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There is more than one way - a study of mixed analytical methods in biographical narrative research

The number of studies using biographical narrative data has increased worldwide. Given the variety of analytical approaches in narrative research, a critical investigation of the relationship between the methodological procedures and the implications for research practice is needed. This article reports on a mixed analysis study applying three analytical methods to autobiographical narrative interview data: (1) formal structural analysis, (2) narrative ethnography and (3) qualitative comparative analysis. Comparing these three models exposes key methodological challenges, such as the use of operational definitions and interpretative practice. The article discusses the role of analytical perspectives for biographical research method design and application as a part of mono-methods and mixed-methods studies.

Keywords: biography; narrative ethnography; QCA; formal structural analysis; methodological openness

Introduction

This article is based on a methodological inquiry running parallel to the EU-funded EuroIdentities project, which explored the biographical dimensions of European identifications. The project brought together experienced biographical researchers from seven European countries, who regularly met to discuss the biographical narrative methods and their research implications. Within this vibrant academic environment, national differences in approaches emerged and clashed, as did interdisciplinary influences. As an early career researcher, that experience was invaluable for me. It highlighted the importance of analytical models in biographical narrative methods, methodological openness and dialogue between different analytical perspectives. This
case study presents methodological pluralism among biographical narrative methods and contrasts between various analytical models. It focuses on the main methodological challenges of biographical research, such difficulties in operationalizing concepts and interpretative practice. It is argued that using multiple analytical models and methodological dialogue can address these problems and contribute to a more advanced discussion on the strengths and limitations of biographical narrative research methods.

The first part of this article presents a brief overview of the methodological debate regarding the relationship between data and analysis, with emphasis on research quality indicators. The second part outlines the study design, data set used and specific analytical models. The article’s third part outlines the key methodological challenges, such as operationalization of key research constructs and interpretative practice. The final part discusses the merits of both mono-method and mixed-method designs and opens the debate on methodological openness within the research community.

**Biographical narrative research**

Biographical narrative research has a complicated genealogy. Rooted in the traditions of oral history and analysis of everyday documents, biography provides an account of the life lived and experienced. It provides an insight into the modes of individual agency and their social frames across time, both historical and biographical, as well as physical and social place. Throughout the last century, different schools and academic disciplines have attempted to understand the mechanisms and significance of biographical material, trying to use it to enhance our understanding of the modern world. In this evolutionary process a variety of analytical approaches have developed not only across the disciplines, such as sociology (Merrill & West, 2009; Roberts, 2001; Rosenthal, 2004), social psychology (Mcadams, 2008; McAdams, 2010), and geography (Halfacree &
Boyle, 1993), but also across various national environments such as American (McAdams, 2010; Shaw, 1966; Thomas & Znaniecki, 1958), German (Riemann & Schütze, 1991; Schütze, 1983, 2003), French (Bertaux, 1981; Ricoeur & Blamey, 1991) or British (Chamberlayne, Bornat, & Apitzsch, 2004; Chamberlayne, Rustin, & Wengraf, 2002) to name just a few. The development of international scientific discourses and their widening influence on national science contexts results in diverse perspectives and facilitates further comparisons and developments.

The increasing ability to share findings and practices across disciplines and traditions calls for the research of differences in epistemology and practice. These comparisons may take the shape of an open mixed-methods approach exploring the dynamics between different biographical approaches to specific research questions. Introducing several methodologies into one design has its problems. Biographical research discussions can focus on two levels: data collection and data analysis. The biographical interview technique has many forms, with some more rigorous and structured than others (Gubrium & Holstein, 2009) and, depending on the character of the data, analysis may focus on the linguistic forms (Scheffrin, 1996), narrative forms (Schütze, 2008), interview content (Linde, 1993), or all of them (Gubrium & Holstein, 2009). Using a data set of autobiographical narrative interviews from a single project, this study compares three analytical models to explore issues of integration between these regarding design, methods and interpretation (Fetters, Curry, & Creswell, 2013).

Comparison between the models within one study aims to explore the strengths and limitations of mixed-method designs and their contribution to higher-quality research.

