

Article

# Comparison as a Method for Geography Education

Holger Wilcke <sup>1,\*</sup> and Alexandra Budke <sup>2,\*</sup><sup>1</sup> Holger Wilcke, Department of Social Sciences, Humboldt-University of Berlin, 10099 Berlin, Germany<sup>2</sup> Alexandra Budke, Institute of Geography Education, University of Cologne, 50923 Cologne, Germany

\* Correspondence: holger.wilcke@hu-berlin.de (H.W.); alexandra-budke@uni-koeln.de (A.B.)

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**Abstract:** Comparison is an everyday process of thinking, which is also frequently used in geography lessons. However, in geography pedagogy, the term ‘comparison’ remains vague and insufficiently defined. In this paper, we will propose a clear definition of what comparison is and introduce it as a systematic method for secondary school geography education. This definition and method is the result of our theoretical–conceptual approach, according to which we have analyzed the current academic discussion about scientific comparison and converted it into a method for teaching. We argue that applying comparison as a pedagogical tool may improve students’ skills to argue, reflect, solve problems, and promote good judgement.

**Keywords:** comparison; comparative method; geography education; European asylum policies

## 1. Introduction

Comparison is an ordinary thinking process that makes it easier for people to sharpen perceptions, practice categorization, and solve problems in their everyday lives. As such, it was operationalized for scientific knowledge production. The method of comparison is as old as the discipline of geography itself. For example, Alexander von Humboldt’s comparisons of climate zones and botanical complexities of high mountains [1] became highly respected academic pieces of work. Similarly, Karl Ritter, the author of *Comparative Geography* [2], who stated that “the personal study of the earth, with critical closeness, and in the comparative method, is the true way” [2] (p. xxvii) is highly regarded. In a Eurocentric manner both scientists are often considered as two of the founders of geography as a scientific discipline and for both, comparison was one of the central methods of generating knowledge.

Up until today, comparison remains applied frequently. For example, comparison plays an important role in ongoing discussions about comparative urbanism [3–5]. However, it is not only in Geography that comparison is a commonly used method, and a matter of debate: with its own disciplinary traditions of comparison likewise exist in other academic fields such as Social Sciences [6–8], Cultural Studies [9–11], Political Sciences [12–14], History [15–17], Religious Studies [18–20], Communication Studies [21–23], or Comparative Education [24–26], and are even discussed transdisciplinarily [27–29]. However, none of these studies used, tested, or studied the transferability of comparison to school education. More specifically, very few scientific publications discuss the applicability of comparison in geography classes. Some of those studies that are available are more than 30 years old [30,31]. In current geography education articles and lesson plans, the idea of comparison is used frequently. We have checked all issues of *The Geography Teacher* and *Teaching Geography* from 2017 and 2018 and, in a few papers, it is pointed out that comparisons can help “reach a clear judgement” [32] (p. 10), to “understand how things may be connected” [33] (p. 67), “to gain a better insight” [34] (p. 34), or “to stimulate further reflections” [35] (p. 56). Comparing is often mentioned as a task for students, but without referring to a concrete procedure or even a method [36–55]. Thus, the aim of this article is to provide a clear definition and systematic method of comparison, which can be used as a tool in geography school education to make the full potentials of comparison usable.

In this paper, we follow a theoretical–conceptual approach, which is widely used in geography [56] to develop a new concept of comparison based on a conceptual literature review [57]. We reviewed the different discussions regarding comparison in the above-mentioned scientific disciplines in order to provide an overview of the main ideas, debates, and models in the given fields of comparison [57]. Our objective was to identify how comparisons are defined, to what extent the process of comparison can be systematized, and whether there are models that provide an accurate description of comparison as a scientific method. We also examined the discussed possibilities as well as limitations of comparison methods. The findings of this analysis are summarized in the following section, with special focus on these four aspects. In this section, we also reflect on these aspects considering of the specific requirements of geography education.

Based on this analysis, we will derive a definition for comparison in geography education in the following section. Building on this, we propose a systematic method of comparison for geography education in secondary classes in section four. In order to illustrate this step by step method, we will use the example of European asylum policies. Both the definition and the method are derived from the analysis of the various scientific studies from different disciplines.

