

Translating COVID Tests Terms From Chinese Into English in the Light of Functional Equivalence Theory*

ZHANG Zhengqing, JIA Xiaoqing

University of Shanghai for Science and Technology, Shanghai, China

Communication of the various testing methods of COVID-19 is vital for English speakers within China and with the outside world. This research is set to find out the appropriate translation of the Chinese phrases referring to COVID-19 tests in English, in light of functional equivalence theory, which is expected to help correct mistakes and facilitate understanding between people speaking the two languages.

Keywords: term translation, COVID-19 tests, functional equivalence theory

Introduction

SARS-CoV-2 spreads all around the world like wild fire, and humanity has already seen wave after wave of infections everywhere. For Chinese government, controlling the pandemic and maintaining a dynamic zero patient policy require each and every resident's cooperation. Communication is the ground work for that. For English-speaking residents in China, to communicate with them regarding various tests is not easy, since neither Chinese nor English has any authority mandating equivalents between the two languages for all testing measures, although both languages have established their own nomenclature for the tests. With the help of functional equivalence theory, this work is set to identify the appropriate translation for the Chinese names of different test measures and thus reduce the confusion in this field. This research is hopefully helpful for the communications and exchanges in the respect of COVID-19 tests between Chinese and English speaking people in and out of China.

Theory of Functional Equivalence

In communication on COVID testing methods across different languages, cultural elements can be omitted since it does not contain any underling cultural references, and the information merely contains the reference to a particular kind of test. So, it is apt to choose functional equivalence theory as the guiding principle for the translation.

Functional equivalence theory puts emphasis on how the reader receives the text, and under this theory a good translation should be that which provokes the same idea and feeling in its receiver as in the receiver of the original. The information contained in the words themselves is not of importance here; instead it is how the

*Grant: 2021 Undergraduate Innovation and Entrepreneurship Training Program (No. XJ2021284).

ZHANG Zhengqing, undergraduate student, College of Foreign Languages, University of Shanghai for Science and Technology, Shanghai, China.

JIA Xiaoqing, associate professor, College of Foreign Languages, University of Shanghai for Science and Technology, Shanghai, China.

reader receives the text that is of vital importance. The aim is to have the English word be of the same reference to the Chinese word, and that the word of choice is understood perfectly by everyone speaking the target language. So, the words themselves are no longer the priority here and to rigidly equate words across languages should be abandoned. Translators should choose, in their respective language, the words that perform that same function for the readers of the translation as that the original does for the readers.

This project is trying to find the best translation for the virus test, hoping that whoever hears the word would understand correctly what it means. Sophisticated technical words should be avoided, or one may run the risk of sacrificing understandability for clarity. A correct but sophisticated word is a deviation from the spirit of functional equivalence theory.

Problem

When communicating with English speakers, Chinese tend to mistranslate the phrases regarding COVID-19 tests. For example, “核酸检测” (He Suan Jian Ce) is most commonly translated into English as “nucleic acid test”, a phrase befuddling most English speakers. One can see this phrase appear in the English papers in China, like Xinhua News (Xia, 2022a) and China Daily (Ma & Yu, 2022).

The same problem is found in another test name as well. “抗体检测” (Kang Ti Jian Ce) has been interpreted as “antibody test”, which is also difficult for English speakers to understand. Examples can be found on official publications as well, like Xinhua News (Xia, 2022b).

“抗原检测” (Kang Yuan Jian Ce) is less seen to be mistranslated, but the authors have come across its misinterpretation into phrases like “the DIY test”.

Translation Analysis of the COVID-19 Tests Names

For the sake of clarity, the COVID-19 tests are now classified by what they actually test. The widely used are the following three testing methods, especially the first two.

RNA of SARS-CoV-2

This kind of test searches for the RNA of SARS-CoV-2. This is the test where samples are taken with cotton swabs in one’s respiratory tract, either nose or mouth, usually by a doctor who comes to the door or the compound. The samples are then stored in vials where the viruses, if there are any, will have their protein shells broken and RNA exposed. The RNAs then go through a process called nucleic acid amplification, where they are multiplied so that agents which would be fluorescent upon combining with the virus’s RNA can detect its presence.

“核酸检测” (He Suan Jian Ce) is the term used in Chinese for this kind of test.

In English, “PCR tests” is the term observed to be used frequently by English speaking community, referring to this kind of test. Mainstream media use this phrase, the examples of which can be found in CNN (Yeung, 2022), USA Today (Vercellone, 2022), US News (Health Day, 2022), and AP News (AP, 2022). PCR stands for Polymerase Chain Reaction, the kind of nucleic acid amplification technique used in this kind of test.

The two words refer to exactly the same test, bringing their respective listeners the same idea. They are also the most frequently used phrases in respective communities, so we may deduct that they are the most proper equivalents in the two languages.

The Protein Shell of SARS-CoV-2

This test tries to find the protein that is unique to SARS-CoV-2. The most common form of this test is through a test kit, which one can do it by oneself at home. A sample is taken by inserting a cotton swab into the nose, and gently scratching against the nasal cavity. The swab is then put into a vial with the agent that will capture the virus protein. People then cap the vial, drop the agents onto the test strip, and read the result.

“抗原检测” (Kang Yuan Jian Ce) is the term used in Chinese for this particular kind of test.

“Antigen test” is used frequently by English speaking community to talk about this kind of test. Mainstream media use this phrase, the examples of which can be found in CNN (Zeidan & Nogueira, 2022), USA Today (Alltucker, 2022), and US News (Smith-Schoenwalder, 2022). Antigen is the name for the protein that is unique to the virus.

The two phrases have the exact same reference and the fact that they are observed to be widely used by their respective language communities shows that the two phrases are appropriate translation for each other.

