

How do data display conventions work?

Readers LEARN them!

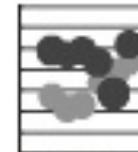
*Ideas in the following slides are adapted from Kostelnick, Charles, and Michael Hassett.
Shaping Information: The Rhetoric of Visual Conventions. Carbondale, IL: Southern Illinois University Press, 2003.

Dr. Di Cook and Dr. Heike Hofmann, Iowa State University

What are conventions?

- Genres—e.g., pie, line, bar, map, donut, radar, etc.
- Elements on charts—axes, plot frames, tick marks, gridlines, symbols, legends, etc.
- Situations in which they are deployed—e.g., bar and pie charts in annual reports; scatter plots in empirical research reports

Common Genres



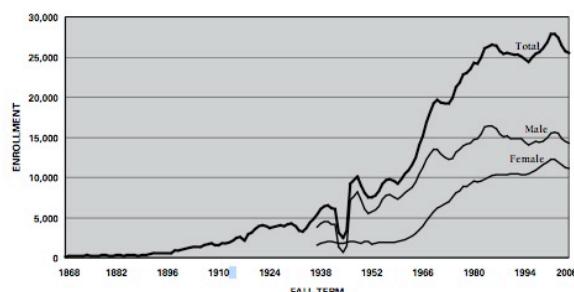
Genres in 2006-07 ISU Fact Book

IOWA STATE UNIVERSITY

Fact Book 2006-2007

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Enrollment: 1868 - 2006



Office of Institutional Research (Source: Office of the Registrar)

IOWA STATE UNIVERSITY

Fact Book 2006-2007

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Alumni by State



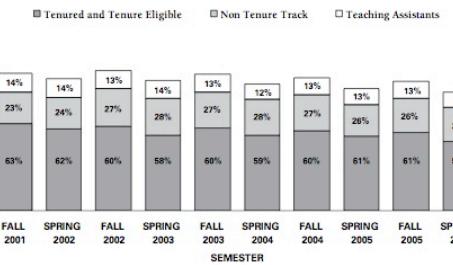
Office of Institutional Research (Source: ISU Foundation)

IOWA STATE UNIVERSITY

Fact Book 2006-2007

SCH Taught by Faculty and Teaching Assistants

Fiscal Year



¹ Student credit hours (SCH) are calculated by multiplying the course credit by the number of students enrolled in the course. SCHs represent those that are taught by tenured faculty, tenure eligible faculty, non tenure track faculty, and teaching assistants funded from academic department General University funds.

Office of Institutional Research

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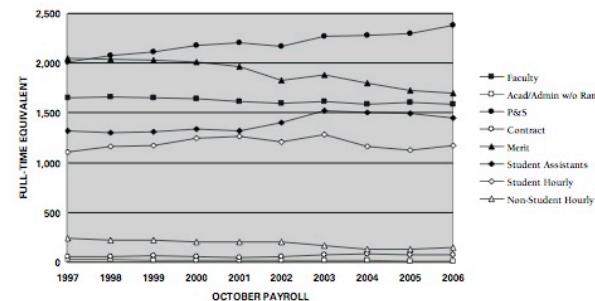
IOWA STATE UNIVERSITY

