THE HIERARCHY OF MALTESE TOWNS

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T HE settlement pattern in any country evolves in response to economic, social, cultural, environmental, and other factors and has to be guided so as to help attain the planning goals and objectives in the best possible way.

Among the fundamental aspects of the settlement pattern are location and hierarchial distribution, which is what this article is about.

Theoretical Basis

In the good old days of straightforward agricultural economies these aspects were unconsciously looked after by natural and largely intuitive measures and decisions. A simple system of hamlets, villages, towns, and cities evolved naturally, reflecting the fertility of the earth and the basic exigencies of transport, defence, and commerce.

With the infinitely more complex present-day economies, technological progress, socio-cultural aspirations, increased affluence, and lesiure, to mention only a few of the factors involved, the planning problems have escalated and the difficulties have often been compounded by long periods of laissez faire and wrong decisions. The hierarchy should reflect a pyramidal system of urban and social services and facilities with the highest at the vertex.

Among the pioneers in the study of the hierarchy of settlements were Christaller, Losch, Auerbach, and Lotka and more recently Doxiadis, Isbary, Parr, and Cori. Christaller's Central Places (*Zentrale Orte*) Theory and Doxiadis's Ekistic Scale are well-known milestones but recently the Rank Size Rule (RSR) has been widely used in the analysis of settlement patterns.

In applying theories evolved in the broader contexts of large countries to a small island like Malta one must bear in mind that the relevance becomes relative. Scaling down is not always appropriate. Demographically our towns would be variously classified as 'neighbourhoods', 'urban villages', 'central communes', 'small towns', or 'small polis', but some have functions

| TOWNS | 193 | 31 | 1957 | 19 | 985 | TOWNS |
|--|-----|---|---|--|-----|---------------|
| | RA | NK | | · RA | NK | ζ (|
| VALLETTA | 1 | 0 | 0_ | _0 | 1 | BIRKIRKARA |
| SLIEMA | 2 | 0 | 0` > | < 0 | 2 | QORMI |
| COSPICUA | 3 | Q | -0+ | | 3 | SLIEMA |
| HAMRUN | 4 | 0 | -0-> | 0 | 4 | HAMRUN |
| BIRKIRKARA | 5 | 0- | | 0 | 5 | RABAT |
| QORMI | 6 | 0 | | _0 | 6 | ZABBAR |
| RABAT | 7 | 0 | 0 |) D | 7 | MOSTA |
| ZEJTUN | 8 | 0 | $1 0 \rightarrow $ | $4 \rightarrow 0$ | 8 | PAOLA |
| ZABBAR | 9 | 0 | | $\sqrt{-0}$ | 9 | ZEJTUN |
| MARSA | 10 | 0 | <u> </u> | $\bigwedge 0$ | 10 | ST. JULIANS |
| SENGLEA | 11 | 0 | $\lambda q /$ | | 11 | ZEBBUG |
| PAOLA | 12 | 01 |) // V | 0 | | VALLETTA |
| VITTORIOSA | 13 | 0, | ρ | 0 | | GZIRA |
| MSIDA | 14 | 04 | <i>lo</i> X | $\langle \rho \rangle$ | | FGURA |
| FLORIANA | 15 | 0, \ _ | A0^/ \\ | <u> </u> | 15 | SAN GWANN |
| ZEBBUG | 16 | 0-11 | / /0/ \ | V XO | 16 | ZURRIEQ |
| MOSTA | 17 | 0-+> | <u> </u> | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | 17 | MARSA |
| ZURRIEQ | 18 | 0 | | $\sqrt{10}$ | 18 | STA VENERA |
| LUQA | 19 | 0-/ | //`q |) X | 19 | COSPICUA |
| ST JULIANS | 20 | 0′ / | 1-01 | /\`0 | 20 | TARXIEN |
| SIGGIEWI | 21 | 0 | $\langle \rangle \rangle \rangle \rangle \langle \rangle \rangle$ | // \0 | 21 | NAXXAR |
| NAXXAR | 22 | 0 | XAON | μö | 22 | MSIDA |
| TARXIEN | 23 | 0' | $\times $ \land | XI-0 | 23 | SIGGIEWI |
| MELLIEHA | 24 | 0 | XOX | | 24 | ATTARD |
| STA VENERA | 25 | 0/~ | 1/ 01 / / | / X0 | 25 | BIRZEBBUGA |
| ATTARD | 26 | 0 | 40 | 0 \ \ | 26 | LUQA |
| KALKARA | 27 | 0 // | α | | 27 | BALZAN |
| GHAXAQ | 28 | 0~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | 0- | AO | 28 | MELLIEĦA |
| LIJA | 29 | 0 X | ~ 0 | 1-0 | 29 | ST PAUL'S |
| ST PAUL'S | 30 | 0 | >0// | $\lambda \setminus 0$ | 30 | G'MANGA PIETA |
| BIRZEBBUGA | 31 | 0' 📐 | 0' / | 0 | 31 | SENGLEA |
| BALZAN | 32 | 0 | 20// | 20 | 32 | GHAXAQ |
| MĠARR | 33 | 0 | Agy | 0/ \ | 33 | VITTORIOSA |
| QRENDI | 34 | - | \`0-X_V | 0 / | 34 | FLORIANA |
| GHARGHUR | 35 | | $0 \sqrt{2}$ | / /0 | 35 | STA LUCIA |
| MQABBA | 36 | 0'/~ | 0V // | $\sqrt{70}$ | 36 | LIJA |
| Figure 1. Malta towns rank stability 1931 – 1957 – 1985. | | | | | | |

of urban units much higher up the scale. In a number of cases our towns have coalesced and are parts of bigger units.

