rpolation between the values $B(r)$, where $i^2=-1$

$$\theta(w)=(pe^{wi}+q)^s=\sum_{r=0}^{r=s}B(r)e^{rwi}\,.$$

erminology of Laplace, $\theta(w)$ is the generating func- the sequence $B(r)$.

shall first show that $B_0(x)=B(m)$ when x is a e integer m. To prove this, substitute $\theta(w)$ from (1) and integrate. This gives

$$\sum_{r=0}^{r=s}B(r)\,\frac{\sin\,(r-x)\pi}{(r-x)\pi}$$

$$B(0)\,\frac{\sin\,(-x\pi)}{-x\pi}+B(1)\,\frac{\sin\,(1-x)\pi}{(1-x)\pi}$$

$$+\cdots\cdot+B(s)\,\frac{\sin\,(s-x)\pi}{(s-x)\pi}\,.$$

$x=m$ is a positive integer, each term but one of ht member vanishes and this one has the value Accordingly, $B_0(m)=B(m)$.

us formula (1) gives exactly the terms of the expan- $(p+q)^s$ for positive integral values $x=m$. It may sidered an interpolation formula for values of x n the integral values.

shall be interested in two developments of this lation formula. The first is based on the develop- f log $\theta(w)$ in powers of w, and the second on the oment in powers of p. The resulting types of de- ent are known as the Type A and Type B series, ively.