## 2. Comparisons in Science and Its Potential as a Teaching Method for Geography School Education

In the following, we will summarize the discussions we have analyzed about comparison in the various scientific disciplines along four aspects, namely our analytical search for a definition, for systematization and models of comparison, as well as for the possibilities and limitations that come with comparing. Our aim in the following section is to draw first conclusions from recent academic debate on comparison and to check the transferability for geography education in secondary classes.

### 2.1. Comparison as a Method

The operation of comparing is a natural and elementary process of human thinking. Therefore, most scholars differentiate between everyday comparison and comparison as a scientific mode of research [6,58,59]. The former is a way of thinking and an everyday operation that is “so fundamental to our cognition that thinking without comparison is almost unthinkable” [6] (p. 115).

In contrast to the everyday comparison, which is often a subconscious procedure, comparisons made within a scientific frame are different in that “the selection and definitions of objects and the properties are compared, as well as in the care and systematically of the procedures of production and analysis of the data from which the comparison are made” [59] (p. 822). Whilst everyday comparison is based on comparison of similarities and differences, and thus refers to a descriptive, informative level of thinking that offers no direct connection value for theoretical knowledge, complex and systematized comparison is a method that goes beyond that [58] (p. 23). Scientific comparisons expand a view beyond an individual case and allow different perception of observations. It also makes identification of causal relationships easier and can allow for more generalized explanations [21,60].

Based on the distinction in scientific discussions between comparisons as an everyday thinking process and as a scientific mode, we argue for defining comparison as a systematized method of school teaching. Contrary to the rare current contributions to the subject in geography education a method of comparison needs a clear and systematic guidance [61–63]. It needs to be clear for both teachers and students how such a comparison is actually carried out and to what extent it goes beyond the juxtaposition of similarities and differences. Such a well-defined method with clear steps would provide a tool for the classroom, which may improve learners’ skills for multi-perspective discussion and problem solving. A specific model with clear steps for undertaking a comparison is very present in scientific discussion and will be discussed in the following paragraph.

### 2.2. Model of Comparative Analysis

One of the first, and most common, models for undertaking comparative research was developed by Franz Hilker [64] and Georges Bereday [65] (Adick [24] offers a discussion about the connections

between Bereday's schematic and Hilker's model). The model of comparative analysis consists of four steps: description, interpretation, juxtaposition, and comparison. Step one involves considering the subject areas that are going to be compared. Step two is the interpretation of the findings identified in step one with consideration of the historical, social, economic, and political circumstances of those subject areas. Juxtaposition is a preliminary stage of comparing facts and findings with the aim of classifying data and to establish criteria, namely a *tertium comparationis*, as a basis for a valid comparison. The final stage focuses on more general comparison but with full consideration of context, in an attempt to generalize the findings and conclude the comparison [64,65].

This model was initially developed to compare different educational patterns in two or more different countries, and has been criticized on a number of different levels. First, it must be noted that a question is not taken into account in the model. However, a question is essential for comparison and should come before comparison, as it determines the criteria and factors for further comparison [59] (p. 835). Furthermore, the sequence of the individual steps that are outlined in the model is not clear and cannot be clearly distinguished from one another. For example, interpretation represents a single step in which the comparative units are to be interpreted with regard to the sociopolitical context but interpretation also seems to be a step that runs through the entire comparison process and needs to be considered as such. For us, the criticism of the model clarifies two important points, which seem to be essential for the conversion of the model into a teaching method. Firstly, each comparison should start with a particular question, which needs to be answered. Secondly, a comparison is not only a juxtaposition, but the entire procedure including analysis and a valid explanation for similarities and differences [21] (p. 149). For school geography education, Harvey Silver [66] also proposed a model whose four phases include description, comparison, conclusion, and application. Questioning is important in his model, but only in the third phase. There is no initial question which directs the comparison [66] (p. 12ff). Moreover, the explanation of how a conclusion can be drawn by the students is imprecise. Despite the criticisms mentioned, both models offer initial points of reference as to what an ideal comparison method should look like.

### 2.3. Units of the Comparison

One of the main questions raised in academic discussion about comparison as a scientific method is what can be compared at all: How do you make sure that two or more entities are comparable? The answer often given is that two or more entities have to share at least one property—the *tertium comparationis* [24,67,68]. For choosing the entities, two different designs are common, mainly in political sciences. With the 'most similar systems design', entities are chosen which are as similar as possible, except for the one phenomenon whose effect should be assessed. The idea is to keep as many extraneous variables as constant as possible. With the 'most different systems design', the strategy is the other way around. Chosen are entities as different as possible, with the aim to find out why there are similarities despite all differences [12,21,69].

