Career paths of Moroccan immigrants in Spain with experience in the export industry in origin. Methodological issues of research

La trayectoria laboral de los inmigrantes marroquíes en España con experiencia en la industria exportadora en origen. Cuestiones metodológicas de la investigación

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Abstract

In recent decades a process of export-oriented industrialisation has been implemented in Morocco. Many foreign companies are starting to relocate their production to Moroccan territory, benefiting (as have other agents) from the tax advantages offered by the government. The lack of labour rights in these companies gives workers an impulse to quit and emigrate abroad. About fifty thousand Moroccan immigrants with labour experience in the industry in Morocco live in Spain. This paper summarises the methodological decisions taken in a doctoral thesis which aimed to study the working and migratory careers of the Moroccan population in Spain who previously worked in the export industry of their country. Throughout the article, questions are answered about research design, data collection techniques, the field work that was carried out or the analytical and synthetic processing of information. For example, the commitment to methodological complementation as a model for gathering data, the conducting of fifty eight in-depth interviews (both in Spain and in Morocco), the preparation and use of the microdata of the National Immigrant Survey in 2007 or the use of grounded theory as a model of analysis.

Key words: Field Work, Grounded Theory, In-depth Interview, Methodological Complementation, Research Design.
Resumen

En las últimas décadas ha sido implantado un modelo de industrialización orientado hacia la exportación en Marruecos. Muchas empresas extranjeras están relocalizando sus procesos de producción en territorio marroquí, beneficiándose entre otros aspectos de las ventajas fiscales ofrecidas por la gobernanza pública. La ausencia de derechos laborales en estas empresas supone para los trabajadores un impulso para abandonar y emigrar hacia el extranjero. En España residen cerca de cincuenta mil inmigrantes marroquíes con experiencia laboral en la industria en Marruecos. El presente trabajo sintetiza aquellas decisiones metodológicas llevadas a cabo en una tesis doctoral que estudia la trayectoria laboral y migratoria de la población marroquí en España que, previamente, ha trabajado en la industria exportadora del país alauí. A lo largo del artículo se responden cuestiones en torno al diseño de la investigación, las técnicas de obtención de datos, el trabajo de campo llevado a cabo o el proceso analítico y sintético de la información. Por ejemplo, se justifica la apuesta por la complementación metodológica como modelo de obtención de la información, la realización de cincuenta y ocho entrevistas en profundidad (tanto en España como en Marruecos), la preparación y utilización de los microdatos de la Encuesta Nacional de Inmigrantes de 2007 o el recurso de la teoría fundamentada como modelo de análisis.

Palabras clave: Trabajo de campo, Teoría Fundamentada, Entrevista en profundidad, Complementación metodológica, Diseño de investigación.
«The journey can lead not only to new knowledge; the traveller could also change», Steinar Kvale (2011).

1. An introduction: the object of research

The implementation, in 1983, of the Structural Adjustment Programme (SAP) in Morocco was a breakthrough, since it led to an economic stabilisation and trade liberalisation that placed the country in the global economic market (García & Jordán, 2006; Soriano et al., 2015). Under the SAP, the interest of foreign investors and the promotion of the country’s industry (especially export-oriented) have increased. Many foreign companies, mainly European, chose to relocate their businesses to Moroccan territory due to the tax benefits offered by the *Charter de L'Investissement*, in force since 1995, and the tax exemption for the first five years, among other reasons. There are currently five areas in Morocco that include a wide range of companies exporting goods and services: from those that work in production (manufacturing industries such as automobile and clothing factories) to those which supply ICT-related services (such as call centers).

In these companies, characterised by a production system with both Fordist (mass production, high pressure and supervision, routinisation of tasks) and post-Fordist elements (flexible specialisation), even while bearing in mind the differences according to the type of company or the industrial sector in which we are settled, most of the workers employed in them work under difficult conditions and with a general absence of labour rights (Intermon Oxfam, 2004; Naïr & El-Khamlichi, 2016; Sales & Piñeiro, 2011; Soriano et al., 2016). The only way out those workers often find is emigration abroad. Trinidad et al. (2015) pointed out how working in the Moroccan export industry facilitates compliance with the requirements for obtaining tourist visas, thus making it easier to migrate to Spain.

