

A Sociological Experiment on Methodological Design—Strengths and Limits of a Pragmatist Approach to Research Methods in the TRUE Project

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Abstract This chapter revisits the TRUE project from the perspective of the methodological choices made and, particularly, of the debate between qualitative and interpretive methodologies on the one hand, and quantitative and formalized methodologies on the other hand. By doing this, we highlight the deeper rationales of methodological choices, the practical goals and implementation and, finally, their outcomes in terms of analysis, as well as limitations that emerged. We show how the confrontation between methodological approaches was not resolved through a unifying solution, but led rather to a pragmatic approach where different methods have been adopted depending on the research goals. In this perspective, the project largely followed a general tendency in social science methodology towards using mixed methods.

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INTRODUCTION

In the early phases of the TRUE project, a controversy broke out concerning scientific methods. At first glance, it concerned mostly practical issues turning on the most efficient way of collecting comparable data on universities across a large number of countries, an issue which was central to the program “Higher Education and Social Change” (Bleiklie 2014; Kosmützky and Nokkala 2014). However, behind this discussion loomed deeper differences within the research team concerning epistemological and methodological foundations of social sciences research, which are well known in the general debate on scientific methods (Creswell 2013). These concerned for example knowledge claims about how scientific knowledge should be developed (positivist vs. constructivist), strategies of inquiry (quantitative vs. qualitative) and research methods.

The overall frame of the TRUE project was in this respect particularly challenging. The project articulated a general goal of providing comparative evidence across countries with a distinct multilevel understanding of higher education, where interactions between field-level governance (policies; Paradeise et al. 2009), population-level dynamics (diversity; Huisman et al. 2007) and university-level governance (de Boer et al. 2007) should be taken into account in order to explain the organizational transformation of universities. This also generated a wide range of subtopics, from policy governance to organizational governance and management, from human resources to finances, evaluation and strategy, each research tradition bringing its own epistemological and methodological approaches.

Appreciating this diversity, while at the same time developing federating methods across countries and topics, was therefore a central challenge. As I shall describe in this chapter, it led to a distinctive mixed methods approach (Tashakkori and Teddlie 2010), where the emphasis has been on combining and integrating different types of data rather than on developing a unitary methodological strategy for the whole project. Further, methods were adapted to the specific TRUE context in an original way, like in the case of the TRUE survey (Seeber et al. 2014), while innovative methods were adopted in some instances, like recourse to self-ethnography (Alvesson 2003).

The aim of this chapter is therefore to revisit the TRUE experience from the perspective of the methodological choices that were made, by highlighting their (sometimes hidden) deeper rationales, the practical

goals and implementation and, finally, their outcomes in terms of analysis, as well as limitations that emerged. Besides documenting this experience and providing background information to the other book chapters, my goal is also to contribute to self-reflection on methods in higher education from two perspectives: the broader methodological debate in social sciences on the one hand and the specific practical issues for our field on the other hand.

The chapter is organized as follows. First, I introduce concepts and distinctions from sociological theories of scientific methods, which are useful to interpreting the TRUE experience in a deeper way. Second, I revisit the TRUE methodological choices from three perspectives, namely the general methodological debate, the working of the selected methods and, finally, the use of data for analytical purposes and the publishing output. I conclude with some reflections on methodological development in higher education studies and its necessary link with theoretical development.

METHODS, EPISTEMOLOGIES AND COMMUNITIES OF PRACTICE

Many discussions on methods in social sciences follow a clear-cut opposition between quantitative and qualitative methods, considered as distinct and incompatible ways of performing research (Snow 1998; Neuman and Neuman 2006). Following this perspective, two (or more) alternative paradigms for doing research can be identified (Lincoln et al. 2011), which can be distinguished in terms of their ontology (assumptions concerning the nature of reality), epistemology (assumptions on how knowledge is generated), methodology (stipulations on how to do research) and methods (approaches to collect information).

