MANUAL
Summerschool Workshop
Set-theoretical comparative methods and fuzzy set QCA analysis

May, 21-23, 2014

PhD programme 2013-2014
Graduate School of Social Sciences
VU University Amsterdam
Set-theoretical comparative methods and fuzzy set QCA analysis
PhD programme Graduate School of Social Sciences, 2013-2014
VU University Amsterdam

Period: 5 (May 2014)
Course Credits: 3 ECTS
Lecturer: Prof. dr. Barbara Vis (b.vis@vu.nl)
Fee (external participants): € 300,-
Maximum participants: 15
Sign-up/ inquiries: Saskia Jans (s.jans@vu.nl)

Schedule:
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Wednesday, May 21</td>
<td>9.30-15.30</td>
<td>HG-1G11</td>
</tr>
<tr>
<td>2 Thursday, May 22</td>
<td>9.30-15.30</td>
<td>HG-1G11</td>
</tr>
<tr>
<td>3 Friday, May 23</td>
<td>9.30-15.30</td>
<td>HG-1G11</td>
</tr>
</tbody>
</table>

Course objectives
Comparative analyses are central to the social sciences, making knowledge of comparative methods crucial for all graduate (MSR and PhD) students in the field. In this GSSS workshop, you are introduced to, discuss, and practice comparative methods that are based on set theory and formal logic and which have become known under the acronym QCA (Qualitative Comparative Analysis), configurational comparative methods (Rihoux & Ragin 2009), or set-theoretical methods (Schneider & Wagemann 2012). These techniques have been introduced to the social sciences by Charles Ragin in the late 1980s (Ragin 1989) and have been improved since (e.g. Ragin 2000, 2008). Over the last years, the scholarly interest for and use of configurational methods is increasing, as a rising number of publications using these techniques signifies (see www.compasss.org for a useful bibliographical overview).

This workshop provides you with a solid understanding of the set-theoretical underpinnings of configurational methods and of the practical research skills needed to perform a comparative configurational analysis, especially of the fuzzy-set type. After the workshop, you will be able to identify and deal with the issues, problems and strategies of ‘small and medium sized’ (N between around 5 to 50) research, projects for which these techniques are most suited. This knowledge of systematic comparative research is also highly relevant for those graduate students who do not intend to use a configurational method, but who are conducting a comparative study (such as a comparative case study design).

Course content
The workshop is structured as follows. The first day starts by refreshing or introducing your knowledge of comparative methods by discussing among others the work of J.S. Mill, on which configurational methods are based, and by introducing configurational thinking. We will especially focus on key concepts of the approach, such as causal complexity, necessity, and sufficiency.
Moreover, we will discuss how necessity and sufficiency can be used to identify subset relationships. In the following days, you will put this knowledge to practice by analyzing subset relationships by means of truth tables. You will learn to work with the most widely used the available (open source) software: Tosmana (http://www.tosmana.net/) and fsQCA 2.5 (http://www.u.arizona.edu/~cragin/fsQCA/software.shtml). We end by discussing how to mix a configurational approach with (an)other approach.

Throughout the workshop, your active participation is required, both in the discussions and in the exercises and re-analyses. Datasets for the re-analysis will be circulated prior to the course. If you already have a configurational data set, there will be ample opportunity throughout the workshop to ask questions how to work with these data.

Class room assignments include, among other things, discussing issues relating to the approach in small groups and conducting re-analyses.

**Course audience**
This course is open to both 'regular' and external Ph.D. candidates ('buitenpromovendi’) who are linked to the various departments of the VU Faculty of Social Sciences and member of the GSSS. The course is both useful for Ph.D. candidates in their 1st year and in later years. Ph.D. candidates from relevant other VU faculties (i.e., psychology, economics, and management science) and other universities are welcome. These external participants are charged a fee (see above). A basic level of prior knowledge on QCA is sufficient to enter this workshop.

**Registration**
Please register for this course before May 1st 2014 by sending an email to Saskia Jans (s.jans@vu.nl). She will add your name to the Blackboard page of this course so you get access to the necessary documents and updates. Participants must also do a preparatory assignment, see below, which they need to send to the course lecturer ultimately one week before the start of the course.

**Important note**
You need to bring your laptop to class for learning how to work with the software and for conducting the re-analyses. Please make sure to install the (open source) software that we’ll use prior to the workshop:
- Tosmana (http://www.tosmana.net/)
- FsQCA 2.5 (http://www.u.arizona.edu/~cragin/fsQCA/software.shtml).