Additionally, further concerns of scholars have previously been expressed with regard to what can be compared. A point of criticism often identified is the focus of nation states on the subject areas identified for comparison [15,24,59]. In the majority of cases, research designs focused on comparison are designed for international comparisons of states, as was the model of Hilker [64] and Bereday [65] presented previously. Nina Glick-Schiller and Andreas Wimmer [70] argue that human sciences take the nation state as an unquestioned and natural unit of analyses, which causes a perception of a nation state based with congruent social, cultural, political, and judicial borders. This naturalization of the nation state is what the authors of this study refer to as methodological nationalism. In the same way, in geography education the simplistic comparison of countries is criticized. In particular, when students are asked to compare the country they live in with unfamiliar places, because misinformation and stereotyping points of view can be reproduced through this comparison [71].

Therefore, it is reasonable to question the entities itself, which cannot only be states, institutions and structures, but also perspectives, methods, “mentalities, experiences, emotions, codes and symbols” [6] (p. 123). Böhn and Obermaier [62] suggested, in their contributions to research into geography education, that it is not only space, time and systems that can be compared but also strategies. Such an extension is logical in order to address geographical problems. Therefore, we suggest that comparing different perspectives, representations and discourses, as well as methods and procedures, makes sense for problem-oriented geography lessons. Furthermore, two points would be concluded from the presented discussion for a comparative method in geography teaching. First of all, it seems to be reasonable for the method of comparison to ensure that the units of comparison have at least one common feature in order to guarantee comparability. Secondly, it is important to reflect on the selection of the comparison’s units, as we will further elaborate on in the following paragraph.

#### *2.4. Reflectivity: Key for Comparison Method*

In regards to the scientific discussion, reflectivity in comparison is urgently required. Some researchers argue that before we reflect on what we are going to compare, we should ask ourselves why we are comparing in the first place [6,7,11]. From a postcolonial perspective, scholars have criticized the risk of eurocentrism and ethnocentrism [21,59,72]. Thus, comparative cultural, social, historical, and urban studies have been criticized for reproducing the idea of “the West” being broadly considered to be superior and developed [3,15,72]. Considering this critique seriously, comparison needs to start with the question of why compare or more subjects, and needs to critically reflect on the intention of the comparison in question [73].

In geography in particular, a postcolonial perspective seems indispensable. For example, the aforementioned Alexander von Humboldt was often portrayed as a polymath for his scientific achievements cf. [74]. At the same time, his eurocentrism and his significance for the guiding ideology of a scientific racism, is often omitted [75] (p. 345). Additionally, some current contributions to geography education clearly outline why critical reflection is needed. Kestler identified the dangers of comparison, especially in areas with “different cultures” [63] (p. 226) and argued this with a quote from Dürr [76] (p. 5), which clearly showed a bias towards colonial continuity. For this very reason, the consideration of a postcolonial perspective in geography lessons is essential [77] (p. 17). Therefore, we argue that reflection has to be an inevitable element of a comparative method, which is thought of as a “continuous process of criticism and self-criticism” [4] (p. 726). We further contend that such a method would enable learners to consider criticism seriously. At the same time, it would also encourage the development of critical thinking among students.

### **3. Comparison as a Method in Geography School Education**

The four aspects discussed in the last section provide an overview of how scientific comparison is considered in different disciplines. In addition, these discussions were related to current contributions from geography education. For each of the four aspects discussed, we have analyzed key considerations that are key for translating comparison from a scientific method to a dedicated teaching method. Combining these crucial considerations, we propose the following definition for a comparison method.

Comparison is a reflective and argumentative process. Based on a geographical question, a number of units are selected, whose similarities and differences are identified along determined variables in order to work out interrelations. Based on this, justified explanations are formulated to answer a specific question, or further questions are raised, which need to be considered to develop a final answer.

This definition is derived from the aforementioned discussions, and already takes into account the limitations of these previously published studies from various scientific disciplines. In the following section, we will discuss the four central aspects of our definition for a method of comparison in more detail. In addition, we highlight the potential for skill improvements through the inclusion of comparison as a method in geography school education.