Fact Book 2006-2007

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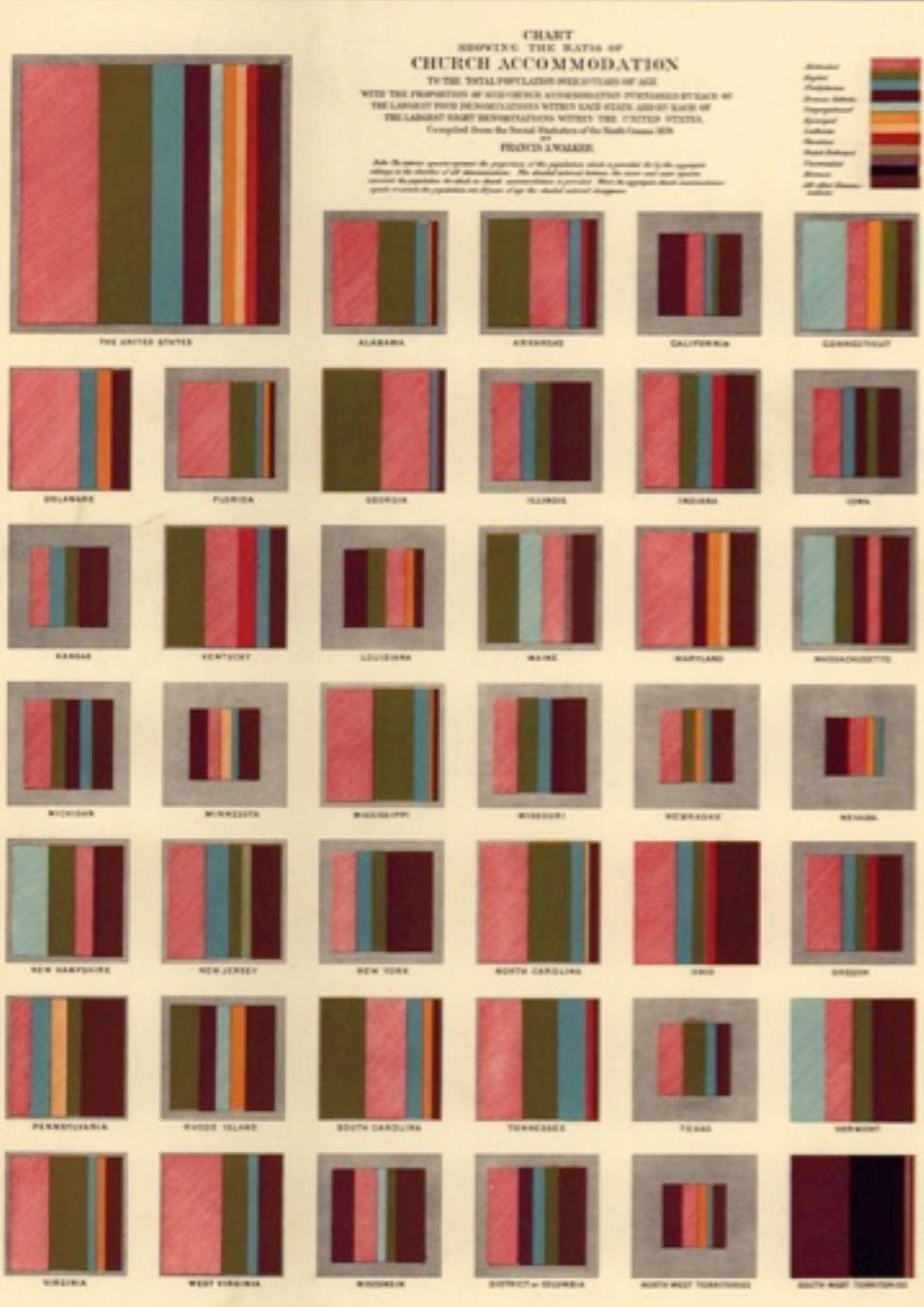
Employee FTE by Classification¹

October Payroll



¹ Student Assistants include Graduate Assistants and Pre/Post Doctoral Research Associates.