On the other side of the Strait of Gibraltar, the beginning of the 21st century coincided with a period of extensive and rapid influx of immigrant population to Spain, which made it one of the top countries in reception of non-forced international immigration. This remarkable situation can be explained, at least in part, by the economic rise of the period, which saw the appearance of new occupations, especially related to the service sector, the agricultural sector and the, back then, emerging construction sector. The incipient decrease in working age population (caused by the
progressive ageing process which has been taking place in Spain in recent decades) and the unwillingness of the Spanish population to take up these occupations caused these jobs to be taken up by immigrant labour. This demand for labour led to a consolidation of flows, while the immigrants who had been living in Spain for several years requested the regrouping of their families and the second generation of population increased. Morocco was among the most important countries of origin: in 2007 there were over half a million residents in Spain who had been born there, of which 8.2% had previously worked in their country of origin’s industry (SNSI, 2007).

This article is based on a doctoral research which aims to analyse the working and migratory careers of this population in Spain, that is, of Moroccan workers with experience in the export industry. The following pages examine all the methodological issues that were relevant to the achievement of the main research results. The article is structured in five sections, wherein are presented, among other aspects, the methodological design of the research, the techniques used to gather information and the procedure of analysis.

2. Research design

2.1. How did the research project emerge?

The doctoral research arises from the collaboration of the author of the article in a R+D project that was being implemented in the field of industrial relocation processes in Mexico and Morocco. Its main goal was to detect the existence (or inexistence) of a differential impact on the migratory career (in the United States, US, and Spain), depending on whether the immigrant had worked (or not) in the society of origin in the export industry (Mexico and Morocco). While the study of the Mexican reality has been undertaken in previous publications by members of the research team, the new project wanted to figure out the main features in the Moroccan case, but always maintaining a comparative perspective. Following a quantitative-qualitative approach, the R+D project was divided into two main phases: “in and about Morocco” and “in Spain”; the author of the article actively took part in the second phase. At the conclusion of the

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1 The doctoral thesis “Immigration and labour market in Spain: Moroccan Workers from the Export Industry” (PhD in Social Sciences from the University of Granada) was defended on March 3, 2017, obtaining a “Cum Laude” mention (the highest possible mark in the Spanish PhD system). The dissertation has been carried out under the supervision of Professors Antonio Trinidad and Rosa Soriano of the University of Granada. It was financed by the FPU program of the Ministry of Education (AP2010-0585). At the time of writing the article, the author had not yet obtained a PhD, so the term “PhD student” will be used.

2 Project CSO 2010-16112, funded by the National Plan of R+D.
R+D project several questions had been answered, such as the configuration of the export industry, its impact in intranational and international population movements, the social and working conditions of workers in export factories, or the gender differences both in the industry and in migratory projects.

Within the framework of the R+D project, emerged a new line of research that would become the doctoral thesis of this article's author (“PhD student”, hereinafter). It would focus on the work environment of those former workers of the Moroccan export industry who had succeeded in their migratory process to Spain.

2.2. What are the goals of the research?

The doctoral research sets, as its main purpose, the need to analyse the working and migratory careers of the Moroccan population in Spain who had previously worked in the export industry in Morocco, known as TMPIE\(^3\). In order to determine this goal more precisely, we have developed six secondary objectives which have guided the research process, and are classified in Table 1 according to the field of the interviewees' experience they pertain to:

<table>
<thead>
<tr>
<th>Labour sphere</th>
<th>Migratory sphere</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To examine the integration and labour mobility in the Spanish labour market of TMPIEs before and during the socioeconomic crisis</td>
<td>4. To determine whether the crisis situation has changed residential and employment expectations of TMPIEs in Spain</td>
</tr>
<tr>
<td>2. To study the evolution of the working conditions of TMPIEs since arriving in Spain</td>
<td>5. To analyse whether the impact of the socio-economic crisis in Spain is giving rise to new migratory projects among TMPIEs</td>
</tr>
<tr>
<td>3. To learn about the labour strategies of unemployed TMPIEs during the current socio-economic crisis in Spain</td>
<td>6. To identify the reasons that have led to the increasing number of TMPIEs who have returned to Morocco</td>
</tr>
</tbody>
</table>

Source: Elaborated by the author.

Note: The sixth objective was added in the course of the investigation due to the repeated mentions of “returning” in the discourse of the interviewees.

