



Reflections on geography, its teaching and the possible function of Geoparks

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1. A general framework

In 1994 Paul Claval wrote that “...Geography teachers have the luck to take part in a thrilling task: it consists in (...) preparing the citizens of tomorrow to use their freedom to mould a world that is in line with their ideals without ignoring the influence of natural or social conditionings” (Claval, 1994, p. 36). Since then geographers, in the evolving of the comparison and reflection on the founding disciplinary nucleuses, and the modalities and methodologies of their teaching, have mapped out many shared courses, as if, motivated by what Chaval said, they are conforming to the guidelines set down in Agenda 21 on Sustainable Development. The basic principles of the document drawn up in Rio de Janeiro in 1992 by the *United Nations Conference on Environment and Development* (commonly known as UNCED), are of enormous geographical interest: protection of the environment, economic growth and sustainable development in an environmental and social sense.

On the subject of globalisation, it must be remembered that the follow-up of the previous meeting was held in Rio in 2012 (called Rio+20), in order to evaluate the practical results

of Agenda 21. The conclusions were disheartening: to date the most important states have not taken significant measures and are all waiting for interventions by others. However through their teaching, geographers are trying to spread those principles as much as possible, even though up against many institutional and administrative obstacles.

A hostile attitude to Geography is to be found in almost all the countries of the world.

Geography, with its conceptual hubs and its specificity, studies the world as a complex system. In an article published in the magazine *International Research in Geography and Environmental Education*, Ester Cecioni (2004) wrote that Geography is undoubtedly the discipline of complexity, particularly owing to the following points (I have added a number of observations in brackets to the first three):

- *the position*, insofar as it is at the organic intersection of various disciplines (without claiming to be at the top as happened in the past);
- *the subject of study*, which is inherent in the relationships between human societies and ecosystems (it has only

been granted for a few decades that man is not the lord of the world but is part of the ecosystems);

- *the method*, which makes use of procedures and languages borrowed from other sciences, such as mathematics, economics or physics (the borrowing, nonetheless, presupposes a re-elaboration ascribable to a discourse made unitary and organic by the specific subject of study);
- the *diachronic* and *synchronic* approach, which makes it possible to evaluate the systems from a historical and structural viewpoint, aimed at a future projection;
- an *intrinsic teleologism* with the action on the evolution of systems as the objective of the discipline, thus proposing transformations of reality itself;
- *transcendence*, or that is the ability to analyse phenomena at all scales of observation, pointing out differences, analogies and variations in quantitative and qualitative terms;
- *the particular attention to the individual modalities of the perception and representation of reality*, considered as the starting point to define the correct modalities in practical individual behaviour.

It must be stressed that all the ethical values, set down in the political paradigm of Sustainable Development (conservation of ecosystems, limited use of resources at the same rate as their renewal, social equity both in this generation and in the legacy left to the future ones), have a highly geographical essence.

With regard to the didactics of Geography it is agreed that the students learn to act in reality to *know*, *interpret* and *plan it*. The teachers must aim at giving knowledge in the educational, indicative and professionalizing whole. Technically speaking, well-taught Geography carries out a meta-disciplinary function, working in three conterminous contexts of intervention:

- *subjective*, taking care of the

enhancement of the perceptive-representational sphere of the pupils;

- *applicative*, aimed at the acquisition and the consequent use of methodologies and technologies for research;
- *ethical*, with the task of giving orientation on values.

The concord that reigns practically unanimously among theoreticians has not yet managed to translate sufficiently into school teaching practice. Eyüp Artvinli's contribution (2012, p. 48), published in No. 0 of J-Reading, is enlightening on this: in Turkey the new syllabus for Geography in schools is very advanced and well devised, aimed as it is at the acquisition of well defined "*geographic skills*" by pupils. Unfortunately however the practical guidelines on how to apply the contents in class are completely insufficient, above all comparing them to the over 35 pages dedicated to assessment. Artvinli concludes that "the ways of teaching geography in classrooms should be renewed according to a geographic skills education by new teacher education programs in Turkey". The main problem (or how the subject is taught) cannot be resolved by dedicating simple refresher courses to the teachers; it is necessary to give them real *teacher training* courses, as moreover it is highlighted in the Italian context on numerous occasions, where an organic didactic project aimed at giving teachers the suitable bases and skills is lacking.

2. A positive note

On a more positive note, I would now like to mention an experience carried out in the early 90s in a Technical Institute in the suburbs of Rome. Despite the scepticism a winter-sports holiday had been organised in the Apennines (Abruzzo, Passo San Leonardo), during which the pupils were supposed to have some hours of lessons every day. The teachers of languages, letters and physical education decided to realise a project proposed by the Geography teacher, called "Man and environment in the Apennine mountains". The days were therefore organised according to a specific timetable:

- 08-09: environment observations
- 09-12 a.m.: sky practising
- 12-13: environment observations
- 13-14.30: lunch
- 14.30-17.30 lessons
- 17.30-20: discussions and different activities
- 20.30: dinner

The Physical Education teacher led the excursions with the Geography teacher and was present during the skiing lessons given by a local instructor. During the excursions the students collected samples of rock and plants as well as carrying out weather observations; when they met shepherds with their flocks they stopped to talk to them. Besides the topographical maps, compass and books on plants and Apennine fauna the Geography teacher had brought the files of the last censuses (population, economic activities), for the afternoon's work. All the teachers helped in following the practical work which were aimed at the report on the project.