Analysis

I have tried to apply the analytical techniques of the Rank Size Rule to our towns as they are officially shown in the Census report of the Central Office of Statistics and I think they show up certain facets which are of general as well as specialist interest.

Figure 1 shows the rank stability of the 36 demographically largest towns in 1931, 1957, and 1985. The towns are arranged in descending order of population and changes of rank are shown by means of lines.

Very striking is the vertiginous decline of Valletta, Floriana, and the Three Cities, the rapid ascent of Mosta and St Julians and the new towns of Gzira. Fgura, and San Ġwann, the rise and fall of Tarxien and Birzebbuga, and the comebacks of Naxxar and Attard.

In this great game of urban leapfrog Hamrun is the only place that has retained its original rank throughout the period in spite of losing Guardamangia. Msida's decline is apparent only because it has lost Pietà, Ta' Xbiex, and part of Gzira.

Figure 2 is the corresponding chart of Gozo for the ten largest settlements. Here the rank structure is much more stable. Victoria and Xewkja retain their position throughout and movements are generally contained to one position up or down except in the case of Gharb which has lost three places. Sannat included Munxar until 1957.

Figure 3 shows the Rank-Size Structure curves for Malta for the three years 1931, 1957, and 1983. These years have been chosen as being rather conveniently placed census years spanning evenly from pre-war to post-war and the present time. The graphs are plotted to log-log scales and indicate the relationship between successive rank sizes. The X-axis is shifted for the different census years to enable the curves to be seen more clearly.

The straight line drawn through the curves is termed the Concentration Index (Q) and for an ideally balanced structure should form an angle of 45 degrees so that the index Q = 1. A steeper line (with Q bigger than unity) indicates a 'primate' structure dominated by the big city whereas a flat line (with Q smaller than unity) indicates a wealt 'oligarchic' structure in which the big city has a number of close rivals and cannot develop its proper functions to the full. As a matter of interest, the United Kingdom, France, Greece, and Austria have Q higher than I while Italy and West Germany have it lower.

It will be noticed that in the case of Malta the Concentration Index Q is

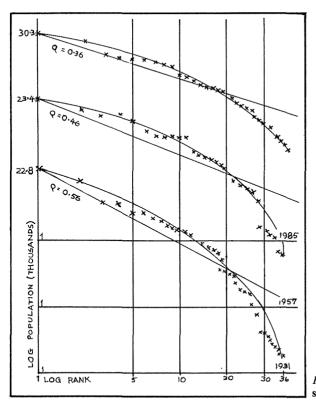


Figure 3. Malta towns rank size structure

very low and getting lower. It is also unusual for the capital city to lose its leadership.

The case of Valletta has been worrying all concerned for a long time. Successive Governments talk of its rehabilitation. In my recent article 'Valletta and the system of human settlements in the Maltese Islands' (*Ekistics*, No. 316/317) I have given details of the exodus of population from the Urban Core to and through the Inner Ring to the Outer Ring.

A point to bear in mind is that apart from its desuetude and neglect Valletta has been going through a process of 'tertiarization' and that it should really be considered as the urban core of a much bigger area, the Valetta conurbation to use a term in its post-Geddesian sense.

Figure 4 shows the corresponding curves for Gozo. Here the position is much more normal, one reason being that the towns are more merely administrative units but actual physical units which still retain their identity. The primacy of Victoria is unchallenged and the Concentration Index is much nearer to the theoretical optimum and is improving, particularly if we include Fontana with Victoria which is the sensible thing to do. The third and fourth ranked towns have always been a bit out of line but have got closer to it in the last census.

Synthesis

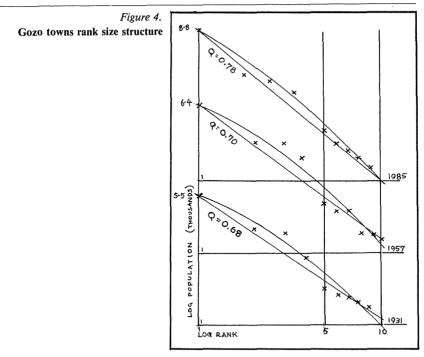
Theoretically, according to the optimum rank-size equidistribution curve, Malta, with its present population (and independently of Gozo) should have some 30-odd towns with a primate city of about 80,000, a second city of 40,000, a third of 27,000, and so on. Similarly Gozo should have a dozen or so towns with a main one of about 7,200, a second one of 3,600, a third one of 2,400, and so on.

In the case of Gozo the position is not far removed from the theoretical and we need not pursue the matter further at this stage.

In the case of Malta the *prima facie* abnormality would practically disappear if we considered the *de facto* physical units rather than the official and traditional administrative units as the settlements forming the hierarchy.

A good look at the 1985 Census figures would show that the Valetta-Hamrun-Sliema conurbation, the Paola-Cottonera, and the Birkirkara-Three Villages agglomerations have got populations reasonably close to the theoretical figures for the first three cities of a balanced hierarchy.

They have, within their combined boundaries, the structure and the functions corresponding to the level of service pertaining to their revised rank. The physical demarcation lines between their individual components have long since disappeared and it would be ostrich-like to ignore these facts of



life.

Recognition of the *de facto* coalescence of towns and using it for a positive purpose does not imply that these should lose their individuality. As parts of a bigger whole they would have an integrated traffic and infrastructural system but their cultural identity and neighbourhood characteristics could be cultivated through the retention of their place names, their parish churches, local community centres, and individual urban textures. There could be diversity in unity as well as unity in diversity.

Italian cities have traditionally been made up of *quartieri contrade* or *rioni*. English cities of 'boroughs', 'wards', or 'neighbourhoods' and the same applies to most countries. But the acceptance of the basic unity is essential because in urban planning a large city and a number of small towns are as different as a large house and a number of small houses. 'Presbyter' should not be 'just old priest writ large'.

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