

Chapter 7: Data Analysis, Interpretation, and Presentation

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Intro HCI
02/26/2013

Data analysis

Qualitative vs. quantitative



Qualitative vs. quantitative

- Raw data
- Qualitative data
- Quantitative data
- Initial processing



<https://en.wikipedia.org/wiki/Mario>

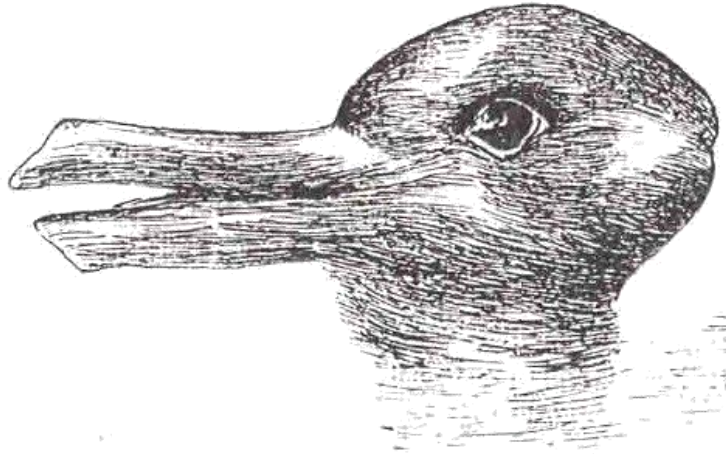
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Key Issues

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Key issues

Interpretation



<https://richardwiseman.wordpress.com/2011/05/17/what-do-you-see-when-you-look-at-this-14/>

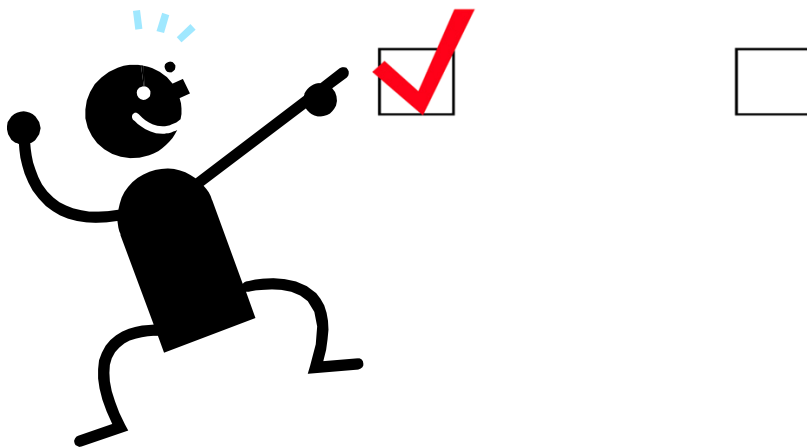
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Key issues

