

Mapping biographies in a Relational Database. Biographies of Luxembourgish soldiers in the Second World War

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Abstract

Project WARLUX researches the personal side of the history of Luxembourgers born between 1920 and 1927 who were recruited and conscripted into German services under the Nazi occupation in Luxembourg. In representing different personal testimonies and individual war experiences, the lives of these men, women and families are uncovered. The team establishes a relational database to be able to represent these war experiences but in doing so, also encounters several challenges, such as a data structure that is too rigid and strict to “map” the fluid and unpredictable life patterns of the study subjects. This article proposes “mapping” with a relational database to represent and analyze different life paths departing from the profiles (military unit, prisoner of war (POW) camp etc.). The objects in the database structure can be a person’s individual profile, but also institutions or “life events”. Every single object is treated equally and connected in order to create a separate “biography” of a person and his or her war experiences.

Keywords

Relational database, nodegoat, biographical data, WWII


1. Introduction

People’s biographies are never linear. Especially during times of crisis such as the Second World War individual life paths are unpredictable. A relational database can support a researcher by providing a more sufficient structure to present non-linear biographies. During the Nazi occupation of Luxembourg, around 12 000 women and men (born 1920--1927) were conscripted to serve in the Labour Service (Reichsarbeitsdienst, RAD) and the German Army (Wehrmacht). The WARLUX project collects their biographical data and collates their individual life paths throughout the war and the post-war period.

This study revolves around approximately 1200 recruits and their family members, serving as a case study to delve into their biographies and individual narratives during the wartime period. The primary objective is to present various analytical approaches to understanding the Second World War, offering alternative life stories and personal experiences. Their life experiences were exceptionally diverse and often controversial: post-war, many were labeled as “collaborators” due to their service in the German Army. While some enlisted voluntarily, others were coerced into frontline service, and some resorted to hiding or desertion. In essence, we encounter a complex tapestry of profiles and paths throughout the war, intertwined with life-altering choices – whether to serve, defy orders, or join the resistance. Each of these choices carried profound consequences. For instance, deserters faced arrest and execution, and their families were relocated to the Eastern regions of the German Reich. Thus, the myriad of data points and life “events” is pivotal in reconstructing these individual profiles.

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Our research is not confined to mere biographical data collection; it delves into the personal experiences, narratives, reactions, choices, contradictions, and survival strategies of these individuals during and after the Second World War. This extensive data collection spanned a three-year period, during which the author and a PhD researcher collaborated closely. We organized the data from the WARLUX project, with its complexities, into a relational database, allowing us to chart the wartime experiences of our subjects. We faced the challenge of creating a comprehensive data corpus from diverse materials and institutions, which we intend to utilize exclusively for qualitative analysis. Our objectives extend beyond traditional prosopography or collective biography studies, as undertaken by other researchers [1]. Instead, we focus on the individual life narratives, seeking to move away from generalizations and the collective portrayal of Luxembourgers' life stories and decisions.

In this paper, I will elucidate our data model by providing a structured map of distinct life phases and their consequential impacts within our relational database. I will begin by exploring the historical context of the period, delving into the profiles of individuals and the accompanying datasets, elaborating on our methodology and biographical approach, and providing a comprehensive overview of our data model's construction. Subsequently, I will undertake a critical examination of our preliminary results, analytical insights, and our approach to working with a relational database, all while considering the ongoing nature of our research.

2. Historical context

In tandem with Belgium and the Netherlands, Luxembourg faced invasion on May 10, 1940. Subsequently, the Grand Duchess departed the country, and a civilian occupational administration was established. This administration enforced German laws and regulations on Luxembourg's territory, with the ultimate aim of annexing the former Grand Duchy, inhabited by approximately 200 000 people, into the German Reich under Gau Moselland.

