Title: Measuring (sub-)national identities in survey research: Lessons from Belgium

Running Header: Measuring (sub-)national identities

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Replication data and documentation are available at https://ssh.datastations.nl/dataset.xhtml?persistentId=doi:10.17026/dans-xwm-mq42

Abstract

This article explores different measurements of (sub-)national identities in survey research and examines to what extent they lead to different results. Using survey data from Belgium, where there is a long-standing tradition of (sub-)national identity surveys, three types of questions are scrutinized: the 'hierarchical' question (asking respondents to which of a list of given identities they feel most closely related in first and second place), the 'Linz-Moreno' question (asking respondents to situate their regional and national identities vis-à-vis each other), and the more recent 'metric' question (asking respondents to situate themselves on distinct 11-point scales for multiple identities). This article analyses the extent to which respondents answer these questions consistently, how varying degrees of consistency can be explained, and what this tells us about the way social scientists measure (sub-)national identities. The results show that, depending on the question, only 39.4% to 69.2% of the respondents answered the three (sub-)national identity questions consistently. Differences in consistency are found to be not only related to respondents' political knowledge and interest, but also to the question forms and wording, leading us to reflect on the validity of identity measurements.

1. Introduction: Surveying (sub-)national identities

Ever since social identity theory drew attention to how group membership can contribute to people's self-identification as well as to their relation to others – thus playing a significant role in intergroup conflicts (Tajfel and Turner 1979) – the concept of social identity has been widely used in the social sciences. It is broadly accepted that social identities can fulfill a number of social functions, including instrumental ones (Kalin and Sambanis 2018).

In comparative federalism and regionalism in particular, the attention given to identities has increased as a consequence of the "new politics of nationalism" (Keating 1996) at the sub-national level. Henceforth, we will refer to such political identities on the sub-state level – be they territorial or non-territorial – as sub-national identities. Territorial politics and constitutional reform processes in countries such as Belgium, the UK, Spain, or Canada are often analyzed through the lens of such sub-national identities, considered rightly or wrongly to be a main driver of these processes (Sinardet 2012). Simultaneously, the transfers of powers to supranational institutions like the EU have also sparked research on the development of corresponding (European) identifications (Opp 2005).

Despite having attracted attention, the concept of identity has not necessarily been neatly defined: "the term is richly – indeed for an analytical concept – hopelessly – ambiguous" as Brubaker and Cooper (2000: 6) point out. Definitions and conceptualizations of identity are numerous and diverse (Abdelal et al. 2006). Furthermore, compared to other social identities such as class or gender, which have been shown to have a significant direct impact on behavior and attitudes, the effects of national identities are more ambiguous (McCrone and Bechhofer 2015). Some even qualify them as "banal" (Billig 1995), i.e., largely

taken for granted, rarely explicitly mentioned, and with a meaning and content not often explicitly spelled out.

While most of the time people indeed do not pay much attention to their national identity (Miller 1995), when challenged or activated, these identities become more visible and awareness of them becomes more important. Their meaning and content are then explicitly discussed. Over the past few decades, claims of political self-determination made by sub-state nationalist movements and parties in Catalonia, Scotland, Quebec, Corsica, or Flanders – to cite only a few prominent examples – have activated a debate about national and sub-national identities in their countries (e.g., Keating 2001). As a consequence, political science has paid attention to these debates and has tried to map the evolutions and varieties of social identities on multiple local, regional, national, and even supra-national levels (e.g., Duchesne and Frognier 2008, Sinardet et al, 2018, Henderson and Medeiros 2021).

In the wake of these developments, measuring both the content and the strength of shared feelings of belonging to (sub-)state collectivities became an important focus in research on sub-state reorganization. Doing so, different strands have developed. Identities and identity discourses among political elites have been researched using quantitative methods (Dodeigne et al. 2021, Reuchamps et al. 2017) as well as qualitative approaches (Van Dam 1997, Heyvaert et al. 2020), but citizens' political identities have more often been scrutinized with large-n surveys, trying to capture the extent to which they subscribe to a (sub-)national identity (Henderson and Medeiros 2021). While this method allows the self-positioning of a large number of citizens on different indicators of (sub-)national identity to be probed, the question arises how well this actually captures their political identity, and if different questions lead to different results.

Drawing on a long tradition of (sub-)national identity surveys in a country where sub-state nationalism has proven to be of significant political importance, the objective of this article is to examine these questions. Doing so, the three most prominent survey questions on (sub-)national identities are studied (see Table 1 for the exact question wordings): (i) the 'hierarchical' question (asking respondents to which of a list of given identities they feel most closely related in first and second place), (ii) the 'Linz-Moreno' question (asking respondents to situate their regional and national identities vis-à-vis each other) and the more recent (iii) 'metric' question (asking respondents to situate themselves on distinct 11-point scales for multiple identities). This article analyzes the extent to which respondents answer these questions consistently, how varying degrees of consistency can be explained, and what this tells us about the way social scientists measure sub-national identities.

2. Three assumptions in survey measures of (sub-national) identities

In the literature on nationalism studies, scholars emphasize the constructed and malleable nature of political identities, which can change over time, in different contexts and depending on the actors referring to it (Anderson [1983] 1991, Gellner 1983, Hobsbawm 1992). However, we notice that (sub-)national identity surveys often rely on assumptions that somewhat contradict this constructivist approach.

A first assumption attributes homogenous meaning to (sub-)national identities. Not the content of national identities that is measured, but their relevance for respondents – assuming that it is a cognitively sound and relevant category for them. For example, if a survey question asks whether and to what degree somebody feels Scottish or British, we do not offer respondents the possibility to say what exactly being Scottish or British means for them.

A second frequent assumption consists in attributing feelings of belonging that are independent from the context. One is asked to what extent one feels Walloon or Belgian, but not how this may vary between places and contexts. One might feel more Belgian when abroad, or more Walloon when listening to a statement by a Flemish nationalist. In a survey question, only one single and stable answer is possible. Stability over time is not assumed though. By repeating the same questions in consecutive surveys, we may to some extent assess the degree to which the intensity of identities evolves over time within a population.