Claims

True

False



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Key issues

Presentation

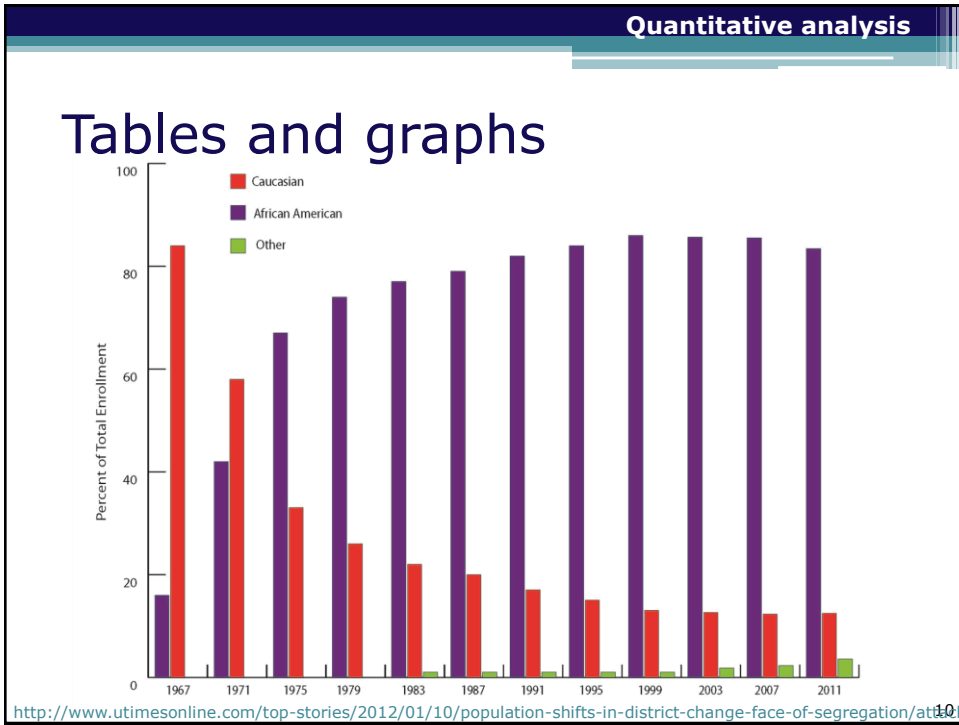
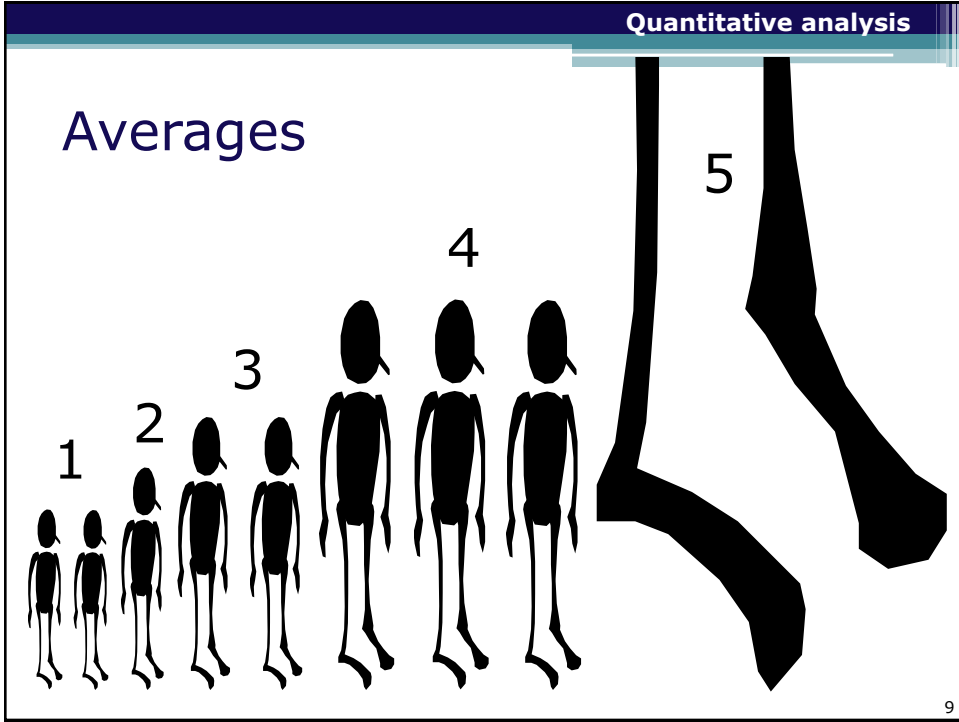