2.3. What was the selected methodological strategy?

\(^3\) TMPIE means Moroccan Workers Coming from the Export Industry, or “Trabajadores Marroquíes Procedentes de la Industria Exportadora”, in Spanish.
Regarding methodological integration in this research project, a strategy of *complementation* was selected. Complementation means that, in the same study, two distinct images of reality are obtained from the use of two methods of different nature. In this way, a “double and differentiated vision of the facts” is reached. The legitimacy of this strategy is “based on the belief that each orientation is able to reveal different and interesting areas of the social reality, along with the fact that it is necessary to have this double vision in order to achieve a better understanding of the phenomenon” (Bericat, 1998: 37). Based on these assumptions, the researcher opted for a complementation with a “maximum level of integration” that would have as a result an “interpretive synthesis integrating the results from each method” (Bericat, 1998: 106). Methodological integration is an excellent and enriching way of looking into a social phenomenon like the one we want to study, since, as Jick (1979) states, the results obtained from the comparison of different methods have greater validity than those gathered using a single method.

2.4. *What are the methods chosen for methodological complementation?*

Among the five gateways to social reality proposed by Beltrán (1985), this research has opted for the qualitative and the quantitative research methods, having chosen in-depth interviews and secondary data (respectively) as data gathering techniques. In-depth interviews were carried out in the framework of the R+D project (see Figure 1), except for two recent rounds of fieldwork that took place in Motril and Tangier. Both the analysis of secondary sources (mainly National Immigrant Survey, NIS, in 2007) and the application of other techniques of lesser importance in the research (e.g., observation) were specific tasks for the PhD student's work.
3. Data gathering techniques I: in-depth interviews

3.1. Why in-depth interviews?

According to Ortí (2010: 272), the maximum feasible personal interaction between the researched subject and the researching subject happens in open interviews (also known as “in-depth interviews”). It consists in “a face to face, direct, and spontaneous dialogue, which requires a certain level of concentration and intensity, between the interviewee and an experienced sociologist, who would be responsible for leading and orienting the logical and affective speech of the interview in a more or less “directive” way. Moreover, due to the difficulty of getting access to a profile as specific as TMPIEs, in-depth interviews emerge as the best possible technique for this task, especially when compared to others such as surveys (which require a larger sample) or discussion groups (which are more demanding in terms of the recruitment of participants and contact among them, because they must meet in a single session).

3.2. Has an outline guide for interviews been developed?
When doing in-depth interviews, the researcher has to translate research questions (in our case, the objectives) into more or less standardised and structured conversational topics (Valles, 2014: 68). The need to do this led to the creation of an interview guide within the R+D project. The guide, which provides a valuable source of information for both the R+D project and for the doctoral research, has been ordered following the axes of space and time: on the one hand, Morocco and Spain, on the other, past, present and future. Conversational topics were organised according to the modules and themes of Table 2.

<table>
<thead>
<tr>
<th>Table 2. Modules and themes of the interview guide</th>
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<tbody>
<tr>
<td>Module I: Morocco</td>
</tr>
<tr>
<td>1. Birthplace</td>
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<tr>
<td>2. Internal migration</td>
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<tr>
<td>3. Work experience</td>
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<tr>
<td>4. Transformations in the region where the export industry is sited</td>
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<tr>
<td>Module II: Spain</td>
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<tr>
<td>5. External migration</td>
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<tr>
<td>6. Work experience</td>
</tr>
<tr>
<td>7. Future expectations</td>
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<tr>
<td>8. Sociodemographic information</td>
</tr>
</tbody>
</table>

Source: Elaborated by the author.

The doctoral research has utilised Module II, which relates to the experience of interviewees since they've resided in Spain. Of the topics that make up this module, number 6 has been of particular importance: socio-occupational experience in Spain, which addresses issues such as the career path of the interviewee after migration, current occupational status (both of the interviewee and of their family/network), their sending (or not sending) remittances, their legal status in Spain, or their personal view on the Spanish labour market during the socioeconomic crisis. The final questions are easily answered: socio-demographic information about the interviewee and a final, personal reflection. This is done in order to reduce the possible emotional impact of the previous topics.