### 3.1. Initial Question

As stated in Section 2.2, we argue for an initial geographical question as a fundamental element of the comparison method. It is a crucial starting point of the comparison, as the entire further process depends on it [59]. A first question provides opportunities to engage more thoughtfully and creatively with the geographical subject matter. Such a question may arouse the enthusiasm of learners and is essential for developing new perspectives, ways of thinking and finding solutions to problems [78]. Furthermore, it will enable problem-oriented and therefore promote general insights. By developing a geographical question, the comparison developed becomes geographically-based. But what is considered to be a geographical question? This question is challenging answering and is widely discussed in geography and geography education cf. [79] (p. 19). One answer recently given is that it is not the subject itself that causes a question to be geographical, but rather the perspective on it [80] (p. 365). Within the idea of a geographical concept, such a geographical perspective can be taken. There are many ideas about these concepts cf. [81] (p. 51). Uhlenwinkel [79] and Dittrich [82], for example, both refer to seven concepts: both define place, space, and scale as key concepts; and change, diversity, interaction, representation, and perception as organizing concepts. However, these geographical concepts have a dual function. On the one hand, they allow for an analytical framework to be formed using a specific geographical perspective through the interaction of different concepts. In this context, the concepts are hence a supplementary tool for both teachers and students to enable development of a geographical question. On the other hand, the concepts can be used as guiding principles for students to structure a problem. Thus, if a problem or question is given, the concepts can support the student in developing, understanding and finding a structured solution [83] (p. 8). At the same time, comparison may not be useful for every geographical issue. A comparison is appropriate when further insights can be determined from it. If this is the case, a specific geographical question already determines the areas of comparison and the variables by to which these subject areas are compared.

### 3.2. Reflectivity

As outlined in Section 2.4, reflection and reflectivity are key elements of comparison [6,7,11]. Therefore, we argue for a method of comparison in which reflection is both required and encouraged. The initial question, the point of view from which it is posed, and the associated (often implicit) assumptions, as well as the variables for comparison determined in the process, their weighting and the formulated conclusions should all be critically questioned during the comparison. Considerations of these aspects of the comparison process raise learners' awareness, promotes critical thinking, and makes it possible to gain new insights.

A distinction must be made between reflection and reflectivity [84] (p. 19). While reflective thinking focuses on questioning existing knowledge, convictions, and ideas, reflectivity is understood to be reflecting and critically questioning one's own actions and assumptions [84] (p. 19). The process of comparison requires and encourages both reflective thinking and reflectivity. If a question, units of comparison, or variables in the comparison are predefined they must be critically questioned, just like all information used in a comparison: Who is asking, from which position, and with what intention. For example, if the students themselves choose the characteristics to be compared, this selection must also be critically scrutinized and, as the students act with the selection themselves, this is reflectivity.

Reflectivity in students is also required when comparing the units of comparison, weighting of characteristics, establishing connections between the units and deriving similarities and generalizations: Under which assumptions did I compare the units with each other; Which characteristics have I paid more attention to than others and why; Which findings from the comparison can be generalized without generating essentialized conclusions?

Reflection and reflectivity are a central prerequisite for knowledge production [85] (p. 16). This understanding can also be seen in other subjects, particularly when identifying that results of a comparison must be reflected upon [86] (p. 392), and in this use of comparison, a learner's ability to reflect may increase [87] (p. 14).

### 3.3. Argumentation

As we define it, the method of comparison is an argumentative method. The ability to form an argument is a fundamental communicative skill that consists of transforming controversial matters back into valid ones with the help of linguistic expressions that represent unquestionable facts and values [88] (p. 70).

Argumentation is central to comparison. When developing a comparison, students should be able to explain questions and provide arguments as to why and how they have decided on a question and to what extent a geographical perspective has been taken. This is essential because the selection determines what is compared and what is not. The selection of units of comparison and characteristics are based on the comparison to be made but must also be argumentatively negotiated and documented. If similarities and differences of units of comparison are then compared, it is also necessary to clearly define when two properties or characteristics are identical and when they differ. Such a distinction must be argued for. The same applies to the weighting of characteristics according to what the comparison is made, as not all characteristics are equally relevant in their meaning or informative value for the question to be answered. Additionally, the reflection process described in Section 3.2 does not function correctly without arguments. Arguments are irreplaceable for questioning preconceptions, discussing new perspectives and justifying evaluations and judgments. This does not convey a specific view of the world, but rather emphasizes the social constructiveness of worldviews [89] (p. 253). Since arguing is central for comparison, we argue that applying this method will improve learners' argumentation skills [90] (p. 21). Comparison enables learners to consider and develop arguments, while simultaneously advancing their competence in geographic knowledge [91] (p. 10). Additionally, whilst incorporation of comparison into education requires students to have an established knowledge of the subject areas to be considered, this knowledge is also put into new contexts through comparison, opening up new perspectives that can generate new insights [92] (p. 114).

