

國立台北大學都市計劃研究所

博士論文

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跨界生產網絡之群聚演化與創新：以台灣自行車產業為例

**The Evolution and Innovation of Industrial Cluster in the Trans-border  
Production Network: The Study of Taiwanese Bicycle Industry**

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## 論文提要內容：

全球化的發展對於產業區域在資金與勞力大量移動下所發生本質上的變化，產生了大量的理論質疑與論爭，在全球化競爭下，由於技術改善與地理區位的整合，跨國公司多半採用外包以增進其產品創新與掌握市場通路。是以，跨界投資生產的興起，也使得台灣產業產生了劇烈的結構轉型，這種跨界投資的過程，無形將台灣原有的地方生產網絡，進一步連結全球生產網絡。因此，本研究認為產業群聚區域之發展是在這些不同空間層級的動態過程中相互競合，特別是在台灣與中國大陸這種「政治仇敵、文化遠親與經濟近鄰」的特殊政經環境下，台灣的傳統產業如何藉由兩岸之間所形成的跨界生產網絡以強化原有的競爭優勢。而台灣自行車產業是在中國改革開後第一批產業外移至大陸生產的製造業，因此本研究著重在跨界生產網絡所形成的產業群聚演化與創新之過程。透過全球生產網絡之分析架構進行廠商、領域與產業系統之間的複雜關係與其策略性接合過程，利用台灣自行車產業案例之分析，本研究之主要發現為產業的組織創新是台灣自行車產業群聚演化的主要機制以及建構區域學習與創新能力的主要因素。

關鍵字：產業群聚、組織創新、全球生產網絡、自行車產業

## **ABSTRACT**

### **The Evolution and Innovation of Industrial Cluster in the Trans-border Production Network: The Study of Taiwanese Bicycle Industry**

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In the current era of globalization, the changing nature of the industrial regional in relation to the increased mobility of capital and labor has been a topic of extensive theoretical inquiry and unsettled debates. Based on the competition of globalization, the large amount of increasing technology and the integration of geographical districts, the multinational company has adopted the outsourcing of manufacturing to engage in product innovation and hold its market channels. Thus leading to industrial innovation has become the key competition strategy. Nevertheless, Political boundaries are part of the historically contingent process of territory building and are key elements in the maintenance of territoriality, the principle through which people and resources are controlled and governed by the establishment of specific territories. Concurrently, traditional industries in Taiwan that had moved out to mainland China to cut down their production cost are facing fierce repressions from global competition and the particular Cross-Strait relations of recent years. A case study of Taiwan's bicycle industry that first moved out their production after China's reform and opening policy is specified for detailed analysis. This study is thus concerned with the evolution and innovation of industrial cluster in the trans-border production network. This is done here by looking at the analytic concept of a 'global production network' to explicate the complex relationships among firms, territories and industrial systems those who are embedded in turn in the overall macro dimensions of strategical coupling process. Using the case of the bicycle industry in Taiwan, the main finding is that organizational innovation is the key mechanism of evolution of Taiwanese bicycle industrial cluster and the element of constitution of regional learning and innovation capability.

Key word: industrial cluster, organizational innovation, global production network, bicycle industry