A third prominent assumption is that the categories offered to respondents are meaningful. The respondents are supposed to have a clear opinion, to be informed and to have reflected on what is being asked. Survey research is thus trying to measure a complex, varied, and moving characteristic of individuals by confronting them with (sometimes hard and exclusive – see below) choices between national identities. The choices offered are also quite obviously tailored to the specific situation in which identities are being measured.

Recent methodological improvements are trying to take the issues into consideration – notably in the form of measurement invariance testing and multiple-indicator approaches. Yet, the aforementioned assumptions remain prominent in many quantitative surveys and, more specifically, in the analyses that are made of them.

If the constructivist caveats apply, however, we can expect that using different questions will also amount to different results. While in the past, different questions have been used to measure identities (with the Linz-Moreno question probably being dominant), seldom was more than one question used in the same survey – not allowing for invariance testing across questions. In the 2014 electoral survey in Belgium, three different questions measuring (sub-)national identities were used. We thus want to seize the opportunity to conduct a comparison

of the answers respondents gave to the three different questions in the same survey, and scrutinize their consistency.

3. Measuring (sub-national) identities in Belgium: Beyond the Linz-Moreno question

Similar to other states characterized by processes of decentralization, a long tradition of survey research on (sub-)national identities has developed in Belgium during the past four decades – a period largely coinciding with the Belgian federalization process. Yet, this case is an outlier in a comparative perspective: in this country (and in all its regions), the proportion of the population identifying with the national level (Belgian) is high. In all other states that have experienced sociological centrifugal decentralization, the population of the regions advocating for decentralization show a much lower national identification, possibly because they are minority nations (Reuchamps 2015). In Belgium, the high level of national identification has even led Flemish-nationalist parties to be ambiguous about their anti-Belgian and separatist agenda (Sinardet 2021). This comes in the wake of Belgium's complex majority-minority nexus that, for a long time, did not coincide with demographic weight and political power. This is also why studying Belgium and (sub-)national entities' identities was so relevant.

In this country, most often, (sub-)national identities were measured within the framework of larger quantitative surveys comprising a range of other socio-political indicators. Since the 1990s, this was done as a part of (post-)electoral surveys, resulting in measurements at least every four years (Sinardet et al. 2018). Next to this, there have also been irregular polls on identities in Belgium, mostly carried out by media organizations. In this article, we will limit

ourselves to scientific surveys. In these studies, three different types of survey questions have been used in particular. Their wording in the 2014 survey, that we will scrutinize in greater detail later, is summarized in Table 1.

[INSERT TABLE 1 ABOUT HERE]

3.1 The hierarchical question

The most frequently and consistently used way to measure identities in Belgium has been through the so-called 'hierarchical question,' asking respondents to which of a list of given identities they feel most closely related in the first and second place. This question first appears in inter-university surveys in 1975, up until the 2019 electoral survey. This renders the hierarchical question also pragmatically well suited to analyze evolutions of (sub-)national identities in Belgium over a long period of time, since it covers almost the entire federalization process (that started in 1970). At the same time, its two-fold and ranking nature requires different techniques of analysis (e.g., Baron 1996).

[INSERT TABLE 2 ABOUT HERE]

These evolutions can be found in Table 2, where we have for the first time brought together all available results. Particularly striking is the much higher importance attached to the municipality/city level in the surveys where this was proposed first (1975, 1995, and 1996). However, some of the differences in response distribution patterns can probably (at least in part) be explained by several method effects; the way the hierarchical question has been put to respondents has differed (De Winter and Frognier 1999).

A first difference concerns the wording of the question. Between 1979 and 1986 (in the Régioscope studies) the question was: “To which group do you consider [yourself] to belong above all?” From 1995 onwards, this became: “Of which unit do you consider yourself part in the first and the second place?” for Flanders, while in Wallonia, one asked: “To what do you have the feeling to belong in the first and in the second place?” (Swyngedouw and Beerten 1996, Swyngedouw and Rink 2008). One notices that the former refers more to an actual group of people, while the second refers more to an institutional reality. In the PartiRep (2009, 2014) and EOS-RepResent surveys (2019), the wording became “To which cultural or geographic entity do you feel most belonging?” (Deschouwer and Sinardet 2010, Deschouwer et al. 2015).

The wording of the identity categories also differed. The Régioscope studies referred to “all Belgians” (‘l’ensemble des belges,’ to make the distinction with the other proposed identities), while later studies just used “Belgium”. Also, Régioscope included all the different institutional identities, making a distinction between the “Dutch language community” and the “Flemish region” (which was dropped in ISPO-PIOP) and also proposing the “Brussels region” as well as the “German-speaking language community” (Delruelle-Vosswinkel et al. 1983: 15). In the PartiRep (2009, 2014) and EOS-RepResent surveys (2019) Europe was added as an option, which was also the case in the 1995 and 1996 ISPO studies (Sinardet et al. 2018).

In some cases, some types of identity categories were further specified and subdivided. This is, for instance, the case in the 1975 study, where the local level – which in other surveys was generally proposed as 'your municipality or city' – was divided into three options: your municipality, the entity of which your municipality and its surroundings are part of, and your city.

The order in which the different identity options are presented to respondents also varied. Existing scholarship has shown that this has an effect on the results due to a primacy effect: options that are presented first tend to get more support, at least among respondents without strong opinions on the matter (Billiet et al. 1984). Because most surveys use a decreasing order going from the highest to the lowest level of governance, Belgium was often in first position, followed by the region/community levels, the province, and the local level. Contrary to this governance-level logic followed in almost all surveys in Belgium, in the first ISPO survey (1991), the Flemish community was used as the first item, and Belgium as the second. This provoked a decline of the choice for Flanders from 40% to 25% in 1995). Also, as the PartiRep and EOS-RepResent surveys followed the same logic, they put Europe in first position. The 1975 study also put the local levels first.

Taken together, these differences call for caution when interpreting the evolutions of (sub-)national identities in Belgium (and mostly some of the quite surprising differences) based on the hierarchical question.

3.2 The Linz-Moreno question

The second most used question in Belgian research on (sub-)national identities is the Linz-Moreno question (Linz 1975, Moreno 1986). It first appeared in 1995 in the ISPO-PIOP electoral survey and has been used in most electoral surveys since then, above all to allow comparison of Belgian data with those of other multi-national countries (De Winter 2007). The wording remained constant the Linz-Moreno question, which also allows for more reliable longitudinal comparisons (Sinardet et al. 2018), although it only covers the last 20 years – only half the period covered by the hierarchical question. Its results can be found in Table 3.