The biographical narrative research field has particular internal dynamics. The diversity of approaches, and the demand to validate their findings by drawing on other methods as a part of mixed-method designs, question the underlying epistemological
assumptions and research practices within the field. The uncertain character of quality indicators for biographical research reflects the wider problem of criteriology (Loh, 2013; Seale, 1999), highlighting difficulties in assessing the methodological quality of data and analysis with measures designed for quantitative methodologies, namely validity and reliability (Seale, 1999, 2004), but also trustworthiness (Guba & Lincoln, 1994), peer validation (Kvale 2007), audience validation (Polkinghorne, 2007), verisimilitude (Clandinin, 2007; Connelly & Clandinin, 1990) and utility (Eisner, 1997; Riessman, 2008). With regards to quality assessment criteria, this study focuses on differences in the analysis of biographical data rather than their collection. The central question in using different analytical models is not only how they differ from each other regarding rules and procedures, but also how they address specific ‘threats' to a study’s validity and the overall argument (Campbell & Stanley, 1966; Seale, 2004). These ‘depend, irretrievably, on the whole range of linguistic practices, social norms and contexts, assumptions and traditions that the rules had been designed to eliminate’ (Mishler, 1990, p.418). This study points towards two particular methodological issues ‘threatening’ the validity of biographical narrative research: operational definitions of the concepts under investigation and interpretative practice. This discussion is designed to contribute to a greater methodological understanding of the role which analytical models play in biographical narrative research.

**Methodology**

This study was designed as a methodological follow-up to *EurolIdentities*, an EU-funded study exploring the biographical dimensions and evolution of European identities (see Miller & Day, 2012). The project conducted 91 autobiographical narrative interviews with transnational individuals across seven European countries. Data collection followed the autobiographical narrative interview method developed by Schütze (1983,
and created a uniform data set. Data analysis took place in national teams and during international workshops, where discussions revealed the various analytical traditions within the broad category of biographical narrative research. This methodological case study is a direct outcome of these discussions. It explores the methodological implications of employing different analytical models on the same type of autobiographical narrative data and focuses on the potential for mixed-methods designs to strengthen biographical narrative research strategies.

**Data set**

The biographical narratives used in this study were collected using the autobiographical narrative interview technique (Rosenthal, 2004; Schütze, 2008). The autobiographical narrative account, given to the interviewer during one interview session, starts with the prompt 'Please can you tell me your life story...' which aims to draw a uninterrupted flow of narration (see Domecka et al., 2012, pp. 21–45) and results in the life story being structured by interviewee rather than the researcher. The autobiographical narrative interview technique has been successfully applied in studies of social exclusion (Apitzsch & Kontos, 2008; Chamberlayne et al., 2002), national and European identities (Eichstetter, 2017; Miller & Day, 2012), health studies and professional studies (Chamberlayne et al., 2004). Autobiographical narrative interview data have four essential characteristics. Firstly, the interview taps into individual soft ontologies understood not as the reflection of the narrator’s objective reality but an understanding mediated by their conceptualisation of their current life situation (Niglas & Kaippnen, 2008). Secondly, it is the narrator who assembles the narrative, selects the key biographical events and their sequence. They reflect the narrator’s sense of biographical continuity and identifications (Schütze, 2008), with the implication that the narrative form of the story can expose tacit identity processes. Thirdly, autobiographical
narrative data are used to investigate a variety of research questions, from gender roles, national and transnational identifications, to studies of social exclusion and medical conditions. They constitute a deep unit of analysis (Ragin, 2008; Rihoux & Ragin, 2008) where applying an appropriate analytical framework to explore the data depends on the research question under investigation. Finally, the autobiographical narrative method falls into the category of small-n studies, some of which focus on as little as one biographical narrative case or build up to 10-20 cases. The number of cases depends on the depth of analysis as well as the number of individual researchers involved in the process.

