CUHK SOCIOLOGY
中大社會系

NEWSLETTER

Using Open-Source Software in Sociology: Python

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Picture by Pexels (www.pexels.com)

I hesitated when I was invited to write this article because my programming experience with Python is less than one year. What I am comfortable with is STATA, just like most of you. On second thought, this makes me the right person to talk about two things. First, the reasons to invest our valuable time and effort in practicing it when we already have familiar tools for social science research. Second, how to start using it.

One obvious reason appears when you ever need to apply machine learning or deep learning techniques to your empirical study. This involves taking texts or images as data and pre-processing them into a couple of measurements that can be fit into your familiar data structures or running predictions during data analysis. For those tasks, both Python and R contain readymade packages that minimize the knowledge requirement. The relative strength of Python over R in process texts or images is that many useful packages currently can only be found in Python. For executing prediction tasks, my impression is that Python is faster than R. (Of course, R has its relative strength over Python when it comes to statistical analysis, where R contains more helpful packages that are developed by social scientists.)

There is a second reason when we only need to work with conventional data sources and conventional methods. Sometimes we need to reshape the data structure, say, transform the unit of analysis from individual to family, or generate an aggregated level time series, and I feel such jobs are done most efficiently with Python due to its flexibility. This is also feasible with R. Hence, if you are only motivated by this reason, choosing either Python or R depends on your personal preference.

Once you decide to start, I recommend you spend a maximum of 10 learning hours for pure learning. This refers to watching online courses or reading official tutorials for a "systematic introduction" (There are tons of great online resources in both English and Chinese). After those hours, do not just watch or read, no matter how satisfying it feels, but start "practicing" by working with your own jobs. It does not mean stopping learning. In fact, we might have to read relevant materials and watch the clip of online tutorials all the time. The point is, only by doing it can you clarify your needs and develop plans for further learning. At the beginning, the psychological barriers might haunt you; the self-doubt about the efficiency or efficacy of your codes, the frustration that you always let ridiculous bugs happen, etc. If it really disturbs you, try to interview people who are more experienced in programming, most likely you will learn that you are not alone, and it is better to trust yourself.

How to Write Your Proposal

CHEN Lingxi

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Writing a research proposal is significant to your PhD study. Thus, I would like to offer some tips for your proposal writing:

1. Communicate with your supervisor. When writing a proposal, you need to discuss with your supervisor about the topic, related literature, key concepts, and word length of your work.

2. Be patient. It is very likely to amend your proposal several times.

3. Figure out the key concepts in your research. Some concepts are related but different, and you need to clearly identify the key concepts you wish to use or further investigate in your research.

4. Address the research gap and the expected contributions of your study. To be specific, you should try to answer the following questions during your proposal writing: What are the research gaps? Why should you fill the research lacuna or advance related studies? Can your studies make any empirical or theoretical contributions, or enhance public policy making?

5. If you are doing a qualitative study, you also need to consider feasibility when writing your proposal. Is it possible to access the field sites or interviewees in particular regions or periods? Is it possible to obtain ethical approval?

Writing a proposal is a tough but exciting journey. Keep working and build a good start for your research!

ANNOUNCEMENTS

✓ Call for Papers
- International Chinese Sociological Association Annual Conference. Dec. 16-17, 2022. Guangzhou, mixed mode. **Deadline: A paper or an extended abstract by Oct 22**. (see the ad)

✓ Job Ads
- Instructor, Social Science, specialized in Cities-related studies, National University of Singapore, Singapore. **Deadline for applications: Sep 12, 2022.** (see the ad)

- Post-doctoral Researcher/University Researcher/Full Professor, Sociology, University of Helsinki, Finland. **Deadline for applications: Sep 13, 2022**. (see the ad)

- Research Assistant Professor/Postdoctoral Fellow, Department of Sociology and Social Policy, Lingnan University, Hong Kong. **Deadline for applications: Sep 28, 2022**. (see the ad)

- Lecturer/Assistant Professor/Associate Professor/Senior Associate Professor in China Studies, Xi'an Jiaotong-Liverpool University, Suzhou, China. **Deadline for applications: Sep 26, 2022**. (see the ad)