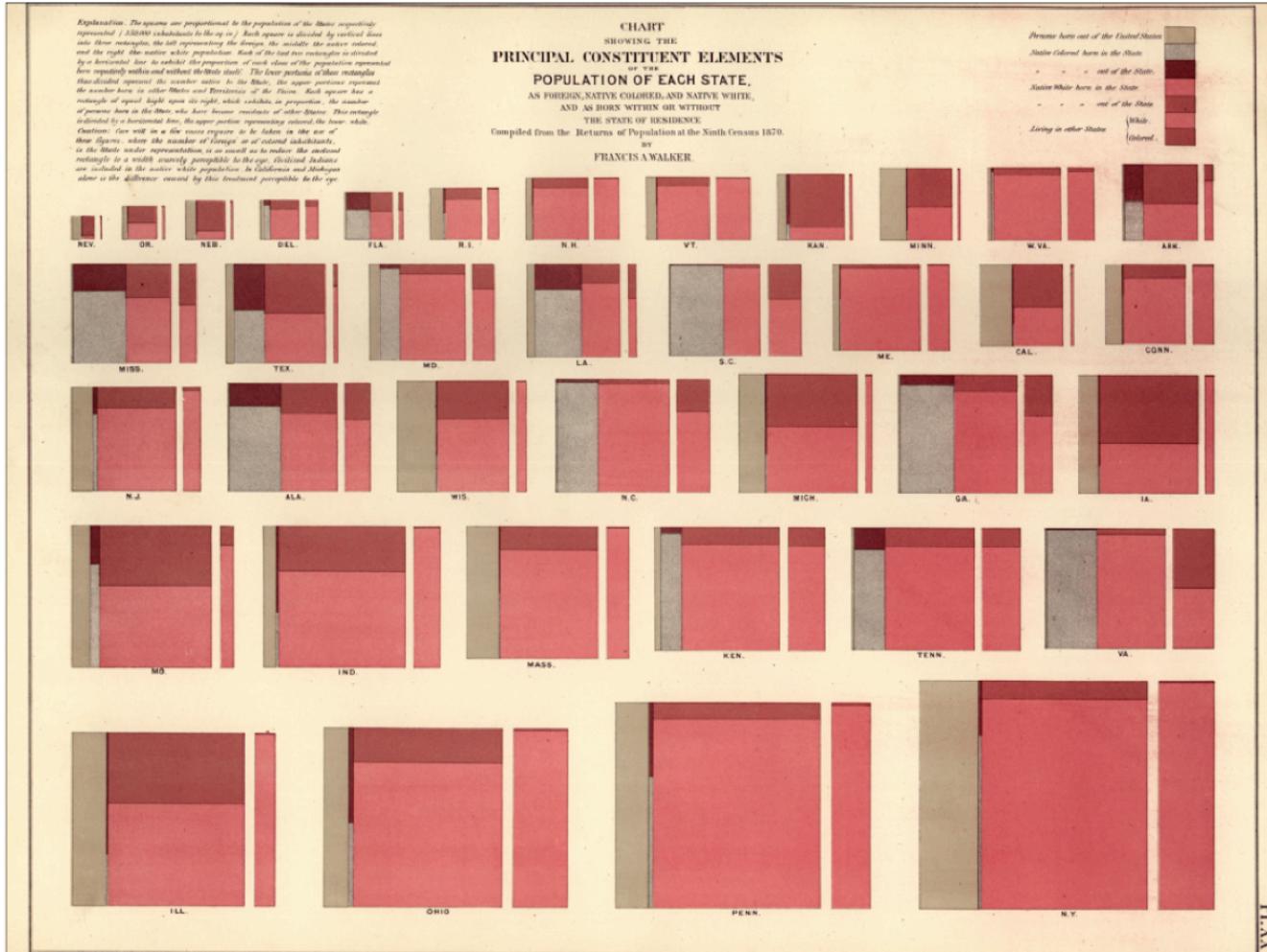
Office of Institutional Research



Walker, Francis A., comp. *Statistical Atlas of the United States Based on the Results of the Ninth Census 1870*. U.S. Census Office. New York: Julius Bien, 1874. Pl. 31.
<http://memory.loc.gov/ammem/gmdhtml/census.html>

Conventional genre?

