

FROM THE EDITOR-IN-CHIEF*

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From time to time the Editor-in-Chief will use a note such as this to convey comments from authors and readers about papers that have recently appeared in the *Electronic Journal of Linear Algebra* (ELA). These notes will include additional references, errata, and comments that the Editor-in-Chief deems of interest to ELA readers.

1. John Maroulas writes to inform readers of existing literature related to the paper [H. Wu, X. Wu, and Z. Yang. More on polynomial Bezoutians with respect to a general basis. *Electronic Journal of Linear Algebra*, 21:154–171, 2010.].

More specifically, he indicates that the results of this paper are related to his work in [5,6], whose results are outcomes of his PhD dissertation. In [5,6], he and his co-author define the notion of general basis, introduce the term *confederate matrix*, and show that the construct of confederate matrix enables polynomials relative to an arbitrary basis to be thought of in exactly the same way as companion matrices do for a basis of power form. The main ideas on Bezoutian matrices used in the ELA paper are found in [6]. In addition, a Bezoutian-type matrix is defined via its controllability-observability expression. Professor Maroulas points out that the bases in (1.6) and (4.1) of the ELA paper are special cases of the general basis defined and studied in [5], and the Hessenberg-type matrices in (1.8) and (4.2) of the ELA paper are a simplified form of that in [5, p. 182]. Also, Lemma 2.1 in the ELA paper is the same as Theorem 4 (i) in [5].

Additional references that may be of interest to ELA readers on this subject are the book [1], and the articles [2–4].

2. The authors of the same ELA paper discussed above in (1) write to indicate that the paper [5] was one of their important references in the ELA paper, and that it should have been more explicitly referred to when the terminology confederate matrix was mentioned in their paper.

They indicate the aim of their paper was to study of properties of generalized polynomial Bezoutians, as a complementary contribution to the investigations

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of orthogonal polynomials and their corresponding confederate matrices with Hessenberg forms in [5]. Although there exist close connections between the Bezoutians and polynomials defined in the ELA paper and those in [5], [5] investigated orthogonal polynomials and arbitrary polynomials and the corresponding confederate matrices with Hessenberg forms, while the aim of the ELA paper was the study of properties of generalized polynomial Bezoutians. Thus, they believe that exist essential differences between the ELA paper and [5,6], and refer the reader to these papers for more details.

REFERENCES

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