Barcelona 4 june 1959

Prof. R.P. Boas
Evanston

Dear Professor Boas,

Dr. T.L. Saaty (Scientific Liaison Officer of the Office of Naval Research) came to see me some days ago in order to consider the convenience to conclude a contract with me on the ground of which I would carry on an research supported by the Office of Naval Research. He advised me of the convenience to write you informing you of my present researche as well as of my further projects of the same.

Therefore I teke the liberty to expound you my present research I am following and the results I think to obtain with a quite reasonable probability.

In two of my papers (Proc.Amer.Math.Soc. vol.4,pp.310-322 and Acta Math. vol.87,pp.17-31) I prooved that a entire function represented by a Dirichlet (or Taylor) series satisfying certain gap conditions cannnot have esceptional values in any strp of a width greater than a quantity depending of the order of the function. Evidently in the case of Taylor series the strip comes to be angle.

Actually my researches have the design of extending the mentioned results to the functions only holomorphic in a half-plane and represented by gap Dirichlet series. For that purpose it will be necessary to define a canonical products in a half-strip (as per instance, $\sigma > 0$, $|t| < a$, and where the sequence of zeros $\{s_n = \sigma_n + it_n\}$ is such that $\lim_{n=\infty} \sigma_n = 0$) with similar properties as Weierstrass's products ones. For the finit order I believe that the definition will be relatively easy, but for the infinit order I think it will be difficult to find an adequate definition. Moreover those products will be probably useful in some other researches.

Of the results that may be obtained on the values of a function represented by gap Dirichlet series in half-strip could be deduced the distribution of Borel's points of a holomorphic function in a circle and represented by gap Taylor series. Moreover it could be afford to study possible connections with the results of Collingwood.

Believe me to be

yours sincerely

F.Sunyer Balaguer
Calle Angel Guimera 66 pral.2º
Barcelona (8)
Spain