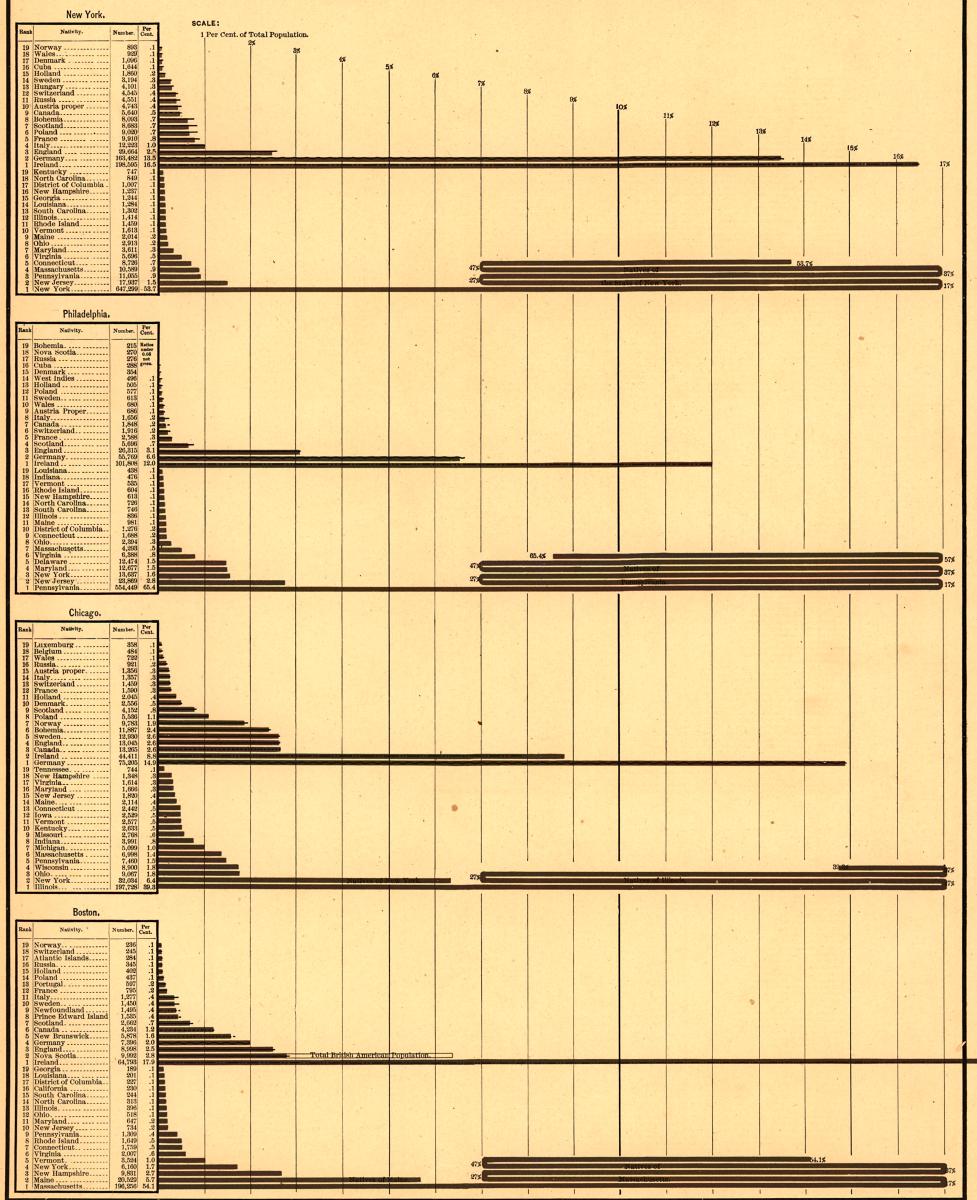
Conventional genre?



Mosaic from the *Statistical Atlas of the United States, 1874*.

RATIOS OF THE PRINCIPAL FOREIGN AND STATE NATIVITIES, TO THE TOTAL POPULATION,
IN NEW YORK, PHILADELPHIA, CHICAGO, AND BOSTON.

(Based on the Returns of the Tenth Census.)



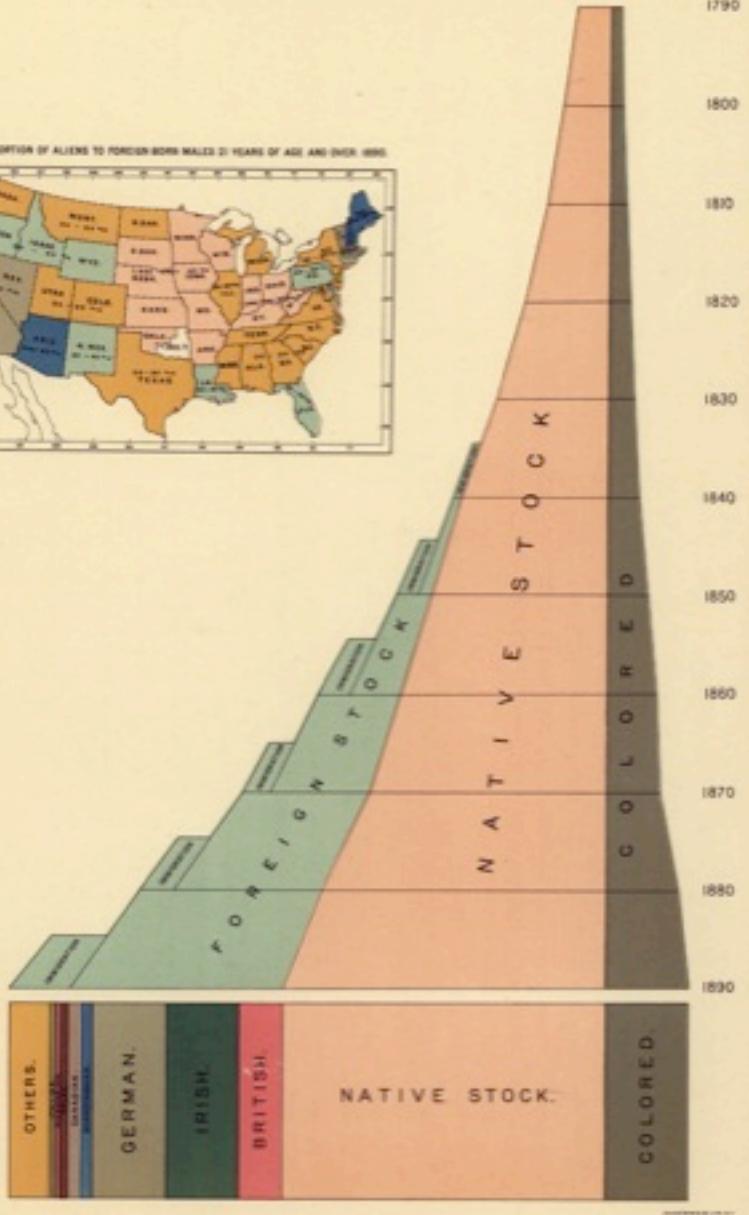
F. W. Hewes and H. Gannett.
Scribner's *Statistical Atlas of the United States*. New York: Charles Scribner's Sons, 1884. Pl. 31.
<http://memory.loc.gov/ammem/gmdhtml/census2.html>

