
Contents

1 dataviz: common aesthetics

1

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1 aes_pos <- ggdraw() +
2   geom_segment(
3     data = data.frame(x = c(0, 0.5),
4                       y = c(0.5, 0),
5                       xend = c(1, 0.5),
6                       yend = c(0.5, 1)),
7     mapping = aes(x = x, y = y, xend = xend, yend = yend),
8     arrow = arrow(length = grid::unit(12, "pt")), size = .75
9   ) +
10  draw_text(
11    c("x", "y"),
12    x = c(1, 0.5), y = c(0.5, 1),
13    hjust = c(-0.8, 0.3), vjust = c(0.3, -0.8),
14    size = 14, family = "serif") +
15    coord_cartesian(xlim = c(-.2, 1.2), ylim = c(-.2, 1.2))
16
17 aes_color <- ggdraw() +
18   geom_tile(
19     data = data.frame(x = 0.15 + .2333 * (0:3)),
20     aes(x, y = .5, fill = factor(x)), width = .2, height = .6
21   ) +
22   scale_fill_okabeIto(guide = "none")
23
24 aes_shape <- ggdraw() +
25   geom_point(
26     data = data.frame(x = (.5 + 0:3) / 4),
27     aes(x, y = .5, shape = factor(x)), size = 8, fill = "grey80"
28   ) +
29   scale_shape_manual(values = 21:24)
30
31 aes_size <- ggdraw() +
32   geom_point(
33     data = data.frame(x = (.5 + 0:3) / 4),
34     aes(x, y = .5, size = factor(x)), shape = 21, fill = "grey80"
35   ) +
36   scale_size_manual(values = c(2, 5, 8, 11))
37
38
39 aes_lwd <- ggdraw() +
40   geom_segment(
41     data = data.frame(
42       x = rep(0.05, 4),
43       y = (1.5 + 0:3) / 6,
44       xend = rep(0.95, 4),
45       yend = (1.5 + 0:3) / 6,
46       size = 4:1
47     ),
48     aes(x = x, y = y, xend = xend, yend = yend, size = size)
49   ) +
```

```

50   scale_size_identity()
51
52   aes_ltp <- ggdraw() +
53     geom_segment(
54       data = data.frame(
55         x = rep(0.05, 4),
56         xend = rep(0.95, 4),
57         y = (1.5 + 0:3) / 6,
58         yend = (1.5 + 0:3) / 6,
59         linetype = 4:1
60       ),
61       aes(x = x, y = y, xend = xend, yend = yend, linetype = linetype), size = 1
62     ) +
63     scale_linetype_identity()
64
65
66   plot_grid(aes_pos, aes_shape, aes_size,
67     aes_color, aes_lwd, aes_ltp,
68     ncol = 3,
69     labels = c("position", "shape", "size", "color", "line width", "line type"),
70     label_fontfamily = "serif", label_size = 14,
71     label_x = 0.05, label_y = 0.95, hjust = 0, vjust = 1
72   )

```

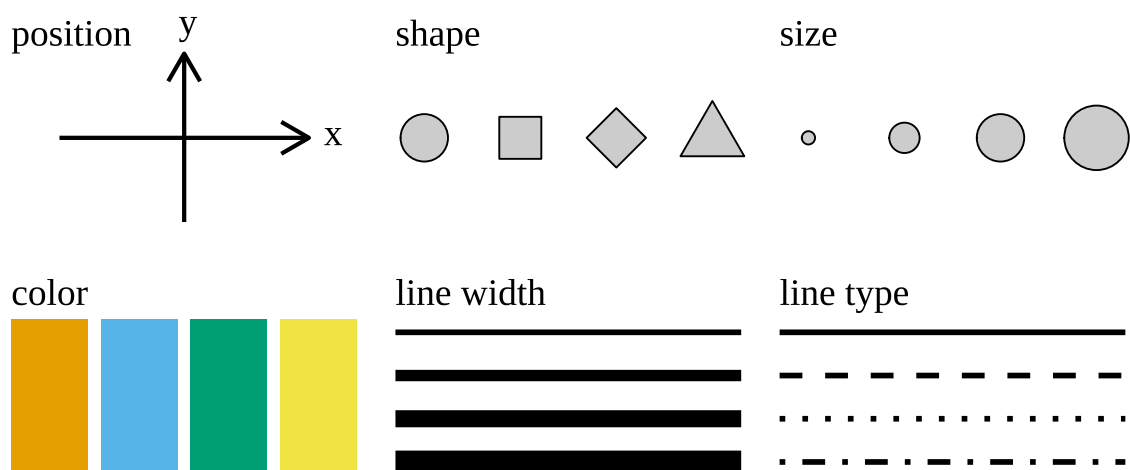


Figure 1: Commonly used aesthetics in data visualization: position, shape, size, color, line width, line type. Some of these aesthetics can represent both continuous and discrete data (position, size, line width, color) while others can usually only represent discrete data (shape, line type).