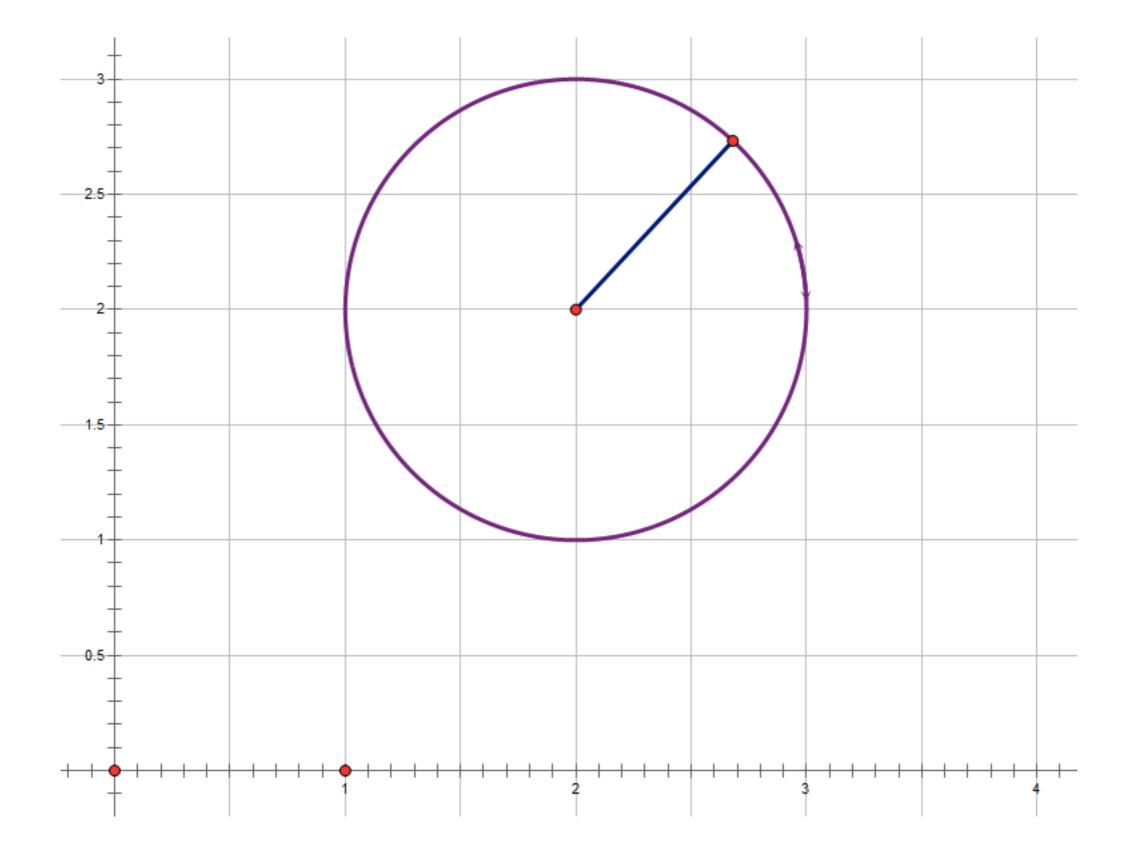
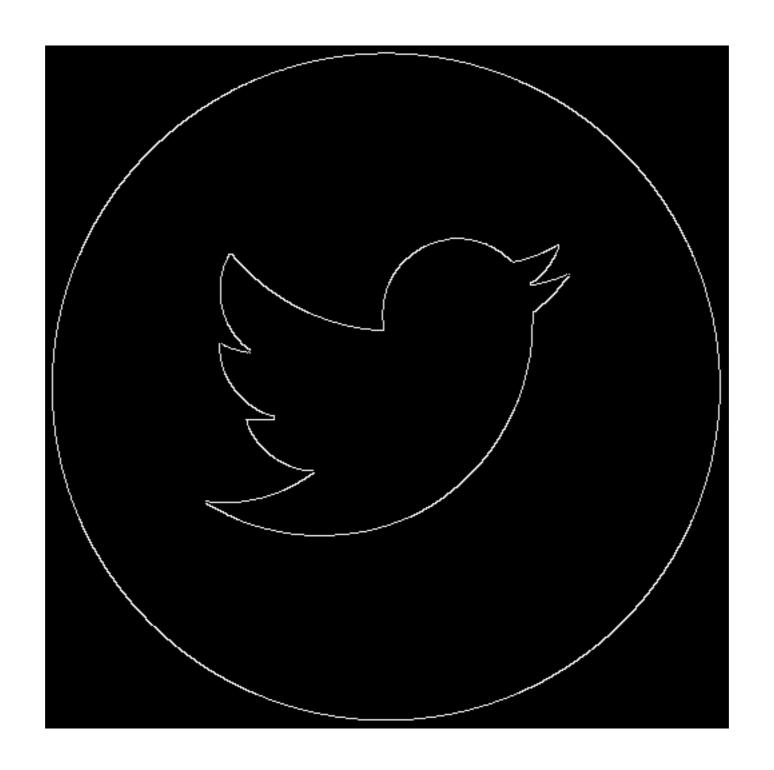