[INSERT TABLE 3 ABOUT HERE]

In general, the Linz-Moreno presents an advantage in that it allows respondents to put their regional and national identity at the same level, while the hierarchical question forces a choice between different identities. A disadvantage is that it reduces the (sub-)national identification to those two levels only, although these may not necessarily be the most important ones for all respondents. One should note, though, that the results for the hierarchical question in Belgium show that on average of 4 respondents out of 5 do choose either the regional or the national identity in the first place.

In the Belgian context, the Linz-Moreno question has a further disadvantage not present in most other countries. The complexity of the institutional and identity landscape in Belgium, based on partly overlapping regional and community identities, makes it difficult to correctly use the Linz-Moreno, which only allows for one type of regional identity to be measured. This difficulty mostly arises in the French-speaking part of Belgium. While the Flemish identity mostly covers both the regional and community institutions, on the other side of the language border there is an important difference between the Walloon and the Francophone identity. This difference reveals itself in the institutional landscape (community and regional institutions not having been merged as on the Flemish side), in political and intellectual debate (where 'regionalists' and 'communitarians' have been at odds with each other), and also among public opinion as the results of the hierarchical question show. The problem also occurs for Dutch-speaking respondents when the Brussels population is included in the sample, particularly in recent years when a Brussels regional identity has developed. Hence, while a dual difference between sub-national and national identities does

still, more or less, make sense for 'Flanders versus Belgium,' it is more difficult for Francophone Belgians who can be 'Belgian' but also 'Walloon' and/or 'Francophone'.

A solution to this problem would be to use Linz-Moreno twice for Walloon respondents: once to compare the Belgian vs. Walloon identity, and once to compare Belgian vs. Francophone identity. However, this is more time-consuming and might also be confusing for numerous respondents. Furthermore, it does still not measure the relation between the two types of sub-national identities.

3.3 The metric question

As a way to combine elements from both types of questions, a metric scale was introduced in the 'Draw Belgium' research project (Reuchamps et al. 2014) and used on a population-wide representative sample in the PartiRep 2014 survey. Respondents were asked: "Could you indicate for each of the below to what extent they apply to you?" on a 0-10 scale where 0 meant "not at all" and 10 meant "a lot". As respondents can identify themselves strongly with the national as well as with several sub-national levels, these variables are not mutually exclusive but can be combined: respondents could indicate for each of these identities how important they are. This allows the metric scale to grasp both the hierarchy and complementarity of (sub-)national identities. Its disadvantage is the limited longitudinal coverage. In 2014, only three identities were included in the survey: "Belgian," "Flemish" or "Walloon," and "European". Its results can be found in Table 4.

[INSERT TABLE 4 ABOUT HERE]

3.4 Other types of measurement

While the hierarchical and the Linz-Moreno question have been the most used, some surveys also included other types of identity measurement. The Eurobarometer (Fitjar 2010) or the German Social Survey (ALLBUS 2016), for example, ask for respondents' 'attachment' to the local, regional, national, and supra-national level on a four-point scale (very, fairly, not very, not at all). The Centre Liégeois d'Etude de l'Opinion (CLEO) uses a question which does not introduce any hierarchy between identities, but measures the frequency and intensity of different possible identities. This was used in various – usually non-electoral – surveys since the late 1980s, including the 'Wallobaromètre' (Jacquemain et al. 1990, Jacquemain et al. 1994). Interestingly, their results show that there is not necessarily an opposition between regional and national identities, since respondents feeling most strongly Belgian also feel most strongly Walloon and European (Jacquemain et al. 2005-2006).

Another way to measure (sub)national identities was to look at the differences in other identities prominent in general social identity theory (Tajfel and Turner 1986). The ISPO-PIOP surveys (1995, 1996) include a question asking respondents to what extent they perceive differences between Flemish and Walloon identities. Most of these also asked Flemish respondents whether they felt closer to being a Dutch citizen than to a French-speaking Belgian, and asked Francophone respondents whether they felt closer to being a French citizen than a Flemish one.

Some research used a much broader definition of identity than the strictly national version, interestingly showing its relativity. When asked in an open question which of the groups they belong to is the most important for them, in 2000 only 5% spontaneously referred to an (sub-)national group (more precisely 4.3% of the Flemish, 5.4% of the Walloon, and 7.8% of the Francophone respondents from Brussels). The national

identification only came after one's descent (family), philosophical/religious group, and organizations. Almost one third of the respondents did not refer to any group identity (Doutrelepont et al. 2001). Focusing specifically on (sub-)national identities can thus attribute them more relevance than they actually have, or even essentialize them.

Despite being very interesting, the heterogeneity of these other types of measurement – both conceptually and longitudinally speaking – led us to focus our comparative analysis on the aforementioned three more-typical questions, i.e., the hierarchical, Linz-Moreno, and metric.

Note that neither the Partirep 2014 survey nor the other surveys mentioned above include 'probes' asking respondents to clarify or explain their identity choice(s). All these surveys were post-electoral surveys focusing on explaining the way people vote, and why. Given the wealth of competing voting paradigms, there was limited space for cognitive interviewing, probing the meaning of identities with qualitative follow-up questions, nor for constructing national identity 'factors,' drawn from items from various related identity questions (such as national pride) (Meitinger 2017). This also means that sophisticated methods to test measurement reliability, validity, invariance, or equivalence, like MTMM (multitrait-multimethod), structural equation modeling, and confirmatory factor analysis, commonly used in comparative survey research like WVS, ISSP, ESS, etc., could not be applied (Saris, Satorra and Coenders 2004, Davidov 2009, Davidov et al. 2014, Revilla and Saris 2015). In this respect, our contribution has a narrower focus; namely, describing consistency from an empirical viewpoint for the specific identity questions in the Belgian context (see below).

4. Methodological inconsistencies between identity questions

As illustrated in the previous section, all these questions use different methods for measuring (sub-)national identities. Considering their different properties, strengths, and weaknesses, one may wonder what impact these questions have on the way respondents express their identity when surveyed. Are these questions equivalent in terms of measurement of the core attitude of this research, i.e., (sub-)national identities (Davidov 2009)? Specifically, regarding national and regional identities, do these different measurements produce logically incompatible answers?