In this perspective, quantitative and qualitative methods would not differ only concerning practical ways of collecting and handling data, but imply incompatible ways of seeing the world and how knowledge is produced (Creswell 2013). A quantitative approach would be rooted in a realist ontology and positivist epistemology: the nature is characterized by the existence of general laws and, therefore, the process of inquiry should be oriented towards discovering regularities and causal explanations; hence, a focus on generalizability of research results and led to the widespread usage of quantitative data which are comparable across contexts. Comparability and controlling for diversity of the contexts are therefore key issues for a quantitative approach (Reale 2014).

On the contrary, qualitative methods would be rooted in a subjectivist ontology and a constructivist conception of science, where reality can be accessed only through the lenses of the observer and his/her subjectivity. Since knowledge is socially constructed, it is situated in specific spatial and temporal contexts and, therefore, there is little scope to inquire for general laws, while generalization is seen as methodologically problematic (Knorr Cetina 1995). Therefore, the goal of scientific inquiry should be to ascertain diversity and to develop thick descriptions of local contexts, by using a rich set of qualitative information closely associated with the views of the involved actors.

Following Kuhn (1962), social studies of science have mostly associated methodological paradigms with the social structure of science, arguing that scientific communities tend to develop an internally coherent methodological paradigm to which their members adhere and which provide these communities with identity and distinction. In this sociological perspective, methodological debates would reflect struggles for power and legitimacy between competing scientific communities and, while individual researchers would have little leeway to adapt their method to a specific research question, as this would imply a loss of recognition and legitimacy by their colleagues.

Interestingly, the initial debate within TRUE largely followed these lines. Some of the researchers argued for a comparative approach based on national and university case studies, mostly relying on interviews, as this would allow understanding country and organizational specificities. Others argued that, in most cases, these approaches led only to the juxtaposition of case studies, without a real comparative approach (Bleiklie 2014; Kosmützky and Nokkala 2014), and, therefore, argued for more quantitative (survey-based) methods, which would allow for systematic comparisons. Retrospectively, I would consider that the debate concerned less the way data should be collected (the method) and more questions concerning the overall goals of the research and the most suitable methodological approach to reach them.

The methodological discussion within TRUE was not however stuck in this confrontation, leading for example to one paradigm dominating the whole project. On the contrary, the project attempted to combine methods and approaches from different traditions, taking stock of their

respective strengths. This follows a general move in social sciences methodology towards more flexible mixed methods approaches (Tashakkori and Teddlie 2010; Small 2011).

In this perspective, the project largely followed a pragmatist epistemological tradition (Maxwell and Mittapalli 2010), where methods of inquiry are considered as set of tools the selection of which largely obeys pragmatic considerations related to the characteristics of the research questions and to practical considerations concerning data and resources.

Two insights of the current research on scientific methods are relevant in this respect. First, methods of inquiry are inherently multilevel constructions involving deeper ontological and methodological beliefs, more mundane aspects concerning data, methods and empirical design and, finally, issues concerning research purposes and practical aims of research (Biesta 2010). Incompatibilities at some levels are constitutive—it is not possible to combine within a research design a positivist and a constructivist epistemology—while others are not: it is not rare combining a positivist approach and the search for general laws with qualitative data and even qualitative methods of analysis, while interpretive approaches can also be applied to numbers. The two clear-cut scenarios of quantitative and qualitative methods might well be widespread research strategies, but other scenarios can be constructed by combining methods across levels, opening a wide space for the development of tailor-made methods adapted to specific research questions (Creswell 2013).

Second, studies of sciences provide evidence that research methods do not function as iron-cage paradigms, but in most instances as *heuristics*, i.e. templates for acceptable ways of performing research which are mobilized in a flexible way by individual researchers depending on the specific research conditions and research goals (Abbott 2004). With some exceptions, most scientific communities are characterized by some level of methodological pluralism, particularly in communities which are multidisciplinary by nature like higher education studies and therefore inherit very different methodological approaches from the parent disciplines.

Therefore, methodological debates are not necessarily stuck in disciplinary confrontations, but might also lead to the emergence of methodological innovation by recombining different approaches.

