## *Tea for Two:* Language and Bilateral Trade with China

Annie TUBADJI University of the West of England Bristol, the UK <u>atubadji@hotmail.com</u>

Don WEBBER Swansea University Swansea, UK d.j.webber"swansea.ac.uk

## Abstract

Trade routes are the reason why half the countries in the world call their herbal brew 'tea' and the other half 'chai' (Saberi, 2010; World Atlas of Language Structures, 2019). Yet, it is not clear whether the spread of the word tea indicates the fashion that drove the consumption and consequently the trade with tea, or whether the intensity of the trade is simply reflected in the intensity of use of the word 'tea'. The question of causality between language frequency and volumes of bilateral trade is explored in this paper from the point of view of narrative economics and Culture-Based Development, exploring the role of the cultural discourse in the economic process. Using linguistic data from Google n-grams (a digitalized 5 percent sample of world libraries) spreading over the period 1821 – 2008 and data on bilateral trade with China from the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII, Paris) for the same period, we apply reverse causality test on whether the ranking of the word tea in a local language is influenced by flows of trade with China. Next, we use factor analysis for all Chinese foreign words in a particular language and we infer the frequency of this factor variable to explain the relevant trade flows. Results from a pooled cross section with time and country fixed effects and panel data analysis are strongly consistent. Our findings suggest that the use of the word 'tea' is universally impacted not by the direct flows of trade with China, but by the overall size of the Chinese economy, independent of the size of the counterpart economy trading with China. Also, while the flows do not affect the change in the frequency of the use of the word 'tea', the use of the word 'tea' does predict both trade inflows and outflows with China. Moreover, the lagged value of the frequency of use of the word 'tea' predicts the trade flows too. In short, the creation of cultural discourse is endogenous to economic power, yet, the cultural discourse itself amplifies the trade flows with the bigger economy. We interpreted these finding as narrative economics evidence for the endogeneity of the cultural discourse and its impact on bilateral economic trade.

Keywords: culture, language, narrative economics, bilateral trade, China, cultural gravity

**JEL classification**: Z12, Z18, D02, N70, N90, O43, P25, P48, R12, R23,