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Re-propose the Oracle Bone encoding in 2020
(預計 2020 年重新提案甲骨文編碼)

On 30th October, 2017, UNESCO confirmed that "Oracle Bone" has a profound impact on culture and social history, and selected "Oracle Bone" as the "International Memory of the World Register". The three major historical writing systems in the world include: Chinese characters, the holy books of ancient Egypt, and the cuneiforms of the Sumerians. Among them, only the Chinese characters have been used since ancient times. However, the ancient Egypt hieroglyphics were officially incorporated into the ISO/IEC 10646 standard codebook in 2010, and so were the cuneiforms in 2015.

2017 年 10 月 30 日聯合國教科文組織，肯定「甲骨文」對文化及社會歷史產生深遠影響，將「甲骨文」入選為「國際世界記憶名錄。世界上歷史悠久的三大文字系統包括：中國漢字、古埃及的聖書字和蘇美爾人的楔形文字，其中自古沿用至今的，就只有漢字。但古埃及象形文字已於 2010 年、楔形文字也已於 2015 年分別正式編入 ISO/IEC 10646 標準碼本。

The development of Chinese characters can be divided into two stages: ancient characters and present characters. The time before Qin Dynasty is ancient characters, and the latter is present characters. The Small Seal is the boundary between the two stages. Oracle Bone, Bronze Inscription, Warring Kingdoms Script, Bamboo and silk manuscripts, and Small Seal belong to ancient Chinese characters; Clerical script and

Regular Script belong to present Chinese character. The Chinese characters we are using now are called modern Chinese characters and belong to the scope of present Chinese characters. In the evolution of ancient Chinese characters to present Chinese characters, the form of a character has become more and more easy to write, which makes the relationship between a glyph and its meaning unclear. Therefore, it has to start with the form of an ancient character to understand the structural meaning of a Chinese character. As a result, ancient Chinese characters are not just historical heritage due to losing the function of recording language, and become the part of the text museum. They are the fundamental literature for understanding modern Chinese characters and preserve the living fossils of Chinese history and culture. As long as we continue to use Chinese characters, the existence of these ancient Chinese characters cannot be erased.

漢字發展大體可以分成「古文字」和「今文字」兩個階段，秦代以前屬於「古文字」,，秦代以後屬於「今文字」,其間以「小篆」為界隔。商代甲骨文(Oracle Bone)、商至周金文(Bronze Inscription)、戰國文字(Warring Kingdoms Script)、簡帛文字(Bamboo and silk manuscripts)及小篆屬於古漢字；隸書(Clerical script)及楷書(Regular Script)屬於今漢字。我們目前使用的漢字稱為現代漢字,屬於今漢字範圍。古漢字演變至今漢字，形體變得愈來愈容易書寫，使得字形和字義關係不明顯，因此，想要了解某個漢字的構形意義時，往往需從溯源它的古文字形體著手。所以，古漢字不應因失去紀錄語言的功能，而成為歷史陳跡，走進文字博物館；它們更是理解現代漢字的基礎文獻，保存中華歷史文化的活化石。只要我們繼續使用漢字，這些古代漢字的價值，就不容抹滅。

Shuowen Small Seal encoding has been at the end of the process since the proposal was brought up in 2015; *Shuowen* Small Seal is the final stage of the development of ancient Chinese characters. It includes all the structural patterns of the Qin Dynasty ancient Chinese characters since the Oracle Bone, and is closely connected to the main parts of these ancient characters, so it is the character set of a required reference for the collation and textual research of the ancient characters. Consequently, after the

completion of the international code of *Shuowen* Small Seal, with the ancient character contrast foundation, the next stage of the Oracle Bone encoding can be launched. Since the cross-strait Oracle experts and scholars (Note1) have continued to review the work in recent years, the contents of the proposal have reached its maturity. It is expected to re-propose the Oracle Bone encoding in 2020.

