 CH Switzerland 360.4 20 NO Norway 345.3 21 ZA South Africa 305.3 22 FR France 293.4 23 JP Japan 248.7 24 AT Austria 248.6 25 IE Ireland 194.2 26 SI Slovenia 154.0 27 PT Portugal 149.3 28	IL	Israel	717.1	8	
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CZ Czech Republic 50.7 40 HU Hungary 46.3 41 MA Morocco 40.5 42 RU Russia 37.4 43	NG	Nigeria	53.7	38	
HU Hungary 46.3 41 MA Morocco 40.5 42 RU Russia 37.4 43	AR	Argentina	51.8	39	
MA Morocco 40.5 42 RU Russia 37.4 43	CZ	Czech Republic	50.7	40	
RU Russia 37.4 43	HU	Hungary	46.3	41	
	MA	Morocco	40.5	42	
QA Qatar 35.2 44	RU	Russia	37.4	43	
	QA	Qatar	35.2	44	

Code	Name	Productivity*	Rank**	Growth Trend***
IR	Iran	34.8	45	/
CY	Cyprus	32.3	46	/
EE	Estonia	30.2	47	/
RO	Romania	29.0	48	
HR	Croatia	26.3	49	/
TH	Thailand	24.4	50	
EG	Egypt	23.5	51	
PH	Philippines	23.5	52	
KE	Kenya	21.8	53	
AE	United Arab Emirates	21.5	54	
ID	Indonesia	20.5	55	
PK	Pakistan	19.7	56	
RS	Serbia	18.8	57	
GH	Ghana	18.3	58	
JO	Jordan	17.2	59	
LB	Lebanon	14.7	60	
SA	Saudi Arabia	14.6	61	
PE	Peru	13.8	62	
LU	Luxembourg	12.8	63	
KW	Kuwait	12.2	64	
ZW	Zimbabwe	11.7	65	/
UG	Uganda	10.5	66	
FJ	Fiji	9.2	67	
EC	Ecuador	9.1	68	
OM	Oman	8.2	69	
TN	Tunisia	7.7	70	/
YV	Venezuela	7.6	71	/
BW	Botswana	6.2	72	
BD	Bangladesh	5.6	73	/
TZ	Tanzania	5.5	74	
LV	Latvia	5.4	75	
BG	Bulgaria	5.3	76	
VN	Vietnam	5.2	77	
ET	Ethiopia	4.7	78	
IS	Iceland	4.7	79	
LK	Sri Lanka	4.5	80	

Code	Name	Productivity*	Rank**	Growth Trend***
UY	Uruguay	4.0	81	
LT	Lithuania	3.6	83	
ZM	Zambia	3.5	84	
MT	Malta	3.4	85	
RW	Rwanda	3.2	86	
MW	Malawi	3.1	87	
BN	Brunei Darussalam	2.5	89	
CR	Costa Rica	2.3	90	
NP	Nepal	2.3	91	
DM	Dominica	2.0	92	
GT	Guatemala	2.0	92	
ME	Montenegro	2.0	92	
IQ	Iraq	1.8	95	
SL	Sierra Leone	1.8	96	
UA	Ukraine	1.7	97	
AM	Armenia	1.5	98	
SN	Senegal	1.5	98	
CM	Cameroon	1.3	100	
LR	Liberia	1.2	101	
AL	Albania	1.2	103	
SK	Slovakia	1.1	104	
BB	Barbados	1.0	105	
ВН	Bahrain	1.0	105	
BY	Belarus	1.0	105	
CI	Ivory Coast	1.0	105	
GL	Greenland	1.0	105	
JE	Jersey	1.0	105	
KZ	Kazakhstan	1.0	105	
SY	Syria	1.0	105	
PA	Panama	0.7	113	
ВО	Bolivia	0.6	114	
AO	Angola	0.5	115	
AZ	Azerbaijan	0.5	115	
BT	Bhutan	0.5	115	
GN	Guinea	0.5	115	
IO	British Indian Ocean Territory	0.5	115	
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Code	Name	Productivity*	Rank**	Growth Trend***
WS	Samoa	0.5	115	/
CU	Cuba	0.5	121	/
MZ	Mozambique	0.4	122	/
PY	Paraguay	0.3	123	/
MN	Mongolia	0.3	124	/
SD	Sudan	0.2	125	
SV	El Salvador	0.1	126	/
CG	Congo	0.1	127	/
LA	Laos	0.1	127	/
MC	Monaco	0.1	129	
СО	Colombia	104.9	34	
JM	Jamaica	4.0	81	
ML	Mali	2.9	88	
DZ	Algeria	1.2	102	<u> </u>

Note: *Prorated number of articles in SSCI-Communication journals from 1980 to 2019; **Based on prorated national productivity; ***Each dot in the trend line represents the lowest point of the time series