with $m < k$, the d_i in F, and each r_i one of the elements of (11). Since no c_h in (10) is zero, this would mean that (10) is not unique and hence that the sequences $(a^h b^{k-1-h})^n$, $0 \leq h \leq k-1$, are linearly dependent. As in [4], this would contradict the fact that (1) is ordinary. Hence $f(X) \equiv g(X)$. Since the characteristic polynomial $\phi(X)$ of S is monic, of degree k, and a multiple of $g(X)$, $\phi(X)$ must also be $f(X)$ and (11) gives the characteristic values of S. This completes the proof.

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A more extensive analysis of the generated compositions which yield Fibonacci numbers will be jointly attempted by Dr. Hoggatt and the author in a subsequent paper. In addition, the author is planning to submit some papers in the future, which will furnish some original models and theorems connected with Fibonacci numbers and their properties. These models and theorems have been incorporated in part in the author's doctoral thesis, which has been cited as a reference in this article.