THE TRUE METHODOLOGICAL APPROACH: A REVIEW OF THE EXPERIENCES

The Rationale for Methods and the Debate

The goal of the TRUE project was to analyze, and possibly, explain, the transformation of European universities from collegial to managed organizations (Amaral et al. 2003; Bleiklie et al. 2011), as well as identifying differences between individual universities and countries in this process. The underlying theoretical assumption was that this change was driven by two processes, i.e. changes in the policy environment with the introduction of New Public Management approaches (Paradeise et al. 2009) and the behavior and strategy of individual universities, leading to internal diversity within national higher education systems (Huisman et al. 2007). The TRUE team was distinctly multidisciplinary, including scholars from public administration, organization studies, political sciences and sociology (Hope 2014).

The project had therefore a theoretical ambition to identifying causal mechanisms linking policy change with organizational change and a distinct focus on comparing universities across countries in order to identify differences and similarities. The multilevel design of the study led to methodological and practical issues, since a large number of cases in each country would have been required; the envisaged solution was to combine in-depth case studies of three higher education institutions (HEIs) in each of the eight participating countries with an overall survey of all HEIs included in the countries included in the study and the collection of general statistical data to analyze system diversity. A second methodological issue concerned the characterization of policies, since national political systems can be distinguished according to many different dimensions (Bleiklie and Michelsen 2013) and, therefore, linking policies and transformation of universities would require strong theoretical assumptions concerning the underlying causal mechanisms.

When the project was approved, the choice of the methodologies in order to analyze the university case studies became rapidly debated. Some members of the research team argued that comparing 24 qualitative case studies based on interviews would hardly be possible and the result would have been the juxtaposition of loosely coupled cases current in higher education research (Kosmützky and Nokkala 2014).

Retrospectively, one should recognize that the issue was not the type of data or the data collection methods, as there are good examples of research combining case studies with systematic comparisons (Paradeise et al. 2009). Even within TRUE, a paper was published comparing universities through fully qualitative data (based on self-ethnography; Bleiklie et al. 2015). However, the key to this qualitative approach was a well-developed theorization to identify common categories and observation points across organizations and introducing a tighter project organization.

The alternative proposed was to use survey-based methods to collect systematically comparable information based on standard scales—to use statistical analyses to compare organizations and their variations. The critique was that, first, survey scores are only comparable at the surface, but hide systematic biases related to the context of respondents and, second, they can only grasp the formal side of organizational behavior, but not the deep social processes within an organization, a critique current in the so-called critical approach to organizations (Clegg et al. 2006). Again, the issue was less with the type of data—there are well-developed techniques to control for bias and to construct from surveys measures of latent concepts which are not directly observable (Nederhof 1985), but with the underlying epistemology. Retrospectively, a more interpretivist and constructivist epistemology would have been hardly compatible with project original goals and design.

The compromise found was to combine the two approaches, by, first, realizing a survey of members of the 24 universities selected and, then, a set of interviews with a smaller number of respondents in one of these universities per country to provide more in-depth interpretations of organizational behavior, focusing as well on specific topics. A price to be paid for this combined approach was to renounce the envisaged large-scale survey of all universities in the concerned countries.

Methods in Practice. Implementation and Limitations

Table 2.1 summarizes the methods used in the TRUE project, highlighting its distinctive mixed methods approach and the attempt to combine different methods in order to provide complementary information.

In the following, I shortly present each method and highlight its value for TRUE and the limitations which emerged.

Table 2.1 Summary of the TRUE empirical methods

<i>Instrument</i>	<i>Unit of analysis</i>	<i>Sample</i>	<i>Method</i>	<i>Data format</i>
Institutional descriptions	Universities	26 universities in eight countries	Data collection from Websites	Word files based on common template
Formal autonomy questionnaire Survey	Universities/Policy Individual respondents inside universities	One university per country 687 respondents in 26 universities	Expert assessment by the participating teams Standardized questionnaire (mostly 5-point Likert scale) delivered online	SPSS data file and codebook SPSS data file and codebook
Interviews	Individuals inside the universities	10–15 people for each university, 8 university (one per participating country)	Semi-structured interviews, plus documentary sources	Case study monographs Summary excel sheets
Analysis of public policies	National political systems	8 countries About 10 interviews per country	Semi-structured interviews, plus documentary literature	Policy case studies Policy templates
Analysis of European policies	Members of European Parliament and officers of the European Commission	10 members of European Parliament and officers of European Commission	Semi-structured interviews	Interviews