3.3. Was the theoretical sampling determined from the beginning?

The theoretical sampling was generated through a process of constant revision: it has been subjected to a dynamic methodology in which the gathering of information and the analysis of said information take place simultaneously. Consequently, the number of
interviews to be made could not be determined in advance. On the contrary, new
interviews were made until the point of theoretical saturation of the categories was
reached, i.e., until the interviews no longer provided new information that was relevant
to the research. In relation to the concept of saturation, the following master sampling
criteria have also been considered (Valles, 2014): heterogeneity (interviewees must be
socio-structurally representative of the studied group) and economy (in terms of means
and time).

3.4. How were the geographical areas of fieldwork selected?

Before determining the areas of fieldwork (within the R+D project), we focused
on a first approach with TMPIE in the city of Granada, since this would provide an
adequate procedure of verification of the methodological design, without any additional
travel or maintenance costs. These interviews yielded a revision in the procedure to
access future interviewees and a redrafting of the interview guide, among other
improvements. Subsequent analysis led us to the conclusion that the criteria for validity
and reliability that the interviews had been conducted under were sufficient to declare
them valid (for example, some of the interviewees' interventions provided spontaneous
and relevant information about some of the research questions). Later, the inquiry into
the provinces in Spain with the most Moroccan population helped to determine, in a
second phase, the geographic areas of fieldwork in detail: the regions and towns and,
within them, the more populous neighbourhoods, squares and streets. To this end, we
used data from the sections of the most recent census (Padrón de Habitantes), which
were applied to the map viewer of the Spanish National Geographic Institute's webpage,
cartociudad.es (see Figure 2).

One example is the procedure for selection of El Ejido (Almería), which is
representative of the cases of other towns that were visited. Almeria is the leading
province in the Peninsula in percentage of inhabitants born in Morocco, who are
mainly settled in the west of Almería and work in intensive agriculture (greenhouses)
and its parallel industries (plastics, biochemistry). The data showed that the
municipality of El Ejido, which is divided into several villages, is characterised by
gathering a large concentration of population in a few sections, which would make
fieldwork easier. We visited 1) San Agustín and 2) Las Norias de Daza, in which more

4 That is, Spain minus Ceuta, Melilla and the Canary and Balearic Islands.
than 50% of their population was born in Morocco, 3) La Redonda and Santa María del Águila, and 4) various sections of the western part of the village of El Ejido.

![Figure 2. Map showing the centers of population of the municipality of El Ejido](image)

Source: Elaborated by the author, based on the census information from Spanish National Geographic Institute (2012).

After the first experience in Granada under the R+D project, it was decided that the following rounds of fieldwork were to be developed following the criterion of sample heterogeneity, according to two typological variables relating to the interviewees' jobs: 1) the sector within the export industry and 2) the sector of their main labour activity in Spain. Both variables were checked using SNSI (2007). In addition to Granada and El Ejido, further rounds were conducted in the provinces of Madrid, Barcelona and Gerona. Subsequently, and independently from the R+D project, the PhD student carried out one final round in Spain, in the port of Motril (Granada). The selection of this site was due to its proximity to the University of

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5 The PhD student has taken part in every round of fieldwork of the «Spanish phase» for the R+D project, both in their design and implementation and in the subsequent analysis of the data.
Granada (which reduced costs) and the context in which the interviews were held, *Operation Crossing the Straits*⁶, which gave access to a more varied profile of TMPIE.

### 3.5. Who made the in-depth interviews?

The different phases of fieldwork in Spain were carried out by the team of researchers of the R+D project (including the PhD student himself), with assistants that spoke Moroccan Arabic, or Dâriya. The assistants were both men and women and were asked to facilitate the access, especially in the case of Moroccan women. The decision whether to conduct the interviews in Spanish or in Arabic was made on the spot, on the basis of the interviewee's language skills. It was held in Spanish when the interviewee was fluent enough not to lose depth in their speech. It was otherwise conducted in Arabic by the assistant, who had been previously trained in different sessions.

### 3.6. Were the interviews arranged in advance?

The meetings with the interviewees were not prearranged. Instead, we established the neighbourhoods, streets and places with the highest concentration of Moroccan population in which we could *roam*⁷ and implement the theoretical sampling before each of the rounds of fieldwork. With this work method we obtained: 1) a speech that was not coerced by the fact of having previous personal networks in common (acquaintances) and 2) a more heterogeneous profile of TMPIE that was closer to reality and, therefore, less biased in its selection (we thus avoided the risk of only interviewing people who, for example, had a greater degree of integration and presence in their local community, which could lead to under-representation of certain social strata and to the loss of some of the heterogeneity in the population of TMPIEs in Spain).