According to National Socialist racial ideology, Luxembourgers were categorized as ethnically "Germanic". Consequently, on May 23, 1941, they were legally conscripted into the Labour Service (Reichsarbeitsdienst, RAD), and on August 30, 1942, into the German army (Wehrmacht) [2]. This conscription of non-citizens clearly violated international law. Faced with coercion and threats from the Nazi regime, over 12 000 Luxembourgers complied with these orders and joined Nazi forces. Many others evaded the draft or joined the resistance, while some deserted during their leave and never returned to their regiments. The occupation gave rise to a "power vacuum," unleashing fresh dynamics that allowed residents to adapt, innovate, and make choices. As historian Tönsmeier [3] aptly noted, "Occupation opens up possibilities for action for those impacted, even as it imposes constraints on their actions". Individuals were compelled to choose their paths: resist, collaborate, join Nazi organizations, volunteer, or quietly adapt to the situation.

The date of August 30, 1942, held particular significance for Luxembourgers during and after the war. Young men who voluntarily joined the German military or police before the August 1942 draft order received state support, and their families gained social prestige within the Nazi administration. Since the date of enlistment held wartime significance, it also remained consequential after the war when these men were eventually tried by Luxembourg civilian courts and convicted as traitors and collaborators [4].

As this brief overview of the historical context illustrates, individual data and choices assume utmost importance in constructing the data model for studying the biographies of Luxembourgers during the war.

3. Research Question

In Luxembourg, the occupation gave rise to a myriad of reactions. The majority of the population stoically endured the imposed restrictions, changes, and intimidation, resulting in

various responses such as acceptance, collaboration, resistance, or passive compliance. These roles assumed by residents were subjected to critical scrutiny by society, leading to the emergence of prejudice, mistrust, and reservations, both during the wartime period and in its aftermath. The allocation of roles within society underwent close examination, with occupied Luxembourg keenly observing the developments and their impact on fellow citizens. Questions about who cooperated with the occupation, who sympathized with the occupiers, who gained advantages in terms of job opportunities or access to goods, who benefited, who suffered, who resisted, and who fought became paramount, particularly in the post-war era when the events of the wartime period were evaluated.

In particular, the largest group directly affected by the occupation, those who were conscripted—whether called to arms or sent to labor camps -- were subjected to close scrutiny, evaluation, categorization, arrest, praise, celebration, or criticism. Their designations, “Ons Jongen” (our boys) or “Zwangsrekrutierten” (Forced Recruits), carried emotional weight, underscoring their coerced enlistment and subsequent fates. Society collectively grappled with these terms, negotiating their significance for those who had been directly impacted. Concepts like “resistance”, “collaboration”, “heroes”, “victims”, and “traitors” were unequivocal, yet Luxembourg recognized the need to challenge and deconstruct these narratives, fostering a deeper self-awareness of its intricate role during the Second World War.

This project aims to contribute to this process by conducting an analysis of individual biographies, with a specific focus on personal records of soldiers in the German Army (Wehrmacht) and women in the Labour Service (RAD).

4. Historiography (research and data)

The largest group of people “directly” affected by the occupation in Luxembourg has been the subject of recent studies, which have predominantly approached them from a “collective” or “quantitative” perspective [5]. Quantitative studies are undeniably valuable for analyzing war biographies. However, in national works, this group has often been examined collectively, with individual biographies occasionally highlighted and then generalized. Frequently, the patriotism and resistance of specific individuals have been emphasized to serve as representative of the entire group. In prior research, scholars tended to focus on single-actor groups, such as deserters, forced recruits, or collaborators, when reflecting on the wartime period in Luxembourg. Before these studies, these groups were largely perceived as undifferentiated collectives with limited agency and sometimes seen through a fatalistic lens [6]. This perception was influenced by the categories used within the post-war judicial, political, and administrative processes of reckoning with the German occupation. These categories often automatically assigned guilt or innocence and were shaped by post-war policies related to citizenship acquisition [7], compensation [8], and commemoration [9]. The connection between war experiences and discourses on national identity has been highlighted by Peter Quadflieg [10]. Luxembourg's master narrative of being a “nation résistante et martyre” draws significantly from the victim discourse that emerged from the 20th-century wartime experiences [11], which also encompassed the conscripts.