**Study design**

This study examined synchronicities and dissonances between three analytical models applied to biographical narrative data. These analytical models ‘attempt to represent the social world in terms of an array of related concepts or a conceptual scheme’ (Blaikie, 2010, p.150). They outline three distinct analytical procedures, rooted in specific ontological and epistemological assumptions, which result in a distinct logic of inquiry, conceptual framework and deliverable findings. This study’s design integrated three analytical models: (1) formal structural analysis, (2) narrative ethnography, and (3) qualitative comparative analysis (QCA) at the level of design, methods and interpretation (Fetters et al., 2013). The study applied an exploratory sequential design (Onwuegbuzie, Johnson, & Collins, 2009; Teddlie & Tashakkori, 2006, 2009) ordered from the most unstructured inductive analysis to the most structured, deductive exploration. The sequential pattern contributed to method integration through accumulation, which occurs when ‘results from one data collection procedure inform the data collection approach of the other procedure’ (Fetters et al., 2013, p.2140). The sampling procedure had a cumulative character (Teddle & Tashakkori, 2009), which
meant that the sample could be increased according to the methodological requirements – from 10 cases used in the formal structural analysis, to 20 in narrative ethnography and 25 cases in QCA (see figure 1).

Figure 1. Sequential design of the study

**Main features of analytical models in selected biographical narrative research**

**Model 1 – Formal Structural Analysis**

The first analytical approach, *formal structural analysis*, offers an analytical tool designed to complement the autobiographical narrative interview technique (Rosenthal, 2004; Schütze, 2008). It focuses on the way a life story is told, searching for underlying narrative patterns. In this study, *formal structural analysis* was applied to 10 autobiographical narrative cases. It is rooted in the abductive logic of inquiry (Rosenthal, 2004), which critically distinguishes between ‘the language people use on an everyday basis, which partly constitutes the social world, and the language of social science’ (Alleyne, 2015, p.38). As a research strategy it focuses on the individual meanings or interpretations and elevates them to the central place of research (Blaikie, 2010, p. 89). Abduction assumes an idealist ontology and constructionist epistemology. The former implies that social reality is made of shared interpretations which social actors produce and reproduce in everyday life whilst the latter assumes that researchers use their own understanding of the social reality to reinterpret their everyday knowledge into a ‘technical language’ of social science (Blaikie, 2010, p. 95). The analytical procedure examines the relationship between the narration’s form and type of biographical experience.
The analytical frameworks for *formal structural analysis* are based on sequential analysis of the biographical account and in-depth analysis of particular events, so-called narrative units. Based on Strauss’s (1995) concept of trajectory, here represented as an individual’s perceived ability to control personal circumstances against external social forces (Riemann & Schütze, 1991), Schütze (2008) distinguishes four main narrative forms: ‘individual action scheme’ where the individual narrates from a position of being able to engage in social action, ‘institutional action scheme’ where individual and structural actions are aligned, ‘trajectory of suffering’ where the individual’s actions are countered by external forces, and ‘biographical metamorphosis’ where the individual is taking direct action to fit with the external conditions. The outcome of the analysis is based on understanding the power interplay across the biographical life span between an individual agent and the wider social structures.

The analytical process for formal structural analysis can follow two strategies: an in-depth analysis of one case (Eichsteller, 2012; Schütze, 1992), including the sequential elements of the narrative units, or analysis of specific narrative elements between two or more cases, usually based on a contrast/comparison design (Davies, Day, Baker, & Eichsteller, 2012). Analysis explores specific narrative forms and their place in the overall structure of a biographical account. In both cases, the process is vulnerable to over-interpretation, especially for inexperienced researchers. To safeguard against this weakness, the research practice focuses on group analysis, following the model of objective hermeneutics (Övermann, 1979). It asserts that diversity of experiences (academic as well as personal) will guard against over-reaching interpretations in the analysis (see also Domecka et al., 2012). As the analysis emerges from the group discussion, the empirical data are tailored to the most appropriate theoretical context aiming to answer the specific research question.
Model 2 – Narrative Ethnography

The second analytical approach, narrative ethnography, engages with both the content and the narrative form of the biography. The analysis is, however, less demanding and time-consuming than formal structural analysis, thus allowing for a larger sample size, an additional 10 cases in this study. Narrative ethnography follows an inductive logic of inquiry, and its analytical procedures aim to discover everyday meanings and narrative nuances with the use of researcher-defined concepts. The inductive logic follows realist ontology, indicating that phenomena under investigation can be observed independently, and empiricist epistemology, which argues that a neutral, trained observer can arrive at reliable knowledge (Alleyne, 2015, pp. 36–37). Induction aims to deliver ‘a well-integrated set of concepts that provide a thorough theoretical explanation of social phenomena under study' (Corbin & Strauss, 1990, p.5).

