Housekeeping

Second presentation due on Wednesday

Revise your first presentation in light of marker's comments.

First written assignment coming soon…

Illustrating Technical Documents

Topics in this section

Illustrations in general

Independent and dependent variables

The conventions of types of illustrations

A picture is worth a thousand words

http://linchikwok.blogspot.ca/2012/08/a-picture-is-worth-thousand-words.html

Illustrations in general

Many people are visual learners, especially when dealing with numerical data.

Graphical representation of data is often more effective than prose or tables.

People can often understand trends in data more quickly from graphics than from raw data or text.

Illustrations in general

All kinds of illustrations can be useful: graphs, charts, tables, designs, diagrams, photographs, pictograms, etc.

Technical writers need to know how to make all of these and use them smoothly in documents.

Illustrations can help overcome readers' resistance to walls of text.

Illustrations in general

Don’t use them for their own sake;
their purpose is make the text easier to understand.

Use an illustration only if it communicates
more clearly than text alone.

Use illustrations to help the reader do these things:

1. see what is most important,
2. understand complex data in a clear, simple form.

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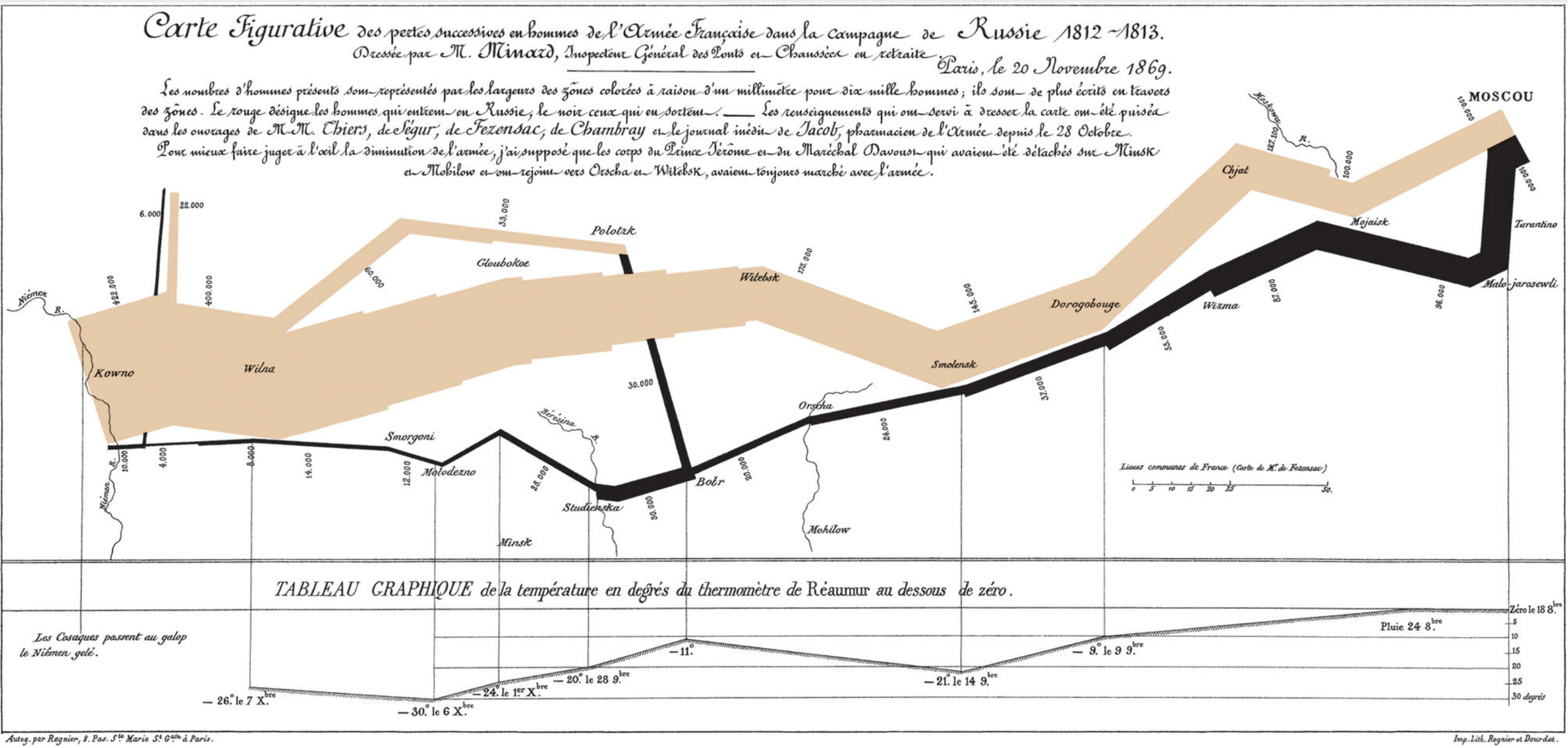
Primary guidelines