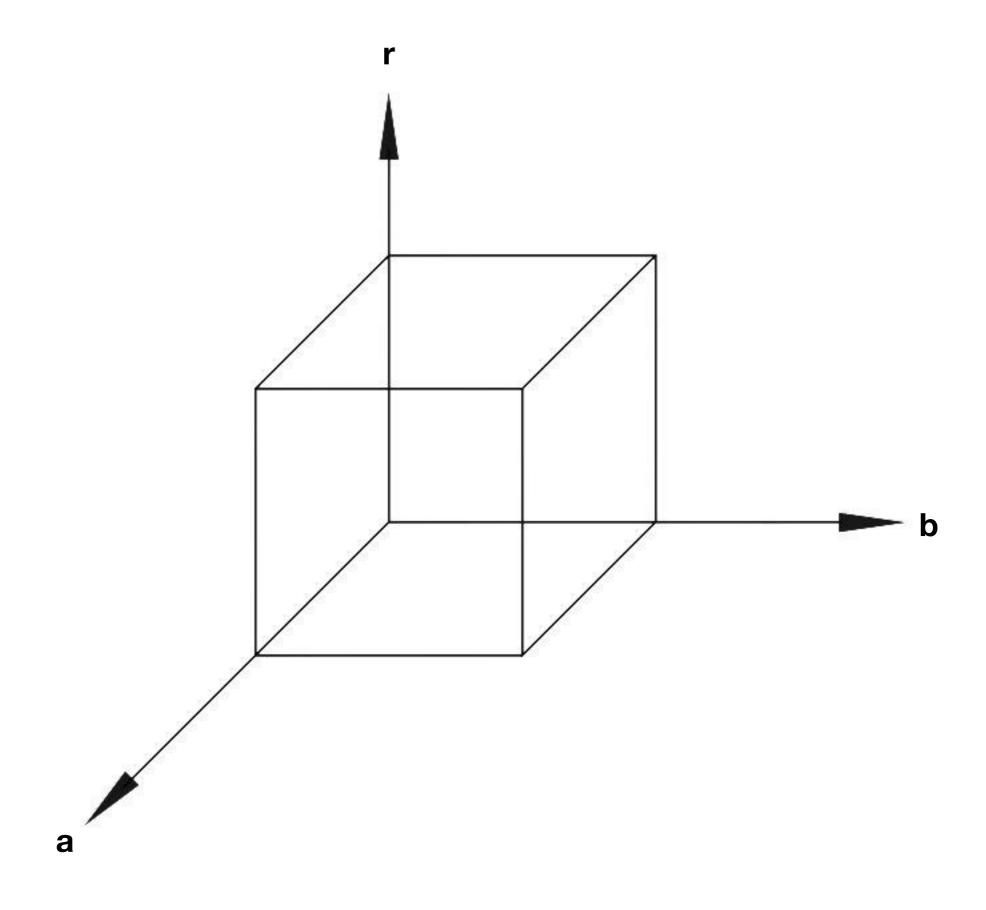
## 标准霍夫圆变换



