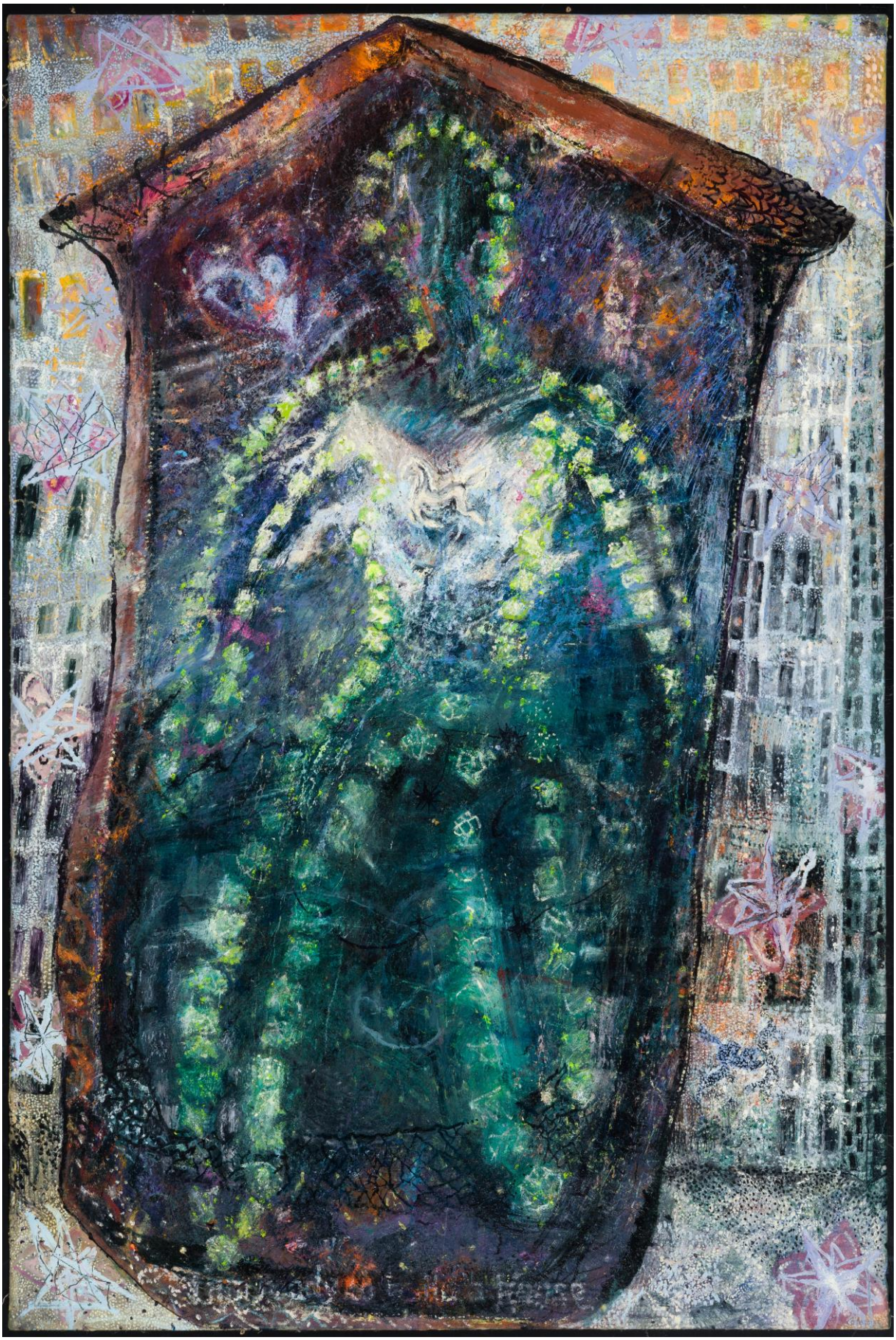EMCOS
ewm