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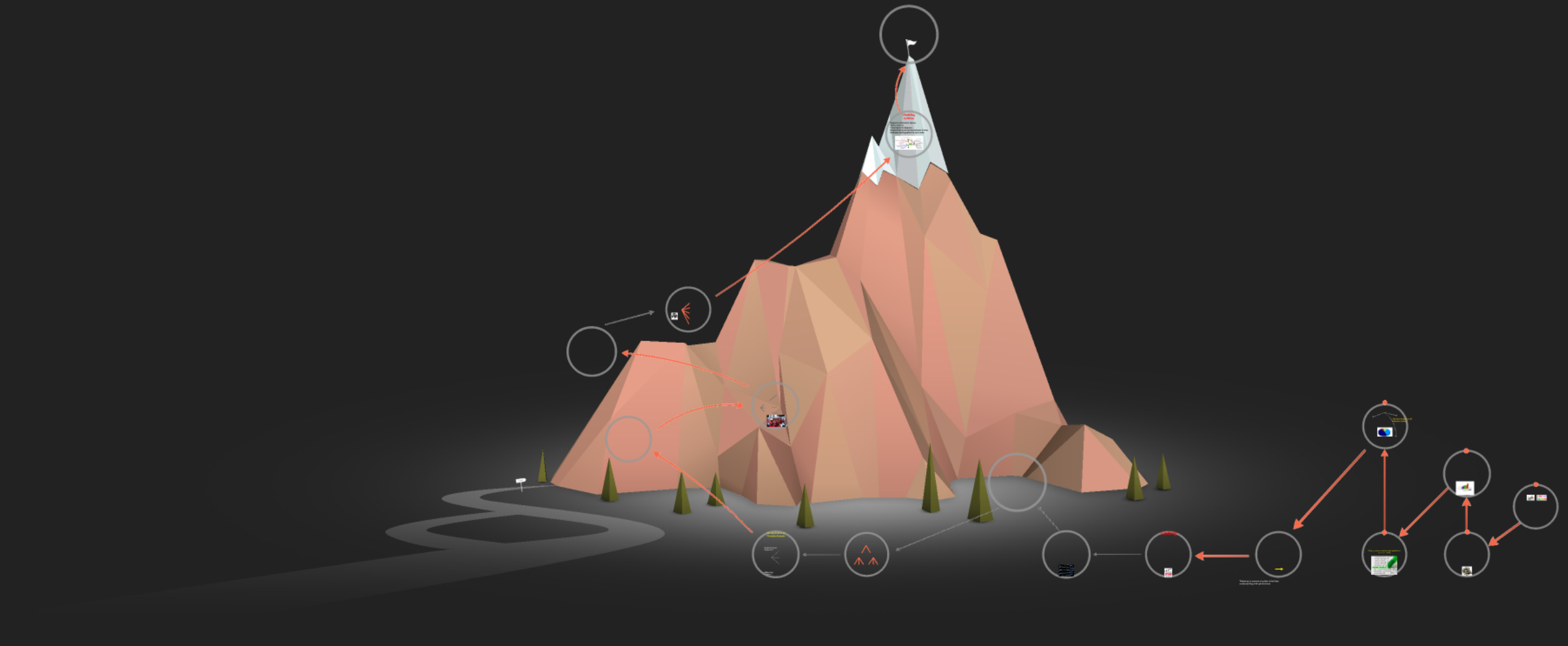