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Data Analysis

Quantitative Analysis

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Quantitative analysis

Tables and graphs

Scores by Team per Season



<http://www.jpowered.com/php-scripts/adv-graph-chart/demo/vbar/index.htm>

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Quantitative analysis

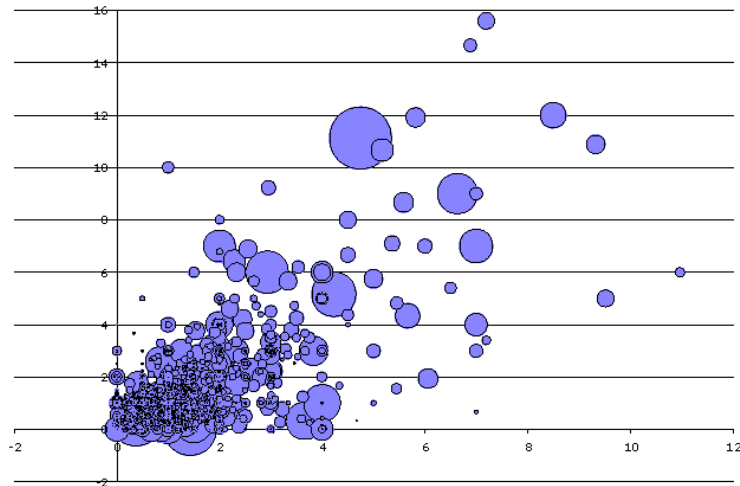
Example



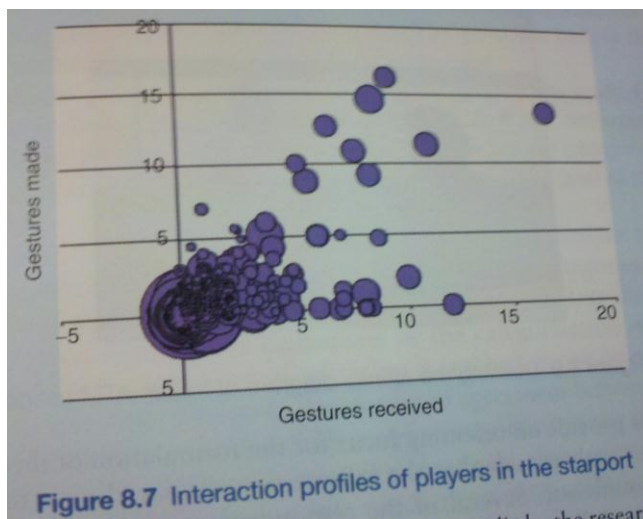
http://venturebeat.com/2011/06/24/star-wars-galaxies-shuts-down/121004_sonygame/

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Example



Example



Qualitative Analysis

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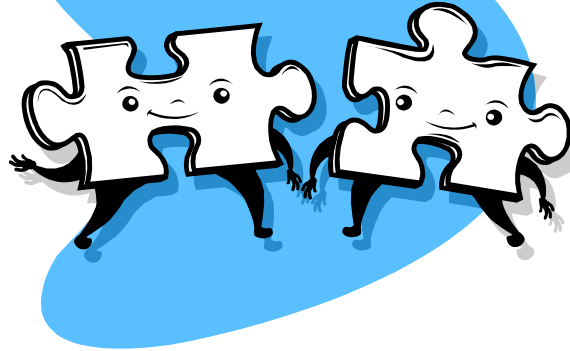
Identify patterns and themes



https://en.wikipedia.org/wiki/File:Fractal_Broccoli.jpg

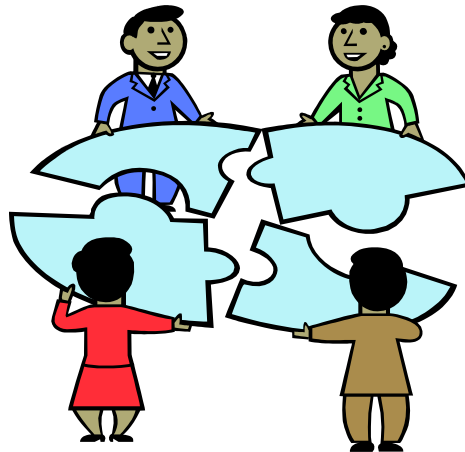
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Categorizing data



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Categorizing data: Content analysis



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Categorizing data: Discourse analysis



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Categorizing data: Conversation analysis



<http://www.iconarchive.com/show/must-have-icons-by-visualpharm/Zoom-Out-icon.html>