### 3.4. Problem-Solving

Comparison is a method of problem solving. The aim of problem solving in geography lessons is not only to develop skills such as the acquisition and analysis of adequate data or the formulation of conclusions, but also to improve students' geographical knowledge and understanding as they actively deal with the matter of the subject [93] (p. 123).

Comparison is often reduced to a simple juxtaposition of similarities and differences between units of comparison. However, comparison, as we propose, goes beyond this and is designed in such a way that the learners themselves become active and produce output in the form of solutions to problems [93] (p. 14). Through the method of comparison, they confront their knowledge, values, beliefs, and attitudes with similarities and differences made visible in the juxtaposition. Based on this, they are critical and discuss and provide argumentative evidence of connections and interrelationships between them. Comparing raises awareness for different perceptions and representations and makes it easier for learners to evaluate alternative opinions and to solve problems in the classroom as well as in everyday situations [21] (p. 147). This understanding is also confirmed in other school subjects where comparison is described as a complex problem-solving process [94] (p. 318), which contributes to building an orderly, communicable knowledge that can also be applied to practical life [95] (p. 32), and promotes well-founded evaluation and judgement [85] (p. 390).

## 4. Comparison as a Method in Geography Education

Having proposed a definition of comparison for geography school education, we here argue for a systematic step-by-step method that can be used in secondary school education to improve learner's skills as described above. The following proposal for a step-by-step procedure is also based on the analysis of the literature for scientific comparison and our derived definition for geography teaching. In particular, the model of Hilker [64] and Bereday [65], as well as the comparison description of

Silver [66], are taken as a starting point and will be extended critically along all aspects of our definition discussed above. In order to better illustrate our proposal for a systematic method of comparison, the individual steps are explained using the example of European asylum policies.

We propose a method of comparison that is carried out by students in six steps. These steps are presented one after the other in a typically used order. It should be noted that comparison can take different forms in its practical application, and it may make sense to adjust and postpone individual steps, while carrying out the method (see Figure 1).

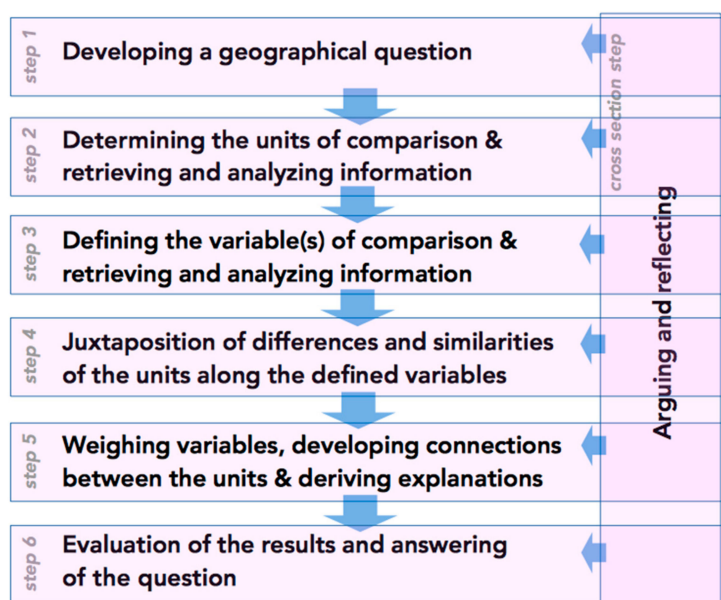


Figure 1. Method of comparison step by step.

#### 4.1. Development of a Geographical Question (Step 1)

A geographical question is an essential prerequisite for a comparison, since all further steps of the comparison depend on it (see Figure 1). Two distinct procedures are considered when identifying a question, which determine the degree of complexity for students. The question could be given by the teacher or as a textbook task. In this case, the first step for the students would be to clarify exactly what is needed to address the question and to check whether the question requires a comparison. Furthermore, the focus of the question should be questioned critically, including the perspective and intention of the question. Alternatively, students could develop a geographical question themselves. The latter is the more complex option, which we will focus on further in the following.

