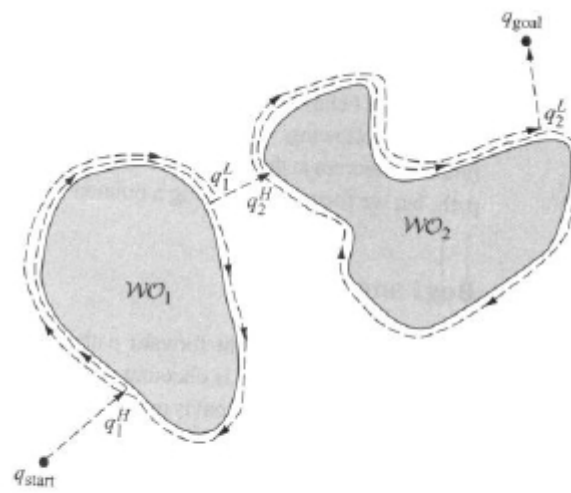


## Bug1.



**Figure 2.1** The Bug1 algorithm successfully finds the goal.

## Bug2

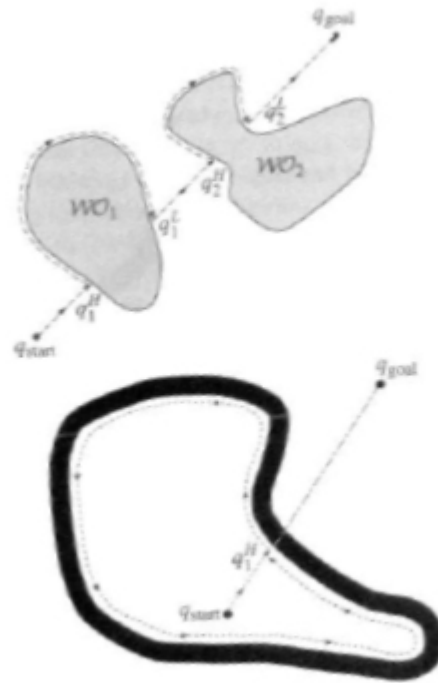
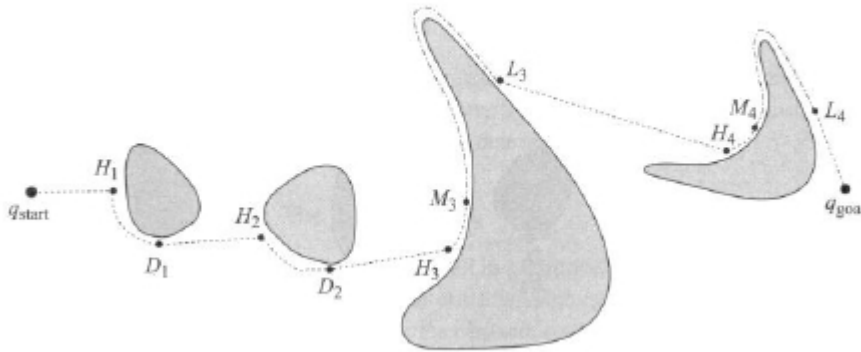
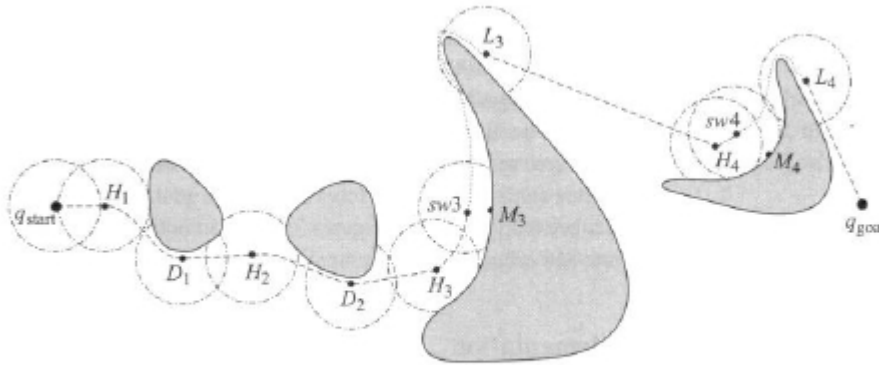


Figure 2.3 (Top) The Bug2 algorithm finds a path to the goal. (Bottom) The Bug2 algorithm reports failure.

## Tangent Bug.



**Figure 2.11** The path generated by Tangent Bug with zero sensor range. The dashed lines correspond to the motion-to-goal behavior and the dotted lines correspond to boundary-following.



**Figure 2.12** Path generated by Tangent Bug with finite sensor range. The dashed lines correspond to the motion-to-goal behavior and the dotted lines correspond to boundary-following. The dashed-dotted circles correspond to the sensor range of the robot.