

Green and Grey on a Satellite Map

Godfrey Baldacchino

One wouldn't be surprised to read that a map is a useful teaching aid. Most textbooks in social studies, geography, history or politics come along with at least one appropriate map of the world or of regions and countries therein. A map is always a handy illustration; but its presence is also meant to serve other educational purposes. It is there to help associate place names with their physical location; to situate localities relative to each other, to enable a discriminatory look at certain features - such as altitude, topography, extent of urbanisation or desertification - and to assist overall in developing a concept of space and territoriality. Let's admit, maps are also potentially very useful because they are visual aids and typically command greater attention, as long as they are used effectively.

“A map is always a handy illustration; but its presence is also meant to serve other educational purposes”



GODFREY BALDACCHINO
B.A., M.A. Ph. D is lecturer and research officer at the Workers' Participation Development Centre, University of Malta and visiting lecturer in the Department of Public Policy. He is the author of the definitive textbook on Social Studies.

I would like to draw the attention of secondary school teachers to a particular map of Malta. This is a satellite image of the Maltese Islands, taken by the French Satellite CNES



on one of its passages over Malta in Spring 1988.¹ This portrait-sized map comes in a full colour format, and is 600mm wide and 750mm long. Surrounded in a sea of aquamarine, the greenish-grey outcrops of the Maltese archipelago stand out clearly.

The map has an impressive amount of detail. A close scrutiny will reveal fairly large structures, such as major arterial roads, quarries, Ta' Qali Stadium, Luqa, Hal Far and Ta' Qali runways, Marsa and Nadur Race-Tracks, apart from various winding valleys and the whole shoreline. The possibility of locating and recognising these and other features is one of the salient features of this map - all of a sudden, the map is no longer a piece of printed paper with strange symbolic language but comes to life as a meaningful document.

The map then lends itself to some interesting lessons. I will limit myself to highlight two:

Going for the Green

One is based on a rural theme. One important distinction in terms of agriculture is the nature of the land in relation to water. In

¹ Malta and Gozo: A Satellite Image, © 1988 CNES and Maptec International Ltd., Ireland. Distributed in Malta by Miller Distributors. When I bought it, some seven years ago, it cost Lm2.

Malta, apart from wasteland (*xaghri*), one differentiates between irrigated (*saqwi*) and semi-irrigated land (*baghli*). Access to water, whether out of natural or man-made means, is an important criterion for determining the agricultural potential of the land and consequently the type of crops it can sustain. The different shades of green on the map of the Maltese Islands bears an indirect testimony to this critical difference. The deeper the green, the more fertile the land. Patches of deep green are not very common; and they tend towards a concentration along an arch of terrain stretching from Siggiewi in the south-west, through Buskett and up to Mgarr and Manikata in the north-west. Pockets of deep green are proportionately more frequent in the northern part of Gozo. On the map, the deepest green of all in the sister isle lies at the Lunzjata Valley.

Why are certain areas greener than others? Which are these areas? What factors, natural or conceived, increase or decrease 'greening'? What types of crops are best suited for different types of habitat? (There is bound to be someone in class who has a family member who is a full or (more likely) part-time farmer - personal experiences can thus be also solicited.

Going for the Grey

A second teaching suggestion is based on the converse, urban theme. The

cumulative effect of a larger population, smaller numbers of persons per household, increased affluence and the development of tourism and manufacturing industries have, all told, resulted in an almost 500% growth in the built-up area of the Maltese Islands in just over 40 years (see table).

The urban sprawl is there for all to see on the map, recognised by its characteristic grey. However, closer scrutiny reveals an important distinguishing feature. Most of the local structures are (as yet!) built of globigerina limestone; and as this ages and weathers, it changes its colour from creamish white to yellow to dull grey. The Map is therefore a time machine, revealing those pockets of construction which were recent developments; others not so recent; others still are seeped in antiquity. The effects of the three main patterns of urbanisation in Malta - the radial expansion from the inner to the outer harbour region; the outward expansion of all existing towns and villages, except Mdina; and the wholesale development of new towns - are all easily discernible in the shades of colour and tone.

The most strikingly light contrasts are the Freeport Development at Marsaxlokk Bay and the Bugibba/ Qawra Peninsula - both very recent major construction sites. The duller grey is amassed at the Cottonera and old village cores.

Questions

A series of questions may be addressed to a host of towns and villages in Malta and Gozo. How much white, yellow or grey is there? Where is this located with respect to the village or town?. Is the change in colour also accompanied by a change in the pattern of building, reflecting more grid-iron and block planning as one comes closer to the present times? Are certain housing estates visible on the periphery? Have certain towns and villages met in the process of expansion?

I am certain that teachers will be able to conjure up many more lessons on the basis of the same teaching aid. In the meantime, the very image of our island home framed within a vast expanse of blue Mediterranean may inspire feelings of awe and environmental fragility - important feelings in themselves, no doubt.

TABLE 1

	1957	1967	1985	1995
Population	292,019	228,238	345,418	378,132
Number of Families	68,007	70,114	96,725	119,479
Number of Dwellings	66,322	78,806	113,785	135,000
Built-Up Area (sq. km.)	11.1	14.6	39.3	48
Agricultural land	135	125	110	88

Source: Baldacchino Godfrey (1997)
Ninvestigaw Is-Socjetà, Malta, PEG, p.65.

Notes for Contributors

Education 2000 is a magazine, published twice yearly (March/April and November/December periods), distributed free to all teachers, school administrators, student teachers and other educational practitioners who are interested in the study and development of the various areas of the school curriculum, teachers' professional development and school management. Its main objective is to facilitate the dissemination of research findings, effective practice and teaching and learning ideas. Each edition will have contributions related to education in the primary, secondary, post-secondary and tertiary sectors. We welcome the following kinds of contributions:

- Reports of research which has implications for the school/classroom situation. (A considerable amount of work in this regard is carried out in the form of dissertations for education degrees. Often this kind of work is shelved and forgotten. This journal will seek to assist in the publication of such work);
- Accounts of school/classroom curriculum-related activities and teaching ideas;
- Discussions of current issues in the teaching of the various curriculum areas and subjects at all ages.

Advice on suitable material in any area of the curriculum and help with the preparation of submissions will be given by the Editorial Board. Articles should not normally exceed 2,000 words. In fact shorter contributions are encouraged. Manuscripts and all bibliographical material should be set out in standard A.P.A. style. The Editorial Board reserves the right to make changes to manuscripts to be consonant with the scope and style of the publication.

ILLUSTRATIVE MATERIAL: Authors are encouraged to submit illustrative material with their articles. Such material (photographs, children's work, diagrams, etc.) should be in its original form rather than photocopies. Copyright permission, when required, is the responsibility of the author.

Contributions should be submitted:

- on 3.5" diskette, containing the original file of the submission (for example Word, Word Perfect, or Wordstar documents, etc), and a **text only** version. Both IBM compatible and Macintosh formatted diskettes are acceptable;
 - a hard copy of the contribution, including detailed notification of the insertion points of illustrative material.
 - all illustrative material in a separate envelope, but with the name of the author and contribution noted on it.
- Contributions are to be submitted to *any* member of the Board, or sent to:
The Editorial Board, **Education 2000**,
Faculty of Education, University of Malta,
Msida - MSD 06 - Malta