Constructing the Sample

Much attention was devoted to the selection of universities in the sample, based on the idea that it should broadly reflect the diversity of universities in Europe. Two main criteria were adopted: the subject specialization, distinguishing between generalist and specialist HEIs (Lepori et al. 2010) and the level of international reputation, as expressed for example by international rankings. Therefore, for each country the sample included: (a) one comprehensive research university; (b) one technical/specialized university; (c) one less prestigious university (e.g. a previous college turned into a university with a low score on research intensity). The final sample was composed of 26 universities, as Switzerland included five cases, Norway four, while France included just two.

This sample can be considered as representative of the (diversity of) European universities, since it includes universities which are rather different in terms of size (number of students between 2000 and 90,000), age (foundation year between late twelfth and late twentieth centuries), international reputation (some universities in the sample being among the first 100 in international rankings, others not included at all) and finally, discipline concentration, as the sample includes both generalist universities and specialized technical universities. Moreover, it covers countries that are very different in terms of their political-administrative systems (Bleiklie and Michelsen 2013) as well as the strength and timing of NPM reforms (Paradeise et al. 2009; Bleiklie et al. 2011). Variation in NPM pressures by countries generated an interesting natural experiment, which could be exploited for hypotheses testing (Canhilar et al. 2015).

Therefore, sample construction was consistent with the project goal to observe variation in university characteristics both within and between countries, a very reasonable approach for a cross-sectional study.

Collecting Descriptive Information on the Sample

As a first step, descriptive formal information for each university in the sample was collected in a standardized report. The report included general information on the university, basic statistical data, and information on funding, strategies, research and educational activities.

The reports were to some extent helpful to analyses at later stages, as they provided good comparative information; further, they demonstrated that since the advent of the WWW, a large amount of information on cases can be retrieved directly through desk work. Currently, most university websites provide rich information on university organization,

history, and statistical data. In many cases they also allow downloading important documents like strategic plans, budgetary reports and even minutes from the rectorate, board and academic senate meetings. The complementary use of Internet sources and interviews proved to be very useful for one case study made in TRUE concerning university budgeting (Lepori and Montauti 2015).

The Formal Autonomy Questionnaire

The formal autonomy questionnaire was a questionnaire comprising closed questions on the level of formal autonomy of universities based on the typology developed by Verhoest (Verhoest et al. 2004) and adapted for the higher education sector (Enders et al. 2013). It was developed by one team member and completed for one university for each participating country, as it should reflect mostly characteristics of the national policy environment. The questionnaire proved to be useful for comparative analysis and, as a matter of fact, is highly complementary to the survey of university members as it provides external expert assessment dealing mostly with formal dimensions of autonomy associated with national regulation. Retrospectively, the value of questionnaire would have been strongly enhanced by completing it for the whole sample for two reasons: the possibility with matching with the survey data and some more statistical power in drawing comparisons.

The TRUE Survey of University Members

The survey of university respondents was the main effort for data collection in TRUE. It was addressed to individuals holding some management responsibility within universities, with the rationale that they would know better how their university works. This included five organizational roles, i.e. the rector (or equivalent), the head of the administration, the faculty deans, the members of the university board and the members of the academic senate.

This sampling approach generated some complexities since the organizational structure differs by university and therefore, the sample composition varies (like some universities not having a board or a senate), generating a risk of systematic bias. Retrospectively, this was less of a problem, since for most questions there were no statistically significant differences in responses by group. The survey also did not include explicitly academics, but they are represented through specific roles (most faculty deans and senate members are academics). Again, there is little

evidence of systematic differences between academics and non-academics (for example external board members) in responses.

