# 21<sup>st</sup> URA International Seminar Okayama University

Date: Wed - (水) 21<sup>st</sup> February 2024 — Time: 16:30 VENUE: Tsushima Campus – International House – Conference Hall Antoine BOSSARD

(Talk supported by the HESPRI project - HYBRID mode, broadcasted on ZOOM)

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ELEVATING HIGHER EDUCATION PUBLIC POLICIES: AN EMPOWERING SPRINGBOARD

## Deciphering Chinese characters: a journey where Asian and Western cultures meet each other

Over Because of the huge number of glyphs involved, Chinese character memorisation is a very challenging topic, even for native speakers. Several pedagogical methods have been proposed for foreign learners, yet they often end up in a long list of characters rather hard to process. Our approach is different: Chinese characters are considered from a logical point of view. Not only can such approach facilitate character memorisation, but it also enables efficient representation and processing of Chinese characters by computer systems. The handling of Chinese characters by computers is a notorious issue with several ongoing problems, such as the representation of some character variants as well as unsatisfactory encoding methods. For instance and concretely, some characters are still not representable on modern computer systems because they are not included in the character encodings, such as Unicode and JIS, on which rely our systems. And so, they remain nonexistent for our devices. This is an obvious issue for people of these cultures considering the ubiquity of computer systems nowadays.

In this presentation, we will review essential properties of Chinese characters and discuss how they could be employed to address those issues.

Our approaches can be of great practical interest for Japanese learners, either for professional purposes (students, translators

and so on) or for any lovers of Japanese culture and artistic design for instance. Note: Talk intended for academics, teachers and students Participation is free of charge.

Advanced Registration - Deadline: Feb 1 9<sup>th</sup> : a - https://forms.gle/aDGTdbyfyxVgQbjSA b - CC to bernard-chenevier@cc.okayama-u.ac.jp ZOOM link will be sent to participants registered outside Okayama.



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### **SPEAKER** Short Bio

Antoine BOSSARD is a Professor of the Graduate School of Science, Kanagawa University in Japan. He received the BS and MS degrees from Université de Caen Basse-Normandie, France in 2005 and 2007. He got a Ph.D. degree from Tokyo University of Agriculture and Technology in 2011.



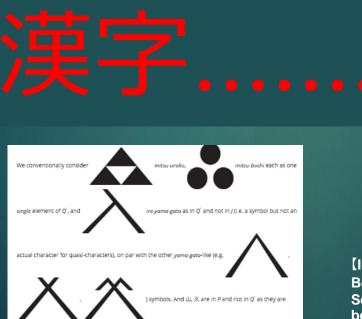
After several years as an assistant professor, notably at the Advanced Institute of Industrial Technology, he joined the Graduate School of Science of Kanagawa Univ. as a tenure faculty. Antoine's research interests are mostly focused on:

- \*\* interconnection networks (topologies and routing problems)
- \*\* information representation and processing of Chinese characters.

He is the author of multiple papers in these fields, published in international journals and conference proceedings. He has also written several books, for instance for his students of computer architecture and functional programming, and on Chinese characters, with notably a commented translation of the first part of the Dictionarium anamitico-latinum of Jean-Louis TABERD (*French missionary of the Paris Foreign Missions Society, and titular bishop of Isauropolis, in partibus infidelium*).

Among other duties, Pr. BOSSARD is also in charge of the following lectures: Undergraduates: (i) introduction to computer systems, (ii)computer architecture, (iii) functional programming, and Master level : graph theory.

He is responsible of the Functional and logic programming lecture at Tokyo University of Agriculture and Technology.



#### Chinese Characters, Deciphered



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