To examine these questions, we draw on a comparison of the answers respondents gave to the hierarchical, Linz-Moreno, and metric questions in the same survey: the 2014 PartiRep survey that was conducted among a representative sample of Flemish (n=1000) and Walloon citizens (n=1018) in Belgium. Both samples were weighted by age, gender, education (and choice of vote in the 2010 general elections). Overall, the questions had a high response rate. Among the respondents of the Flemish sample, the non-response rate was 0.2% and 0.8% for first and second choice on the hierarchical question, 0.6% for the Linz-Moreno question, and 0.1% for each of the metric questions. For the Walloon sample, we arrive at 0.4% and 0.7% for the hierarchical question, 0.7% for the Linz-Moreno question, and 0.0% for first two metric questions, 0.3% for the third.[1] In this section, we provide an overview of the various strengths and weaknesses of the three questions, as well as how we operationalized the theoretical inconsistencies that can arise between them and that we used to empirically capture them.

[1] While these high response rates present sufficient empirical material for our analyses, one should note that the absence of an explicit "do not know" option could have boosted the response rate of undecided respondents (see for instance Billiet and Matsuo 2012). This could have increased inconsistencies in voters' responses. These results should, therefore, be analyzed cautiously.

4.1 Weaknesses and strengths of the various identity questions

As alluded to previously, these three types of questioning methods are far from perfect, and stem from common survey pitfalls (Billiet 2016). De Winter (1998) identified several weaknesses relevant to the hierarchical and Linz-Moreno questions used in the ISPO-PIOP surveys.

A first problem is that the number of possible sub-categories for a given level (e.g., city, municipality, agglomeration, etc. that are later considered jointly as the local level) influences the responses: the more items are covered by a category, the more likely it is that this category will be chosen. A second difficulty is linked to the emotional connotations of the identification items. The formulation of the questions can induce rejection or adhesion. Therefore, researchers have to pay great attention in the wording of the alternatives, which must be neutral. Third, findings on *recency effects*, which implies that the latter category on the list is more often chosen, and *primacy effects*, which implies that the category on the top of the list is more often chosen (Billiet et al. 1984, Martin 2000), indicate that the order of the options has a great influence on the results (one may note for example the drop in 'Flemish' and the increase in 'Belgian' choices between 1991 and 1995 in Table 1). These *recency* and *primary effects* may provoke the fourth weakness: the logical contradictions observed in the responses obtained through the Linz-Moreno, hierarchical, frequency/salience, and the metric questions (De Winter 1998, De Winter and Frognier 1999). Finally, a specific problem with the Linz-Moreno question is that it is difficult to apply to situations of multiple (i.e., more than two) identities. The Linz-Moreno question does not determine the prominence of an identity over its multiple alternative identities unless it is multiplied until every binary combination possible is obtained. Because it is composed of

only two levels of identity, the Linz-Moreno question thus is less rich than the hierarchical question.

Consequently, regarding the respective strengths and weaknesses of the three question types, the balance provided by the Linz-Moreno question and its benefit in terms of simplicity that makes it easily applicable in research designs imply that it is the option most favored by scholars. Its success is thus more a matter of nuance and pragmatism than the result of empirical adequacy. But still, quite paradoxically, its simplicity gives the Linz-Moreno question a methodological acuity: it can be "interpreted as an ordinal variable of the degree of regional identity or conversely national identity, which allows for more detailed analyses" (De Winter 2007: 592).

4.2 Measuring inconsistencies

Belgium offers an interesting case for studying the effects and results of using different identity questions because of its multi-level identities and its long tradition of survey data on the matter. In the past, the degrees of inconsistency between the hierarchical and Linz-Moreno questions have been analyzed based on the PIOP-ISPO surveys of 1995 (De Winter 1998, De Winter and Frognier 1999). A relatively high level of logical consistency was found between the answers to the hierarchical and Linz-Moreno question (about five out of six). However, they also revealed the considerable primacy effects.

In the 2014 PartiRep survey, the hierarchical, Linz-Moreno, and metric questions were included in order to compare how respondents answer all three of them. Regarding the questionnaire's order, the Linz-Moreno question came early and followed the questions on religion and income. The hierarchical question was situated around the middle of the questionnaire and followed those on satisfaction with European, national, and regional

government and a battery of questions about quota for women. The metric question was situated towards the end of the questionnaire following a battery of questions regarding immigration. They were far apart from each other in a questionnaire that counted nearly 500 (sub-)questions. Thus, we can presume that the context of preceding questions was probably not 'leading' the answers on the identity scales, apart from a potential fatigue effect for the metric questions.

In terms of question wording simplicity, the Linz-Moreno question is most likely the easiest to answer, as each category contains a simple unequivocal sentence, e.g., "I feel more Flemish than Belgian." It contains only five options (and two identity objects). The hierarchical question uses the official name of the (sub-)national entity of belonging, and thus the more complicated jargon of regions and communities (instead of more commonly used notions of "Flanders," "Wallonia," etc.). It counts nine identity objects. Finally, the metric question requests that the respondent mentally transform their (latent) identity (hierarchy) into a unique point on a 11-point scale, presented as a line where only the two extreme points are labelled, e.g., Belgian line: 0=not at all and 10=very strong). Of the three questions, this is mentally the most difficult task.

Now, when operationalizing the main (in)consistencies between the responses to these three questions, we examined the extent to which the 'hierarchy' between national and sub-national identity was respected in the answers. A summary can be found in Table 5. We may presume that, for instance, respondents with a consistent hierarchy in terms of their predominant identification with Belgium rather than their region, would display this hierarchy in the answers to all three identity measures. Hence, a respondent that opts for the Linz-Moreno category of "more Belgian than Flemish" should on the hierarchical question opt for Belgium in the first place, and Flanders in the second place (or at least for

Belgium before Flanders as first or second choice). Likewise, in order to be internally consistent, such a respondent would have to give a higher score on the Belgian metric identity scale than their score on the Flemish metric scale. Hence, the respondent's pattern of identity would be considered inconsistent if (s)he opts for the Linz-Moreno category of "more Belgian than Flemish," but opts in the hierarchical question for Flanders in the first place, and Belgium in the second place (or at least for Flanders before Belgium as first or second choice), or if in the metric measure (s)he would give a higher score for the Flemish identity than for the Belgian one.