Recent studies have started to delve into Luxembourg's culture of collective remembrance, offering fresh insights into the diversity of wartime experiences. They reveal that many actor groups have been overlooked in the current state of research and public discourse. This oversight is evident in the struggles faced by the “Zwangsrekrutierten” (Forced Recruits) in obtaining post-war compensation [12]. In the current historiographical discourse, the “Forced Recruits” are the predominant actor group and are often viewed as a cohesive collective [13]. However, contrary to the national narrative, not all of them displayed heroism or deserted. The majority served at the front, quietly completed their service, returned home, and often never discussed their experiences. Our goal is to uncover this “average” segment of the majority and illuminate the life stories hidden between the lines. This includes exploring the reasons why a

Luxembourger might have volunteered and understanding the social impact of military service within their communities.

5. Sources / Dataset

5.1. Origin

While biographies are typically structured to encompass key stages of life, including birth, education, work, and ultimately, death, the impact of external events, such as the Second World War, can profoundly alter the trajectory of one's life story. Traditional biographies may deviate, take unexpected turns, diverge from the original life path, and, in some cases, abruptly conclude.

Our subjects have been exposed to various conditions and institutions, such as military service or imprisonment, and have been actively engaged in diverse networks, ranging from those of soldiers to resistance fighters. The pertinent sources documenting their experiences are dispersed across different European countries, originating from various contexts and homelands. The occupying Nazi administration, responsible for registering young men and women for labor and military service, generated organizational and official documents, statistics, and standardized forms and cards. These records are preserved in the Luxembourgish National Archives and other repositories. Beyond basic information like names, birth dates, and places of residence, we require additional data, such as military records found in German archives. Further information on captivity, repatriation, and compensation was gathered in the post-war period. Luxembourgish state surveys and statistics offer comprehensive insights into the experiences of the war generation during the conflict. Consequently, our dataset comprises diverse and heterogeneous sources.

A structured collection of data related to this group exists on a website by the Fédération des Enrôles de Force [14]. Unfortunately, this dataset is known to be inaccurate and incomplete, rendering it insufficient for extensive research. With the WARLUX database, our objective is to create a new and enriched dataset, primarily focused on the case study of Schifflange, an industrial town in the southern region of Luxembourg.

5.2 Data Sample

While the conscription affected a significant number of over 12 000 men and women, Project WARLUX narrows its focus to a case study involving approximately 300 recruits from Schifflange and their families. At the onset of the war, Schifflange boasted a population of around 5 000 inhabitants [15]. In totality, our data sample encompasses roughly 1 200 individuals, including both recruits and their family members [16].

The comprehensive data entry process, a pivotal aspect of this research endeavor, was carried out by the author in collaboration with a PhD researcher and several student assistants. This substantial data collection and entry effort primarily spanned from August 2020 to July 2023. It's worth noting that the PhD researcher will continue to actively engage in the ongoing tasks of analyzing and using the dataset, with these activities expected to persist until possibly 2025. Consequently, given the ongoing work and the possibility of new records being incorporated, the final results of this project are anticipated to be available in 2025 [17].

5.3 Ambiguity and Uncertainties

Handling such a diverse dataset presents a considerable challenge in terms of data collection and constructing biographies. As previously mentioned, a substantial portion of the data is riddled with ambiguity, errors, and gaps. For instance, in the post-war period, we encountered a

statement from a former Wehrmacht soldier claiming desertion. However, we never came across definitive evidence from the German authorities in the form of a warrant, court record, or missing unit report. It is important to note that desertion from the army was often celebrated as an act of “resistance” [18]. However, the absence of data on his desertion in the German military archives does not necessarily negate the event itself. Documents could have been destroyed, lost, or the army might have reported his desertion only towards the end of the war. Therefore, during the data entry process, we must meticulously record both the source of information (such as an assertion in the veteran's memoirs) and whether it aligns with other data (e.g., through additional witness statements).