1. Tailor your illustrations for your audience.
2. Decide what you want your audience to learn from each illustration.
3. Keep it simple — usually just one main point per illustration.

An exception?



https://en.wikipedia.org/wiki/Charles_Joseph_Minard#/media/File:Minard.png . Public domain.

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Primary guidelines

4. Position illustrations as close as possible to the narrative that it supports.

5. Label each illustration clearly with a number title (above a table, below a figure or chart).

Numbers & titles

number & title above (for a table)

Table 12.1 Data Displayed in a Table

Death Rates for Heart Disease and Cancer, 1970–2005

Number of Deaths (per 100 000), Population

	Heart Disease		Cancer	
Year	**Male**	**Female**	**Male**	**Female**
1970	471.2	267.4	227.6	151.6
1980	392.1	213.5	240.3	148.3
1990	267.5	150.6	246.6	153.2
1997	230.8	129.7	229.7	148.5
2003	178.9	98.2	215.3	148.1
2005	170.3	91.5	207.7	143.8
Percentage change, 1970–2005	–63.9	–65.8	–8.7	–5.1

Sources: Based on Statistics Canada, Catalogue no. 82-221-XDE; *The Canada e-Book*, Catalogue no. 11-404-XIE; and Catalogue no. 84F0209.

clear headers for columns

lines separate key parts

sources identified

Numbers & titles

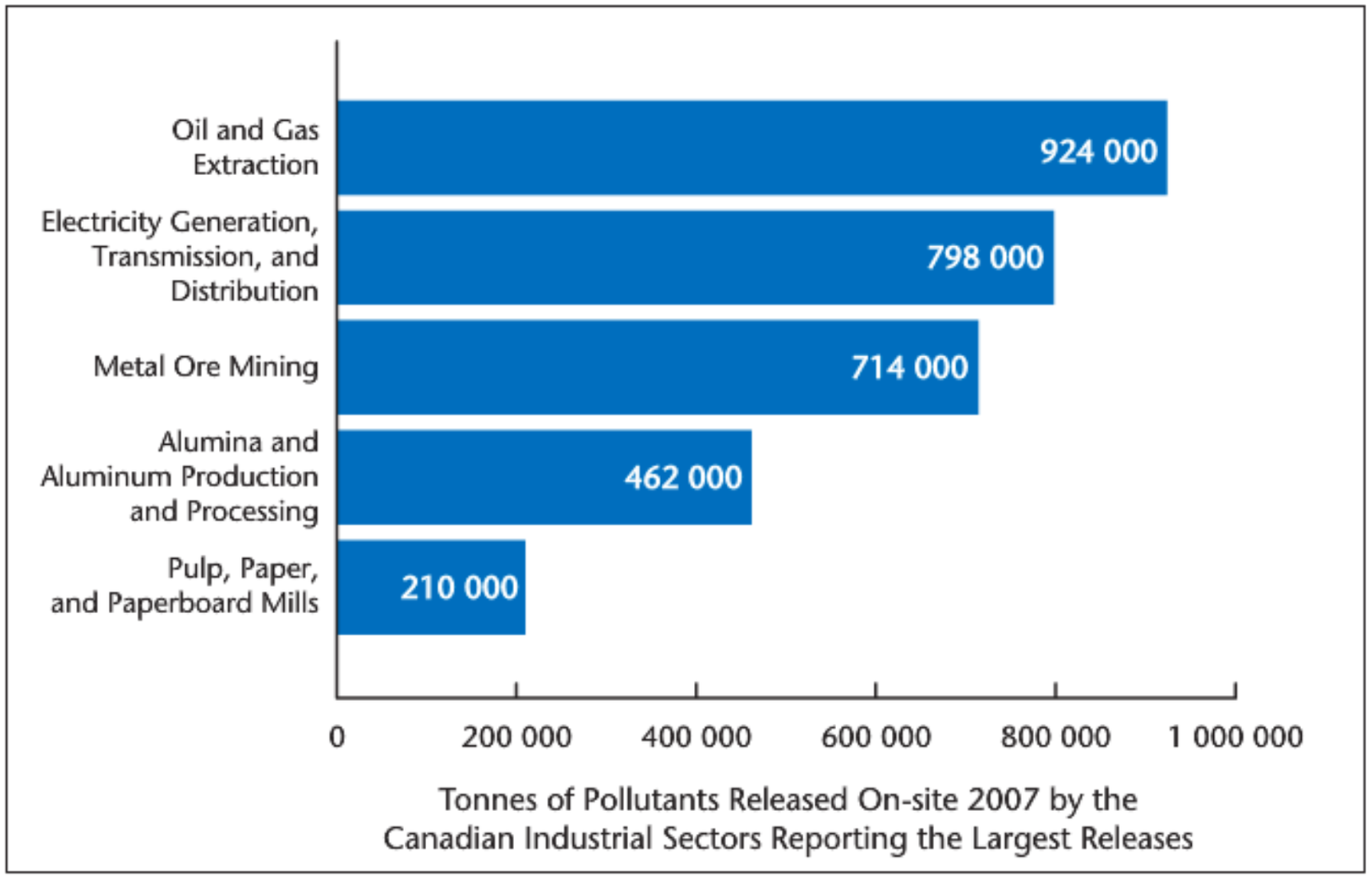


Figure 12.1 A Graph Displaying the "Big Picture"

Source: *Environment Canada's National Pollutant Release Inventory—National Overview 2007*. Available at http://www.ec.gc.ca/inrp-npri/default.asp?lang=En&n=0D743E971&offset=3&toc=show.

number & title below (for a figure)

sources identified

Primary guidelines

6. Add comments below a title if further explanation is needed.

7. Refer to the illustration at least once in the main text of your document. (E.g. “As Figure 1 illustrates…”)

8. Identify any sources that you have used and state that you are using them with permission.

Independent versus dependent variables

I assume that you're familiar with basic line graphs.

I hope that the discussion of variables will be a review
of basic scientific techniques.

In any useful comparison of two variables,
one will be independent of the other,
and the other will depend on the first one.

Changes in the dependent variable will depend
on changes in the independent variable;
the independent influences the dependent.

Identify the variables

independent the amount of food offered to a cat

dependent the weight of the cat

http://thehealthycookingcoach.com/by-nature-cat-food-passes-the-taste-test/

Identify the variables

dependent the amount of noise made by a motor

independent speed at which a motor is operated

http://www.sandsmuseum.com/cars/elise/information/press/magazine/magazine2005/roadandtrack.html