Similar logical reasoning of internal consistency can be applied to most of the other categories of the Linz-Moreno scale, i.e., for those opting for the "more Flemish than Belgian" category, and those opting for "only Flemish" or "only Belgian" positions. The middle category of the Linz-Moreno scale, however, poses a particular problem as the hierarchical question does not allow for *ex aequo* answers, i.e., equally strong regional and national identities, which have become predominant for both the Flemish and Walloon populations (Deschouwer et al. 2015). We adopted a strict attitude towards this problem by coding a respondent as "inconclusive" (and thus treated as missing) when they feel "as much Belgian as regional" on the Linz-Moreno question, but on the hierarchical question mention Belgium as first choice and Flanders as second. Thus, when it is impossible to decide unequivocally on the consistency between response categories from two question types, we considered these responses as "inconclusive" and treated them as a missing value. The same goes for respondents that did not answer both of the compared questions. Consequently, some comparisons were calculated for only part of the survey sample.

When operationalizing the (in)consistencies in this line, as summarized in Table 5, we see that the share of consistent options varies between the three pairs of comparisons. As a

consequence, the 'base likelihood to reply consistently,' i.e., the likelihood to find consistent answers if the data would be distributed randomly, varies between the three. For example, if the data were randomly distributed, there would be a probability of 41.7% to score consistently on both hierarchical and Linz-Moreno questions, a probability of 17.2% to score consistently on the metric and Linz-Moreno questions, and a probability of 31.2% to score consistently on the metric and hierarchical questions. If we want thus to evaluate how consistent respondents answered the three questions, it is thus against these base likelihoods that respondents' effective consistency needs to be assessed.

[INSERT TABLE 5 ABOUT HERE]

In addition to estimating the overall degrees of (in)consistencies between the three questions, we wanted to test if these were related to certain characteristics of the respondents. To this end, we developed three main expectations and took a few control variables into consideration.

First, we expected respondents' degree of (in)consistency to be related to their degree of political knowledge (Converse 1964, Bishop et al. 1980, Judd and Milburn 1980). It is reasonable to think that those who self-assess themselves as politically informed have a higher chance of correctly understanding the questions and their internal hierarchy, and therefore would answer consistently.[2]

Second, and following a similar rationale, we expected respondents' degree of (in)consistency to be related to their degree of political interest. It is equally reasonable to

[2] We assessed respondents' political knowledge by asking them five questions about the functioning of Belgian politics. The final score corresponds to the sum of correct answers (min. 0 - max. 5).

expect that not only those who self-assess themselves as politically informed but also those who have a higher interest in politics are more likely to correctly understand the questions and their internal hierarchy, and thus answer consistently.[3]

While the former two expectations were based on respondents' internal political efficacy, we developed a third expectation about their political orientation on the decentralization issue. We expected that respondents that were more in favor of decentralization would, on one hand, have a well-formed opinion on the identity question and a strong internal hierarchy leading to coherent answers.[4] To check whether this only concerned the voters of certain types of parties, we controlled for respondents' vote in the last election.

The dependent variable was operationalized as a categorical variable with two categories for each of the three pairwise comparisons based on the operationalization set out in Table 5. Inconsistent answers were coded 1, consistent answers were coded 0, inconclusive answers were coded missing. To test for correlations, we used Kendall's tau correlation coefficient in order to have a non-parametric measurement capable of dealing with partly-skewed variables. All analyses were conducted three times: once for the entire sample, once for the Flemish sample only, and once for the Walloon sample only – in order to see if effects we see overall also hold among respectively Flemish and Walloon respondents (the survey was not conducted among the population of the Brussels-Region).

5. Results

[3] We assessed respondents' political interest by asking them to situate themselves on a 0-10 scale to express "To what extent are you interested in politics" (with 0 signifying 'not at all' and 10 'very much').
[4] We assessed respondents' decentralization preferences by asking them to place themselves on a scale from 0 to 10 where 0 signified 'transfer all competences to the sub-state entities,' 10 signified 'transfer all competences to the state level,' and 5 signified 'preserve the status quo'.

Table 6 presents the results of our analyses. First, we looked at the overall degree of inconsistencies among the three pairs of comparisons. The highest consistency rates were obtained when comparing the answers to the Linz-Moreno and the hierarchical questions – with nearly two thirds (65.7%) of consistent respondents. When comparing the answers to the metric and hierarchical questions, only 58.4% were consistent. As for the comparison between the Linz-Moreno and the metric question, we obtained only 42% of consistent answers. Despite minor differences, these results largely hold for both the Flemish and Walloon samples.

While at first glance there seem to be important disparities in respondents' ability to deal with different identity questions depending on their type, the comparisons of the consistency rates to the base likelihoods show that this is not the case. When compared to the base likelihood, i.e., the probability of answers being consistent if the data were distributed randomly, all comparisons achieve a roughly similar score: 24.0-27.2%. This means that the higher consistency scores between the Linz-Moreno and hierarchical questions, or the lower consistency scores between the Linz-Moreno and metric questions can be attributed to the fact that, due to the question formulation method, it is easier to be coherent on the former, while it is more difficult to be so on the latter. At the same time, it also shows us that the difference between potentially random and effective consistency only concerns about a quarter of the respondents.

While this conclusion largely holds for the Flemish sample, the Walloon one has a slightly lower difference from the base likelihood for the comparison between the Linz-Moreno and hierarchical questions. This means that Walloon respondents are slightly less consistent at 18.3 percent (which is 6.3 points lower than the average consistency in the

Belgian sample). One possible explanation for this is the additional difficulty arising from the two possible sub-national identities in the sample (Francophone and Walloon) that cannot be easily expressed consistently on both the Linz-Moreno (aggregating sub-national identities) and the hierarchical (allowing two items, be it national and sub-national or two sub-national) questions.

[INSERT TABLE 6 ABOUT HERE]

After detecting these overly poor consistency scores across the three sets of pairwise comparisons, we wanted to dig deeper into why some respondents answer the questions in a consistent way, while others do not.[5] One of the main reasons behind these inconsistencies may be the artificial, random, and spur of the moment nature of some responses, whereby respondents chose a response category without having any preference, or even not understanding the question (Converse 1964). The very high response rates mentioned above suggest a considerable effect, although it is hard to measure.

