

The caption is the only part that travels

Someone will paste your figure into a situation report without the paragraph that explained it. Whatever the caption says is what the figure will mean from then on, so the caption has to carry the finding, the denominator and the thing the chart cannot support.

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Lesson 6 of 8

Data Visualisation for Programmes — The page it must survive

What this lesson covers

- Assume it will be lifted
- Four things a caption has to carry
- The title and the caption do different jobs
- Labelling inside the chart
- Numbers in a bilingual caption
- The five-second test
- Report it whole
- What comes next

Assume it will be lifted

- Write for the second life — The caption is the only part of the analysis that travels with the picture, so it has to be. . .

Assume it will be lifted

Caption	What survives the paste
"GAM by commune"	The chart, with no interpretation
"Figure 3"	Nothing
"GAM by commune with 95% CIs. The three highlighted communes are the only ones whose interval clears the district median."	The finding, the uncertainty and the limit

Four things a caption has to carry

- The finding, as a sentence — Not what the chart shows — what it *says*
- The denominator, or where to find it — 1,955 households, 1,850 cases, 24 schools
- The uncertainty, if the chart has any — "with 95% confidence intervals" is four words and it stops the chart being read. . .
- What the chart does not support — One clause, and it is the one that gets removed first when someone edits for length

Four things a caption has to carry — In Python

```
CAPTION = (  
    "Four food security instruments applied to the same 1,955 households. "      # denominator  
    "The highest prevalence is seven times the lowest, "                      # finding  
    "so the instrument chosen decides the caseload before any analysis begins." # implication  
)
```

Four things a caption has to carry — In R

```
labs(caption = str_wrap(CAPTION, 90))
```

The title and the caption do different jobs

Element	Job	Length
Title	Names the comparison	3–6 words
Caption	States the finding and its limits	2–3 sentences
Axis label	Names the quantity and its unit	2–4 words
Direct label	Identifies a series in place	1–3 words

The title and the caption do different jobs

- If the title states the finding, delete the caption or the title — Two headings competing is the commonest layout fault. . .
- On this platform the title names and the caption tells — Every figure in `build.py` carries both, in both languages, . . .

Labelling inside the chart

- Direct labels beat legends — A legend makes the reader match a colour to a name and carry it back to the chart; a label...

Labelling inside the chart — In Python

```
for name, series in lines.items():  
    ax.plot(series.index, series.values)  
    ax.annotate(name, (series.index[-1], series.iloc[-1]),  
                xytext=(6, 0), textcoords="offset points", va="center")
```

Labelling inside the chart — In R

ggrepel::geom_text_repel() on the last point of each series.

Labelling inside the chart

- Label the values only when the reader needs them exactly — A bar chart with a value on every bar is a table wearing a . . .
- Never label a value to more precision than the interval justifies — 42.9% on a bar whose interval is ± 3 points, not. . .
- Put the unit on the axis, once — "Households flagged (%)" and then bare numbers, not "%" repeated on every tick

Numbers in a bilingual caption — In Python

```
caption={
    "en": "Counting improved sources overstates coverage in every district. "
          "The difference is households whose source is improved and more than "
          "thirty minutes away.",
    "fr": "Compter les sources améliorées surestime la couverture dans chaque "
          "district. L'écart correspond aux ménages dont la source est améliorée "
          "et située à plus de trente minutes.",
}
```

Numbers in a bilingual caption — In R

One figure, two captions, written together rather than translated later.

Numbers in a bilingual caption

- The decimal separator changes — 42,9 % in French, 42.9% in English — and the renderer handles it, which is why the...
- The space before the percent sign changes too — and French uses a narrow no-break space
- Translate the finding, not the words — A French caption that reads as a translation has failed the same test as a...

The five-second test

- If they describe the chart, the caption is a title — "It's a bar chart of communes" means the caption did no work
- If they state the finding, it works — "Three communes are clearly above the others" is the caption having done its job
- If they state a finding you did not make, fix the chart — A reader who says "so Dessalines is the safest" has read a...

Report it whole — Example

Figure captions in this report

Every figure caption states the finding as a sentence, names the denominator, and names one thing the figure does not support.

Captions are written to be self-contained: a figure reproduced without its surrounding text should still carry its own interpretation and its own limits.

Values are labelled to the precision the confidence interval supports and no further.

Figures and captions exist in English and French. The captions are written in both languages rather than translated, so the finding rather than the wording is what is shared.

Report it whole

- The second paragraph is the whole lesson — and it is a claim about the report's own robustness rather than about its. . .

What comes next

- Everything so far has been about what the chart says.

Read the full lesson, with runnable code

[https://data-analysis.cassion.dev/courses/data-visualisation/
viz-06-the-caption-that-travels](https://data-analysis.cassion.dev/courses/data-visualisation/viz-06-the-caption-that-travels)