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XLV. *Of the Increase and Mortality of the Inhabitants of the Island of Madeira.*
By Dr. Thomas Heberden, F. R. S.

Read Nov. 26, 1767. **W**HEN I consider the number of people in the Madeira, and the state of the inhabitants, I know no place more proper for forming an estimate of the increase and mortality of mankind, than this island; for the number of persons is upwards of 60,000, all of whom may be supposed to live and die in the same place where they received their existence; the accession of strangers and the egression of the natives being so equally inconsiderable, that if the one doth not exactly counterbalance the other, the difference may justly be neglected, as of no consequence in the general calculation.

This has excited my curiosity; and, by my interest with the vicar-general of this diocese, I have procured a survey from house to house in each of the respective parishes; from which, and the parish registers, I have deduced the adjoined account.

An Hypothesis.

The number of persons in this island, in the year 1743, was 48234 of seven years old and upwards.
2 Now

Now supposing the minors were in the same proportion then, as in this present year, the total of the inhabitants was 53,057. Therefore, by the rule of anatocism, they have increased at the rate of 1.0082 *per cent. per annum*; and by the same rule do double in 84 years 4 months and 25 days.

From an exact survey, made in the beginning of the year 1767, the number of inhabitants on the island of Madeira, was as follows;

Persons of seven years old and upward	58669
Persons under seven years of age	5945
Total	<u>64614</u>

Anno	Christened		Buried		Wedd.
	Males	Fem.	Males	Fem.	
1759	1021	905	542	594	438
1760	1198	1111	643	713	421
1761	1035	1022	837	909	513
1762	1128	1125	662	704	491
1763	1118	1115	540	578	476
1764	1112	1085	620	705	469
1765	1183	1143	618	649	495
1766	1172	1138	506	531	462
	<u>8967</u>	<u>8644</u>	<u>4968</u>	<u>5383</u>	<u>3765</u>
Total	17611		10351		

Christened

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Chriftened in 8 years	17611	Medium for each year	2201 $\frac{3}{4}$
Buried in 8 years	10351	Medium for each year	1293 $\frac{7}{8}$
Oftennial increafe	<u>7260</u>	Annual increafe	<u>907 $\frac{1}{2}$</u>

Proportion of the yearly births to the number of perfons,	as	1	to	29,35
_____ of the yearly burials to the number of perfons,	as	1	to	49,89
_____ of births to burials	_____	100	to	58,77
_____ of males born, to females	_____	100	to	96,39
_____ of females buried, to males	_____	108,33	to	100

Weddings each year, at a medium	_____	470 $\frac{5}{8}$
Proportion of Weddings to births,	as 1	to 4,68
_____ of Weddings to burials,	as 1	to 2,75

Mortality of the Seasons.

Winter		Spring		Summer		Autumn	
January	93	April	108	July	129	October	87
February	84	May	105	August	135	November	111
March	132	June	120	September	84	December	84
	<u>309</u>		<u>333</u>		<u>348</u>		<u>282</u>

The mortality of spring and summer, to that of autumn and winter, as 115 to 100.

N. B. This calculation of the mortality of the seasons is not deduced from the whole number of Inhabitants on the island, as I could not procure authentic materials to proceed with exactness; the number of the perfons, from which it is calculated, is 6880.

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