Identify the variables

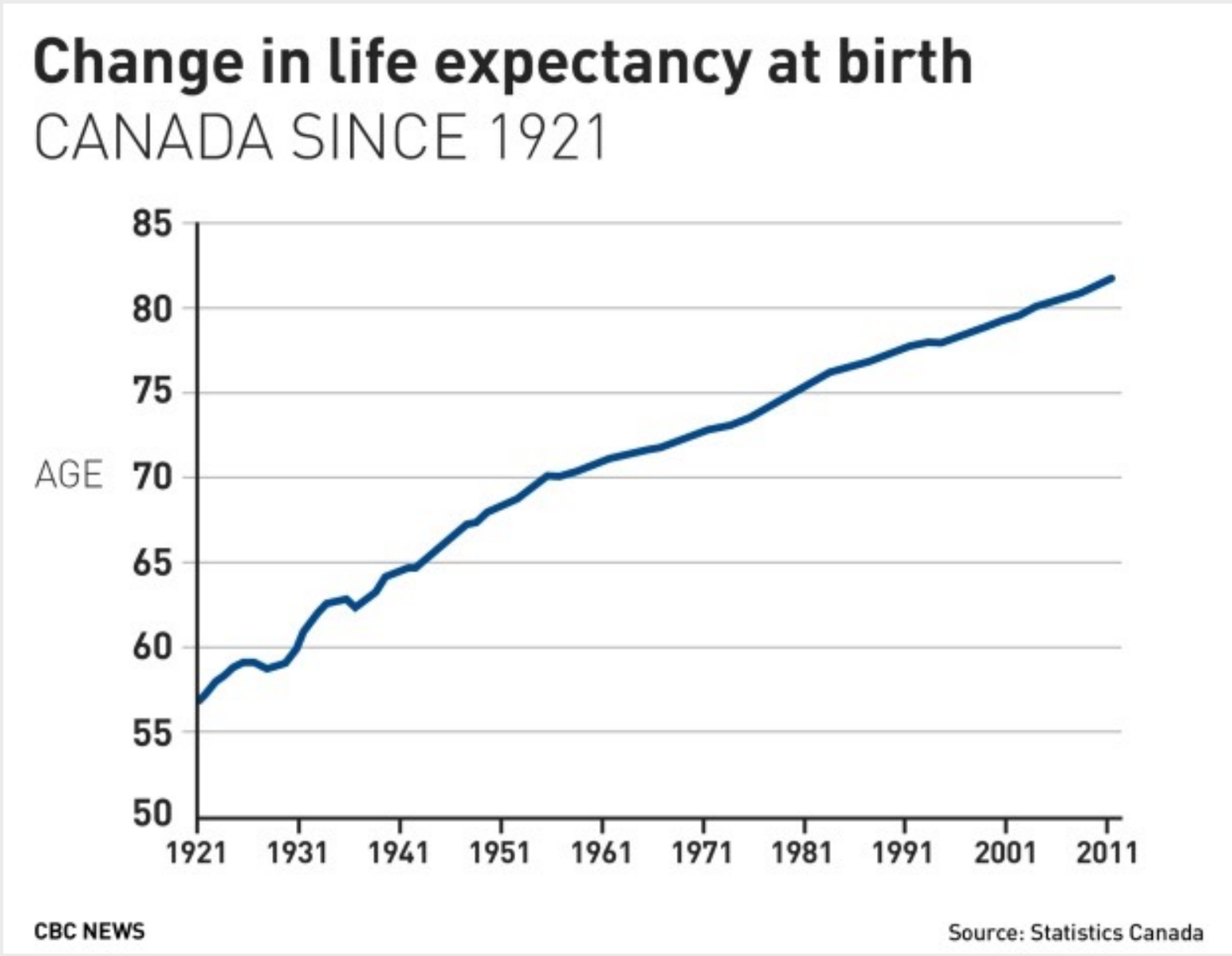
independent changes in the payload of an airplane

dependent changes in the range of the airplane

https://airbalc.com/charter

Independent versus dependent variables

Always put the independent variable on the x-axis of a graph, and the dependent variable on the y-axis.



http://www.cbc.ca/news/health/life-expectancy-lancet-1.3993213

Next time…conventions of illustrations