Upon their arrival in Rome the pupils were given an entry test in which they wrote down their place of birth (theirs and their parents') and whether or not they had been on any trips. They then drew the route they had followed in the morning on squared paper, indicating the type of roads, direction, the change in the position of the sun, the population of the areas crossed. Furthermore, they then explained this in general terms (ecosystem, rocks) and in particular technical ones (transhumance or mountain grazing, isotherms etc.). Having obtained information at a personal level, they then gave each other information on the research to be carried out and on the important goals (e.g. respect for the environment). The general objectives were to work in a group, to learn and study through the direct observation of reality, find sources, elaborate statistical data, learn cartographic language, build age pyramids, thematic maps, diagrams and aerogrammes. The

boys and girls always worked in groups the composition of which changed every day.

From the censuses there was confirmation of the decrease in the population, demographic aging, with an increasingly high female prevalence, of the decline of the traditional agro-pastoral tradition and a rise in tourism. For each variable comparisons were made with what happened in Italy in similar regions.

Finding themselves in a totally different situation the students reacted positively to this and when they got back they covered the walls of the school with thematic maps, diagrams, photos, drawings and even an environmental impact assessment matrix. The teachers had the great satisfaction of receiving compliments from colleagues who, just a few days beforehand had considered them bound to fail.

To some extent this experience draws inspiration from the recently formulated syllabuses by the Commissions for the reorganisation of the curricula that the Ministry had set up in the late 80s. As I had taken part in those Commissions, I had the possibility to spend a couple of days there. Just a few years later the area was to be found in one of the National Parks set up in the 90s (Parco Nazionale della Majella). In the Statute of Parks the main aim is the protection of the ecosystems without mentioning the didactic aspect.

3. New possibilities in the Geoparks

In this framework of attention to the environmental aspects, to study and discover by means of field work and didactic excursions, the existence must be highlighted of other territorial organisations called Geoparks, established in 1998 by UNESCO, and which in Europe are connected in a European Geoparks Network, created in 2000 with 4 members and which has increased almost tenfold in 12 years. Their statute offers greater possibilities with respect to that of the National parks, insofar that it mentions the cultural aspects. In fact in the official website European Geopark Network (<http://www.europeangeoparks.org/>), it says: "A Geopark must comprise a certain number of geological sites of particular importance in terms

of their scientific quality, rarity, aesthetic appeal or educational value. The majority of sites present on the territory of a European Geopark must be part of the geological heritage, but their interest may also be archaeological, ecological, historical or cultural.

A Geopark has direct impact on the territory by influencing its inhabitants' living conditions and environment. The objective is to enable the inhabitants to reappropriate the values of the territory's heritage and actively participate in the territory's cultural revitalization as a whole.

A European Geopark has an active role in the economic development of its territory through enhancement of a general image linked to the geological heritage and the development of Geotourism".

In the United States of America Geoparks have not yet been established, which may seem strange as it was the first country to create the protected areas (Hot Spring Arkansas, 1832), and at a later date the first National Park (Yellowstone, 1872). In the US National Park Service the figure of the interpreter is today foreseen, a person who is required to have a much deeper knowledge of the natural aspects (geology, vegetation, animals) than what they are expected to have in the human ones. Undoubtedly they also know the anthropic aspects but in my experience they are more interested in nature and panoramas.

The Geoparks around the world are increasing, and in 2004 the International Geographical Union created a Task Force, directed by the Chinese Professor Dongying Wei. In 2012 the Task Force was promoted to Commission, still directed by Prof. Wei. China is considerably active in this field: the members of the Global Geoparks Network recognised by UNESCO in January 2013 were 90, of which 27 in China. Unexpectedly perhaps we find Italy in second place, moreover with only 8 members. On a par with us is Spain, so much so that these two countries stand out in the European Geoparks Network: my attention was attracted by this.

In the European Geopark geotourism is also mentioned; the setting up of facilities in the Geoparks should follow on from this. It would

be very interesting if this were to be done, as facilities of this type are the most suitable to host didactic initiatives like the one described above. In such a context there would be a much more active collaboration than in any National Park. The Geopark would have to supply teaching materials (not only informative) and videos to show, and the teachers could find the basic support of guides. It goes without saying that in the possible competitions for guides, a degree in Geography would be the most fitting qualification.

At the International Geographical Union, the members of the Executive Committee are given the task of liaising with the Commissions: at the time I chose to be able to carry out this role for the Geoparks Commission, proposing myself however as active collaborator and not just as a simple "liaison officer". Restricting myself to the activity in Italy, I am collaborating to establish among various countries something that has already been done occasionally: the hosting of students in the respective Geoparks, which in Italy could entail the cooperation of the Italian Association of Geography Teachers as supplier of "interpreters". They should obviously have good knowledge of the Geopark in which to operate: it would also be a way to venture out, showing that in dealing with humanity-environment relationships, the geographer is the most suitable figure.

It would be useful for the collaboration between Ministries and other state bodies to let all students enjoy a week like the one described during the school year. Not only would the new generations have a mentality that is more consciously interested in the protection of environments and lifestyles developed within them, but this type of experience would be important for the teachers of Geography themselves as training and refresher course.

The geographical opportunities are today many and diversified, varying from those concerning direct observation and on-the-spot investigations to studies of a quantitative-qualitative type that can sustain them, from those regarding the interpretation, analysis and computer elaboration of data to those that can use the world of the web and the social networks, just to mention a few. The important

thing is to find planning strategies to create a didactic-training system which starting from the teachers can actively involve and “convince” the students!

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