Testing respondents' political knowledge and interest, as hypothesized, does reveal significant differences. Respondents with higher political knowledge had a higher chance of giving consistent answers for the three question comparisons. The same goes for respondents who declared a greater interest in politics. While the correlations are significant for the three questions in the overall sample, some pairwise comparisons were not

[5] We tested for recency and primacy effects but did not find substantial differences. We also considered that consistency scores were calculated based on samples of different sizes (and respondents). We thus tested whether only taking into account respondents that answered all three questions (n=545) produced different results. But we did not find significant differences.

significant in the Flemish and Walloon sub-samples – probably because of the lower number of observations.

For the relation that we hypothesized to exist between respondents' opinions towards decentralization and their political identity, results are more complex. On one hand, we see that respondents in favor of decentralization are more consistent on the Linz-Moreno and metric questions. A look into the data shows that respondents expressing a solely regional identity on the Linz-Moreno question are well served with the metric question because they attribute a 0 value to the national identity, whereas on the hierarchical question, some of them still ticked the national identity (probably because it outperformed their local one). This explanation is not verified for N-VA voters (Flemish regionalist party), for whom – although they can be expected to be the most decentralist together with VB voters (Flemish regionalist party) – the opposite is true (for VB voters (Flemish nationalist party), the sample size may not have been large enough to detect a significant effect). The opposite, in turn, can be used as explanation for the two correlations found in the Walloon sample for the other two pairwise comparisons. Double identities can be well expressed on the hierarchical question without inconsistencies vis-à-vis the two others, and were linked to more recentralization positions in the Walloon sample. For the hierarchical and metric questions, this pattern was found particularly among Ecolo voters (Francophone greens). As for the significant inconsistencies observed among PS voters (Francophone socialists) on the hierarchical and metric questions, a look into the data showed that many of them were related to a pattern of respondents choosing a Belgian and then regional identity on the hierarchical question, while they weighted both equally on the metric question.

Finally, we wanted to check to what degree the three inconsistency measurements were intercorrelated. While one would expect correlations among all of them if

inconsistencies were solely related to political knowledge and interest, the results show that this is not the case. Respondents who are inconsistent on the Linz-Moreno and metric questions are not the same as those who are inconsistent on the hierarchical and metric questions. In addition to issues of knowledge and interest, inconsistencies on the Linz-Moreno and metric questions can be expected to arise from the much larger possibilities that the metric question gives the respondents, while they are forced into a clear hierarchy by the Linz-Moreno question. As for the inconsistencies on the hierarchical and metric questions, one also has the flexibility of the metric question that is reduced in the hierarchical. The latter, however, also allows for sub-regional identities. In sum, this reaffirms that in addition to issues of political knowledge and interest, the question formulation method behind the inconsistencies is crucial.

6. Conclusion

In this article, we aimed to analyze to what extent respondents consistently answer the identity questions traditionally used in surveys, how we can explain different degrees of consistency, and what this tells us about the way social scientists measure identity. The results of our analysis are sobering: depending on the question, not even two thirds and sometimes not even half of the respondents answer identity questions consistently. While we showed that differences in consistency come with respondents' political knowledge and interest, we also demonstrated that a large share of the inconsistencies was related to the question formulation method used.

The hierarchical and Linz-Moreno questions force respondents to establish a hierarchy between identities – with the latter allowing for equal national and sub-national identities. The metric question allows for more nuances in responses, but thereby also presupposes

that respondents are capable of responding in a nuanced way – which can be difficult when identity feelings are either not clear or complicated to think about for respondents.

The validity of these questions is furthermore constrained by the context of the region. In some regions, the question of regional versus national identity has been politicized for decades by nationalist parties and movements, with politicization sometimes peaking during crucial elections or referendums where autonomy or independence for the region is a very salient issue. In other regions, the competition between regional and national identities (let alone independence) is not a very salient issue (e.g., German-speaking community) or is competing with other salient (sub-)national identities (i.e., the Brussels region where Flemish vs. Francophone or Flemish/Francophone vs. Brussels regionalist compete, not to mention the local level). In some provinces, like Limburg and Luxemburg, we even find remnants of a provincial identity.

Even when researchers are aware of and try to take into account all these caveats and circumstances, they are often bound by practical limitations. On one hand, these may come with the space and attention that is reserved for identity measurements in larger cross-topic surveys. On the other hand, one may want to reproduce the same questions over large periods of time for reasons of comparability. The three identity questions used in our analysis were drawn from previous surveys for reasons of comparability, but all three had never been used together in the same questionnaire, besides in 2014. In an ideal world, one would like to try out many more question variations, test them in experiments or focus groups, and use a split-ballot design, but this often falls short due to practical limitations.

Notwithstanding these understandable practical excuses, our results oblige us to reflect on the validity (and possibly also the reliability) of the identity measurements we are using: on the presupposition that the question is sound to respondents and corresponds to

the way they would actually express their political identity (if they have one); on the presupposition that the meanings of identities are homogenous across respondents; and on the fact that some questions, by their methodological set-up, allow some identities to be expressed more easily than others.

Measuring identities accurately is crucial to understand and evaluate their importance for contemporary politics and society. Yet the present research shows that there is quite some work ahead of us. In this respect, different avenues seem promising. Regarding survey construction, one may want future questionnaires to capture in greater detail the meaning of identities. One avenue for this is adding open, and hence more qualitative, questions to surveys asking respondents to explain why they have answered the way they did and what their (sub-)national identity (if they have one) means for them. Another avenue is to include multiple identity indicators and operationalize them as latent variables. Regarding methods of analysis, one may want to go beyond the consistency checks as used in this article and engage in measurement invariance testing, which comes with the additional advantage that it can also be applied to data collected in the past. Furthermore, beyond cross-sectional verification, longitudinal panel-data could provide further insights into the evolution of (in)consistencies over time.

Eventually, beyond methodological and analytical improvements, if respondents appear to be 'inconsistent,' they are of course inconsistent in our present terms. Many respondents themselves are maybe consistent in a way that we fail to understand. We hope that this article has provided another stepping-stone on the way to enhancing this understanding.