**Assessment**
To obtain ECTS credits for the course participants are required to (1) be present in all sessions; (2) actively participate during the classes, (3) submit the preparatory assignment (see below), and (4) submit a reflection paper (see below).
The grade for this course is 70% reflection paper; 20% class participation; 10% preparatory assignment. All assignments need to be graded as sufficient in order for students to pass this course.

**Required Readings:**
The following books are the main required readings of the course, which you need to purchase and read in advance of the course:


In addition, I recommend you to read some parts of the following book:


The 2012 book by Schneider and Wagemann is an excellent, up-to-date advanced text book for the different set-theoretical approaches. It is a must-read for researchers intending to use a set-theoretical approach in their research.

In addition to these books, we read and discuss a series of articles. You can find an overview of these required readings as well as some additional readings in the schedule below. It is expected that you have read the relevant chapters and articles in advance of the workshop.

If you want to read even more on the logic of comparative configurational methods or consult some of the many examples of empirical applications of these methods, see the extensive bibliography available on the resource website www.compasss.org. Also the recently published mini-symposium on configurational approaches in *Political Research Quarterly* (2013, vol. 66, issue 1, 167-235) is a possibly useful read.

**Schedule**

*NB: Please note that the links in the detailed schedule below may not work (any more). In that case, please look up the articles in the “traditional” way (e.g., through UBVU or by Googling the title).*

**Day 1 (morning) Comparative Research in the Social Sciences & Configurational thinking, part I**
The first day of this workshop begins by refreshing, or introducing, the basics of comparative research. You will reflect on some key questions related to the comparative method. Why, for example, is this method so central in the social sciences in general? What are its strengths and what are its pitfalls? By discussing these and related questions you will both learn what the comparative method has to offer for their own research and will arrive at the appropriate level for the rest of the course.
Required readings

- Rihoux & Ragin (2009), chapters 1 and 2;

Additional readings


Day 1 (afternoon) Configurational Thinking, part II

In the afternoon of the first day, we continue discussing set-theoretic thinking, which is at the heart of configurational approaches. Because of their centrality in these approaches, you will among other things be made (more) familiar with necessary and sufficient conditions. It is interesting to note that – although often not using this vocabulary – ‘traditional’ case studies also typically focus on necessary and/or sufficient (combinations of) conditions.

Required readings:

- Ragin (2008), Introduction, chapters 1 and 6;

Additional readings

- Schneider & Wagemann (2012), Section 3.1.1.1 ('Basic logic of sufficiency'), Section 3.2.1.1 ('Basic logic of necessity') and Section 3.3 ('Causal complexity in set-theoretic methods')
Day 2  CsQCA: Boolean algebra, truth tables, applications and re-analysis & FsQCA: the basics
Arrived at the second day of the workshop, you have gathered enough theoretical baggage to turn to the first configurational approach: crisp-set QCA. I will introduce Boolean algebra and show how to apply minimization rules to Boolean truth-tables. By means of some recent applications of csQCA, you will both learn how to work with the software packages and obtain better insight into how Boolean analysis works and whether this method can be of use to your own research.

Required readings:
- Rihoux and Ragin (2009), chapter 3, chapter 6 (pp. 123-138);
- Rihoux and Ragin (2009), chapter 5 (for fsQCA, the basics);
- Ragin (2008), chapter 9;
- Schneider, C.Q., & Wagemann, C. (2010), Standards of Good Practice in Qualitative Comparative Analysis (QCA) and Fuzzy-Sets, *Comparative Sociology*, 9(3): 397-418. Available [here](#).

Recommended readings:
- Schneider and Wagemann (2012), Chapter 1, Chapter 2 and Sections 4.1 ('What is a truth table?'), 4.2.1 ('Crisp sets') and 4.3 ('Analyzing truth tables');

Day 3 (morning) FsQCA: Calibration, coverage, consistency, applications & re-analysis
On the final day of the workshop, we continue with fuzzy-set QCA (fsQCA). Again we re-analyze some recent work to demonstrate how to conduct a fsQCA analysis with the software (fsQCA 2.5) and make clear how this approach can be of use (or not) in your own research.

