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Andrei V. Tetenov* (a.tetenov@gmail.com), Russia, and **Olesya Chelkanova**
(chelkanova_olesya@mail.ru). *On the structure of self-similar and self-affine Jordan arcs in \mathbb{R}^2 .*

It was proved by the author more than a decade ago that if a self-similar arc γ can be shifted along itself by similarity maps that are arbitrarily close to identity, then γ is a straight line segment. We extend this statement to the class of self-affine arcs in the plane and prove that each self-affine arc admitting affine shifts that may be arbitrarily close to identity is a segment of a parabola or a straight line. A direct outcome of this result is that each self-affine Jordan arc $\gamma \subset \mathbb{R}^2$ which is not a segment of a parabola, can be represented as an attractor of a finite graph-directed affine IFS for which the pieces of γ may intersect each other only by their endpoints. (Received August 31, 2021)