### 3.7. Where were the interviews conducted?

Following Webb & Webb's (2004) advice that, in the interest of getting more out of interviews, you should make the conversation pleasant for the interviewees, we tried to set up minimal conditions of privacy and peace. Therefore, the ideal place to conduct the interviews was the interviewee's home⁸, since this also facilitated the observation of

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⁶ This operation is activated annually between June and September in different Spanish ports to facilitate the holiday exit (and later return) of immigrants to Morocco.

⁷ The strategy of *roaming* is “an informal approach to the stage where the gathering of information will take place” (Carrero et al., 2012: 137-138).

⁸ In determining the dates of fieldwork we have opted for implementation in weekends and, in the case of weekdays, in the afternoon (when respondents come home from work).
the studied individuals' home and family atmosphere. However, we have visited a variety of places to find people to interview (mosques, call shops, stores, greenhouses, association offices, businesses...), so it was not always possible to conduct them back at their home. In these cases, we looked for a quiet, out-of-the-way place.

3.8. What were the prevailing criteria in conducting the interviews?

The interviews were carried out a) in clear, simple and brief language, b) with an educated and sensitive treatment of what we were told (some issues were emotional or sensitive to the interviewee), c) listening critically (not believing everything we were told) and attentively (stressing or directing the conversation towards the themes that were interesting beforehand or emerged as such in the course of interviews, which required a degree of intuition, improvisation and verbal and nonverbal skills from the interviewer) to what we were told, and d) anonymously, in other words, we never asked for real names. The research team has always been identified as making part of the University of Granada and we explained the purpose and process of the interview to each potential interviewee. We also reminded them that the obtained information would only be used for scientific purposes.

3.9. How was the information gathered from the interviews?

The in-depth interviews were collected as voice recordings using digital recorders and then translated (in the case of those conducted in Arabic) and transcribed. If the respondent agreed to the interview on condition of not being recorded (something that happened in rare occasions), it was systematically transcribed on paper.

The PhD student (independently from the R+D project) also used a field notebook to openly and immediately record any relevant aspect about the interview: off-record comments (especially after the conclusion of the interview, once a climate of trust between the interviewer and the interviewee had been created), reflections on the part of the researcher, describing the context of the interview, etc. It also served to collect those observations that the PhD student considered relevant to understanding the daily life of TMPIEs in Spain. At the end of the workday, these notes were rewritten in a document called field dossier, where we described the day, made a summary of each interview, and expounded on our reflections and observations. The PhD student added,

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9 The transcription was done by the research team members, including the PhD student, except for those in Arabic.

10 An excessive delay in writing could lead to the information being diluted.
in his case, photographs of the environment in which TMPIEs live, to capture another angle of their daily lives. The dossier and the photographs proved to be an excellent tool when, after some time had elapsed, they helped in recollecting many nuances that served to improve the analysis of the interview.

3.10. Did any obstacles arise during the fieldwork?

The first obstacle that appeared while on the field (which had been foreseen during the methodological design) was the great difficulty of locating potential respondents. Although the number of Moroccans living in Spain is significant, the studied population is small: only 8.2% have worked in the export industry in the country of origin (SNSI, 2007). In order to successfully complete the theoretical sampling and to ease the tasks of the fieldwork, we decided to extend later rounds, and also to determine in detail the sections where the concentration of Moroccan population was highest.

On the other hand, we tried to solve the unexpected obstacles that appeared during fieldwork on the spot. Moreover, they were collected in the field dossiers in order to address them before future rounds. Among the different decisions that were made to solve them, we can highlight: 1) we preferred to conduct the interviews in the interviewees' home and, when that wasn't possible, we avoided bars, coffee shops and similar places (though we didn't avoid them for searching for interviewees). This decision led to an improvement in the quality of the recordings; 2) after the experience of fieldwork in Catalonia, it was decided that the following rounds would be organised so as not to waste time travelling between remote towns; and 3) for the fieldwork in Madrid, we developed a list of associations of immigrants, which we visited throughout the days it lasted despite not having contacted them beforehand. Working in situ allowed us to see the effect of the economic crisis on the subsidies and aid received by associations and NGOs first hand: many of them had closed down.

