

Micro-macro: Why focus on levels of data collection and analysis? Introduction to the *BMS* Micro-macro section

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journals.sagepub.com/home/bms**Camille Hamidi***Triangle, University of Lyon, France***Claire Dupuy***ISPOLE, Université of Louvain, Belgium***Résumé**

Individus, organisations, populations : à quel(s) niveau(x) se situer pour recueillir des données, les analyser, les interpréter ? Comment penser l'articulation entre ces différents niveaux, si l'on en retient plusieurs ? Ces questions se posent pour toute recherche, mais parfois de manière presque inconsciente ou mécanique. Cette introduction pose quelques jalons permettant de réinscrire ces questionnements dans leur histoire, de préciser de quoi on parle en évoquant ces niveaux micro-meso-macro et d'exposer quelques uns des principaux enjeux d'articulation entre ces niveaux.

Abstract

Individuals, organisations, populations: at what level(s) should we collect, analyse and interpret data? How can we envision the articulation between these different levels if we choose more than one? These questions arise in all research, but sometimes in an almost unconscious or mechanical way. This introduction outlines a number of milestones that will enable to place these questions in their historical context, to specify what we are talking about when we refer to these micro-meso-macro levels, and to put forward some of the main issues at stake in the articulation between these levels.

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Introduction

Individuals, organisations, populations: at what level(s) should we collect, analyse and interpret data? How can we think of the articulation between these different levels if we choose more than one? These questions, which are classical in the social sciences, arise in all research, but sometimes in an almost unconscious or mechanical way. The aim of this section is precisely to explain these choices and to discuss them explicitly. Here we refer to Gilles Laferté's observation on the genesis of the collective work *Le laboratoire des sciences sociales* (Laferté et al., 2018). When looking back on his years of thesis writing and socialisation at the Maurice Halbwachs Centre at the ENS in Paris, Laferté notes that he and his fellow students all used the same methods and the same approaches, as they were convinced of their interest, but without ever questioning this fact. This reality, common to all research training institutions (to varying degrees depending on how deliberately senior members pass on their knowledge, how uniform the paradigms in force are, etc.), raises questions. As Laferté et al. put it, "In this sense, each person 'endures' his or her science as much as he or she produces it, depending on his or her social trajectory and intellectual socialisation". (2018: 4). It seems to us that this is particularly the case for the question of levels of scientific exploration, and this is what we wish to address here: whether researchers decide to continue along their path for explicit reasons, or to shift their gaze and try something new.

In this introduction, we outline a number of milestones that will enable us to place these questions in their historical context (I), to specify what we are talking about when we refer to these micro-meso-macro levels (II), and to put forward some of the main issues at stake in the articulation between these levels (III).

This section is intended to be open, and we call on researchers to submit further articles in order to pursue our methodological reflections on the issues associated with multiple levels of data analysis and collection.

Re-integrating micro-macro enquiry into its history

Reflections on levels of data analysis and collection run through the social sciences and their history. We do not aim to review all these discussions, as some have already attempted to do, but rather to give an overview of the issues (e.g. Grossetti, 2006; Knorr-Cetina and Cicourel, 1981; Alexander et al., 1987) in order to re-integrate this line of enquiry into the debates that have surrounded it. To this end, we have chosen to present a few milestones of the social sciences in France. This illustration of the way in which these questions have been approached and constructed over time serves to

emphasise how they have developed under various names depending on the era and on the sub-fields of each discipline.

Historically, it can be considered that the social sciences in France were built around a primacy of the macro level: at the end of the 19th century (Revel, 1996), Simiand's (1903) sociology research programme called for a move away from the particular, the individual, in order to focus only on repetitive phenomena, observable regularities that would make it possible to produce laws. The *Annales* movement and structuralism then followed this line of thought, leaving a profound mark on history, sociology and anthropology. This tendency also characterised the beginnings of French political science, heir to laws and centralism, which privileged the State level and tended to see the local level as nothing more than particularism and exceptional events that were not worthy of interest (Briquet and Sawicki, 1989). This tropism was also found in the Marxist-inspired work that subsequently developed in the discipline on state-periphery relations, as well as in the work marked by the systemic and functionalist perspectives that were influential in political science at the global level.

The 1970s-1990s were then marked by an interest in the micro level, both in France and elsewhere in the world, around the return of the actor in sociology (Bert, 2013; Touraine, 1984) and the circulation of Italian micro-history works (Ginzburg, 1993) and the history of everyday experience in German historiography (Lüdtker and Kott, 1991). Here too, developments in international political science played a role, under the influence of the behaviourist revolution. Finally, it seems that in the recent period, forms of articulation between different levels of analysis have been favoured. The major sociological proposals of the last few decades have often envisaged the abolition of these distinctions in the pages of theoretical conceptualisation (Bourdieu, 1980; Giddens, 2012; Cicourel, 1981). More recently, empirical surveys have also been prominent in this respect (see below).