《說文》小篆編碼自 2015 年提案迄今，已進入編碼尾聲；《說文》小篆是古文字發展的最後階段，它囊括了自甲骨文以來先秦古文字的全部構造模式，與前代古文字的主要部件皆有緊密聯繫。「小篆」是古文字整理必須參照的字符集。因此，完成了《說文》小篆的國際編碼，古文字有了對照基礎後，便能適時啟動下一階段的「甲骨文」編碼目標，由於兩岸甲骨文專家學者（註 1）近年持續進行審查工作，提案內容已臻成熟，我們預計 2020 年重新提案甲骨文編碼。

Oracle Bone is the first well developed ancient Chinese writing, containing a considerable number of pictographic drawings as it's the oldest writing; it can help scholars to explore the significance of the earliest Chinese characters and provides a wonderful and lively glyph application for cultural, art, and business. The structure of Oracle Bone has not been fully finalized as it is the earliest script, thus a character often has many manifestations, such as the same character can be presented in the way of pictographs, combined ideograms, phonograms or phonetic loan; the radical structure of a character can be varied according to the changes of positions and number. Like Bronze Inscription, Warring Period Script and Small seal, Oracle Bone is different from modern Regular Script so it does not belong to the same system as the modern Regular Script does. Oracle Bone has a lot of glyphs and cannot be mapped with modern Regular Script, a glyph that can be mapped also has a unique structure of form, as a result, it cannot be treated as a font of modern Chinese characters and attach to the Regular Script, consequently, it has to be placed in an exclusive encoded area.

「甲骨文」是現存中國古代最早的文字。因為時代最早，也最成熟，所以保留了相當多的圖象文字，很能幫助學者探討中國文字的最早意涵，並提供運用在文化、藝術、商業等層面的文創意維。因為時代最早，所以造字心理多元，文字

結構多樣，字形也還沒有完全定型，一個字往往有多種樣貌，例如：同一個字可以用象形、會意、形聲、假借等方法來造字；一個字的結構，也有偏旁、位置及數量多少的變化。因此它與金文、戰國文字及小篆一樣，與現代楷書不屬於同一個體系。同時甲骨文字元有大量的字形，與現代楷書無法對應；能夠取得對應的字形，在字形上也具有獨特的構形，所以它不能直接作為對應現代漢字的一種字體，而附屬於楷書；而必須獨自佔有一個編碼區域，獨立編碼。

In summary, Oracle Bone plays an essential role in the development of Chinese characters, the unique value of Oracle Bone to the research and collation of ancient and modern Chinese characters lies in:

1. Oracle Bone represents the earliest stage of the development of ancient characters, it is the origin of the later Bronze Inscription, Warring State Script, Xiaozhuan and Regular Script, and it is linked to the main components of various typefaces of later generations, so it is a required reference character set for the collation and textual research of Chinese characters.

2. The glyphs and contents of Oracle Bone are closely related to the history and culture of the Shang Dynasty, through the understanding of Oracle Bone, people will be able to know the true facts of world's four ancient civilizations at their early stage.

3. Oracle Bone has been discovered for more than 120 years, leading scholars around the world have done a lot of in-depth research, and have achieved fruitful results. The completion of various works is quite adequate for us to establish a sound character set of Oracle Bone.

4. As the common source of the Chinese character cultural circle, Oracle Bone is the common property of the Chinese cultural circle; as the oldest writing of one of the four ancient civilizations, it is also the common property of the whole world.

總結甲骨在漢字發展歷史上具有重要的作用，甲骨文對古今文字的研究和整

理的獨特價值是：

1. 甲骨文是古文字發展的最早階段，它是後世金文、戰國文字、小篆、隸書、楷書的源頭，與後代各種字體的主要部件多有聯繫，所以，它是中國文字整理與考據必須參照的字元集。

2. 甲骨文的字形及內容與商代歷史文化密切相關，透過對甲骨文的瞭解，可以讓全世界瞭解世界四大古文明的早期真相。

3. 甲骨文發現一百二十多年以來，全球已經有眾多專業學者對甲骨材料進行了大量而深入的研究，他們匯整了清晰可靠的甲骨資料集，建置了甲骨文資料庫，編輯可供參酌的甲骨工具書，取得豐碩的成果，足以讓我們建立完善可信的甲骨文字集。

4. 作為漢字文化圈的漢字共同源頭，甲骨文是漢字文化圈的共同財產；作為四大古文明之一的中國的最早文字，也是全世界的共同財產。

The compilation of ancient Chinese characters into international codes has important values in cultural preservation ,academic research and information provision. Firstly, *Shuowen* Small Seal established the foundation of encoding, and we hope to incorporate ancient Chinese characters such as Oracle Bone, Bronze Inscription and Warring Period Script into the international code to fulfill the importance of preserving and informatizing ancient Chinese characters.

古漢字編入國際編碼有其文化保存、學術研究、資訊提供等重要價值，先由《說文》小篆奠定編碼基礎，我們期許將甲骨文、金文、戰國文字等古漢字，陸續納入國際編碼，達到古漢字保存與資訊化的重要性。

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