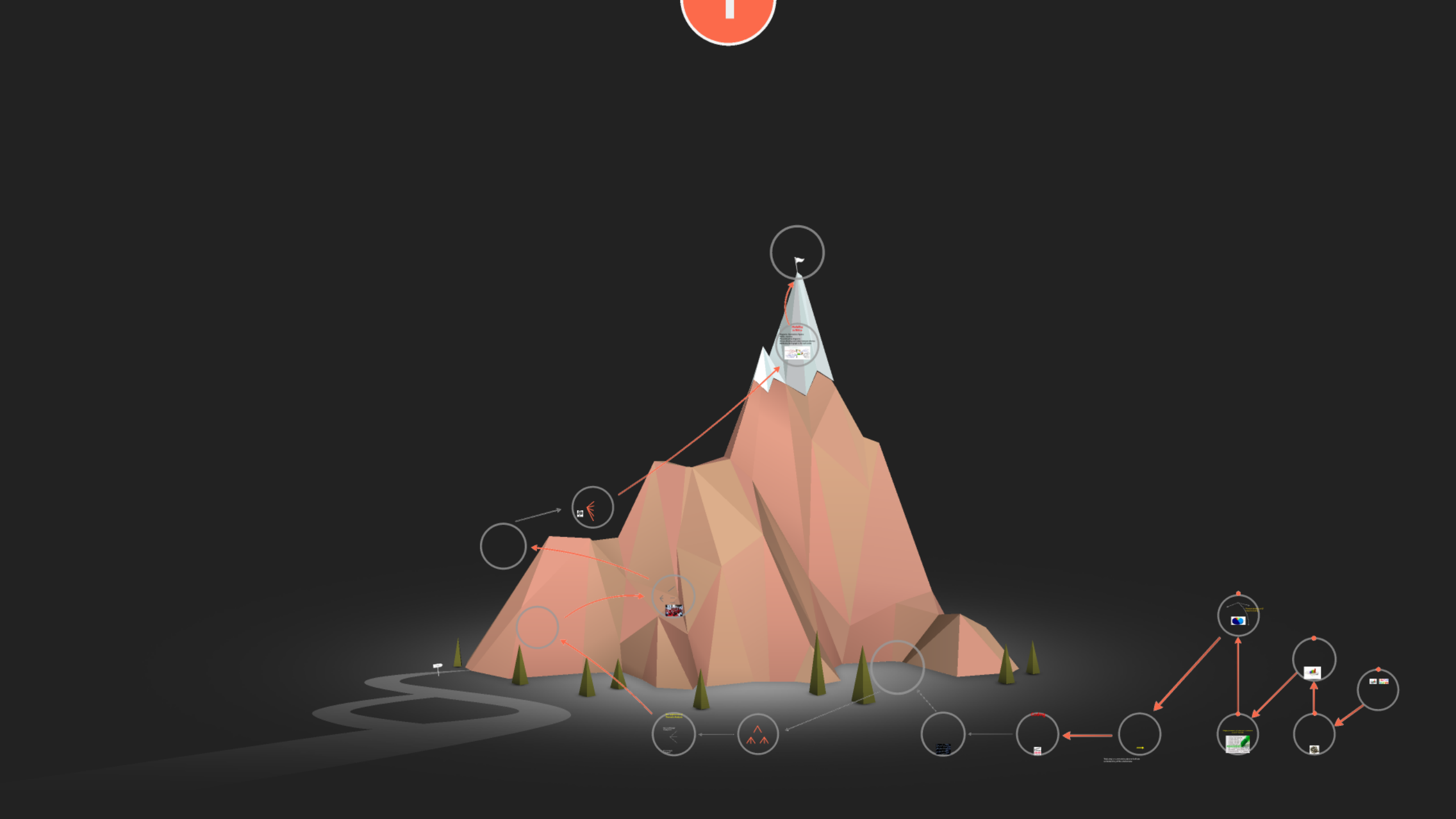
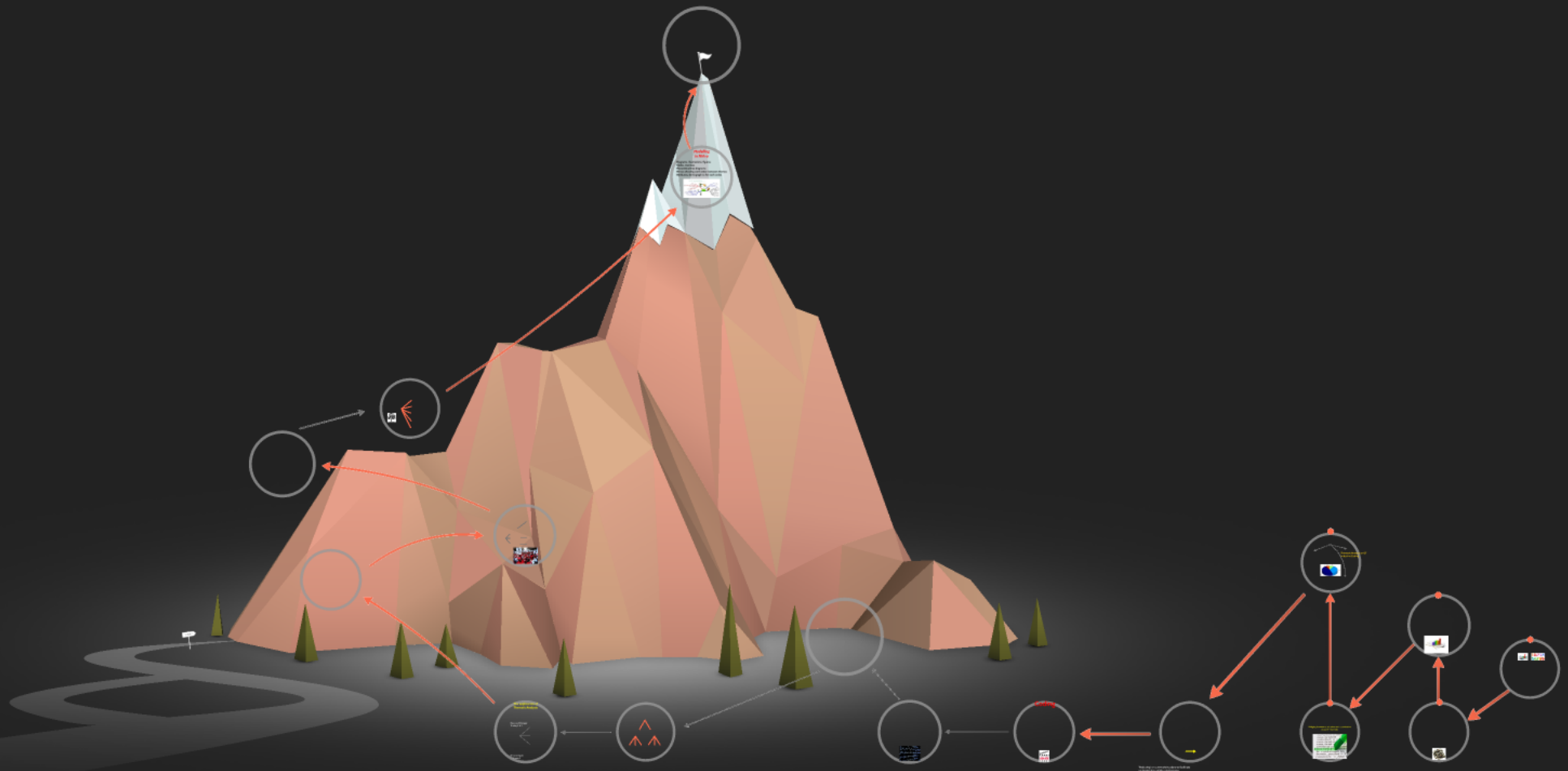


