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Concerning Indecomposability of Preimages of Planar Continua Under the Map $z \mapsto z^n$.

In the 2005 Topology Proceedings, David Bellamy showed that the preimage under $z \mapsto z^n$ of a pseudocircle which separates 0 from ∞ is again a pseudocircle. He concluded his paper by asking whether the preimage of any hereditarily indecomposable continuum which is irreducible with respect to separating 0 from ∞ must have a hereditarily indecomposable preimage under this map, and whether a continuum which properly contains a pseudocircle can have a hereditarily indecomposable preimage. The author provides answers to both of these questions, as well as some insight into conditions for indecomposability of the preimage. (Received August 23, 2007)