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Critical incidents



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Theoretical Frameworks

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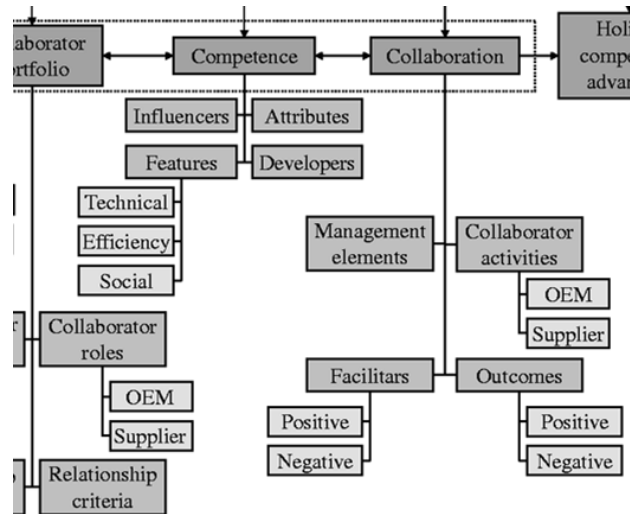
Grounded Theory



Coding: Open coding



Coding: Axial coding



<https://www.emeraldinsight.com/journals.htm?articleid=1838289&show=html>

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Coding: Selective coding



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Grounded theory

Question data



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Grounded theory

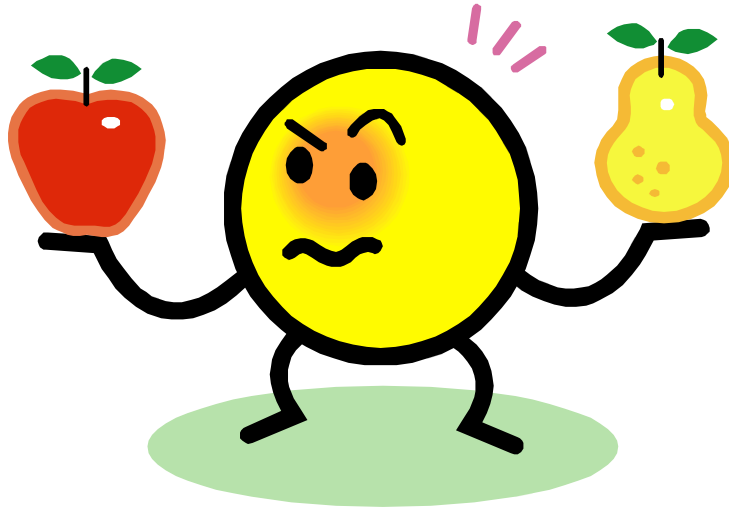
Levels of analysis



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Grounded theory

Comparisons



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Theoretical frameworks

Distributed cognition

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Granularity



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Immersion



<http://starwars.wikia.com/wiki/Stormtrooper>

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Understand work practices



<http://starwars.wikia.com/wiki/Stormtrooper>

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Cognitive system



<http://starwars.wikia.com/wiki/Stormtrooper>

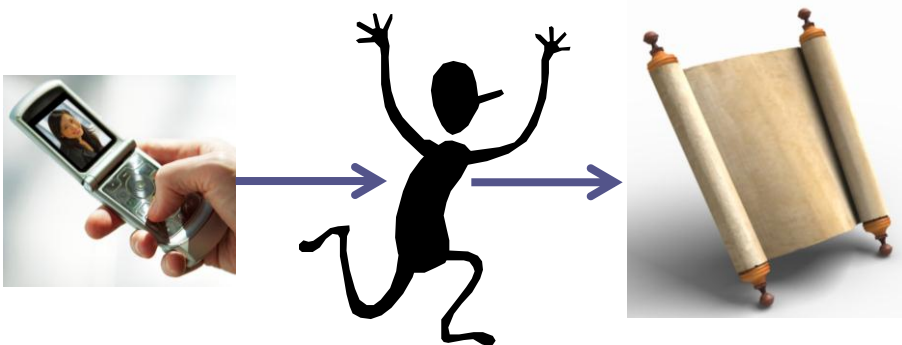
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Communication pathways