Required readings:
- Ragin (2008), chapters 2–5, 7;
- Schneider, C.Q., & Wagemann, C. (2010), Standards of Good Practice in Qualitative Comparative Analysis (QCA) and Fuzzy-Sets, *Comparative Sociology*, 9(3): 397-418. Available [here](#).

Additional readings
- Schneider & Wagemann (2012), Sections 4.2.2 ('Fuzzy sets') and Chapter 5 ('Parameters of fit').
Day 3 (afternoon) Mixing methods

We conclude the workshop with a discussion of mixing methods, especially focusing on to what extent a configurational approach can be mixed with a more "traditional" quantitative approach. What are the advantages of mixing? And what are the disadvantages? What are the implications hereof for your own research? Mixing configurational comparative approaches, like fsQCA, with case studies makes a lot of sense, as you will already have seen in the earlier sessions of the workshop. Of course, there is also room to discuss any questions you may have in this regard.

Required readings

- Rihoux and Ragin (2009), chapters 7 and 8;

Assignments

For this workshop, you need to do two assignments: a (short) preparatory assignment and a reflection paper.

Assignment 1: Preparatory assignment

Please prepare a document in which you answer the following questions.

1. What is the research question of your PhD project or Resma thesis? Please write down both the research question and a short description of the topic of your project. If you have no research question yet, please describe what the project will be about and what possible questions you are thinking about.

2. What is the methodological approach of your project? That is to say, which method or methods are you planning to use? Why have you made this choice? When answering this latter question, you can discuss issues such as the number of cases in your study, your research question or other issues you find pertinent. If you have no methodological approach yet, please discuss the approaches you are considering using (and why).

3. How much do you already know about comparative research in general and about configurational approaches (QCA, and/or fsQCA) in particular? If you are planning to include a configurational approach in your project: have you already collected data? Feel free to use as much space as you need when answering these questions. However, in most cases 1 to 1.5 pages will probably be enough to answer them all.

The goal of this assignment is twofold. First, it prepares you for this course. Second, it provides the relevant background information for me as instructor and for your fellow workshop participants. The latter will facilitate the discussion and group work throughout the workshop.

Please email your assignment to me (b.vis@vu.nl) and to the other participants (email list will be provided in due course) 1 week prior to the course (i.e., May 14, 2014), at the latest.
**Assignment 2: Reflection paper**

In assignment 2, you need to reflect on what you have learnt in the workshop, in particular whether configurational comparative approaches (like fsQCA) have something to offer for your own project and why (not).

There is no required structure for the reflection paper, but you may want to address the following points:

- Is the argument that you want to make in your study a set-theoretical argument? If yes, what is the argument exactly and how can a configurational comparative approach help you to test it? If not, would it make sense to try and turn it into a set-theoretical argument? Why (not)?
- What are your main concepts and how would you calibrate these? (if applicable)
- Do you want to combine a configurational comparative approach with another approach and, if so, which one? Does this pose epistemological and/or ontological problems and, if yes, how are you planning to address these?
- Irrespective of whether you'll use the approach for your own research project or not, what are the strengths, weaknesses, opportunities and threats of configurational comparative approaches?

The approximate length of the assignment is 2,000 words (incl. references), but you are free to write a longer paper if this is relevant for your project. Please email your reflection paper to Barbara Vis (b.vis@vu.nl) on **June 27, 2014** at the latest.

**Bio Prof. Dr. Barbara Vis**

Prof. dr. Barbara Vis is full Professor of Political Decision-Making on a Fenna Diemer Lindeboom Chair at the Department of Political Science and Public Administration of the VU University Amsterdam, the Netherlands. Her research and teaching interests lie in comparative political economy, political decision-making, and political methodology. Her research largely takes place in the context of the VIDI project 'HIGH-RISK POLITICS: Explaining and Improving Political Actors' Decision-Making on Electorally Risky Issues' that she is directing (2012-2017). This project, funded by the Netherlands Organisation for Scientific Research (NWO), studies risky decision-making of different political actors (politicians, political parties, governments) on salient issues (welfare state reform and military intervention). See also the project’s website www.highriskpolitics.org. Prof. dr. Barbara Vis is also involved in two other, related, research projects at VU University Amsterdam: NEUJOBS, an FP7 funded project that examines the future developments of European labor markets, and In Search of a New Welfare State, a project funded by Stichting Institute Gak. You can read more about her work on her personal website: www.barbaravis.nl.