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Table 1. Wordings of three most prominent (sub-)national identity questions in Belgium (here from 2014)

Question	Answer options	
Hierarchical question		
a) To which cultural or geographical entity do you feel belonging first and foremost? b) To which cultural or geographical entity do you feel belonging in the second place?	– Europe – Belgium – French-Community in Belgium – Flemish Region or Community – German-speaking Community	– Walloon Region – Brussels-Capital Region – your province – your city or municipality
Linz-Moreno question		
Which of these affirmations corresponds most to your vision of yourself?	– I feel only Flemish/Walloon – I feel more Flemish/Walloon than Belgian – I feel as Flemish/Walloon as Belgian – I feel more Belgian than Flemish/Walloon – I feel only Belgian	
Metric question		
Could you, for each of the identities below, indicate to what extent they apply to you? You can indicate this on a scale from 0 to 10, on which 0 signifies not at all, and 10 signifies a lot.	– Belgian – Flemish/Walloon	

Table 2. First choice for (sub-)national identities in Flanders and Wallonia based on the hierarchical question, in percentages (1975-2019)

Flemish respondents	**1975**	**1979**	**1980**	**1981**	**1982**	**1986**	**1991**	**1995**	**1999**	**2003**	**2004**	**2007**	**2009**	**2010**	**2014**	**2019**
Belgium	19	34	40	37	35	44	42	52	56	54	42	52	43	45	56	45
Flanders	17	45	44	47	48	33	40	25	27	30	39	34	27	29	21	31
Province	2	2	2	2	2	3	3	3	2	4	6	3	5	9	7	4
Municipality/City	61	19	14	13	14	20	13	17	13	12	12	10	15	13	15	9
Europe													9			10
Other							2	3	0	0		1	1	4	1	1
n	2150	1004	690	492	418	531	2379	2066	2497	1247	1000	1124	1531	1900	925	1006
Walloon respondents	**1975**	**1979**	**1980**	**1981**	**1982**	**1986**	**1991**	**1995**	**1999**	**2003**	**2004**	**2007**	**2009**	**2010**	**2014**	**2019**
Belgium	27	54	59	61	57	58	68	65	72	68	56	75	57	70	69	57
Wallonia	22	18	17	15	18	16	11	10	11	10	12	8	9	5	11	11
French Community	4	16	16	17	16	11	11	8	5	6	8	6	5	7	5	5
Province	4	2	1	1	1	2	0	0	2	2	5	1	3	2	4	4
Municipality/City	44	9	6	6	8	12	7	10	10	10	15	8	9	14	10	11
Europe													16			9
Other							3	7	0	4		2		2	1	2
n	1219	944	619	457	381	315	1391	1241	1294	742	880	662	800	337	911	1022

Sources (by research groups): 1975: AGLOP – GLOPO; 1979, 1980, 1981, 1982, 1986: Régioscope (ULB-UCL); 1991, 1995, 1999, 2003, 2007, 2010, 2014: ISPO-PIOP; 2009, 2014: PartiRep; 2019: EOS-RepResent.

Note: Not all columns add up to 100 as a consequence of rounding

Table 3. (Sub-)national identities in Flanders and Wallonia based on the Linz-Moreno question, in percentages (1995-2017)

Flemish respondents	**1995**	**1999**	**2003**	**2004**	**2007**	**2010**	**2014**	**2017**
Only Flemish	3.6	7	7.2	7	7.3	8	8.7	11.9
More Flemish than Belgian	23.1	22.4	23.3	29	27.4	27.4	18.4	23.5
Equally Flemish and Belgian	45.3	42.2	42.3	45	35.5	41.3	41.7	36.9
More Belgian than Flemish	17.2	13.3	15.1	8	17.0	12.4	8.0	14.4
Only Belgian	10.8	15.1	12.1	11	12.7	10.9	23.2	13.2
N	2088	2157	1202	517	1073		1002	604
Walloon respondents	**1995**	**1999**	**2003**	**2004**	**2007**	**2010**	**2014**	**2017**
Only Walloon	1.5	2.3	3.6	3	1.6	4.4	2.1	5.8
More Walloon than Belgian	9.4	11.3	8.3	11	6.1	5.0	6.9	10.4
Equally Walloon and Belgian	44.7	41.8	39.7	31	38.0	21.1	42.7	34.6
More Belgian than Walloon	25.3	22.0	18.3	13	19.9	22.8	11.7	19.2
Only Belgian	19.1	22.5	30.0	42	34.4	46.7	36.6	30.1
N	1223	1381	764	310		467	1004	396

Sources (by research group): 1995-2014: same as Table 2; 2017: Belgian Tetris survey (Reuchamps et al. 2018).
Note: Not all columns add up to 100 as a consequence of rounding

Table 4. (Sub-)national identities in Flanders and Wallonia based on the metric question, in percentages (2014)

Flemish respondents	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Belgian	1.8	1.3	1.0	2.9	2.1	9.5	7.7	17.4	22.9	11.4	22.0
Flemish	2.0	0.4	1.6	1.4	1.8	8.2	7.7	16.0	23.2	14.9	22.8
European	3.9	2.1	3.8	5.6	4.4	17.3	14.0	18.4	13.5	6.9	10.1
Walloon respondents	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Belgian	0.6	0.3	0.4	1.1	0.9	6.6	4.5	9.0	18.8	14.2	43.6
Walloon	3.9	0.3	1.3	1.3	2.0	9.3	5.8	10.3	19.5	12.8	33.5
European	3.9	0.9	2.2	2.8	3.0	16.3	12.6	16.3	19.2	7.7	15.3

(Flemish respondents: n = 1000; Walloon respondents: n = 1018)

Source: PartiRep (2014)

Note: Not all rows add up to 100 as a consequence of rounding

Table 5. Consistency operationalization between the hierarchical, Linz-Moreno, and metric questions

Hierarchical		Linz-Moreno					Base likelihood
1st choice	2nd choice	Regional only	Regional > National	Regional = National	Regional < National	National only	
Regional	National	⊗	●	–	⊗	⊗	1/4
National	Regional	⊗	⊗	–	●	⊗	1/4
Regional	Other	●	●	–	⊗	⊗	2/4
National	Other	⊗	⊗	–	●	●	2/4
Other	Regional	●	●	–	⊗	⊗	2/4
Other	National	⊗	⊗	–	●	●	2/4
Other	Other	–	–	–	–	–	NA
Base likelihood		2/6	3/6	NA	3/6	2/6	10/24 (41.7%)

