

ShiBo_HW0

shi bo

2026-01-28

```
draw_cat <- function() {
  op <- par(mar = c(0, 0, 0, 0))
  on.exit(par(op), add = TRUE)

  plot.new()
  plot.window(xlim = c(0, 1), ylim = c(0, 1), asp = 1)

  # Head
  symbols(0.5, 0.55, circles = 0.28,
          inches = FALSE, add = TRUE, fg = "black", bg = "white")

  # Ears
  polygon(c(0.32, 0.40, 0.45), c(0.72, 0.92, 0.72), col = "white")
  polygon(c(0.55, 0.60, 0.68), c(0.72, 0.92, 0.72), col = "white")

  # Inner ears
  polygon(c(0.35, 0.40, 0.43), c(0.73, 0.86, 0.73), col = "pink", border = NA)
  polygon(c(0.57, 0.60, 0.65), c(0.73, 0.86, 0.73), col = "pink", border = NA)

  # Eyes
  symbols(c(0.42, 0.58), c(0.60, 0.60),
          circles = c(0.03, 0.03), inches = FALSE, add = TRUE, bg = "black")

  symbols(c(0.42, 0.58), c(0.61, 0.61),
          circles = c(0.01, 0.01), inches = FALSE, add = TRUE, bg = "white")

  # Nose
  polygon(c(0.49, 0.51, 0.50), c(0.54, 0.54, 0.50), col = "pink")

  # Mouth
  lines(c(0.50, 0.47), c(0.50, 0.47), lwd = 2)
  lines(c(0.50, 0.53), c(0.50, 0.47), lwd = 2)

  # Whiskers
  segments(0.28, 0.52, 0.42, 0.50, lwd = 2)
  segments(0.28, 0.48, 0.42, 0.48, lwd = 2)
  segments(0.28, 0.44, 0.42, 0.46, lwd = 2)

  segments(0.72, 0.52, 0.58, 0.50, lwd = 2)
  segments(0.72, 0.48, 0.58, 0.48, lwd = 2)
  segments(0.72, 0.44, 0.58, 0.46, lwd = 2)
}
```

```
draw_cat()
```