The major advantage of this approach was a more manageable population of respondents and less subject to potential knowledge bias. Systematic follow-up and reminders resulted in a very good response rate: in the end 687 valid questionnaires were collected from a population of 1420 potential respondents (response rate 48%). At the university level, the number of respondents ranged from 7 to 55. In terms of roles, the composition of respondents is rather similar to the original population: we collected 246 questionnaires from senate members (response rate 45%), 235 from middle managers (48%), 162 from board members (50%), 20 from central administrators (74%), and 24 from rectors (89%). Retrospectively, a slightly larger sample, including for example a subset of academics, would have been useful in order to increase statistical power.

The survey included only closed questions, mostly standardized 5-point Likert scales, in a few cases single-choice questions. The preparation of the questionnaires was a complex process, as it had to take into account the different interests within the TRUE research teams. In the end, the survey included following groups of questions:

- The organizational role of the respondent and his/her overall perception of the university.
- University policy and funding environment, as well as resource acquisition.
- University governance and management.
- University strategies.
- University internal allocation process for resources and evaluation.
- The relationships between university bodies and the distribution of power within the university.

This broad coverage of topics has to be considered as a strength of the TRUE survey, as it permits combining different items in more robust constructs and makes investigation of a wide range of different research questions possible (see below section “[Comparing Universities](#)”). It led however to the rather unfortunate decision to include some questions only in the questionnaire for a specific role—for example focusing the rector’s questionnaire on evaluation issues and the administrator’s one on budgeting issues in order to reduce the number of questions. While understandable in the context of TRUE, this choice reduced the

analytical power of the questionnaire—most analyses rely only on common questions to all questionnaires; moreover, it generated complexities in the management of the responses as five different questionnaires had to be merged together.

Much attention was devoted to standardizing questions and scales and adopting a wording as clear and as neutral as possible. Feedback from the respondents (in the remark section of the questionnaire) was overall positive in this respect. This effort proved to be important also for publishing, as a common critique against such questionnaires was bias induced by how questions are formulated; for instance, New Public Management, a major issue for the TRUE project, is never mentioned explicitly in the questionnaires.

Survey delivery was managed centrally through an online tool by one team member, while national participants took care of sending personalized reminders to potential respondents at their universities. The survey was anonymous; the contact e-mails of the respondents were stored solely for the purpose of recalling.

This approach worked well. The online tool allowed for translation to national languages whenever this was deemed necessary, as in the case of France. Online delivery is also desirable in order to reduce social desirability bias, i.e. respondents adapting their responses to what they perceive coincide with the preferences of the researchers. Finally, local contacts and reminders strongly contributed to the high response rate—in most universities the central management agreed to inform about the survey and motivate responding.

Once data had been collected, all questionnaires were merged in a single SPSS file including standard codes for respondents and universities, as well as contextual information on the university, like size, disciplinary specialization, and international reputation. The file is accompanied by a codebook explaining the methodology and all response codes.

The whole process of design, delivery (in two waves) and coding was performed during the year 2011 and took about nine months.

Interviews of University Members

As a second step, interviews of university members were performed in one university per country. To limit case variation, it was decided to cover the traditional generalist universities in the sample. The interviews aimed at gaining more in-depth knowledge about the decision-making processes and accompanying factors impacting on the decisions made.

Again, a common template was developed focusing on decision-making processes and suggesting an in-depth investigation of a recent case of institutional restructuring, but the individual teams had some leeway to customize the interview guide to their specific research interests. A minimum of 12 individual interviews were requested, selected among those who responded to the survey.

While individual teams were of course free to exploiting their own case study interviews, two instruments were devised for comparative work. First, an excel template was provided, where summaries and excerpts of the interviews could be entered, organized by respondent and by topic. Second, the French team devised the structure for a case study monograph, providing excerpts from the interviews integrated with descriptive information and interpretations by the research teams. The case study monographs were meant as an intermediary product between the interview transcriptions and the final case study and should have helped realizing comparative analysis. However, the excel file proved to be difficult to use because it did not include in-depth information, whereas monographs still required extensive work in order to compare cases (Hope 2014). Furthermore, not all countries provided the monographs.