Such a question developed by students, in the context of migration and asylum in Europe, could be whether the numbers of refugees received in European countries differ from one another and whether the differences in distributions are fair. According to the geographical concepts mentioned previously, the proposed question can be identified as geographical. In terms of space, the question of Europe is addressed and requires the specific comparison of individual countries. The scale of the subject must also be taken into account, in particular the size, number of inhabitants and economic strength of the respective countries. In discussions about a joint European asylum policy, questions of solidarity and social change are also negotiated and can be grasped by the concepts of change, interaction, and diversity. Overall, this is a geographical issue which can be approached in a comparison.

#### 4.2. Determining the Units of Comparison (Step 2)

In the second step, two or more units of comparison should be defined, which can then provide further insights into the comparison. Again, two different procedures can be distinguished. Either the units of comparison can be given to the student, for which it must then be determined whether answers can be generated with these predefined units. Or the students can determine the units themselves, which is the more demanding path as students must weigh up and justify arguments on why the selected units were chosen for comparison.

For the example of asylum policies in Europe, three states of the 28 EU member states could be compared to provide an initial overview of the comparison. The number of units of comparison also determines the degree of complexity in the comparison. It is also necessary to define the specific countries that are compared and that the tertium comparationis must be identified and justified. In the example provided it would be possible to define Malta, Sweden, and Germany as reference units. This choice could be justified by the size and by the fact that Malta is a country with an EU external border.

#### 4.3. Defining the Variables of the Comparison (Step 3)

The third step of undertaking a comparison is necessary to define the variables according to which the units are to be compared. As with the first two steps, there are two different approaches. If the comparison variables are given to the students, they need to check whether the characteristics are likely to lead to meaningful results and whether sufficient information on the comparison variables and units is available. The method becomes more complex for students when they have to define the comparison variables themselves. The comparison variables determine the further course and the perspective of the comparison and must be appropriately justified by the students. It is essential that students retrieve further information with regard to the variables of the comparison. Where necessary, the units of comparison must be revised or adjusted if, for example, insufficient information is available for a unit. The degree of complexity of the comparison is also determined in this step, as it increases with the number but also the quality of the variable.

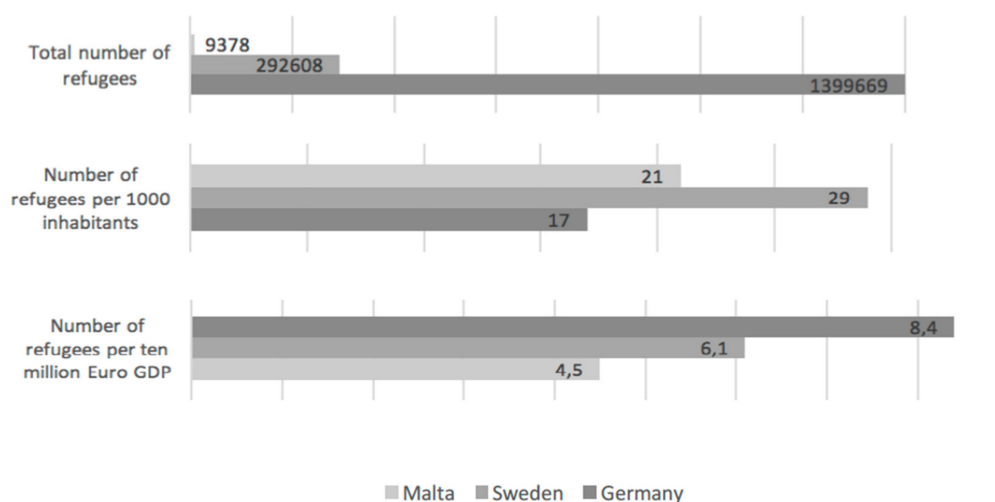
For the proposed example of asylum policies in Europe, the question addresses the first comparative parameter: the number of refugees admitted to EU countries. When reference is made to the number of recordings, it is important to determine exactly who is included in this definition. In this given example refugees are defined as recognized refugees, those recognized as such, i.e., under the Geneva Convention, as well as people who are still in the asylum procedure. These figures do not provide any information on the number of refugee's newcomers in 2017.

However, what is meant to be a simple comparison where students initially only have to consider one variable, becomes more complex when students also need to go on to consider whether to compare the absolute figures or relative figures, such as the population or GDP of the host countries. This choice requires an argument-based explanation.