Novelty?

65. GROWTH OF THE ELEMENTS OF THE POPULATION: 1790 TO 1890.

PLATE 22

1790

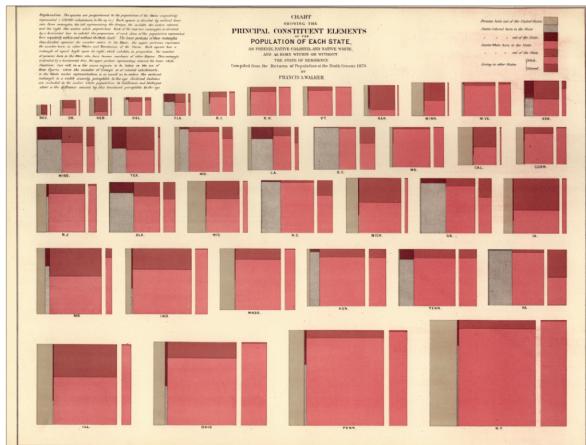


Gannett, Henry. *Statistical Atlas of the United States, Based on the Results of the Eleventh Census*. U.S. Census Office. Washington: GPO, 1898. Pl. 22.
<http://memory.loc.gov/ammem/gmdhtml/census.html>

Novelty?

Genre guidelines

- Choose genres that are familiar to your readers
- If the genre is unfamiliar to your readers, give them some help interpreting it!



Mosaic from the *Statistical Atlas of the United States*, 1874.