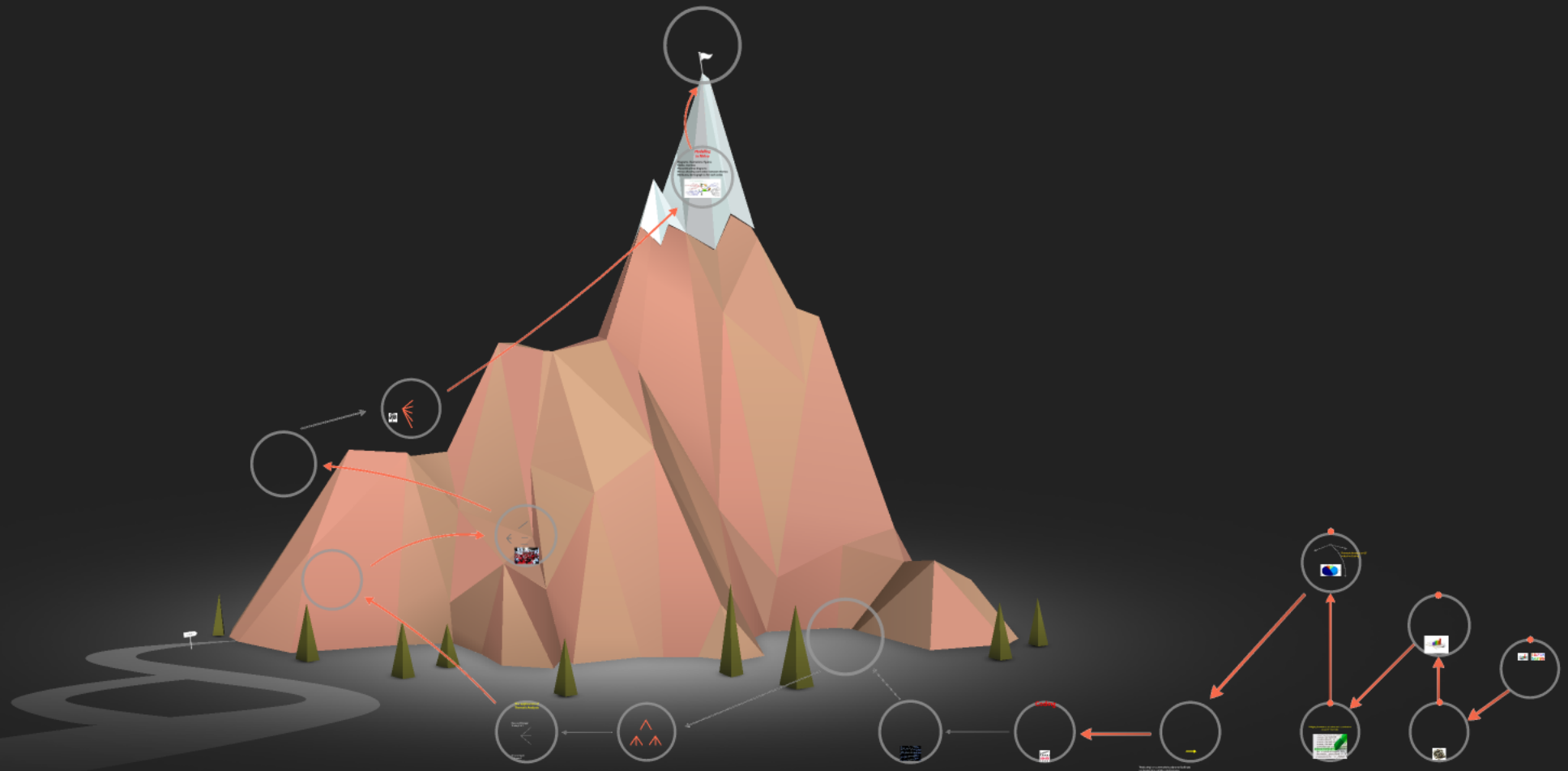


Coding Theory



Coding Theory

Using NVivo




10234
56789

NOMINAL data

NOMINAL data

ORDINAL data

NOMINAL data

ORDINAL data

INTERVAL data

NOMINAL data

ORDINAL data

INTERVAL data

RATIO data

NOMINAL data

qualitative data, not 'ordered', categorical description

ORDINAL data

INTERVAL data

RATIO data

NOMINAL data

qualitative data, not 'ordered', categorical description

ORDINAL data

provides some order in relation to each other in a ranked fashion.
However, the intervals of the order is not exact.

INTERVAL data

RATIO data

NOMINAL data

qualitative data, not 'ordered', categorical description

ORDINAL data

provides some order in relation to each other in a ranked fashion. However, the intervals of the order is not exact.

INTERVAL data

like ordinal data but the intervals between each value are exact or equally split

RATIO data

NOMINAL data

qualitative data, not 'ordered', categorical description

ORDINAL data

provides some order in relation to each other in a ranked fashion. However, the intervals of the order is not exact.

INTERVAL data

like ordinal data but the intervals between each value are exact or equally split

RATIO data

most metric data with a natural zero point

EXAMPLES

EXAMPLES

Nominal - Ordinal - Interval - Ratio

EXAMPLES

Nominal - Ordinal - Interval - Ratio

What is your weekly salary?

EXAMPLES

Nominal - Ordinal - Interval - Ratio

What is your weekly salary?

(1) I have too much money

(2) a(...) a lot; (b) average; (c) a little

(3) a(...) <£50; b(...) £50 - £100; c(...) £101 - £500 ; d(...) >£500

(4) £500

