Vu Thanh Tung

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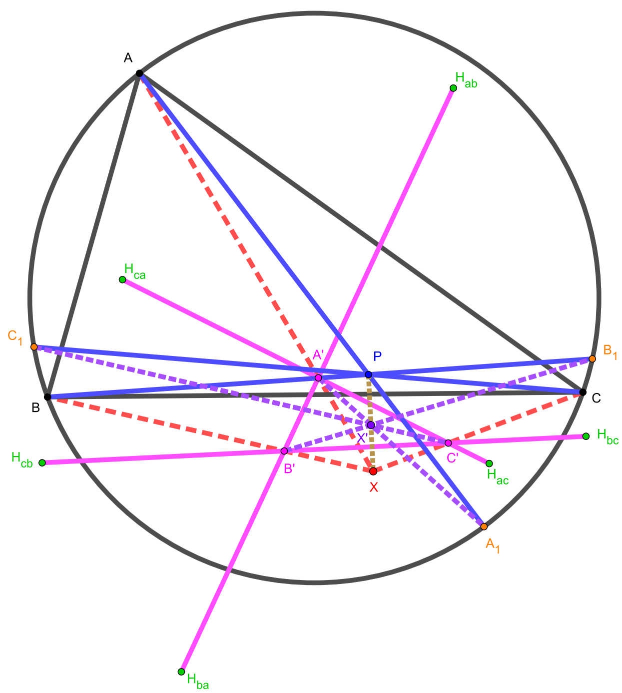
Theorem. *Let $\triangle A_1B_1C_1$ be the circumcevian triangle of a point P with respect to $\triangle ABC$. Let $H_{bc}, H_{cb}, H_{ca}, H_{ac}, H_{ab}, H_{ba}$ be respectively the orthocenter of $\triangle PB_1C, \triangle PC_1B, \triangle PC_1A, \triangle PA_1C, \triangle PA_1B, \triangle PB_1A$.*

Let $A' = H_{ca}H_{ac} \cap H_{ab}H_{ba}$, $B' = H_{ab}H_{ba} \cap H_{bc}H_{cb}$, $C' = H_{bc}H_{cb} \cap H_{ca}H_{ac}$. Then

- *Three lines AA', BB', CC' are concurrent at point X.*
- *Three lines A_1A', B_1B', C_1C' are concurrent at point X'.*
- *P, X, X' are collinear.*



Vu Thanh Tung, 250 Quang Trung, Nam Dinh city, Vietnam
E-mail address: `tungvtt@gmail.com`