Antibody for SARS-CoV-2

This test reveals whether there is IgM/IgG antibody present in one's blood. The antibody is the protein cells produced to induce immune responding to SARS-CoV-2. It is the medium through which human immune system fights against the virus. If one is infected, these antibodies will be present in one's blood. Typically, the blood will be sampled by nurse in the hospital, and then dropped on a test strip, to show whether or not antibodies are there.

“抗体检测” (Kang Ti Jian Ce) is the term used in Chinese for this particular kind of test.

In English, “serology test” is often used in this sense. Serology refers to the study of blood serum, where the antibodies would be found. Mainstream media use this phrase, the examples of which can be found in CNN (Wagner, Mahtani, Macaya, & Rocha, 2021), USA Today (Rodriguez, 2021), US News (Kaiser Health News, 2021), and AP News (AP, 2022).

The two words have exactly the same reference and bring their respective listeners the same idea.

Conclusion

As for a general name, Chinese has “新冠病毒检测” (Xin Guan Bing Du Jian Ce), though Chinese tend to specify the kind of test rather than using this general term. In English, however, a general term is used frequently: COVID tests or COVID-19 tests, both of which can refer to any of the afore-mentioned tests.

This paper analyses the appropriate English translations for the Chinese names of the COVID tests. They are summarized in the list below.

Chinese	English
核酸检测 (He Suan Jian Ce)	PCR tests
抗原检测 (Kang Yuan Jian Ce)	Antigen tests
抗体检测 (Kang Ti Jian Ce)	Serology tests

However, one should be aware of the fluidity of language, and the terms are susceptible to changes whenever a new trend sweeps their respective language community. It is hoped that the appropriate translations would be widely known and this work would be of help to the ongoing fight against COVID.

References

- Alltucker, K. (2022). Free COVID tests for Medicare enrollees ready at CVS, Costco. Retrieved from <https://www.usatoday.com/story/news/health/2022/04/04/covid-tests-medicare-pharmacies-free/7265479001/> (Accessed on 15 Apr. 2022)
- AP. (2020). Snohomish county health officials probe positive blood tests. Retrieved from <https://apnews.com/article/health-seattle-washington-united-states-virus-outbreak-0e2d208da6cd7cd5624d723adc4934a2> (Accessed on 15 Apr. 2022)
- AP. (2022). Georgia moves to weekly COVID-19 data reporting. Retrieved from <https://apnews.com/article/covid-health-georgia-public-19a7cd98d156ee0dd58162cc9dbce838> (Accessed on 15 Apr. 2022)
- Health Day. (2022). Researchers say they've developed accurate 4-minute COVID test. Retrieved from <https://www.usnews.com/news/health-news/articles/2022-02-09/researchers-say-theyve-developed-accurate-4-minute-covid-test> (Accessed on 15 Apr. 2022)
- Kaiser Health News. (2021). Amid COVID-19 booster debate, West Virginia to check immunity of vaccinated nursing home residents. Retrieved from <https://www.usnews.com/news/best-states/articles/2021-07-30/west-virginia-to-check-immunity-of-vaccinated-nursing-home-residents> (Accessed on 15 Apr. 2022)
- Ma, Z., & Yu, Y. (2022). Travel permits get containers on the move. Retrieved from <https://www.chinadaily.com.cn/a/202204/15/WS6258de18a310fd2b29e57336.html> (Accessed on 15 Apr. 2022)
- Rodriguez, A. (2021). COVID antibody tests can't confirm vaccine protection, experts say. Retrieved from <https://www.usatoday.com/story/news/health/2021/09/01/covid-19-antibody-tests-cant-confirm-vaccine-protection-experts-say/8239505002/?gnt-cfr=1> (Accessed on 15 Apr. 2022)
- Smith-Schoenwalder, C. (2022). Rapid tests were supposed to be a key to resuming normal life. A new study raises doubts. Retrieved from <https://www.usnews.com/news/health-news/articles/2022-01-06/study-suggests-rapid-antigen-coronavirus-tests-could-miss-early-infection> (Accessed on 15 Apr. 2022)
- Vercellone, C. (2022). Fact check: Article falsely claims PCR tests vaccinate against COVID. Retrieved from <https://www.usatoday.com/story/news/factcheck/2022/02/23/fact-check-article-falsely-claims-pcr-tests-vaccinate-against-covid/6832471001/> (Accessed on 15 Apr. 2022)
- Wagner, M., Mahtani, M., Macaya, M., & Rocha, V. (2021). The latest on COVID-19 vaccines for children. Retrieved from <https://edition.cnn.com/us/live-news/coronavirus-pandemic-vaccine-kids-updates-10-26-21/index.html> (Accessed on 15 Apr. 2022)
- Xia, H. (2022a). Citywide nucleic acid testing underway in Guangzhou. Retrieved from <https://english.news.cn/20220409/2c242ea886974616953e2389980f6bf7/c.html> (Accessed on 15 Apr. 2022)
- Xia, H. (2022b). Aussie researchers develop sensitive COVID-19 antibody test. Retrieved from http://www.xinhuanet.com/english/2020-11/10/c_139506347.htm (Accessed on 15 Apr. 2022)
- Yeung, J. (2022). China accuses US of "weaponizing" extended Shanghai lockdown. Retrieved from <https://edition.cnn.com/2022/04/13/china/shanghai-us-consulate-covid-lockdown-intl-hnk/index.html> (Accessed on 15 Apr. 2022)
- Zeidan, R., & Nogueira, M. (2022). Opinion: We're locked down in Shanghai with 25 pounds of mangoes—and some very helpful neighbors. Retrieved from <https://edition.cnn.com/2022/04/12/opinions/shanghai-lockdown-china-covid-19-food-zeidan-nogueira/index.html> (Accessed on 15 Apr. 2022)