Mathematical Property of the Data and Relevant Research Methods

Mathematical Property of the Data and Relevant Research Methods

Qualitative

Mathematical Property of the Data and Relevant Research Methods

Qualitative

Narrative Analysis
Grounded Theory
Thematic Analysis
Discourse Analysis
Text Analysis etc.

Mathematical Property of the Data and Relevant Research Methods

Qualitative

Narrative Analysis
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Discourse Analysis
Text Analysis etc.

Quantitative

Mathematical Property of the Data and Relevant Research Methods

Qualitative

Narrative Analysis
Grounded Theory
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Discourse Analysis
Text Analysis etc.

Quantitative

NON-PARAMETRICS:
Chi Square, Wilcoxon test etc.
PARAMETRICS:
Regression, Factor Analysis, Logistic, Correlation, SEM etc.

What is code (coding)?

What is code (coding)?

A single word or a phrase

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A single word or a phrase

Grouping the interview texts according to characteristics (like a filing system)

What is code (coding)?

A single word or a phrase

Grouping the interview texts according to characteristics (like a filing system)

Breaking down the texts into units or codes

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Summarising ('reducing') the texts into important codes or themes

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A single word or a phrase

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Breaking down the texts into units or codes

Summarising ('reducing') the texts into important codes or themes

Concrete 

What is code (coding)?

