multiplied by the divergent series

$$1 + \tfrac{1}{2} + \tfrac{1}{3} + \ldots$$

gives an absolutely convergent product. The strangeness of this last conclusion is removed when we consider that the series

$$-1 + \frac{1}{1.2} + \frac{1}{2.3} + \ldots$$
$$= -1 + (1 - \tfrac{1}{2}) + (\tfrac{1}{2} - \tfrac{1}{3}) + \ldots = 0.$$

Since one of the factor-series is zero, we may well have a product-series with a definite limiting value. This value in this case is itself zero, as is seen from the following expression for the product-series

$$W = -c_1 + \sum_1^\infty{}_\nu (c_\nu - c_{\nu+1}), \text{ where } c = \sum_1^\nu{}_x \frac{1}{x(\nu + 1 - x)}.$$

COLORADO COLLEGE, *March* 23, 1892.

ON EXACT ANALYSIS AS THE BASIS OF LANGUAGE.*

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Abstract.

A SCHEME for an artificial language was published in the Philosophical Transactions of the Royal Society for 1668 by Bishop Wilkins. Since, however, it presupposes a complete enumeration of all that is or can be known, it would be overthrown by every considerable advance in knowledge. The mathematician and philosopher Leibnitz devoted much thought to what he called a *specieuse générale*, which he hoped would be an aid in reasoning and invention; but he died without publishing even an outline of his system. The new universal language Volapük, invented by J. M. Schleyer of Constance, is built upon a purely linguistic basis, being derived from a comparative study of the chief natural languages. In this paper it is proposed to show that the proper and necessary basis for an artificial language is scientific analysis and classification, and two specimens of language

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