

## HANDLE SPLIT VERTEX( $v_i$ )

1. Search in  $\mathcal{T}$  to find the edge  $e_j$  directly left of  $v_i$ .
2. Insert the diagonal connecting  $v_i$  to  $helper(e_j)$  in  $\mathcal{D}$ .
3.  $helper(e_j) \leftarrow v_i$
4. Insert  $e_i$  in  $\mathcal{T}$  and set  $helper(e_i)$  to  $v_i$ .