#### 4.4. Juxtaposing Differences and Similarities (Step 4)

The comparison based on the differences and similarities of units using the defined variables is a descriptive step. A table is often useful to define this step. Such a table could be drawn up by students to provide an initial overview of the chosen study locations within the EU, including the economic strength and size of the country and the number of refugees living in each country in 2017. In order to increase the usefulness of the figures, the total number of refugees living in the countries concerned can be compared with the size of the country and its economic strength (see Figure 2):





**Figure 2.** Recording figures for refugees living in Germany, Sweden, and Malta in 2017 (Source: [96], own calculations).

According to the UNHCR, the number of refugees living in Germany in 2017 is 1,399,669 and is therefore considerably higher than in Sweden (292,608) and Malta (9378) (Ibid.). However, if these figures are compared to the population of the countries in question a different picture emerges. There are 17 refugees per 1000 inhabitants in Germany, whilst Sweden (29) and Malta (21) have a higher number per 1000 inhabitants. A similar picture emerges when the number of refugees is put in relation to GDP. For every 10 million euros of GDP there are 5 refugees in Germany, 6 in Sweden, and 8 in Malta.

These relative values show why identifying similarities between units of comparison is not a straightforward task. For example, how should the 21 refugees living in Malta per 1000 inhabitants be compared to the 17 in Germany. Are the two figures on a similar level or is there already a difference? Such a consideration must be justified on the basis of the available information.

#### 4.5. Weighing Variables, Developing Connections Between the Units, and Deriving Explanations (Step 5)

A crucial point for this step is the weighting of the comparison variables and defining the connections between the juxtaposed similarities and differences of the units of comparison. The decision of the weighting of variables in the comparison must be justified. The weighting and its justification are therefore important as it determines the course of the comparison in terms of content. Thus, the interpretation follows the weighting of comparison variables. For this purpose, connections between similar or different characteristic values of units have to be worked out. Furthermore, it is necessary to evaluate the results and findings of the comparison where students can apply both factual and normative evaluation standards. In the following, we outline a possible approach for students with regard to the example topic. Note, however, that this is only one way in which students may handle the present comparison.

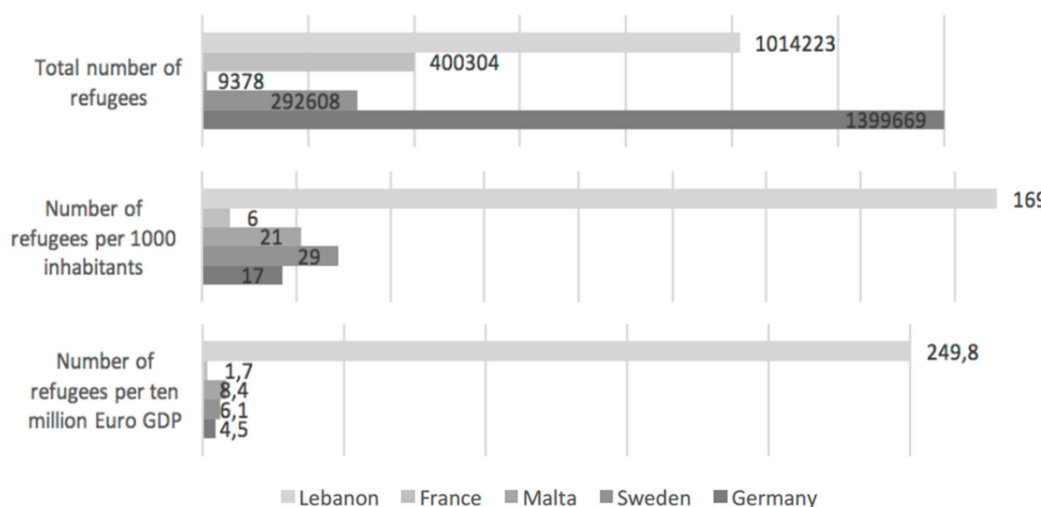
The juxtaposition (see Figure 2) initially revealed that the three chosen countries have different total numbers of refugees, but that the figures differ in relation to the number of inhabitants and economic power. In their weighting of the variables, students could argue objectively that the absolute figures are only meaningful in relation to the size of the country or its economic strength. Guided by the normative concepts of justice and solidarity, students could consider the unequal distribution of refugees in Europe as unfair in terms of the size and economic strength of the individual host countries.

