Theorem. Let $\triangle A_1B_1C_1$ be the cevian triangle of a point $P$ with respect to $\triangle ABC$. Let $A_2$ be the point, other than $A$, that circles $(ABC)$ and $(AB_1C_1)$ intersect. Define $B_2, C_2$ cyclically. Let $A' = BB_2 \cap CC_2$ and define $B', C'$ cyclically. Then:

1. $AA', BB', CC'$ are concurrent.
2. $A_2A', B_2B', C_2C'$ are concurrent.