ZebraTables

Definition

- Zebra table is when there are alternating white-and-grey stripes on a table.

Current Recommendations:

- Edward Tufte: never use zebra tables, adjust the typography
- Jessica Enders: alternating single shaded rows likely has the best lookup task performance and highest subjective user preference.

Research

- Edward Tufte's Website: zebra tables and lists
- Darkhorse Analytics
- Zebra Striping: More Data for the Case by Jessica Enders (10 Sept 2008)
- Design Better Data Tables by Matthew Ström (3 Aug 2016)
- Web Typography: Designing Tables to be Read, Not Looked At | Richard Rutter | 31 Oct 2017

Edward Tufte's Website: zebra tables and lists

https://www.edwardtufte.com/bboard/q-and-a-fetch-msg?msg_id=0001IV

"Again, this is a solved problem, with examples in Envisioning Information, chapter 3. Strips are merely bureaucratic or designer chartjunk; good typography can always organize a table, no stripes needed."

- Edward Tufte

Another suggestion, by Matthew Ericson, on how to get around Zebra Tables.

Darkhorse Analytics

From: darkhorseanalytics.com

Link to step by step slides: https://www.darkhorseanalytics.com/blog/clear-off-the-table

Remove
to improve
the **data tables** edition

Created by **Darkhorse Analytics**   www.**darkhorseanalytics**.com

Comments:

Edward Tufte
@EdwardTufte

A+
Table design/editing = brilliant.
@dhanalytics gets it right,
fixes #Excel tables
darkhorseanalytics.com/blog/wp-conten...
#statistics #dataviz #ddj

4:36 PM · Apr 3, 2014 · Twitter for Websites

http://

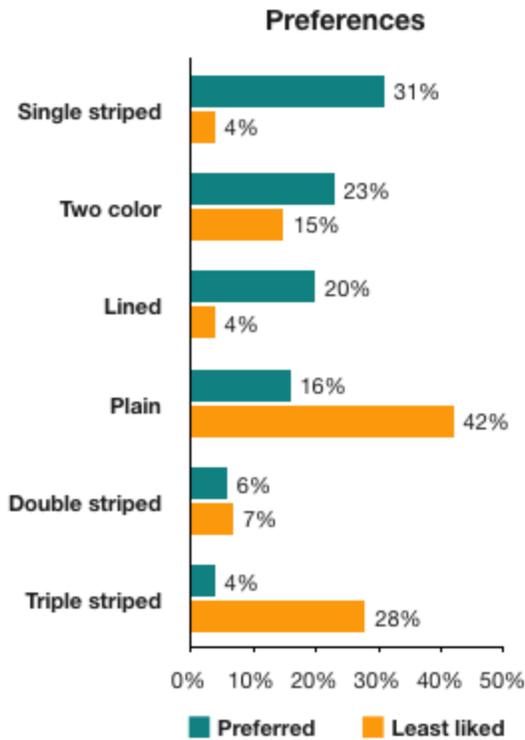**Zebra Striping: More Data for the Case by Jessica Enders (10 Sept 2008)**

Jessica initially thought zebra stripping would improve performance. She ran two tests to test this.

Analyzed performance (speed to look up something in a chart) across 2276 surveys online.

Zebra striping improved the success rate in numerical lookup with statistically significant accuracy across several different parameters. (Statistically significant in yellow. Orange is p=0.0545. No highlight is not significant.).

Preferences

	Preferred	Least liked
Single striped	31%	4%
Two color	23%	15%
Lined	20%	4%
Plain	16%	42%
Double striped	6%	7%
Triple striped	4%	28%

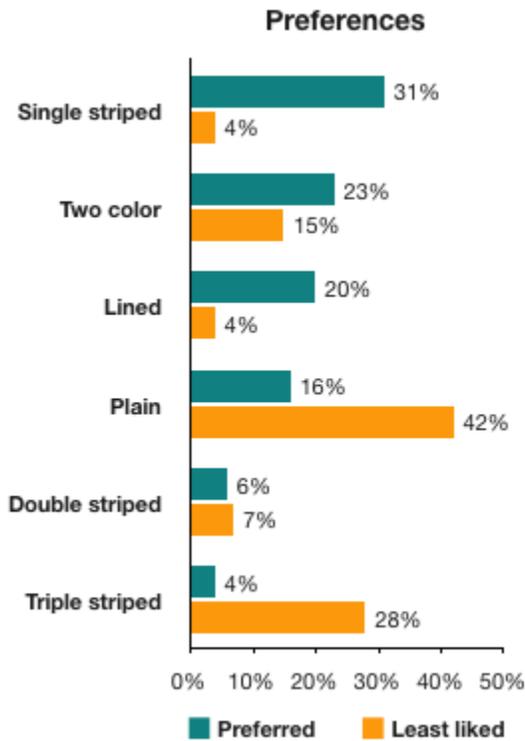**Question**: What was the change in speed between these studies?

Criticism: This is the table that was presented. It is unclear what these tables looked like in their plain and lined versions and how the text and line spacing was adjusted. From the study below, it appears the spacing wasn't adjusted.