Retrospectively, the interview data collection suffered from being situated in a late stage of the project and of a less-tight management of the process. Exactly because of their depth and complexity, the possibility of using interviews for comparative analyses depends even more than for survey from extensive work on developing common concepts and frames of analysis.

Systematizing Information on Policies

Finally, a distinct data collection concerned the organization of national higher education policies in a comparative perspective, what would have provided the “independent” variables for the comparative analysis of university transformation. This work was led by the Norwegian team (for national policies) and by the Portuguese team (for European policies).

Based on a theory-based typology of political-administrative systems (Bleiklie and Michelsen 2013), an interview guide was developed for about respondents from relevant stakeholders such as parliament, minister, civil servant, funding agencies, evaluation agencies, association of universities, and unions. Together with information from reports and secondary literature, the interviews constituted the basis for national policy reports.

At the end, five of the eight TRUE countries have delivered the policy study template. The topics that were covered were supranational policies, structural characteristics of national political-administrative systems, as well actors and decision-making processes.

As I will show later, these data led to a number of interesting comparative analyses; however, the goal of matching them with the university-level information, particularly from the survey, was hardly realized. Retrospectively, it would have been desirable to better integrate the policy-level and institutional-level data collection already in the design phase.

METHODS AS A TOOL FOR KNOWLEDGE DEVELOPMENT

In this section, I will analyze the use of the data collected within TRUE for scholarly publication, with a specific focus on how the data have been used, the analysis techniques adopted, and the extent to which specific characteristics of the TRUE data enabled new insights, respectively constrained the analysis and results achieved.

I will divide the presentation according to three main types of analyses, i.e. comparative analyses of higher education policies, comparative analysis of universities using most of the TRUE sample and case studies and small-sample analysis of individual universities.

This presentation is forcefully selective and does not aim to provide a full overview of TRUE scholarly impact. Cases have also been selected for methodological interest, not for the scholarly value as such. Importantly, the TRUE project did not focus solely on common products, like a book series from the whole project, but has purposefully encouraged team members to pursue their own lines of research and to publish in different outlets in order to achieve a broader impact. Complementarily, a few common products have been realized: a special issue of the journal *Higher Education* on the project's conceptual framing (3268 Bleiklie and Michelsen 2013), a common paper based on the survey (Seeber et al. 2014) and the current book.

Comparing Universities

The analysis reveals that the TRUE survey was widely used for comparative analyses concerning different topics and by most teams within TRUE; in this respect, despite some methodological shortcomings, the

survey proved to be a real federating dataset within the project, which, thanks to its broad design in terms of topics, allowed for the use by different teams.

Most analyses were comparative in nature and combined existing conceptual frameworks in higher education with the new data; the major innovation was therefore seen in a more systematic comparison across a reasonably large number of cases. Survey data were used to compare the governance models of universities (Bleiklie, Frøhlich and Michelsen, Chap. 6). They were also used to analyze topics like university strategy (Frølich et al. 2014), evaluation (Reale and Marini, Chap. 5), accountability (Marini and Reale 2012) and budgeting (Lepori and Seeber, Chap. 4). Data from the formal autonomy questionnaire were also combined with survey data to provide an interesting contrast between university formal and real autonomy (de Boer and Enders, Chap. 3).

In most cases, the methodological approach adopted was to compute the respondents' means within each university for different questions and to compare them across questions and universities. The results are interesting in two respects: first, they document systematic differences by university and country and, second, they show that patterns differ by characteristics and that, e.g. organizational engagement and decentralization are not correlated (Frølich et al. 2014). A useful method for this kind of analysis proved to be Factor Analysis, as it allows combining different items in more robust constructs and identify latent variables of theoretical interest; unfortunately, the fact that questions have different groups of respondents somewhat limited its use for the TRUE survey data.

These results highlight the complexity of the organizational model of European universities, which cannot be simply reduced to the opposition between a collegial and a corporate model (Bleiklie et al. 2015). A general methodological critique of these studies is that they don't allow controlling for differences between universities in the number and composition of respondents.