A single word or a phrase

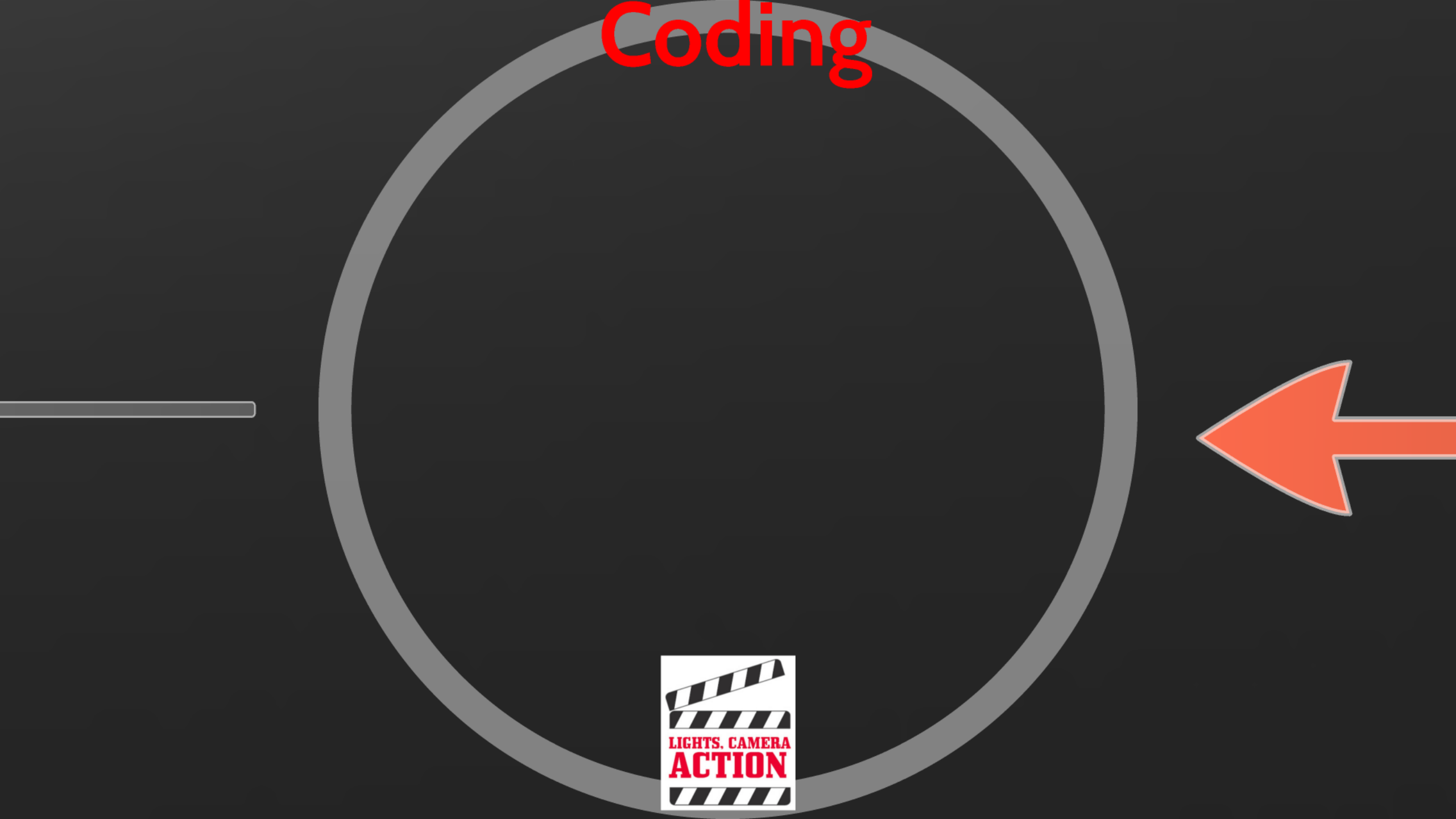
Grouping the interview texts according to characteristics (like a filing system)

Breaking down the texts into units or codes

Summarising ('reducing') the texts into important codes or themes

Concrete → Abstract

Coding



Coding

- Concrete to abstract
- Coding before conceptualising
- Be precise; not too wide nor too narrow
- Be 'sensitive' to what is in the data

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Example: ... He constantly listens to his criminal leader as such his action does not adhere to widely accepted social norms.

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Example: ... He constantly listens to his criminal leader as such his action does not adhere to widely accepted social norms.

Possible codes:

1. Behaviour (too broad) ... or ...

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Example: ... He constantly listens to his criminal leader as such his action does not adhere to widely accepted social norms.

Possible codes:

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Example: ... He constantly listens to his criminal leader as such his action does not adhere to widely accepted social norms.