Narrative ethnography’s analytical framework focuses on the interaction between ‘narrative work’ - the process of assembling a narrative account - and ‘narrative environments’ - focusing on on-going concerns (Hughes, 1971) in the key areas of social life, such as relationships, jobs, local cultures, organisations and status (Gubrium & Holstein, 2009). It advocates the ethnographic study of ‘narrativity’ or the way social situations relate to a story, in this case a biographical narrative account. In the process of ‘comparing incidents and naming like phenomena’ (Corbin & Strauss, 1990, p.7), a grounded theory approach serves to develop more abstract and theoretically sophisticated categories that capture the properties and social dynamics of the phenomenon under investigation (Glaser & Strauss, 1967). The outcome of the analysis is an in-depth ethnographic discussion of the ongoing concerns, such as job searching or family conflict, aiming to outline the diversity of experiences within the sample.
The process of analysis in narrative ethnography explores the variation of biographical experiences embedded in one or more narrative environments. These observations are then integrated in the chosen theoretical framework or contribute to the development of new conceptual frameworks. This process is open to other sources of information regarding the cases, such as academic studies on a given topic. This openness, however, poses a significant methodological challenge about pre-existing knowledge of the context of the biographical case under investigation and how this guides and influences further analysis (Holstein & Gubrium, 2004). This is particularly relevant when assessing the extent of interpretation in biographical research, raising the question of whether research should focus only on what is in the transcript or include external knowledge about the person, or historical events outlined in the biography, to draw further generalizations regarding the topic.

**Model 3 – Qualitative Comparative Analysis (QCA)**

The third analytical approach, *qualitative comparative analysis* (QCA), is designed to uncover similarities and differences in the configuration of autobiographical elements. The method is intended for small-n studies (Ragin, 2008) but is sample size sensitive, with a larger number of cases enabling more sophisticated analysis. The sample in this study was increased by another five autobiographical cases, bringing the study's overall sample to 25 narrative interviews. The *qualitative comparative analysis* applies a deductive logic of inquiry. It is built to test a pre-existing, theoretically derived hypothesis, searching for confirmation or rejection of an explicit statement when tested against empirical data (Ragin, 2008, p.14). This research strategy is embedded in realist ontology, assuming that the phenomenon in question exists independently and can be directly observed, and falsificationist epistemology, which focuses on a trial and error approach with the aim to falsify or confirm a theory against empirical data (Alleyne,
QCA’s analytical framework is built from the bottom up by the researcher. Similar to quantitative research, designing the framework of variables is a theory-driven process. Firstly, the researcher establishes the ‘outcome condition’ and operationalizes it according to the data. Secondly, a number of contributing conditions are identified and operationalized, reflecting a particular theory-derived hypothesis. The outcome of the analysis indicates both: the association between a configuration of conditions and the outcome (necessary conditions); and the association between a configuration of conditions and the lack of a specific outcome (sufficient conditions) (Ragin, 2000, 2008; Rihoux & Ragin, 2008).

The analysis process is supported by the open source software fsQCA. The software requires data to be converted into numerical values, based on fuzzy set theory (see Ragin, 2000, 2008). The analysis output indicates all possible combinations of conditions occurring in the data set, with indications of the strength of associations, such as consistency and coverage (Rihoux & Ragin, 2008). Understanding of the outcomes, however, requires intensive re-interpretation. There is always the risk that some associations between conditions exist only in a particular data set or do not make sense in the biographical context (Collier, 2014; Lucas & Szatrowski, 2014). QCA is based on logical modelling but is highly dependent on the researcher’s ability to translate the output back into the biographical narrative context. The outcome is usually a typology of the different combinations of conditions which lead to a specific biographical outcome.