Cases where information and other potentially inaccurate data are provided must be treated consistently within the data model, with any ambiguity clearly indicated by citing the sources of origin. Ambiguity can arise in terms of conflicting data, particularly regarding the source of the information. Information from the wartime period may differ from self-declarations made in the post-war era, especially regarding the date of enlistment in the Wehrmacht. Some survivors may have provided different or false information about their service duration to avoid being labelled as collaborators. Additionally, memoirs, often written years after the war, may contain details that diverge from what is recorded in military personnel records. Consequently, each data statement is meticulously cross-referenced with its source to ensure the traceability of information and to clarify the context in which the data originated. As Aram and Fernandez et al. elucidate, a relational database proves to be an appropriate solution for gathering data from various sources [19]. Therefore, a relational database appears to be the most suitable approach for managing this complex and often ambiguous dataset.

6. Sources / Dataset

This study employs a biographical approach, delving into documents, personal perspectives, and the active decision-making processes that shaped individual life paths. It recognizes that historical actors, within their complex environments, often faced multiple options, and their decisions were not purely self-centered nor solely driven by external constraints. Instead, most decisions were grounded in a situational logic, reflecting what appeared most suitable at the moment [20]. Even in cases where a young man received a mandatory order to join the Nazi forces, the path was not preordained. Our unique method, being used for the first time in Luxembourg, allows for a close examination of individuals, rather than making generalizations about collective groups.

The application of this biographical approach is influenced by Rosenthal's work [21]. She developed methods of objective hermeneutics, drawing from sociological theories, to reconstruct biographies as social constructs. Her analysis of the “Hitler Youth generation” and their experiences during the Third Reich led to the creation of a “life history” approach that offered a new perspective on the history of National Socialism. Rosenthal distinguished between the biographer's perspective in the past and the present, introducing the concept of Gestalt as a phenomenological notion that interconnects experience, memory, and narration, which should be considered in all narrated and written biographies. This underscores the importance of our targeted biographical approach, which focuses on analyzing the individual experiences of soldiers and recruits.

In a similar vein, Fickers and Brüll [22] employ the term “situational opportunism” to emphasize the link between biographical research and sociological decision theory. According to both authors, active decision-making should be contextualized within the individual's situation and the context in which they acted. In our case, we will examine the social environment and the conditions of active decision-making in which each individual actor found themselves. As Schimank notes [23], historical actors typically had several options within the complexities of decision-making processes.

6.1 “Life mapping”

Worth, a proponent of social geography, employs life maps as a means to explore the “geography” of the life path, as demonstrated in her article on investigating transitions to adulthood among visually impaired young individuals [24]. In the realm of social geography, life courses encompass a holistic understanding of people's entire life trajectories, their social interactions, and their connections to broader structural forces. It encompasses fateful moments, crossroads, decision-making, records of significant experiences, places, and the people who shape one's life. The term “mapping” is also aptly employed to navigate the intricate life paths and twists and turns experienced by individuals who lived during the war. Within this “Map”, we incorporate information derived from diverse sources, including interviews, documents, personal and public memoirs, and other testimonies. Collectively, this map constructs the life and geography of an individual.

Drawing from Denzin's approach [25], we analyze the narrative in terms of its origins, cultural background, place of residence, identity, life events, and pivotal experiences. Particularly at the turning point, we consider the war as a framing device and a significant turning point in the lives of these individuals. Adhering to a sociological perspective, we follow an inductive process that contextualizes knowledge and human intention [26]. Mapping these lives not only involves connecting different individuals but also linking various life events with one another [27].

6.2 Tool

Translating these sources into machine-readable data is a crucial step in our project. The project team has chosen to employ a relational database called nodegoat, which is a web-based research environment tailored for use in the humanities. Developed by Lab 1100, a company based in the Netherlands, nodegoat offers a range of functionalities that facilitate data exploration, including spatial and temporal visualizations. It enables us to construct datasets based on their data model and provides relational modes of analysis with spatial and chronological contextualization. The combination of these features within a single environment allows us to process, analyze, and visualize complex datasets instantly, with a focus on relationships, timelines, and spatial dimensions. Nodegoat operates on an object-oriented framework, drawing inspiration from actor-network theory. In this framework, individuals, events, artifacts, and sources are treated as equals, and their hierarchy depends solely on the composition of the network or their relations [28].

