# The two lines inverse limit and end-point-generated fans

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For positive numbers $r < 1$ and $\rho > 1$, let $L_{r,\rho}$ be the union of two line segments in $[0,1] \times [0,1]$, one from $(0,0)$ to $(1,r)$ and the other one from $(0,0)$ to $(\frac{1}{\rho}, 1)$. It was proven for all such $r$ and $\rho$ that, if $r$ and $\rho$ never connect, then the Mahavier product of $L_{r,\rho}$'s is homeomorphic to the Lelek fan.

We show that for all such $r$ and $\rho$, if $r$ and $\rho$ do connect, the Mahavier product of $L_{r,\rho}$'s is the union of a countable family of Cantor fans with additional properties regarding the limits of sequences of end-points. We further define what it means for a fan to be end-point-generated.