**Research challenges in biographical narrative research**

The three analytical models outlined in the previous sections represent different logics
of inquiry – abductive, inductive and deductive – and have their unique strengths and weaknesses. The depth of these differences can only be fully explored by investigating specific methodological queries associated directly with biographical narrative research: operationalization of concepts and interpretative practice. The following discussion uses illustrations from the project ‘Becoming a citizen of the world – a biographical study of new cosmopolitans’ (Eichsteller, 2013), exploring transnational and European dimensions of identities through biographical narratives (Eichsteller, 2012, 2017). Examples and extracts are selected to illustrate the research practice of the biographical methodologies.

**Problem 1 - Operational definition**

Operational definition challenges the biographical narrative inquiry due to the unstructured nature of biographical narrative data. The focus of a life story narration is a logical sequence of biographically relevant events, operating at the level of the individual narrator’s often tacit knowledge, and the emphasis of analysis is on answering the explicit research question, working at the academic level of knowledge. To infer from the data, the analysis needs to define properties of the concepts under investigation ‘in terms of operations by which they are measured’ (Phillips, 1987, p.205). These operations differ across the three analytical models under investigation. The study on the concept of 'transnational/cosmopolitan identity' among people with transnational experiences, for example, did not identify a single individual who would state explicitly 'I am transnational' or 'I am European.' Defining 'identity' in narrative accounts is more complicated than finding a self-professed statement of belonging. The challenge to build an appropriate operational definition of the concept is rooted in epistemological requirements of the analytical model and shaped by the logic of inquiry. The implications of these differences become apparent in the process of contrasting
analytical models, which raises the questions: Do different analytical models measure the same thing (see Hoyle at el., 2002:33)? How sophisticated is the conceptual framework? And how can findings based on the application of different analytical models be integrated? Table 2 shows examples of operational definitions for transnational identity used by different analytical models.

Include Table 2 here

In *formal structural analysis* issues of identity are embedded in the way each narrator chooses to place them within their life story’s overall Gestalt (Schütze, 2008). Identity is defined as the overarching theme of the story, or the narrator’s ‘mental space’ (Schütze & Schröder-Wildhagen, 2012). To find these areas within a text, the researcher looks into the narrative process structures indicating the processes of positioning within social structures of new social identifications. The research process within that analytical paradigm requires constant dialogue between the level of knowledge and the language of the individual narrator and the study's operational definition combining the concept of transnational identity with the life story's transnational context. The operational definition focuses on the level of comparisons between different destinations (for example in terms of the culture of the migration host) and the narrator’s individual place (within the story or as an observer). *Narrative ethnography* operationalizes identity in terms of transnational practices (O’Reilly, 2013), looking at the most significant elements of a narrator's social life, such as intimate relationships, local communities, jobs, organizations, and status. Those transnational elements may carry particular importance to the narrator's sense of belonging, such as being in an international relationship or employed by an international organization. When looking at how these transnational elements modify the sense of belonging and loyalties, the researcher gains insight into what constitutes the types of practices that may result in
some form of transnational identity. *Qualitative comparative analysis* (QCA) defines transnational identity with the aid of existing theoretical knowledge. For example, Szerszynski and Urry’s (2002) study of cosmopolitan identity names a set of ‘cosmopolitan' dispositions, such as the ability to speak multiple languages, exposure to global cultural elements such as global cities or international organizations, the ability to adjust to new situations and the desire to participate in global culture.

At conceptual level, the application of three analytical models sought to capture varied dimensions of transnational identifications – from individuals’ perceptions of social positions, the power relations within the new society to new types of transnational everyday practices – and the personal skills and characteristics determining their position, or an outlook on transnational issues. This multidimensional character of 'identities,' from individual characteristics to a sense of individual and group belonging, is well established in the literature (see Jenkins, 2008). The application of different analytical models highlights the complexity of the interplay between the data and the operationalization of the concept. The methodological comparison indicates that the use of different analytical methods taps into different layers of narrative data, making it possible to integrate the findings, but it also runs the risk that the conceptual framework does not measure the same phenomenon. This subsequently impacts on the cross-validation of the results between the analytical models. It may lead to a situation where the outcome of analysis for one model contradicts the outcomes of others.

