Conversion Guide between R and Python: Data visualization

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General structure

❒ **Basic plots** – The main basic plots are summarized in the table below:

Type	R Command	Python Command
Scatter plot	`geom_point(x, y, params)`	`sns.scatterplot(x, y, params)`
Line plot	`geom_line(x, y, params)`	`sns.lineplot(x, y, params)`
Bar chart	`geom_bar(x, y, params)`	`sns.barplot(x, y, params)`
Box plot	`geom_boxplot(x, y, params)`	`sns.boxplot(x, y, params)`
Heatmap	`geom_tile(x, y, params)`	`sns.heatmap(x, y, params)`

where the meaning of parameters are summarized in the table below:

Command	Description	Use case
`color / hue`	Color of a line / point / border	`'red'`
`fill`	Color of an area	`'red'`
`size`	Size of a line / point	`4`
`linetype`	Shape of a line	`'dashed'`
`alpha`	Transparency, between 0 and 1	`0.3`

Advanced features

❒ **Additional elements** – We can add objects on the plot with the following commands:

Type	R Command	Python Command
Line	`geom_vline(xintercept, linetype)`	`ax.axvline(x, ymin, ymax, color, linewidth, linestyle)`
	`geom_hline(yintercept, linetype)`	`ax.axhline(y, xmin, xmax, color, linewidth, linestyle)`
Rectangle	`geom_rect(xmin, xmax, ymin, ymax)`	`ax.axvspan(xmin, xmax, ymin, ymax)`
Text	`geom_text(x, y, label, hjust, vjust)`	`ax.text(x, y, s, color)`