Nodegoat boasts several advantages, including network analysis capabilities, efficient data storage, and a flexible data model. Additionally, our project provides the opportunity to integrate short biographies and personal profiles. However, it also presents challenges, primarily in data modeling complexity (both an advantage and a disadvantage) and the rigidity of the one-set operation for biographical data. More details about these challenges are discussed in the following section. An illustrative project that utilizes nodegoat and follows a similar biographical approach is the “Forced Academic Migration” project at the University of Bern [29]. This project collects biographical data on German and Jewish academics who fled to Switzerland from Nazi Germany, aiming to depict academic relations and career paths in exile.

The object-oriented approach employed levels all entities, treating them without privileging the human over the non-human. Individuals are categorized as objects, actors (or agents) within the broader system of networks. Nodegoat primarily focuses on the creation and contextualization of individual objects as they traverse time and space. Nonetheless, queries and selections can also be made for network analysis outside of nodegoat or for multivariate analysis within the context of prosopography. Since we do not directly rely on statements from the actors themselves, the biographical profiles are naturally constructed and can be distorted due to the source situation. This distortion is particularly evident in the case of political systems like the Nazi regime, where personal data about individuals is tainted by ideology, as it is created within

the context of this ideology. For example, someone's name might be associated with labels like “anti-German” or “traitor”.

7. Data model

The primary objective is to gather crucial data, including biographical profiles, and to depict the various stages of individuals' lives. As previously mentioned, nodegoat utilizes the concept of “objects” to represent diverse data. To comprehend and interpret biographical choices effectively, they must be contextualized within the life-worlds of the individuals. Historians encounter challenges when reconstructing past decision-making and action options due to the multiple identities and roles of historical actors. Depending on their role (private, professional, social), these actors had varying degrees of freedom in specific situations. The core motivation is to comprehend past actions or inactions within their situational logic and to explore the interplay between subjective intentions and structural factors, individual decision-making possibilities, and social role patterns.

In the context of Luxembourg, the application of these terms seeks to move away from established labels such as “volunteers”, “forced recruits”, or “heroes”. WARLUX aims to emphasize the individual over group categorizations. A volunteer, for instance, may not necessarily be a staunch Nazi supporter, just as a recruit may have joined voluntarily. The perspective adopted is not one of absolutes; it acknowledges that people's actions are influenced by their circumstances, backgrounds, and various external factors. Moreover, the existing framework, including the country of birth and the prevailing political system—in this case, the Nazi occupation—sets the stage for individuals' possibilities for action and decision-making. These structures provide a horizon that both limits and enables our actions without definitively defining or constraining them.

For different types of information and data, nodegoat utilizes the concept of “objects”. Two specific objects are highlighted as examples.

The screenshot shows a user profile for 'Gaasch Roger' with an 'edit' button. Below the name is a unique identifier '(ngMy5D176MCbyNCQeL3v5cSDuL.f)'. The profile lists several biographical attributes: Name (Gaasch), First Name (Roger), Sample Community (Schifflange (LU)), Whereabouts (returned), Gender (male), Religion (Katholisch), Nationality (LUX), and Recruit (yes). Below this is a section for '[Birth]' with a search bar containing '25' and '1 - 1 of 1'. At the bottom, there are fields for 'Date Start' (03-09-1922), 'Date End' (-), and 'Locati...' (-).

Figure 1: Object Person with standard biographical data

Object Person:

The person's profile encompasses standard data points such as birth and death dates, residence, education, and profession (see *Figure 1*). Information regarding military unit and

imprisonment could have been directly incorporated here. However, we made the deliberate choice to house this information within another object. First, this decision was made to avoid over-determining this object. Second, we aimed to present individuals' lives as “chapters” or separate entities (objects), allowing the Wehrmacht experience to be a distinct chapter in the lives of those involved, but not a mandatory one. By using objects, we represent different life situations.