Possible codes:

1. Behaviour (too broad) ... or ...

2. Deviant Behaviour (precise)

3. Going astray (precise)

Bridging between qualitative and quantitative research methods

Thematic Analysis

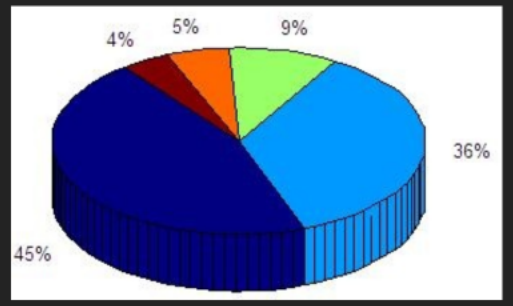
Bridging between qualitative and quantitative research methods

Thematic Analysis

A method for coding and analysing qualitative data
(interview texts, website contents, flickrs, twitter, bloggers, newspapers, photoes, videos, archives, essays etc.)

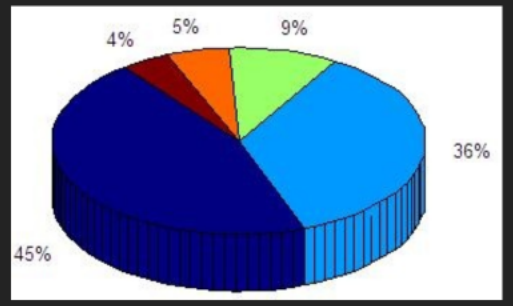
Bridging between qualitative and quantitative research methods

Thematic Analysis or GT
Inductive Coding



QUALITATIVE Analysis

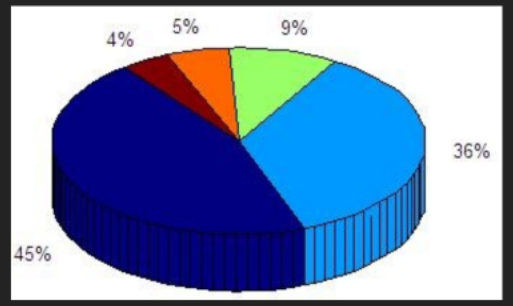
Thematic Analysis or GT Inductive Coding



QUALITATIVE Analysis

Thematic Analysis Deductive Coding

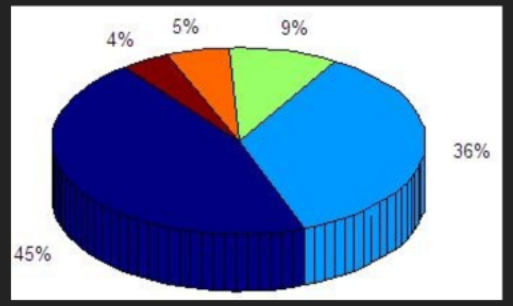
Thematic Analysis or GT Inductive Coding



QUALITATIVE Analysis

Thematic Analysis Deductive Coding

Codes derived from a priori theory (relevant literature)



Thematic Analysis or GT Inductive Coding

QUALITATIVE Analysis

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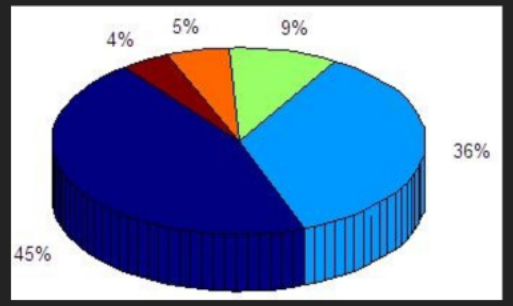


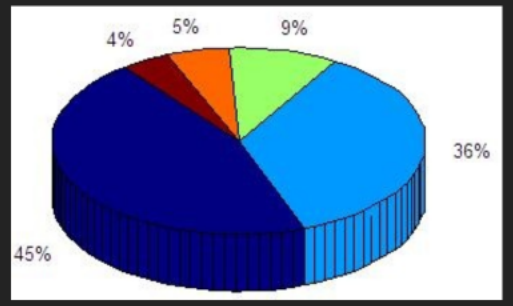
Thematic Analysis or GT Inductive Coding

Word-Frequency Analysis

QUALITATIVE Analysis

Thematic Analysis Deductive Coding

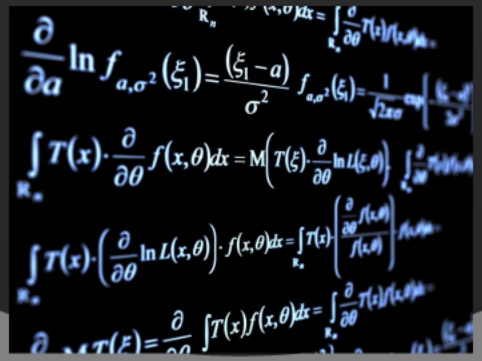
Codes derived from a priori theory (relevant literature)