3.11. How many interviews were conducted?

A total of 44 in-depth interviews were made in Spain (see Figure 3). The interviews were conducted within the R+D project, except those that happened in Motril which were performed independently by the PhD student. While carrying out the rounds of fieldwork in Spain and analysing the interviews in a simultaneous process, the PhD student became aware of the importance of the category “return” for this research. For this reason, a new round of fieldwork was designed, this time in Morocco instead of
Spain. In 2014, 2 in-depth interviews were conducted in Tangier, while on a short visit to the Tanger Free Zone, and in 2015, 12 more interviews were carried out. All 14 interviewees were individuals who had worked in the export industry either before their arrival in Spain or after returning to Morocco.

The selection of Tangier as the geographical space was influenced by several factors. First of all, the high presence of export companies in Tangier-Tetouan (the region is the second industrial centre of the country after Casablanca, and first in terms of exports). Secondly, its proximity to the University of Granada. And thirdly, the presence of members of the OARS-MED\textsuperscript{11} residing in the city, which helped with the

\textsuperscript{11} A research institution belonging to the University of Granada, of which the PhD student is a member.
execution of the fieldwork. The interviews showed the professional experience of the immigrants in Spain who decided to return to Morocco during the crisis. They also enabled us to check whether the export industry was an attraction for the active population who decided to return.

4. Data gathering techniques I: secondary data

4.1. Which secondary data have been used?

Based on the idea that qualitative and quantitative methodologies are not incompatible (Ruiz, 1996), the PhD student incorporated a series of secondary data in the phase of analysis and interpretation of the qualitative data. The use of these secondary data, within the methodological strategy of complementation, has served as a procedure of quality control for qualitative results. First, new incidents that had been overlooked during the analysis of qualitative information have emerged as relevant. And second, we contrasted the theoretical results after the addition of these new data. In conclusion, methodological complementation has expanded and enriched the results, strengthening and consolidating the research.

Secondary data came from various official statistical sources. However, the ones that were awarded a primary role within the strategy of complementation were the microdata from the National Immigrant Survey in 2007 (NIS-07). The NIS-07, to use its Spanish acronym, is the first (and, so far, last) major survey on migration flows covering the whole national territory and all groups of immigrants. This survey analyses the migration process of immigrants, from their country of birth to their arrival in Spain, as well as their social networks and their professional career in Spain, among other things. This heterogeneous information allowed us to select a subsample of interest: residents who had been born in Morocco and whose last job in the country of origin had been in the manufacturing industry.

4.2. What are the advantages of the NIS-07?

Although the selected subsample has some disadvantages, such as its being made up of 152 surveys, they have been overcome by implementing a dual data analysis: on the one hand a univariate descriptive statistics, on the other hand a qualitative analysis of the survey, studying each respondent individually in a manner similar to interviews. Among the advantages of the NIS-07: a) it is the only data source

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12 The software that was utilised for the exploitation of microdata from the NIS-07 was SPSS 20.
that can discriminate the Moroccan population according to their occupation in the country of origin, b) it provides excellent information about the labour and migratory processes of TMPIEs both in Morocco and in Spain, and c) because of its implementation date (2007), it enables us to contrast the situation of TMPIEs before the crisis with their current situation (using the interviews). Figure 4 shows the strategy used in the research.

5. Data analysis

5.1. What analysis model was selected?

Grounded Theory (GT), which was introduced to the scientific community in 1967 by Glaser & Strauss (1999), is a method of qualitative data analysis oriented towards the development of theory. GT is an inductive process (theory emerges after the collection of data) based on the idea that all sociological analysis must go beyond the mere description of social reality.

5.2. What are the implications of GT for theoretical sampling?

Theoretical sampling in GT is characterised by its dynamism and flexibility: the processes of data gathering and data analysis are developed together, which means that the sampling is generated in the course of the investigation. In the first rounds of fieldwork (Granada and El Ejido) the sampling was opened in search of situations that provided relevant information about TMPIEs. From the data that was obtained, which was fragmented and codified, a series of concepts and social patterns began to emerge,
progressively directing the research towards other informants and locations (Catalonia, Madrid, Motril, Tangier). This led to a greater variability of categories. The process progressed “spirally” (Carrero et al., 2012), until new incidents\textsuperscript{13} ceased to appear. When the data began to be repetitive we reached the point of theoretical saturation of the categories and therefore the sampling and fieldwork were suspended.