**Problem 2 - Interpretative practice**

The second problem occurring in narrative biographical research is rooted in the notion of subjectivity associated with the issue of interpretative practice. The biographical account generated by the autobiographical narrative interview technique does not aim to
be an objective report of the sequence of biographical events. It is due to the narrator's non-objectivity that researchers can investigate both the 'what's of transnational lives and 'how's of the narrative process, but as Polletta et al. (2011) highlight, whilst there is willingness to accept the story as subjective, the notion of the non-objective researcher is harder to justify; after all, objective observation is what constitutes scientific inquiry. Within biographical research, the issue is especially prominent in the area of interpretation where knowledge of context is involved (Holstein & Gubrium, 2011; Holstein & Gubrium, 2004). Each analytical model applied in this study has a different take on the issue. The following extract including the first few sentences of the autobiographical narrative interview illustrates the process of analysis.

*Interviewer: Can you tell me your life story?*

*Daniela: OK. So I start. I was born in Romania, next to the Hungarian border and that's why I had my three mother-tongue languages. That means - Hungarian, Romanian, and German. And, at the age of 14, I came over to Germany. Well, I got basically two possibilities. The first one, I got a one-year scholarship with a school to stay for a year, and the other one was a sports scholarship, which was kind of dependent on my sports achievements. And so I decided to take the second one. It took us a long time to get the visa and, because it was kind of difficult, although we were almost European Union, I needed about half a year to get out of Romania, and then I started in Germany to play basketball. [Daniela, 28, Romania - Germany]*

The opening of the autobiographical narrative, also known as a preamble (Schütze, 2008) is a structural element of *formal structural analysis*. The analysis of this structure is based on its meaning to the overall structure of text – it signals the beginning of the story and highlights main running themes – as well as the analysis of common structural patterns across different narratives. As a matter of running themes, this narrative passage indicates the importance of multilingual heritage – the ability to communicate in several languages including German, a key turning point associated with the move to
Germany and the significance of young age. The interpretation of those themes would indicate that, at the age of 14, Daniela started an independent journey from Romania to Germany, where she had to deal with the competitive world of sports and cultural differences, maybe even some sort of discrimination. These interpretations can be confirmed, to a certain degree, by the further analysis of the biographical structures. This is the reason why *formal structural analysis* insists on considering the biographical account’s whole structure. The other issue is the matter of commonality of structural patterns. This type of preamble is a rare opening in a biography, with most starting with the place and time of birth, early childhood memories and education. Starting at the age of 14 can be interpreted as significant. This is where the experience of the researcher comes to the forefront of the analysis, and Övermann’s (1979) objective hermeneutics – a process in which a group of researchers discusses and cross-examines their interpretative practices – aims to ensure unbiased analysis.

Narrative ethnography places interpretative practice at the centre of the analytical inquiry (Holstein & Gubrium, 2011). It claims the most accurate analysis of social reality reflected within the narration is rooted in the interplay between knowledge of context and the individual’s interpretation of events. The concept of the narrative environment, the context shaping and influencing narrative patterns, becomes a key interpretative principle, expressed in issues such as relationships, jobs, organizations and communities occurring separately in biographical narratives, with knowledge and sensitivity specific to a given environment. In Daniela’s narrative, the opening reference ‘we were almost in the European Union’ places the interpretation firmly in the institutional context of the EU and refers to freedom of movement within the EU just before Romania’s accession. Further interpretations can follow the biographical experiences of mobility restrictions, experiences of culture shock and the unequal status
of Romania’s citizens in Germany. By acknowledging the context (Holstein & Gubrium, 2004, pp. 267–281) and focusing on the ‘what’ as well as the 'how' of the narrative, the narrative ethnographic approach improves understanding of causality patterns and enables cross-examination of the findings within a specific research field.