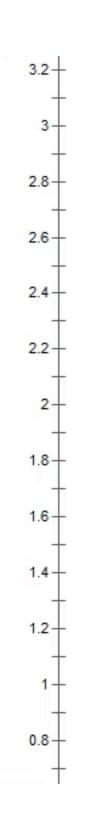


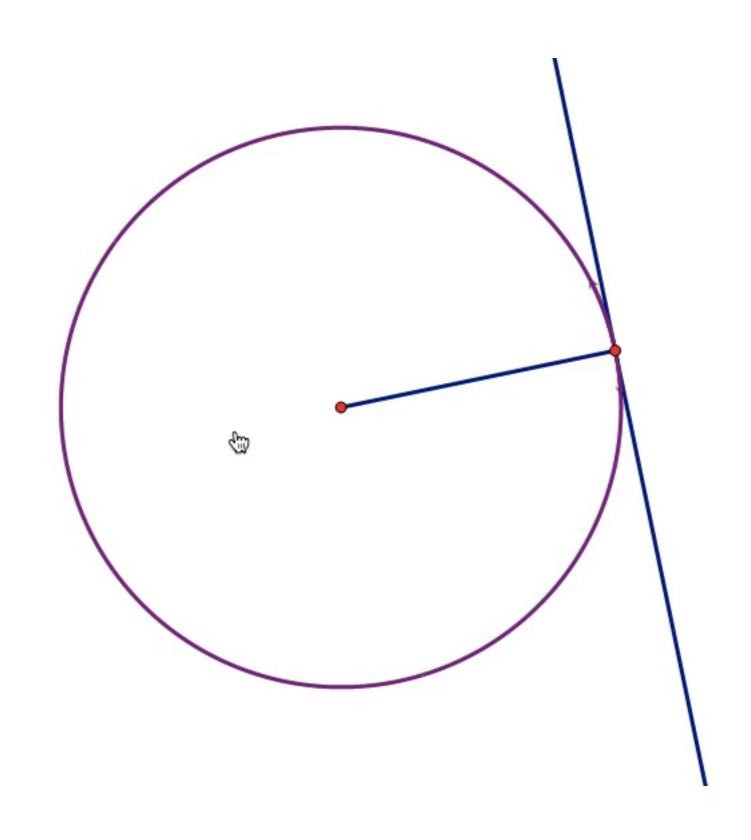


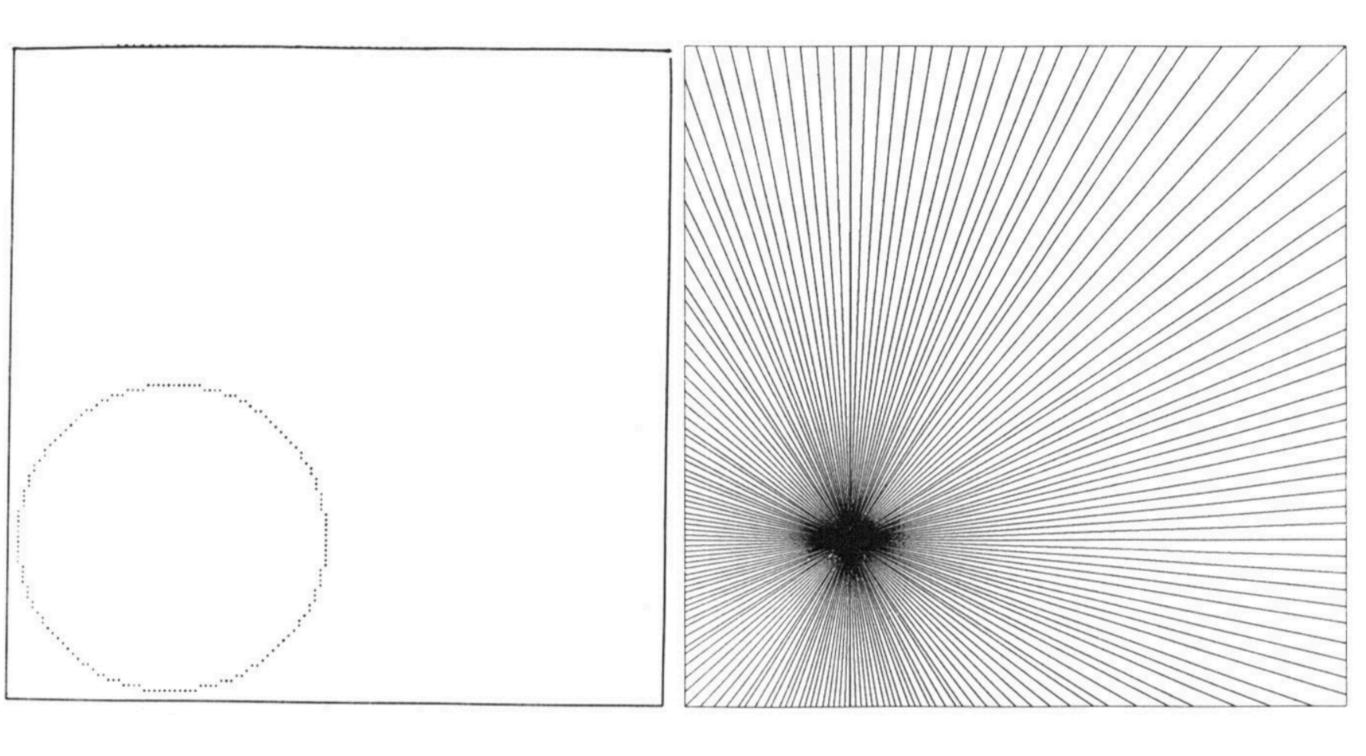


## 霍夫梯度法

## 一、确定圆心







## 二、确定半径

8-9	0	0	0	0
7-8	0	0	0	0
6-7	0	1	0	0
5-6	1	0	1	0
4-5	0	0	0	1
3-4	0	0	0	0
2-3	0	0	0	0
1-2	0	0	0	0
r/center	(a1,b1)	(a2,b2)	(a3,b3)	(a4,b4)