Reflections on levels of data analysis and collection have been developed under titles other than "micro-macro", the one which is currently favoured in the methodology literature. This is the case, for example, of discussions on contextual analysis. This analysis serves to "identify the effects attributable to a social structure on individual behaviour". (Boudon, 1969: 14–15). While several researchers point to the risk of a somewhat allusive and lazy use of the notion of context when it is used to define the framework of a study and create a reality effect at the beginning of that study (Revel, 1996; Hay, 2006; Audemard, 2017), in the last twenty years or so various currents of research have sought to give it a more precise meaning. Reconstructing the multiple contexts needed to understand the observed phenomenon can then constitute an integral part of the analysis: this is the case of certain micro-historical works (Levi, 1989). In other research streams, for example in electoral sociology (Braconnier, 2010), it may be necessary to distinguish between environmental effects and context effects: the former relate to factors external to and affecting individuals, and the latter to what arises from social interactions (Huckfeldt and Sprague, 1993; Huckfeldt, 1986).

In addition to the debates around contextual analysis, mention should be made of the analyses of public action in terms of local/national/European level, or, before them, those concerned with state/periphery relations. It is in terms of the scales of public action that part of the reflection on levels of analysis has been structured in French political science

(Briquet and Sawicki, 1989). The national level initially held primacy in these explanatory mechanisms. The analysis has gradually become more complex, with empirical studies showing that the local level is not simply a variation of the national level (Bruneau, 2018) and developing the analysis of the elaboration and implementation of sub-national policies with the tools of *territorial politics* (e.g. Dupuy, 2020; Pasquier, 2015; Pollard, 2018; Le Galès, 2003; Pinson, 2009; Pasquier and Weisbein, 2004). With the development of European studies, research has focused on the question of the influence that certain decisions adopted at the European level have on the development of public policies at the sub-national level, while others have complemented this approach by looking at the autonomy of national and sub-national actors in their use of European policies (e.g. Woll and Jacquot, 2010; Saurugger and Terpan, 2015; Itçaina et al., 2016). This research has the advantage of explicitly raising the question of the relationship between the various levels of analysis (see the debates around multilevel governance, Hooghe and Marks, 2001). Finally, with the development of globalisation, and without listing every single one, we will mention the debates around multi-sited analysis and the ethnography of the international (Gupta and Ferguson, 1992; Marcus, 1995; Burawoy, 2000). These debates raise the question of how to identify the relevant fields in order to monitor transnational phenomena (Siméant, 2015; Siméant-Germanos, 2012).

What is micro-macro?

We will now focus on what this micro-macro distinction means. To this end, we can start with a first distinction proposed by Frédéric Sawicki (2000), widely used in French political science, between the object of the research on the one hand and the method used on the other. The object of the research refers to the level of theoretical construction of the problem, to what we are trying to explain: is it individual or inter-individual behaviour, or is it about interactions (micrological level) or social structures (macrological level)? The method used contrasts microscopic studies (the intensive study of a limited number of cases) with macroscopic studies (work on numerous cases with a reduced number of variables). The point of this distinction is to remind us that the two dimensions do not necessarily go hand in hand: structural regularities (macroscopic level) can be investigated using samples of individuals (micrological method), for example.

This distinction has subsequently been complicated for the greater good. Jacques Revel (1996) proposes to distinguish between the scale of observation, associated with the collection of data, the scale of analysis, and the levels of action, i.e. “levels that are considered relevant for defining the acting entities (individuals, families, organisations, states, etc.)”. (Grossetti, 2006: 288). Michel Grossetti suggests taking into account several dimensions whereby it is possible to progress from the most micro to the most macro: mass (the number of actors, for example), duration (more or less extensive) and context (more or less specialised, a professional universe, a geographical area, etc.) (2006: 297).

We can therefore see that reflections on levels of analysis and collection must be unfolded in order to characterise the nature of the levels studied in the research in hand.

The texts presented in this section endeavour to explain the levels chosen, the way in which their articulation is viewed, and what this helps us to understand about reality. In order for this reflection to be heuristic, we have established three principles. First, methodological reflection is not understood here as a guide to good practice. As advocated more widely in the BMS, the aim is neither to say what should be done nor to smooth out what has been done in order to produce a discourse on practice that would avoid back-and-forths and hesitations. Second, we do not consider that there is just one (or several) “right” level(s) of analysis *per se*. Rather, we believe that “the choice of a particular scale of observation produces knowledge effects” (Revel, 1996: 19). As Bernard Lepetit observes, “the soldier, the customs officer or the fisherman on foot, for example, do not have the same relationship to the coast of Brittany, and the difference in their points of view on the territory would lead to its mapping at different scales.” Thus, rather than a relationship between similarity and reality, the scale designates a reduction. It expresses a deliberate intention to target an object and indicates the field of reference in which the object is designed. The adoption of a scale is first and foremost the choice of a point of view of knowledge. (Lepetit, 1993: 131). Moreover, personal affinity, taste and initial postulate are also involved in the act of privileging this or that level, given that human activities integrate these different levels in the frameworks of daily life: these distinctions are pure research constructions (Cicourel, 1981). Finally, the texts published in this section defend the principle of combining levels of analysis rather than preferring just one of them, in that this is what best allows us to grasp “the layered structure of the social” (Revel, 1996: 13).