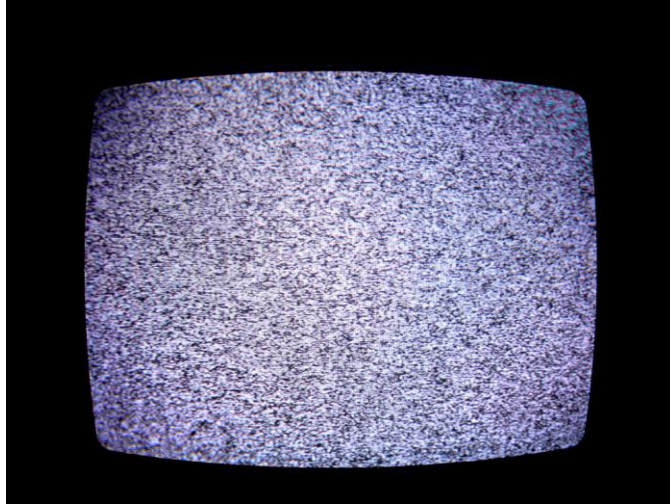
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Propagation of representational states



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Benefits



<http://www.geekjuicemedia.com/12/post/2012/03/youth-is-wasted-on-the-young.html>

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Benefits



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Example



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Your turn



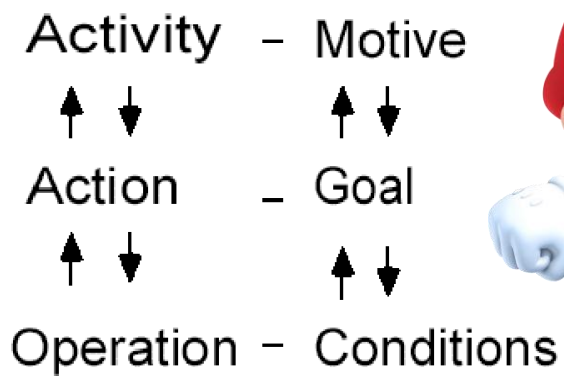
http://nintendo.wikia.com/wiki/Dr._Mario_%28character%29

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Activity theory

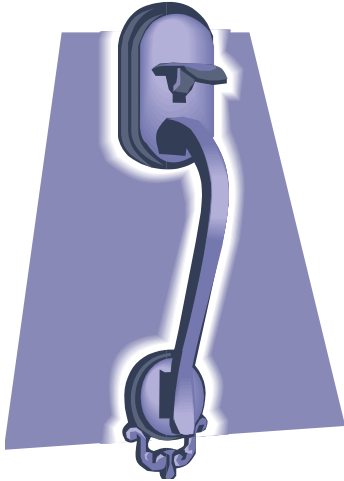
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Individual model



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Physical artifacts



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Abstract artifacts



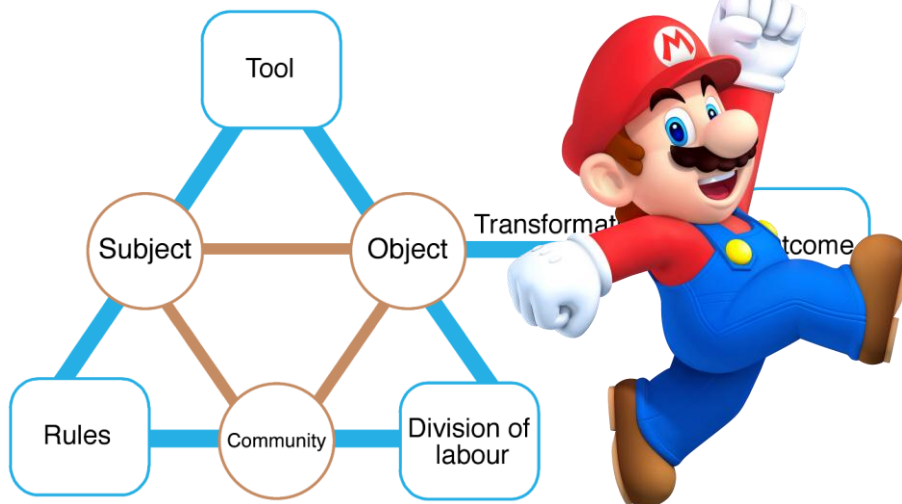
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Social context



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Overall system



www.id-book.com, <https://en.wikipedia.org/wiki/Mario>

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Presentation

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Rigorous notation



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Stories



Summary