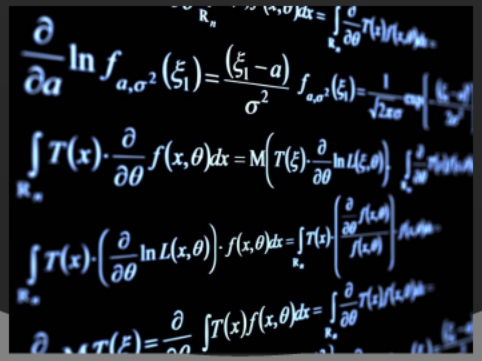
Thematic Analysis or GT Inductive Coding

Counting and comparisons of codes followed by interpretation of the underlying context.

Word-Frequency Analysis

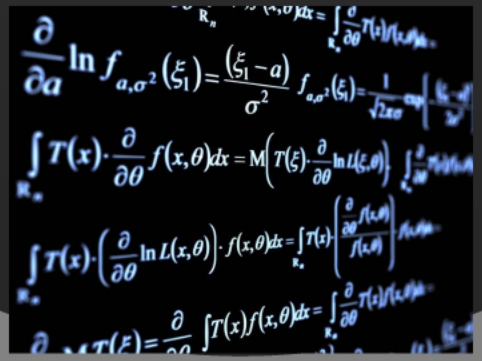

$$\frac{\partial}{\partial a}\ln f_{a,\sigma^2}(\xi_1)=\frac{(\xi_1-a)}{\sigma^2}$$
$$\int_{R_n} T(x)\cdot\frac{\partial}{\partial\theta}f(x,\theta)dx=\mathrm{M}\left(T(\xi)\cdot\frac{\partial}{\partial\theta}\ln L(\xi,\theta)\right)$$
$$\int_{R_n} T(x)\cdot\left(\frac{\partial}{\partial\theta}\ln L(x,\theta)\right)\cdot f(x,\theta)dx=\int_{R_n} T(x)\cdot\left(\frac{\frac{\partial}{\partial\theta}f(x,\theta)}{f(x,\theta)}\right)$$

Coding is a comprehensibility problem. It follows the set theory in mathematics.



Coding is a comprehensibility problem. It follows the set theory in mathematics.

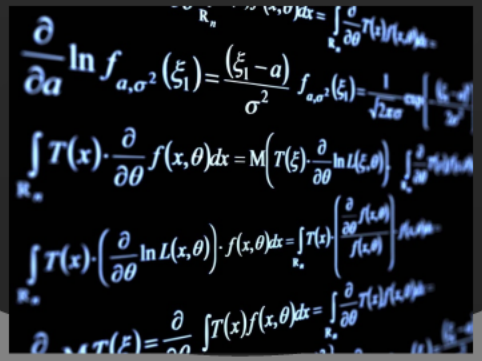
"The Coding Theory"



Coding is a comprehensibility problem. It follows the set theory in mathematics.

"The Coding Theory"

Example of a transcript: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, ..., n-5, n-4, n-3, n-2, n-1



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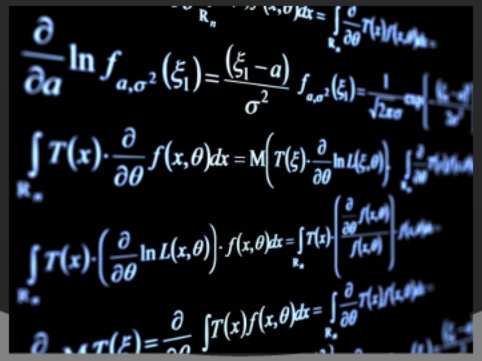
Example of a transcript: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, ..., n-5, n-4, n-3, n-2, n-1

Possible codes for the transcript:
Code 1 = (a set of real number < n) - too broad



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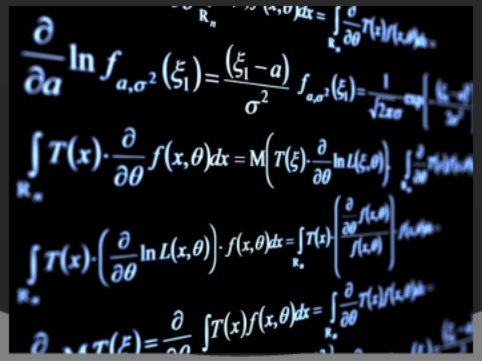
Possible codes for the transcript:

