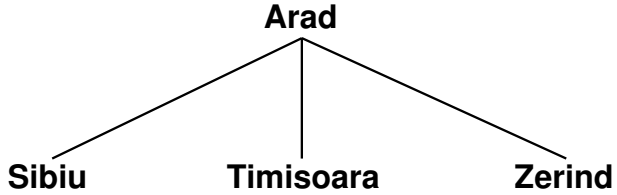
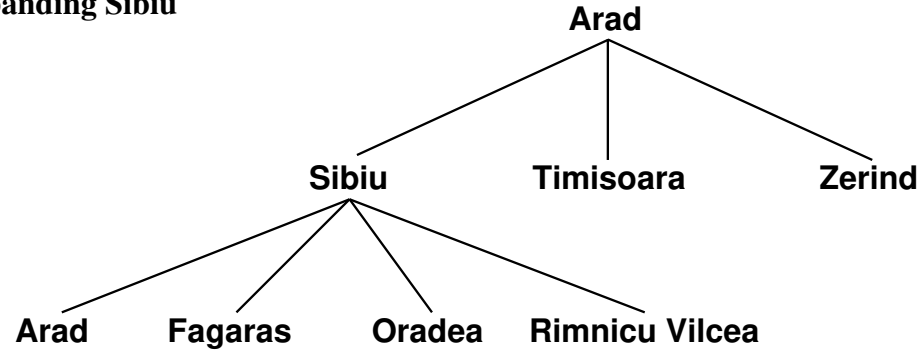
**(a) The initial state**

**(b) After expanding Arad**




**(c) After expanding Sibiu**