Conventional elements

X-Y axis

Circles, lines, bars, dots, boxes

Tick marks, gridlines

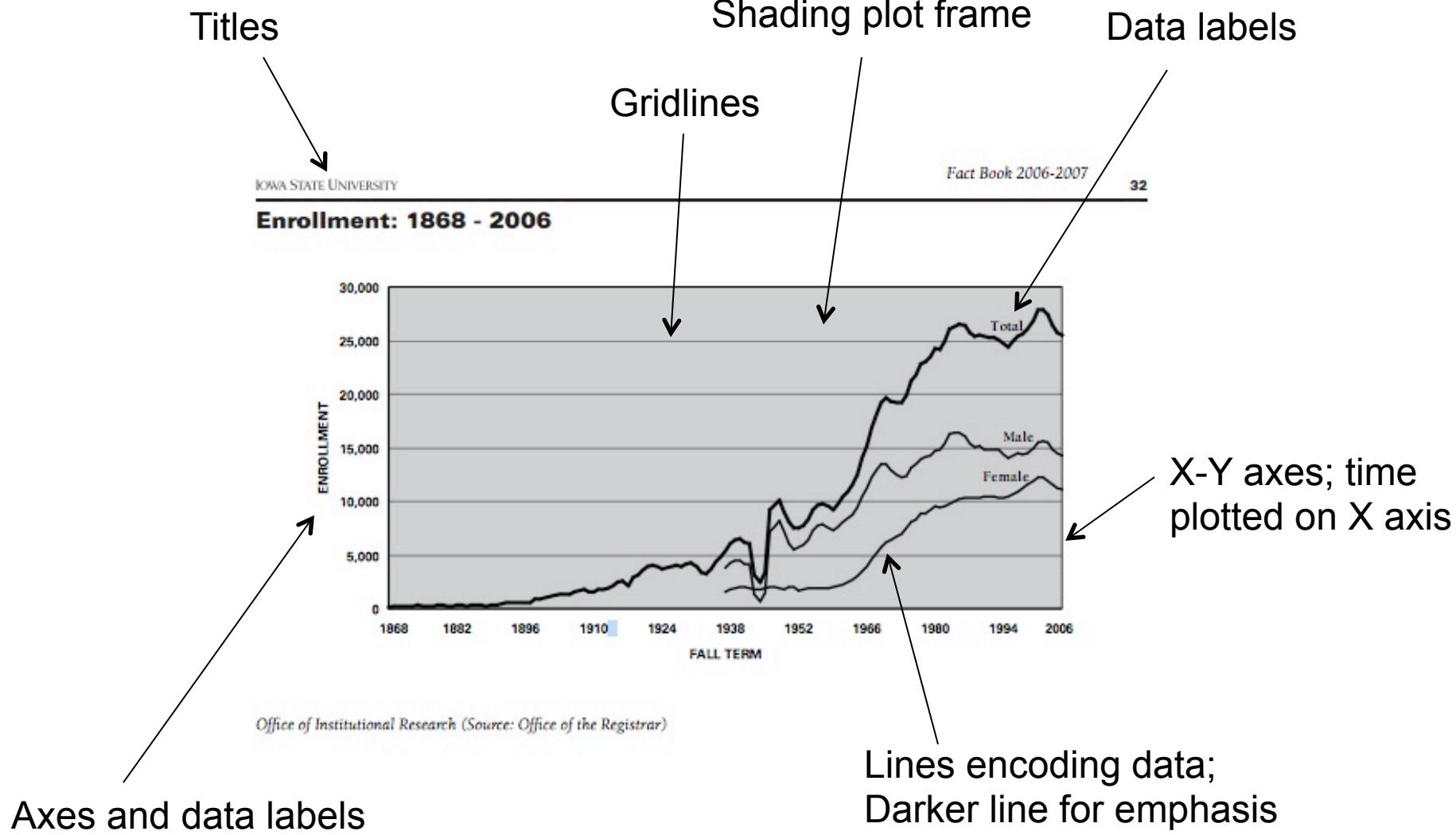
Symbols for variables

Legends

Titles, labels for data

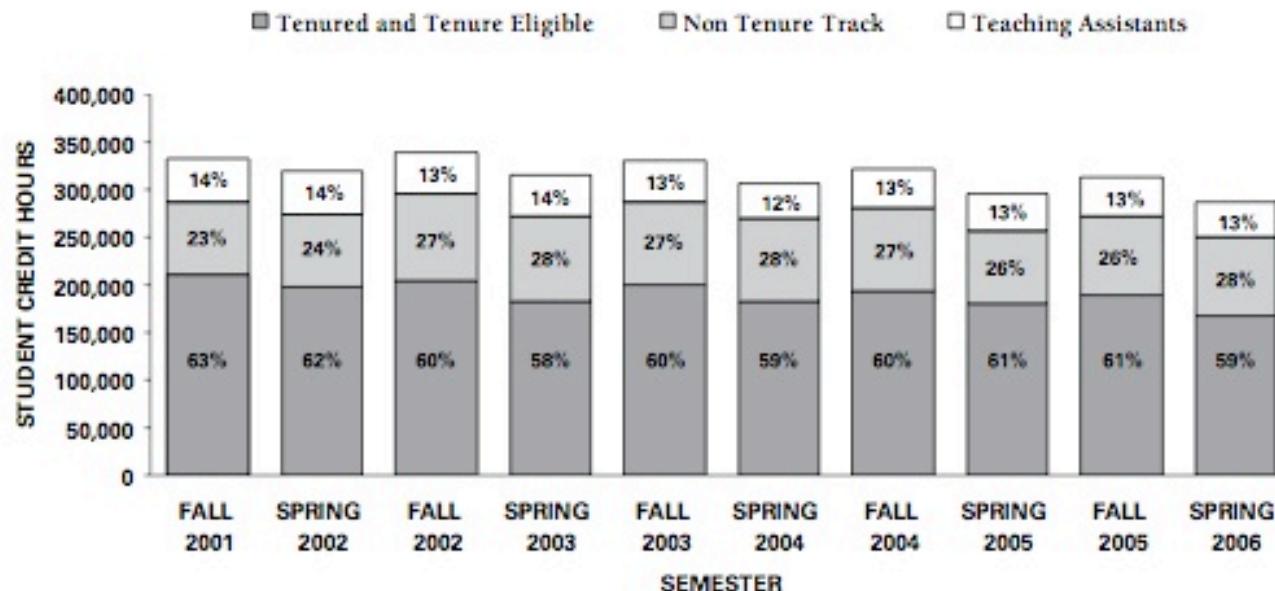
Shading of plot frame

Color



SCH¹ Taught by Faculty and Teaching Assistants

Fiscal Year

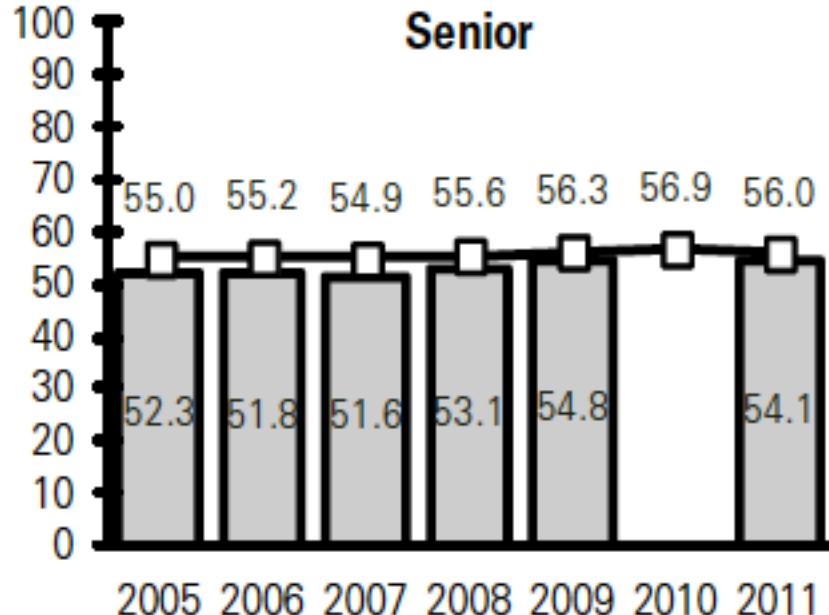
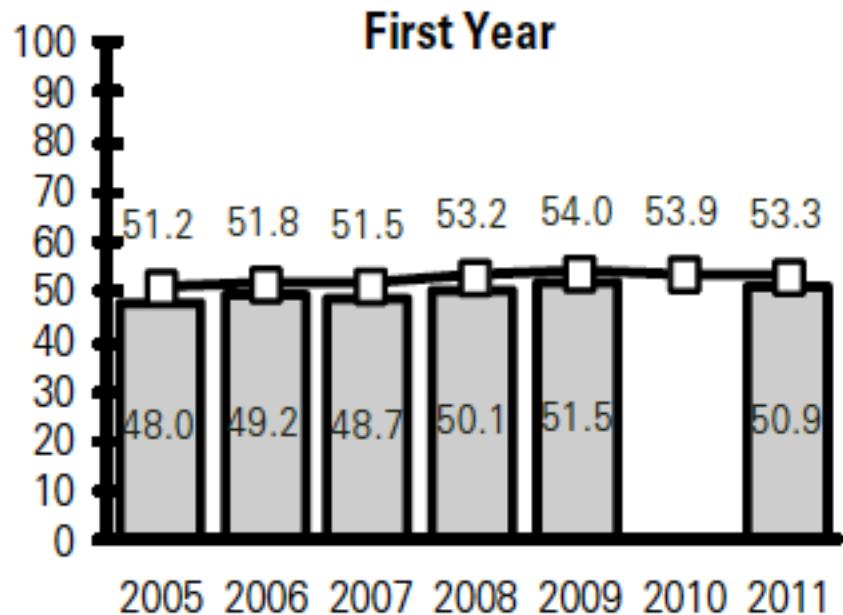


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LEVEL OF ACADEMIC CHALLENGE

Iowa State University

Doctoral/Research Extensive



Iowa State University Office of Institutional Research. President's Council Handout, January 20, 2012. Data from 2011 National Survey of Student Engagement (NSSE). Available online: <http://www.ir.iastate.edu/PDFfiles/PCR/0112Handout.pdf>