Metric	Linz-Moreno					Base likelihood
	Regional only	Regional > National	Regional = National	Regional < National	National only	
Regional > National [=0]	●	⊗	⊗	⊗	⊗	1/5
Regional > National [>0]	⊗	●	⊗	⊗	⊗	1/5
Regional = National	⊗	⊗	●	⊗	⊗	1/5
Regional [=0] = National [=0]	⊗	⊗	–	⊗	⊗	0/4
National > Regional [>0]	⊗	⊗	⊗	●	⊗	1/5
National > Regional [0]	⊗	⊗	⊗	⊗	●	1/5
Base likelihood	1/6	1/6	1/5	1/6	1/6	5/29 (17.2%)

Metric	Hierarchical														Base likelihood
	1st Regional	2nd National	1st National	2nd Regional	1st Regional	2nd Other	1st National	2nd Other	1st Other	2nd Regional	1st Other	2nd National	1st Other	2nd Other	
Regional > National [=0]	⊗		⊗		●		⊗		●		⊗		–		2/6
Regional > National [>0]	●		⊗		●		⊗		●		⊗		–		3/6
Regional = National	–		–		⊗		⊗		–		–		–		0/2
Regional [=0] = National [=0]	⊗		⊗		⊗		⊗		⊗		⊗		–		0/6
National > Regional [>0]	⊗		●		⊗		●		⊗		●		–		3/6
National > Regional [0]	⊗		⊗		⊗		●		⊗		●		–		2/6
Base likelihood	1/5		1/5		2/6		2/6		2/5		2/5		NA		10/32 (31.2%)

Note: ● = consistent, ⊗ = inconsistent, – = inconclusive. Data: PartiRep (2014). To account for the specific Belgian circumstance where the Walloon Region partly overlaps with the French Community and entirely with the German-speaking Community, we had a specific coding for someone who scored the French- or German-speaking Community first and Wallonia second on the hierarchical question, and vice-versa. When compared to the Linz-Moreno question, we coded the response as consistent when

‘Regional only’ or ‘Regional > National’ were scored, as inconclusive when ‘Regional = National’ was scored, and as inconsistent when ‘Regional < National’ or ‘National only’ were scored. When compared to the metric question, we coded the response as consistent when ‘Regional > National [=0]’ or ‘Regional > National [>0]’ were scored, as inconclusive when ‘Regional [>0] = National [>0]’ was scored, and as inconsistent when ‘Regional [=0] = National [=0]’ ‘National > Regional [>0]’ or ‘National > Regional [=0]’ were scored.

Table 6. Correlates (Kendall's tau) of the (in)consistency measures between the three compared questions

	Entire sample			Flemish sample			Walloon sample		
	Linz-Moreno vs. Hierarchical	Linz-Moreno vs. Metric	Hierarchical vs. Metric	Linz-Moreno vs. Hierarchical	Linz-Moreno vs. Metric	Hierarchical vs. Metric	Linz-Moreno vs. Hierarchical	Linz-Moreno vs. Metric	Hierarchical vs. Metric
Consistent cases[a]	65.7%	42.0%	58.4%	69.2%	43.4%	57.8%	60.0%	39.4%	59.3%
Difference from base likelihood	+24.0%	+24.8%	+27.2%	+27.5%	+26.2%	+26.6%	+18.3%	+22.2%	+28.1%
Political knowledge	**0.063**	**0.043**	**0.121**	**0.107**	**0.072**	**0.138**	0.041	0.046	**0.125**
	[0.020]	[0.030]	[< 0.001]	[0.006]	[0.012]	[< 0.001]	[0.277]	[0.098]	[< 0.001]
Political interest	**0.080**	**0.051**	**0.092**	**0.128**	0.045	**0.122**	0.028	0.052	0.052
	[0.005]	[0.014]	[< 0.001]	[0.001]	[0.120]	[< 0.001]	[0.483]	[0.075]	[0.150]
Decentralization (=0)	0.015	**-0.042**	0.031	-0.032	**-0.079**	-0.001	**0.075**	0.016	**0.071**
	[0.577]	[0.036]	[0.198]	[0.398]	[0.005]	[0.984]	[0.047]	[0.568]	[0.042]
Choice of vote:									
CD&V				-0.028	-0.010	-0.055			
				[0.527]	[0.770]	[0.159]			
Groen				0.066	0.016	0.023			
				[0.136]	[0.616]	[0.550]			
N-VA				0.054	**0.067**	0.047			
				[0.220]	[0.040]	[0.224]			
Open VLD				-0.016	0.008	-0.013			
				[0.713]	[0.807]	[0.743]			
sp.a				0.018	-0.023	0.021			
				[0.691]	[0.477]	[0.591]			
VB				0.005	-0.020	0.008			
				[0.904]	[0.536]	[0.844]			
cdH							0.005	0.030	-0.018
							[0.904]	[0.346]	[0.665]
Ecolo							0.080	0.273	**0.087**
							[0.065]	[0.087]	[0.030]
MR							0.073	0.038	0.059
							[0.094]	[0.235]	[0.143]
PS							-0.083	0.007	**-0.129**
							[0.056]	[0.817]	[0.001]
Linz-Moreno/Metric	**0.254**			**0.229**			**0.278**		
	[< 0.001]			[< 0.001]			[< 0.001]		
Hierarchical/Metric		-0.008			-0.012			-0.010	
		[0.759]			[0.745]			[0.800]	
Linz-Moreno/Hierarchical			**0.237**			**0.330**			**0.140**
			[< 0.001]			[< 0.001]			[0.004]

Note: [a] Consistency frequencies have been weighted based on respondents' age, gender, education, region, and vote in the 2014 elections. Non-percentage numbers are Kendall's tau coefficients, with p-values in brackets and significant coefficients at p < 0.05 in bold. Abbreviations for political parties: CD&V Christian Democratic and Flemish, N-VA New Flemish Alliance, Open VLD Open Flemish Liberals and Democrats, sp.a Flemish Socialist Party, VB Vlaams Belang, cdH Humanist Democratic Centre, MR Reformist Movement, PS Socialist Party. Source: PartiRep (2014).