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Statistical Analysis Methods of the Corresponding Patterns of the Sound System Among Chinese Varieties

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Abstract:

Sound system evolves toward certain direction. The corresponding pattern of sound change among varieties of the same proto-language developed due to the situation of language contact. Differences between these varieties might lead to communication break-down among their speakers. The objectives of this study is to examine the corresponding pattern between of Chinese varieties and Japenese, Vietnam, Korean languages. Analysis of the collected data were done by matching polyphones, analysing of levels of sound and sound system so as to avoid inaccuracy of the values of the study. This study has recommended a method of how to develop a database called 'character (zi4)-sound (yin1)' database. Besides, this study has also suggested a method by using a particular software on statistical analysis of sound system which can be applied in the future. A precise statistical analysis of this study will contribute to the field of comparative linguistics, computational linguistics, language variation, etymology, second language acquisition, translation etc.

Keywords:

corresponding patterns of characters and sounds, comparative linguistics, computational linguistics, database management , pivot table

漢語相關語言間音韻對應規律的統計方法

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【提要】

語音的演變,具有一定的規律和方向。同族系的兩種語言,經過千百年的演變,也許會讓彼此的差異大到無法互相通話,但其音韻之間, 必然存在或多或少的對應規律。至於原本不同系屬的語言,也有可能因 爲接觸的頻繁,拉近彼此的距離,而形成另一種形式的音韻對應規律。

雙語之間音韻對應規律的統計分析,是比較語言學的重要工作項目。精確的對應規律統計,對於分析雙語音韻異同、擬測共同祖語音韻、考求本字和同源詞、語言(方言)系屬的劃分、語言(方言)調查字表的製定、第二語言學習,甚至相關語文翻譯的研究,都具有決定性的參考價值。

然而,對應規律的統計,是一項煩瑣而又複雜的工作。例如多音字 的配對選澤、音韻層次的分析……等等,任何一個環節的疏忽,都有可 能降低統計結果的精確性,進而影響它的價值。

本文擬針對漢語相關語言間的音韻對應規律的統計,從字音資料庫的建立,到統計軟體的設計,以至於統計結果的應用,提出個人一得之愚,以分饗同道,並就教於方家。

【關鍵詞】字音對應規律、比較語言學、計算機語言學、資料庫檔案管理、 樞紐分析表