In the same vein, a collective paper has been published analyzing the introduction of hierarchy and rationality (Seeber et al. 2014), as key features of the new corporate model of public organizations (Brunsson and Sahlin-Andersson 2000). The main innovation was to develop a measure of the strength of NPM policy pressures as a quantitative scale constructed from policy analysis (based on Paradeise et al. 2009), which could be used as an independent variable in order to predict the

introduction of managerialism in European universities. This approach represents an interesting case of exploiting qualitative policy analysis to develop quantitative measures to be used in regressions.

Intraclass correlation coefficients (ICC), i.e. the ratio of between and within universities variance, have also been used in order to identify for which characteristics differences between universities are statistically significant (as compared with differences between respondents; Frolich et al. forthcoming). ICCs represent a step towards more refined analytical methods, which employ statistical techniques to take into account the multi-level structure of the data (respondents nested within universities). Multilevel regressions (Snijders and Bosker 2004) were adopted by Marini and Reale to test associations between the extent a university was considered as managerial or collegial by respondents and the extent of accountability within the university (Marini and Reale 2012). A main methodological problem with this kind of analyses is endogeneity, i.e. that it is impossible to identify causality (except when this is suggested by a strong theoretical argument).

Finally, Canhilal and Lepori investigated through a multilevel regression whether stronger NPM pressures have differential impacts on university characteristics, therefore combining the multilevel approach with the (exogenous) NPM pressures variable (Canhilal et al. 2015). Results conform to institutional logics theory, whereby universities are hybrid organizations subject to contrasting pressures from a managerial and academic logic and tend to adopt selectively those managerial practices which do not conflict with core stipulation of the academic logics, like autonomy of academics concerning the conduct of research and academic careers (Lepori and Canhilal 2015).

This discussion reveals the challenging character of the TRUE survey and that its exploitation required researchers to introduce novel analytical methods, rarely used previously in the higher education field. The complexity of the data and its multilevel structure faced the researchers with a number of methodological problems and, even within the project itself, some critique was advanced regarding the robustness of results. From the original descriptive approach, the analysis is moving towards theoretically better informed methodological approaches, like multi-level models and to a more explicit link with theory to develop hypotheses to be tested with the data. The integration of the survey with other data sources, like in the case of the NPM measure, proved also fruitful and represents a major avenue for further exploitation. At the same time, two

structural limitations have to be acknowledged: the limitations in combining different items given the survey structure and the small number of universities, implying that it becomes difficult to test complex hypotheses and to control for all confounding factors.

Comparative Analysis of Policies

The comparative analysis of policies emerged in TRUE as a distinct stream of research, which was based on the policy case studies, on secondary literature and on exchanges between the members of the team. Rather than collecting original data, the major outcome of TRUE was to foster exchange and collaboration between research teams to provide small-scale comparative analyses—most studies include 3–4 countries. These studies largely share a common theoretical framework which foresees that the structure of political-administrative systems strongly influence country’ reform capacity and trajectories (Pollitt and Geert 2000). Studies in this direction include a comparison of funding policies reforms in three TRUE countries (Mathisen Nyhagen 2015), a broader comparative study of political-administrative reforms in all eight TRUE countries (Bleiklie and Michelsen 2013 and Bleiklie, Henkel and Michelsen, Chap. 10) and an analysis of European governance in higher education (Veiga and Magalhaes, Chap. 8).

Some multilevel studies have also been performed, which attempt at linking changes at the policy level with the organizational transformation of universities using descriptive information from country research teams (Bleiklie et al. 2011) and comparing reforms with the level of university autonomy from the autonomy template (Mathisen, Bleiklie and Hope, Chap. 11). These works represent an important attempt to address a critical link within the TRUE project.

Individual and Small-Group Analyses

University case studies using interview materials are relatively less represented in the TRUE publications. This might be expected for different reasons: the explicit focus of the project on cross-country comparative analyses; the major effort undertaken in collecting the survey data; finally, the fact that interview materials have become available at later stage and, therefore, much work is still ongoing.

