$$head\text{-}fragment\text{-}ph \Rightarrow \begin{bmatrix} \text{category} & \text{[head } \left[\text{cluster } \left\langle \left[\text{head } \left[\overline{\text{H}_1}\right], ..., \left[\text{head } \left[\overline{\text{H}_n}\right]\right\rangle \right] \right] \\ \text{content} & \textit{message} \\ \text{Dtrs} & \left\langle \begin{bmatrix} \textit{cluster-ph} \\ \text{head } \left[\text{cluster } \left\langle \left[\text{head } \left[\overline{\text{H}_1}\right], ..., \left[\text{head } \left[\overline{\text{H}_n}\right]\right\rangle \right] \right] \right\rangle \end{bmatrix} \end{bmatrix}$$