QCA as an analytical model focuses on comparing the internal configuration of conditions between narrative cases, tackling the issue of non-objectivity of the analysis and variations between the contexts differently. The deductive character of the study imposes on the researcher the task of identifying a number of conditions – present in every case – quantifying their strength and direction to allow systematic comparison and modeling of different configurations (Ragin, 2008). If we assume for analysis purposes that the number of languages spoken by the narrator is a good indicator of transnational identity, Daniela's preamble offers one of these accountable conditions of linguistic competency: She mentions three mother languages, and her interview is conducted in English. We can therefore identify her case displaying a strong language condition contributing to her transnational identity, as is the ability to cope in different cultural settings from an early age. Conditions are derived from specific theories and need to be identified in every case. The investigation measures the strength of association between conditions across cases, providing systematic analysis of the phenomenon in question. The configuration of conditions treats the variety of contexts across the data - for example, the intensity of transnational mobility (number of countries) or its nature (temporary or permanent) – as a condition in itself. The systematic analysis highlights a system of associations between cases and examines the relations between the configuration of conditions and a given outcome.

The examination of three analytical models in terms of interpretative practice points towards different approaches to safeguard objectivity in the analysis. Qualitative
comparative analysis anchors the analysis in theoretical frameworks and uses logical deduction to either confirm or reject the hypothesis; formal structural analysis uses the overall narrative structure within the biography and values both individual experience and collaborative practice to justify the key points of analysis; and narrative ethnography welcomes cross-examination of particular biographical elements with the preexisting scope of research, guiding and guarding the argument's inner logic. The comparison indicates that interpretative practices and their safeguards are embedded within the epistemological assumptions of each model. These assumptions, however, differ significantly from one to another, often resulting in misunderstandings regarding the rigour of the research practice and the results’ internal validity.

**Discussion**

The three analytical models presented in this study illustrate methodological pluralism (Michie, 2013) within biographical research, exposing differences in specific approaches to biographical data and their direct consequences for research practice. Operationalization of concepts and interpretative practice are the key methodological issues guiding discussion on how this different approach to biographical inquiry functions and what critique it is likely to face. The shortage of methodological discussions within the field is problematic, as it leads to the assumption that there is one ‘right way of doing biographical research’. This study advocates ‘methodological openness’ (Domecka et al., 2012) regarding the underlying epistemological assumptions and methodological differences and hopes to have outlined opportunities for growth and learning.

The first area of comparison explores the issue of operationalization. Using three analytical models requires conceptual and theoretical frameworks capable of exploring
concepts, such as transnational identity, at the various levels of analysis, be it sense of belonging, engagement in social practices or a particular set of characteristics. The study suggests that the sequential order of analytical models within the design – from logical abduction, induction to deduction – aids the conversion of narrative material into a more structured set of conditions used in qualitative comparative analysis. QCA is designed to operate with deep analytical units, such as biographies, but requires in-depth knowledge of these units, preferably structured according to coherent analytical frameworks directly resulting from the other two qualitative techniques. These frameworks can be represented by narrative structures - an analytical framework for formal structural analysis or theoretical context of narrative environments - treated as a source for hypotheses against which data can be tested. In the process of bringing multiple analytical models together at a conceptual level, the advantage of integrating multiple types of analysis into one mixed-methods design strengthens the analysis of biographical narrative data and strengthens the concept validity (Hoyle, et al., 2002) of the study.

The second area for discussion highlights the issue of the analytical procedures safeguarding interpretative practice. These procedures determine the potential for creative thinking and innovative solutions embedded in the analysis. As the most deductive approach, QCA allows either confirmation or rejection of a specific theoretically derived hypothesis but leaves little space for an innovative or explorative approach to the topic, unlike narrative ethnography and formal structural analysis. Between these two, narrative ethnography depends on knowledge of the theoretical context and may direct the analysis towards known aspects of the phenomenon under investigation. Formal structural analysis is most attuned to the innovative potential of biographical narrative data. It is designed to explore the social circumstances reflected
in the narrative structures of biographies. The integration of analytical approaches in a mixed-methods design has the potential for innovative and ‘out-of-the-box’ answers to research questions. The sequential design allows, firstly, exploration of empirical data’s inner structure before contextualizing it within the wider theoretical context and finally checking the most likely set of associations across the biographical cases. This approach can significantly boost a study’s internal validity (Hoyle et al., 2002).