Nevertheless, they point to some important directions and potential complementarities with other data sources. This book includes a comparative chapter on university strategy practices within universities based on the exploitation of the institutional monographs (Fröhlich, Stensaker and Huisman, Chap. 7); this analysis might probably be further extended by matching the qualitative information with the responses to the survey, which includes a number of questions on strategy, moving towards a true mixed methods approach.

A combination of documentary analysis, survey data, statistical data and interviews is the method adopted for an in-depth analysis of budgeting in European universities, based on the notion of hybridity (Lepori and Montauti 2015). Interestingly, this paper comes from a group who largely promoted the survey, showing how disciplinary boundaries have become blurred in the course of the project.

Another paper from TRUE is exceptional in methodological terms, since to provide a comparative analysis of the association between environmental characteristics and organizational control, the authors decided to have recourse to self-ethnography, i.e. the analysis of their own universities based on information acquired during their own career (Alvesson 2003). The paper was published in a good organizational journal (Bleiklie et al. 2015), displaying the potential for methodological innovation in connection with qualitative methods.

DISCUSSION AND LESSONS LEARNED

After this review, I would like to suggest some remarks and directions for future debate.

First, I highlight the diversity of methods adopted in TRUE, ranging from statistical analysis of survey data, to comparative analysis of policy information to interviews and self-ethnography. The original confrontation between methods, largely an outcome of the project design and the composition of the team, was not resolved through a unifying solution, but led rather to a pragmatic approach where different methods have been adopted depending on the competences of the research team and on the research goals. In this perspective, the project largely followed a general tendency in social science methodology towards using mixed methods and bridging the quantitative and qualitative research traditions.

Second, it is possible to identify some disadvantages, but also advantages of this approach. The process of methodology development

was rather complex and difficult to structure in a proper way. In some instances, the ambition for innovative methods faced the researchers with new implementation challenges, resulting in a number of limitations in the exploitation (as is apparent in the case of the survey). There are certainly costs implied in methodological innovation and lessons to be learned for the future implementation of the same methods. One of them stands above all: the need of carefully planning the matching of the different steps of data collection, in order to avoid incompatibilities which limit their combined usage, as in the case of the formal autonomy questionnaire that would have been much more useful when applied to all universities included in the survey.

Yet the effort was fruitful in terms of the diversity of outputs—it would hardly be conceivable to cover all TRUE topics with a single methodological approach—but also in terms of innovation. Particularly, the TRUE survey allowed to providing novel results on the responses of public organizations to New Public Management, which are being published in journals and presented in mainstream conferences in Management and Organization studies like EGOS and the Academy of Management.

Third, while most of the initial debate within TRUE focused on data collection methods, other issues emerged as soon as TRUE members started exploiting the collected data. The debate from then on focused on analytical methods and the need for a proper theoretical framing that could drive the identification of observation points and variables. The fact that this reorientation was not just limited to quantitative analyses is revealed by the paper by Bleiklie et al. (2015), where the adoption of a potentially problematic method like self-ethnography was acceptable only because it allowed a tight coupling between theory and empirics (Brannick and Coghlan 2007). This also shows how complex innovation in research can be. Against positivist accounts to the effect that good research always starts from a theoretical frame, our research demonstrated how innovation also could be born from methods and data collection. Again we may draw the lesson that the mutual interplay between data, methods and theory is indispensable and overshadows the more barren controversy about the relative merits of deductive and inductive approaches as conditions for good and innovative research.

The general lesson from the TRUE project resonates the one driven by Teichler a few years ago that the value of comparative project is not in the possibility of collecting data across different countries—this is even

less needed in the age of the Internet—but lies in the possibility of disrupting established ways of thinking, thanks to confrontation between teams with different objectives, perspectives, histories and disciplinary rooting (Teichler 1996). This process might well have been difficult and conflictual in some instances and might have given the impression that much time was lost in discussions. Retrospectively, it is easy to suggest how better choices and more careful implementation processes might have been undertaken. However, if we believe that the core of scientific inquiry lies in innovation and learning and that this is not possible without taking risk, the TRUE project was certainly an interesting experiment well worth the attempted the outcomes of which cannot be fully assessed until a few years from now.

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