Object Wehrmacht:

The “Wehrmacht” object is not applicable to everyone, as not every individual experienced this life event. Some men voluntarily joined the Nazi forces, while others chose to go into hiding, resulting in the omission of the Wehrmacht object from their “biography”. Instead, we created a scenario or event-like context and traced various decisions and outcomes.

With these straightforward data models, we track the course of individuals' lives and their decision-making processes. We enriched the biographies, following the suggestion of Hyvönen et al. [30], by incorporating additional data such as information from public encyclopedias about military units, geolocations of operational locations, and personal data from ego-documents like letters from the front and memoirs. Nevertheless, these objects and individual profiles are linked to dates, places, and other profiles. As demonstrated by Fokkens et al. [31], our goal is to extract relationships between people and events, specifically events with their participants, timing, and location. In our small-scale project, we established these links ourselves or through data import using CSV files, rather than employing Natural Language Processing (NLP) as Fokkens did.

8. Discussion

Through the use of various situations or events as distinct objects, we construct a comprehensive life history map. These objects, such as the Wehrmacht experience, the decision to desert or go into hiding, and the ensuing consequences like family resettlement, are not merely components within a person's profile; they exist as separate entities in their own right (see *Figure 2*). This approach allows us to create a nuanced and detailed representation of individuals' life trajectories, highlighting the pivotal moments and decisions that shaped their experiences.

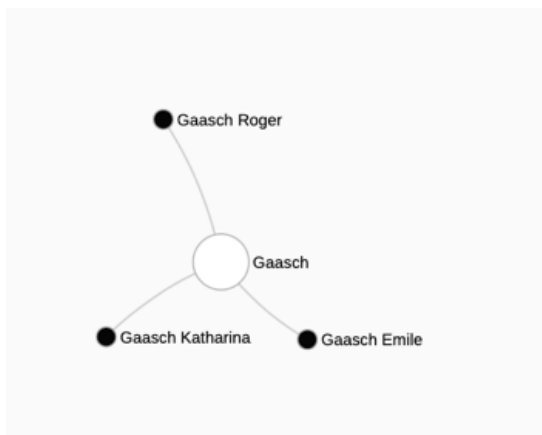


Figure 2: Linked members of family Gaasch

8.1 Mapping of *Biographies*

Let's illustrate this approach using the example of Roger Gaasch, born in 1922. In our database, Roger Gaasch is represented within the “Person” object, which contains standard data about him,

including his birth and place of residence. Additionally, he is represented within the “Wehrmacht” object, which includes data about his enlistment in the Wehrmacht and the unit in which he served. His family members, including his parents and sister, also have entries within the “Person” object, with links connecting them to Roger Gaasch (see *Figure 2*).

As we delve into Roger Gaasch's life, we encounter different phases or events. For example, his desertion in 1943 is captured in the “Desertion” object, while his involvement with the French resistance in 1944 is documented in the “Resistance” object. Simultaneously, the consequences of his actions ripple out to affect his family members, who are linked to the “Repression/Resettlement” object (see *Figure 3*).

By structuring the data in this way, we aim to create a comprehensive map of individual biographies and the interconnected relationships between people and events, allowing us to trace the complex trajectories of individuals like Roger Gaasch and the repercussions their decisions had on themselves and their families.

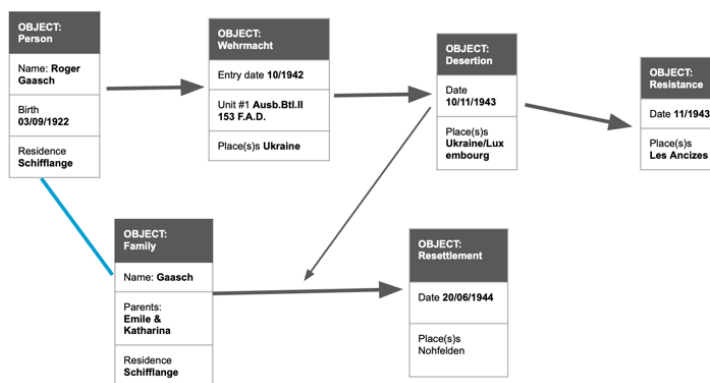


Figure 3: Data model WARLUX – Single objects and different life “chapters” and consequences for specific decisions such as desertions (Resettlement for the family)