Operationalising and analysing multi-level data

The articles in this micro-macro section draw on their own subject matter and literature to examine some of the crucial questions raised by the articulation of levels of analysis and observation. Two of these questions in particular are intended to be addressed by the articles in the section.

The first concerns the empirical analysis of the traces and effects of one level of analysis on another: how to capture and describe them? What methodological devices are able to do so? Recent research on political generations can help to answer this question. This work, which is very diverse in terms of theory and subject matter, includes in its analysis of individual political attitudes and behaviour the historical contexts of socialisation of individuals, marked by distinct values, ideas and institutions. Several methodological approaches are used in this type of research (Tiberj, 2017; Grasso et al., 2017; e.g. Farrall et al., 2020; Neundorf and Pop-Eleches, 2020; Pop-Eleches and Tucker, 2017; Hervouet, 2021; Neundorf et al., 2020). Some, who are interested in the preferences for democracy of individuals who have lived part of their lives under an authoritarian regime, propose to work on the experiences of individuals under authoritarianism (e.g. Hervouet, 2021, Neundorf et al., 2020; Pop-Eleches and Tucker, 2017). From a methodological point of view, therefore, traces of the macro level, in this case authoritarian regimes and their functioning, are operationalised at the individual level through a series of lived experiences (Pop-Eleches and Tucker, 2017). These include membership of the dominant political party or trade union, having been a member of the

military, having been part of a youth movement, or having observed a religion. At the micro level, each individual is thus associated with a series of experiences of authoritarian rule. The effects of these experiences on individuals' relationships to democracy are then theorised and examined empirically on the basis of opinion survey data, i.e. data at the individual level.

In other research, the empirical analysis focuses on describing the effects of the macro level at the individual level, yet without attempting to operationalise the macro at the individual level. This is the case for work that investigates how certain public policy contexts define normative universes that inform individual attitudes and preferences (e.g. Farrall et al., 2020; Svallfors, 2010; Grasso et al., 2017). These analyses theorise the expected effects on individual attitudes of the experience of being socialised in particular normative public policy contexts. Individual attitudes are then described empirically. The evidence of macro to micro effects is then based on the comparison over time of the respective evolution of normative policy contexts on the one hand and individual attitudes on the other.

In addition to this question of the description and analysis of the traces and effects of one level of analysis on the other, the articles published in the micro-macro section should focus on the mechanisms by which the articulation between the different levels of analysis is constructed and the methodological devices that allow them to be documented. Some works favour an analysis defined in terms of influence, while others prefer to think of it in terms of circulation, which raises a series of issues associated with their study from a methodological point of view. Work on globalisation from the perspective of governments and public action helps to illustrate some of these issues. Some of the research on this subject theoretically considers globalisation to be a constraining force for national and sub-national governments, which tends to result in a necessary convergence of public policies (see Hay, 2008; Hay and Rosamond, 2002). In this case, the mechanism of influence is documented by the congruence between the magnitude of the pressure exerted by globalisation, operationalised for example by the scale of foreign investment or by the convergence of policy recommendations from international organisations in a given sector (e.g. Martens, 2007; Fervers et al., 2016), and the direction and nature of the changes in public policy observed in the case(s) under consideration. When the mechanism linking globalisation, at the macro level, and public policies, at the macro level, is viewed in terms of circulation, it is in some cases documented through the process tracing method, which makes it possible to monitor the idea or the public policy instrument and its circulation between levels of government, institutions and circles of actors (e.g. Palier, 2005; Jacquot, 2015). Other research focuses empirically on how institutions, actors and ideas at national and sub-national levels mediate the circulation of ideas or instruments (e.g. Maroy et al., 2017). The empirical analysis then focuses on uses, appropriations or resistances among national actors, in the institutional context in which they are embedded, in order to capture the circulation mechanism empirically.

These bodies of work show how the conceptualisation of the mechanisms that articulate the different levels of analysis structures the way that they can be operationalised. We can also see from the references cited above that certain currents of research, centred on certain objects and methods, deal more frequently and routinely with these questions than in other types of research, where they are less obvious. In this

section we argue that this effort at reflexivity can be heuristic for research that is less accustomed to it, by making it possible to question the obvious in the construction of reasoning and data collection. The micro-macro section is intended to be a permanent feature, precisely in order to pursue the reflection initiated by the first articles. We therefore invite all authors interested in developing methodological reflections on the articulation of levels of data collection and analysis to contribute by submitting their article to the BMS.

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