Also, this columns are quire far apart

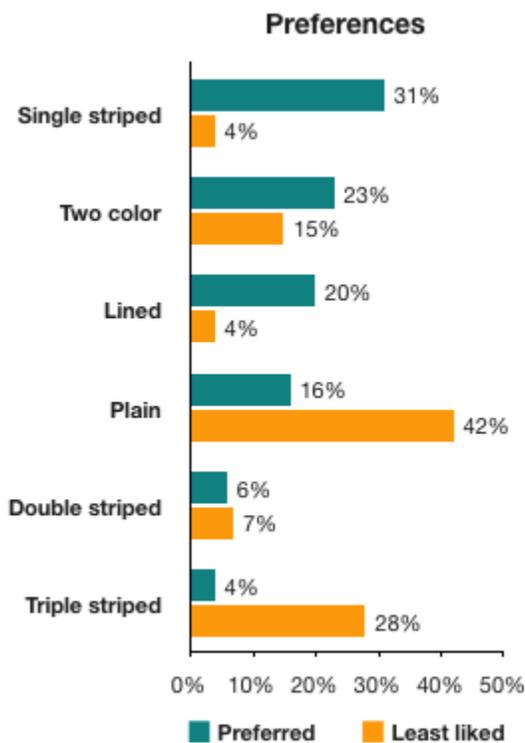| Country	Land area under rice (hectares)	Coastline ('000 km)
Australia	70	25,760
Bangladesh	10,900	
Belgium		67
Brazil	3,730	
Burma	6,300	
Cambodia	2,240	
Canada		202,080
China	26,510	
Denmark		7,314
Egypt	630	
Finland		1,250
Germany		2,389
Iceland		4,970
India	42,400	
Indonesia	11,900	
Iran	560	
Ireland		1,448
Italy	220	7,600
Japan	1,670	29,751
Mexico		9,330
Netherlands		451
New Zealand		15,134
Nigeria	1,800	
Norway		25,148
Pakistan	2,460	
Philippines	4,090	
Poland		491
Portugal		1,793
Russia	160	
South Korea	1,020	2,413
Spain	120	4,964
Sweden		3,218
Taiwan	270	
Thailand	10,320	
Turkey		7,200
United Kingdom		12,429
United States	1,210	19,924
Vietnam	7,470	

User preference

Jessica makes the argument, that is striping doesn't harm usability, and if users prefer it, then perhaps its should be included. The third study was to test user preference. Users were asked to rank these tables in order of preference from first to last.

Preferences

These images could not be presented in a random order to the user in the question.

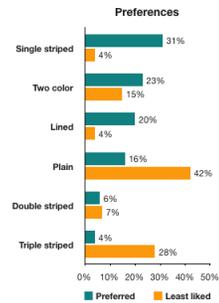The final results show the following user preferences.

- The least liked charts are plain and triple striped.
- The most liked are single striped, double striped, and lined
    - Note: the two-colour option has 15% of people who liked it least. Whereas single-striped and lined has less people like it less
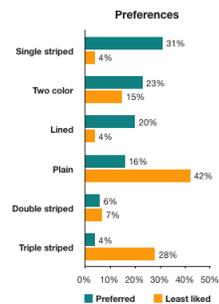
Preferences

Design Better Data Tables by Matthew Ström (3 Aug 2016)

https://medium.com/mission-log/design-better-data-tables-430a30a00d8c

Font: ensure its **Lining** (not old style).

Font: ensure its **tabular**, not proportional

Example the font: Work Sans (link to Google Fonts).

How to enable tabular lining in CSS: CSS-Tricks article.

Alignment

Textual data: left-aligned

Numerical data: right-aligned

Column headers: aligned with the data

No center alignment

Units: include only with the first data point in each column

Rules:

Vertical rules likely unneeded

Horizontal rules allow you to have less vertical space

"Zebra striping is bad."

Web Typography: Designing Tables to be Read, Not Looked At | Richard Rutter | 31 Oct 2017

https://alistapart.com/article/web-typography-tables/

Excerpts form the article:

Align to the decimal point: how to with CSS

"The syntax of the new value is simple. You include the alignment character (usually a full stop or comma) in quotes, followed by a space and your desired alignment keyword, which defaults to right if you omit it. For example, the following will centre the data and align to a decimal point as in our prior example:"

```
td { text-align: "." center; }
```

"To specify **tabular lining numerals**, set the font-variant-numeric property with a value of lining-nums and tabular-nums:"

```
table { font-variant-numeric: lining-nums tabular-nums;
}
```

"The equivalent properties for legacy browsers requiring font-feature-settings, use the lnum and tnum OpenType feature tags."

"If you need to specify **proportional numerals**, set the `font-variant-numeric` property with a value of `proportional-nums`. For legacy browsers requiring `font-feature-settings`, use the `pnum` OpenType feature tag."

Oblique headings to save space

"You can use a simple CSS translation to achieve the effect. You will also need to absolutely position the headings so the original width of the columns isn't retained and they shrink to wrap the data instead."

```
th {
    transform-origin: bottom left;
    position: absolute;
}
th.degC {
    transform: translate(2.58em,-2em) rotate(-60deg);
}
th.degF {
    transform: translate(5.14em,-2em) rotate(-60deg);
}
```

Scroll the table offscreen

```
.fig-table { max-width: 100%; overflow-x: scroll; }
```

"It is important not to set a width on your table; the browser can then compress the table as far as it can before overflowing off the screen. To preserve readability, make good use of non-breaking spaces and `white-space:nowrap` to limit the amount the data wraps in the cells. It's better to have a readable table that requires scrolling than an unreadable one which doesn't."

Responsive Tables

Examples of Tables

Filament Group

http://filamentgroup.github.io/tablesaw/demo/modeswitch.html