The following theorem is an immediate consequence of (4.1) and (2.6):

(4.2) *The class of cyclic strongly arcwise connected continua consists exactly of all cyclic locally connected continua A such that every arc-preserving transformation $T(A)=B$, where B is not an arc, is topological.*

Brown University and
University of California at Los Angeles

A NOTE ON SUBGEOMETRIES OF PROJECTIVE GEOMETRY AS THE THEORIES OF TENSORS[1]

T. L. WADE

Klein's viewpoint (A) of a geometry as the invariant theory of a transformation group, as formulated in the Erlanger Programm in 1870,[2] has played an important part in the study of geometry during the past half century. A number of explicit utilizations of this viewpoint in invariant aspects of algebraic geometry have been made.[3] In the last decade the viewpoint (B) of a geometry as the theory of a tensor has received considerable theoretical discussion and utilization in connection with the new differential geometries.[4] While the adjunction argument, whereby subgeometries of projective geometry result from the latter by holding certain forms latent, has had considerable use,[5] and is closely related to tensor algebra, there seems to have been no explicit treatment of algebraic invariants for subgeometries of projective geometry from the viewpoint (B) with the use of tensor algebra. To indicate how this might be done is the purpose of this paper. The material here is largely an application and continuation of the basic paper by Cramlet.[6]

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[1] Presented to the Society, April 27, 1940.

[2] F. Klein, *Gesammelte Mathematische Abhandlungen*, Berlin, 1921, vol. 1, p. 460.

[3] C. C. MacDuffee, *Euclidean invariants of second degree curves*, American Mathematical Monthly, vol. 33 (1926), pp. 243–252; *Covariants of r-parameter groups*, Transactions of this Society, vol. 39 (1933).

[4] J. A. Schouten and J. Haantjes, *On the theory of the geometric object*, Proceedings of the London Mathematical Society, vol. 42 (1937), pp. 356–376.

[5] H. Weyl, *The Classical Groups: Their Invariants and Representations*, Princeton University Press, 1939, pp. 254–258; H. W. Turnbull, *The Theory of Determinants, Matrices, and Invariants*, Blackie and Son, 1929, chap. 21.

[6] C. M. Cramlet, *The derivation of algebraic invariants by tensor algebra*, this Bulletin, vol. 34 (1928), pp. 334–342.