#### 4.6. Evaluating the Results and Answering the Question (Step 6)

In this step, students answer the question from a geographical perspective. They may also formulate further questions or subsequent steps which may seem integral to answering the initial question. Additionally, it is necessary to reflect on the insights into the comparison identified so far.

An answer to the question whether refugee reception figures in European countries differ from one another and whether the differences are fair could be as follows: A comparison of the three EU member states revealed that the distribution of recognized refugees and people whose asylum procedures are still ongoing are distributed differently. In order to assess these differences comprehensively, the absolute number of refugees must be put in relation to the size and economic strength of the countries. Out of the considered three countries, most refugees live in Germany, but when taking into account the size and economic strength of the countries, more refugees live in Malta or Sweden than Germany. A question that students might ask subsequently is what a fairer distribution of refugees in Europe may look like. In order to counter the disparities, one could argue for an asylum system based on solidarity and binding quotas. Students could argue for a concrete distribution key, which takes equal account of the size and economic strength of the respective country and would therefore make it possible to calculate a fair distribution for all EU member states.

At the same time, it should be noted that this possible answer takes into account the insights gained during the outlined comparison process. As previously stated, reflection is an essential part of the method of comparison proposed here, and is a cross-over step that should be considered at each step. At this point, reflection is made explicit in order to make it clear that through reflection, other perspectives can be identified and thus other insights and answers to the question can be found. Two further aspects might be considered critically. The first could be questioned in the focus on European nation states. For example, if a country such as Lebanon were included in the comparison, the refugee protection found in the European Union could be put in a global context. This would shift the comparison to a different scale and not just compare states with each other, but place the European Union and its Asylum Politics in contrast to other regions of the world (see Figure 3).



**Figure 3.** Recording figures for refugees living in Germany, Sweden, Malta, France, and Lebanon in 2017 (Source: [96], own calculations).

Secondly, the perspective on EU asylum policies can be critically questioned, as the perspectives of the refugees themselves are not considered, in particular where the refugees want to live. This leaves the answer to the question presented, in which refugees are talked about without being given a voice. On the basis of these considerations, the question and the perspective created by it could be criticized. Through these critical considerations the answer given above could be further differentiated. The proposed quota system could enable refugees' perspective to be considered and provide newcomers a say in the choice of country they are to reside in, which may be influenced by factors such as whether they already have family members living in a certain country. Taking into account a global responsibility for current movements of people, the EU should also not only be able to bring people into the asylum process who manage to overcome the deadly external borders of Schengen Europe, but also to take off the pressure on countries such as Lebanon, which hosts the

majority of refugees worldwide. This broadening of perspectives could also lead to the deconstruction of European discussion(s) about 'limits of receptiveness'. This possible addition to the outlined answer illustrates that reflection can increase the importance of considering different answers. Overall, it can be assumed that the method by which comparison is undertaken causes different results and depends on students' previous knowledge, their ideas of norms and values, and the level of their competences relevant to this method. This in turn offers the opportunity for discussion in the classroom.

## 5. Conclusions

Comparison is an everyday process of thinking which is also constantly being used in geography lessons. However, in geography pedagogy, the term 'comparison' remains vague and insufficiently explained. Therefore, we have examined the recent academic discussions on comparison in various scientific disciplines and identified four essential aspects, that are relevant for the use of a comparison method in geography classes. Comparison is an everyday thinking process that requires systematization for use as a method that goes beyond the simple juxtaposition of similarities and differences. An initial question is essential for a systematic method of comparison, as it determines the criteria and factors for the whole comparison procedure. It is necessary to ensure that the units of comparison have at least one common feature in order to guarantee comparability. Reflection has to be an inevitable element of a comparative method. With this in mind, we have defined comparison as a reflective and argumentative process, which is based on a geographical question. A number of units are selected, whose similarities and differences are identified along determined variables in order to work out interrelations. Furthermore, justified explanations are formulated to answer the initial question. Besides this definition, we proposed a systematic step by step method, that can be used in the geography education in secondary classes to improve learner's skills to argue, reflect, solve problems, and promote good judgement. This definition and method is the result of our conceptual approach, according to which we have analyzed the current academic discussions about scientific comparison and convert it into a method for teaching. The next step would be to empirically examine the applicability of the method in teaching situations. Nevertheless, the result of this paper is the explicit definition and a systematic method, as so far there has been no precise understanding of what comparison in geography education is about.

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