Depicting the decision-making process within the database poses a complex challenge. Let's consider the scenario of a young Luxembourger who volunteered for the Wehrmacht. Instead of simply labeling him as a “volunteer” in the database, we adhere to the Fickers/Brühl principle of “situational opportunity”. This means that we must examine various conditions to comprehensively represent and capture the nuances of this active decision-making process.

The presumed “volunteer” is connected to his family members, and these connections can be linked to membership in Nazi organizations. By mapping these relationships and affiliations, we can gain insights into the proximity to Nazi ideology, and it becomes apparent that the young man may have volunteered for the Wehrmacht out of genuine conviction. If we include additional information, such as the family's financial status and potential German kinship, we can further investigate the family's social and economic context. It becomes apparent that the young man's decision could have been influenced by financial hardship and/or a strong belief in the National Socialist cause.

However, this example underscores the complexity of the biographies and lives of individuals living under occupation. Their lives were marked by twists and turns, much like other occupied and persecuted people during the Nazi occupation. To accurately represent these multifaceted life trajectories, we need a database that can adequately convey their complexity within their personal and political contexts. We utilize different objects to map various life routes and their subsequent consequences, such as resettlement or material and financial advantages. The date August 30, 1942, assumes particular significance as it marks the distinction between voluntary and forced recruitment of Luxembourgers into the German Army, although it's important to note that some soldiers continued to join voluntarily after August 1942.

As Worth suggested, this data model and life map provide researchers with the means to analyze individual lives, decisions, and their consequences [33]. However, it is important to

acknowledge that this model has its limitations and challenges. Using different life “events” as individual objects or profiles is time-consuming, requiring researchers to navigate between objects for every data entry. Moreover, the data often contains ambiguities, especially in the context of violence and occupation, where every decision can have life-altering consequences and where post-war accounts may present different versions and contradictory statements.

9. Conclusion

WARLUX faces the challenging task of transforming individual and unstructured biographical data into structured and interpretable data within the nodegoat database. To avoid imposing a linear structure on individual life stories, the data model needed to be flexible and adaptable, accommodating unstructured and lifeworld models of individuals. This was achieved by treating different life “events” or “situations” as equal objects, placed on the same level as the individuals themselves. This approach allows for a nuanced understanding of each individual's unique life trajectory, rather than imposing a rigid and inflexible schema.

However, it's important to acknowledge that difficulties persist, particularly in the data collection process, where ambiguities and a lack of structure in the data pose challenges. Nevertheless, by treating different life situations and events as equal objects and employing objects equally, WARLUX is able to visualize the lives and individual stories of Luxembourgers during the war as intricate and multifaceted maps, capturing the complexity of their experiences.

9.1 Outlook

The next steps involve conducting a qualitative analysis of first-person documents, such as diaries and letters, with the aim of enriching the biographical dataset. This will be achieved by introducing various “experience” objects based on these first-person documents. Notably, a collection of letters has been gathered through a crowdsourcing campaign [34], and these letters will undergo analysis and integration into the database in the upcoming phase of the project.

To incorporate these letters into the database, transcriptions of the letters are generated using HTR/Transkribus [35] and then imported as text files into nodegoat. Within the nodegoat environment, these transcriptions are linked to corresponding objects, individuals, dates/events, and locations. Additionally, text clustering is employed to identify and group relevant keywords and themes within the letters.

This dataset presents a valuable opportunity for further enrichment by adding additional information about individuals, following a methodology similar to that used by Koho et al. in their study on Linked Data based on Finnish POWs in the Soviet Union [36]. This approach could contribute to a more comprehensive understanding of the experiences and biographies of Luxembourgers during the war.

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