5.3. What is the data analysis process of GT like?

The data analysis process of GT was performed under the systematic application of (Carrero et al., 2012) 1) the constant comparative method\textsuperscript{14}, 2) the criterion of theoretical sampling and 3) the criterion of theoretical saturation of the categories we found. In addition, data was analysed through the encoding process by which incidents were transformed into substantive theory (descriptive or empirical level) and then into formal theory (conceptual or theoretical level) (see Figure 5). In this process the data was analysed in order to identify different themes that served to conceptually classify incidents. The coding was divided into three phases: 1) open coding (fragmentation of data, coding of incidents in the categories that emerged, and the appearance of memos -annotations-), 2) selective coding (a code was identified as the key category, which structured the theoretical sampling) and 3) theoretical coding (formal theory reached a higher level of abstraction through the central category).

![Figure 5. The data analysis process of GT](image)

Source: Elaborated by the author, based on Carrero et al. (2012).

\textsuperscript{13} Segments of the raw data that can be analysed separately and which point towards key issues for the verification of the theoretical framework.

\textsuperscript{14} Looking for similarities and differences between the incidents in the data to find regularities relating to social processes.
Career paths of Moroccan immigrants in Spain with experience in the export industry in origin. Methodological issues of research.

1 Substantive codes (or categories) are classification elements that are often used in the theoretical explanation that emerges from the incidents.

2 Theoretical codes are constructs with a higher level of abstraction than categories and, therefore, have explanatory value in themselves. Among these is the central category.

The data analysis process of Grounded Theory has led to the identification of 272 substantive codes, 41 families (associations of substantive codes), 8 theoretical codes and a central category: “Readjusting socio-occupational and residential aspirations and expectations / making new migratory decisions”. This central category has become the theoretical code that explains the most variation in the data, that is, the foundation of the main subject of research.

5.4. How has the data analysis process been realised?

If we translate all the above elements of GT to the terms of this specific doctoral research, the analysis process has been developed (using the program Atlas.ti 6) following a series of steps (Muhr, 1997; in Valles, 2015: 635). First a hermeneutical unit was created (i.e., a new Atlas.ti project), which was then associated with the primary documents of each interview transcript. Then began the process of categorisation, which meant reading and selecting the fragments of interest to the research and assigning codes and memos. The coded fragments were compared and subsequently the categories were reduced through the organisation of primary documents, codes and memos into families. For this integration of categories, networks were established on the basis of the created codes. Lastly, all this work was supplemented with quantitative data (NIS-07) which helped to refine its analysis and interpretation. The results were then written as chapters of the dissertation.

6. Conclusions

This article has attempted to show in a brief and clear way all the methodological issues that arose, and the respective decisions that were made, in the process of making a doctoral thesis on the labour and migratory trajectories of the Moroccan population living in Spain who had worked in the export industry while still in Morocco. The relevance of the article lies in the fact that it synthesises the methodology of a dissertation which in turn is inserted in an international research

15 The coding phase has been developed by PhD student under the R+D project.
project, with the participation of researchers from universities and scientific institutions from Spain, Canada, the United States and Morocco. The complexity of the methodological decisions made, all of which have been justified in detail throughout the article, makes the present work a useful resource for anyone who might be preparing future research projects with similar topics or issues.

The introductory section has focused on succinctly outlining the subject of research. Specifically, the socio-economic context of Moroccan immigrants in Spain, both in origin (the export industry in Morocco) and in the receiving country, has been presented. Next, the research design was discussed, detailing issues such as the background of the doctoral project, the transnational study in which it is inserted, the main and secondary objectives, or the selected methodological integration strategy (complementation) that led to the use of in-depth interviews and secondary sources (mainly NIS-07) as data gathering techniques.

The following sections justify and explain the use of both research techniques. Of particular interest is the part that deals with all the issues that have arisen surrounding the fieldwork during which the in-depth interviews were made, which included the drafting of interview scripts, the theoretical sampling, the selection of settings and the actual gathering of the data. Finally, we have set forth the model of data analysis that was selected for this research: Grounded Theory. The process of analysis of GT has led to the identification of a code as the central category, which has become the foundation of the main subject of research.

References
Career paths of Moroccan immigrants in Spain with experience in the export industry in origin. Methodological issues of research.