**Conclusion**

This study investigated the relationship between the methodological procedures and implications for research practice. It compared philosophical assumptions, analytical frameworks and analytical processes of three analytical models: formal structural analysis, narrative ethnography and qualitative comparative analysis. By reflecting on two significant methodological problems, differences in operationalization and interpretative practice, the study explored the potential of biographical methods to interact with each other within mono-methods and mixed-methods design.

The application of multiple analytical models within one study has significant strengths. It widens methodological awareness of, and reflection on, the long-term consequences of every decision made in each step of the study. The selection of data across a wide range of structured and unstructured life stories determined the choice of analytical models, setting the study firmly in particular theoretical frameworks reflecting certain ontological and epistemological assumptions. Only in that type of comparative design can we reflect and fully understand the significance of research procedures and safeguards to analytical practices. With that awareness, we can examine different levels of control over the research process as well as the use of creative solutions and opportunities for innovation in biographical research. The study also indicates that,
within the biographical narrative tradition, a mixed-methods design can positively impact construct and internal validity.

Along with these strengths, this study also has significant limitations. Whilst all three methods can be applied to biographical narrative data in a mixed-methods design, it is not guaranteed that they produce a coherent conclusion. A study’s findings from each model can be too different (but not necessarily contradictory) to integrate in a clear, logical argument. Finally, it is worth remembering that biographical narrative research has a large number of research traditions, both in data gathering and data analysis. The three models included in this study represent only some, whilst others have been omitted. It is possible that other biographical approaches could fit better to the research design, address the problem of integration in a more sophisticated way, and add more towards studies of particular research problems.

Integrating biographical methods into more elaborate research designs at analysis as well as data level offers great methodological potential. To advance biographical research methods to that level, researchers within the field should, however, advocate and cherish ‘methodological openness’ to compensate for the tendency to work within traditions of specialism, which tend to bestow recognition on status within academic culture. We should encourage dialogue on the use of multiple methodologies in the biographical narrative field as well as a more comprehensive overview of the similarities and differences between them. The more openly we discuss the strengths and limitations of biographical methods, the more we can defend and improve our analysis and findings in dialogue within our respective fields of interests and with other research methodologies.
EuroIdentities ‘The Evolution of European Identity: Using biographical methods to study the development of European identity’ is a Framework 7 Collaborative Project. Partners include Queens University, Northern Ireland; Bangor University, Wales; Otto-von-Guericke Universität, Magdeburg, Germany; Łódz University, Poland; Tallinn Technological University, Estonia; Institute of Sociology, Bulgarian Academy of Science; and ‘Federico II’ University, Napoli, Italy; more information available on http://www.euroidentities.org/

Reference List


Riemann, G., & Schütze, F. (1991). Trajectory as a basic theoretical concept for analyzing suffering and disorderly social processes. Social Organization and Social


Figure 1 Sequential design of the study including sample sizes

Table 2 Examples of operational definitions for transnational identity.

<table>
<thead>
<tr>
<th><strong>Formal Structural Analysis</strong></th>
<th><strong>Narrative ethnography</strong></th>
<th><strong>Quantitative Comparative Analysis</strong></th>
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</thead>
<tbody>
<tr>
<td>Transnational identity is seen as a way of making sense of cultural contrasts and observations. Ability to see the biographical experiences as an outcome of different national contexts as well as the critical role of individual agency driving the transnational trajectories.</td>
<td>Transnational identity focuses on identity adjustments driven by a change of context in the key narrative environments, such as intimate relationships, organizations, local culture, jobs, and status.</td>
<td>Hypothesis 'Cosmopolitan Dispositions' based on Szerszynski &amp; Urry (2002) Transnational individuals are cultural specialists characterised by specific types of dispositions, individuality and cultural skills.</td>
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</tbody>
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