Code 1 = (a set of real number < n) - too broad

Code 2 = (a set of rational number < n) - too broad



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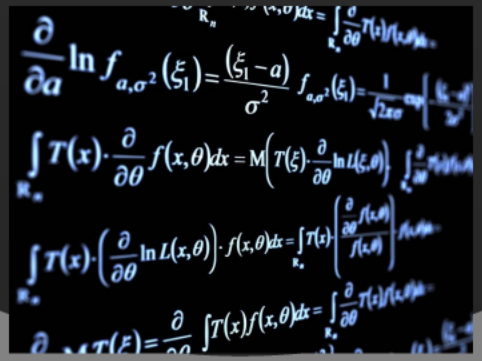
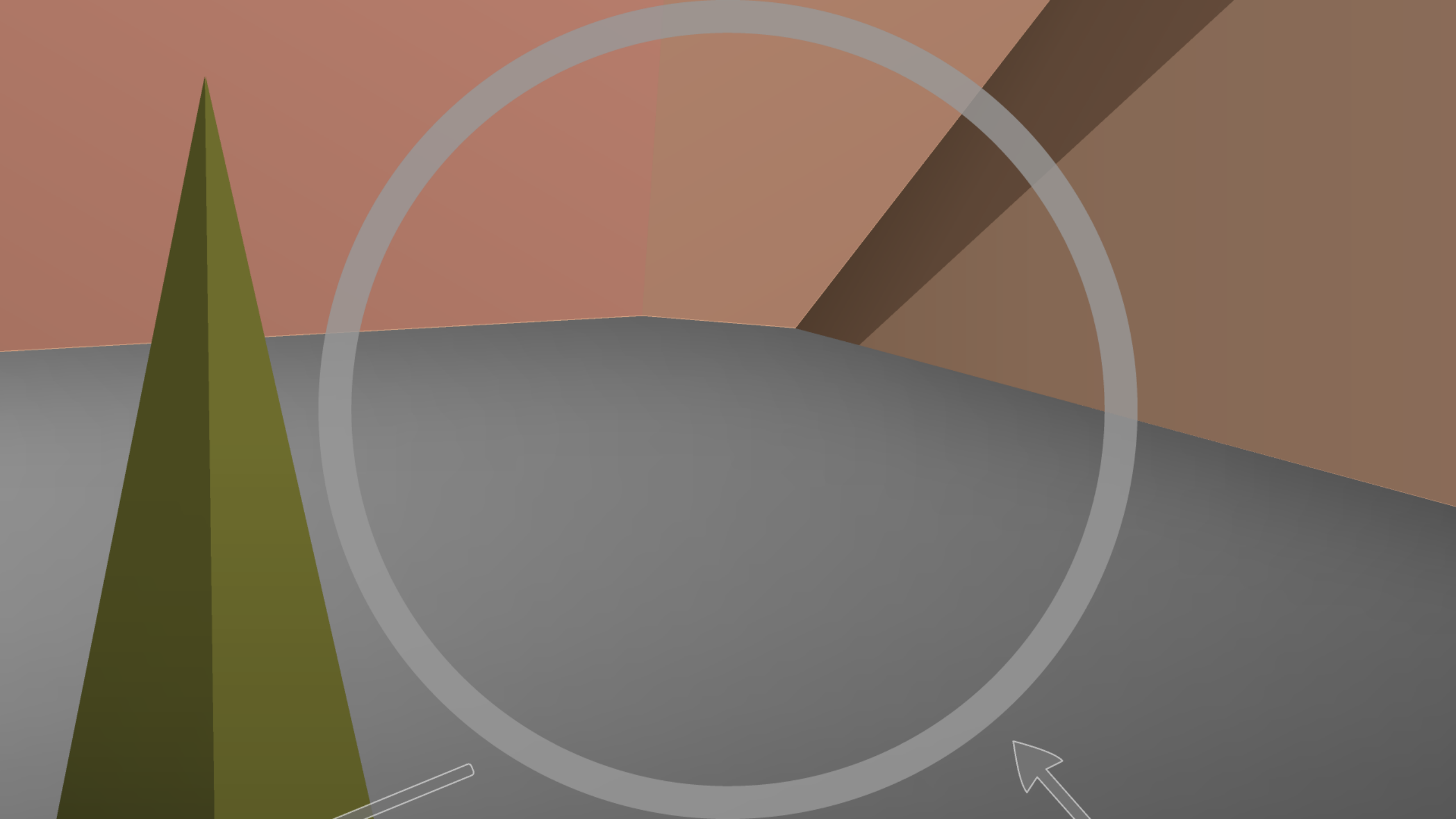
Possible codes for the transcript:

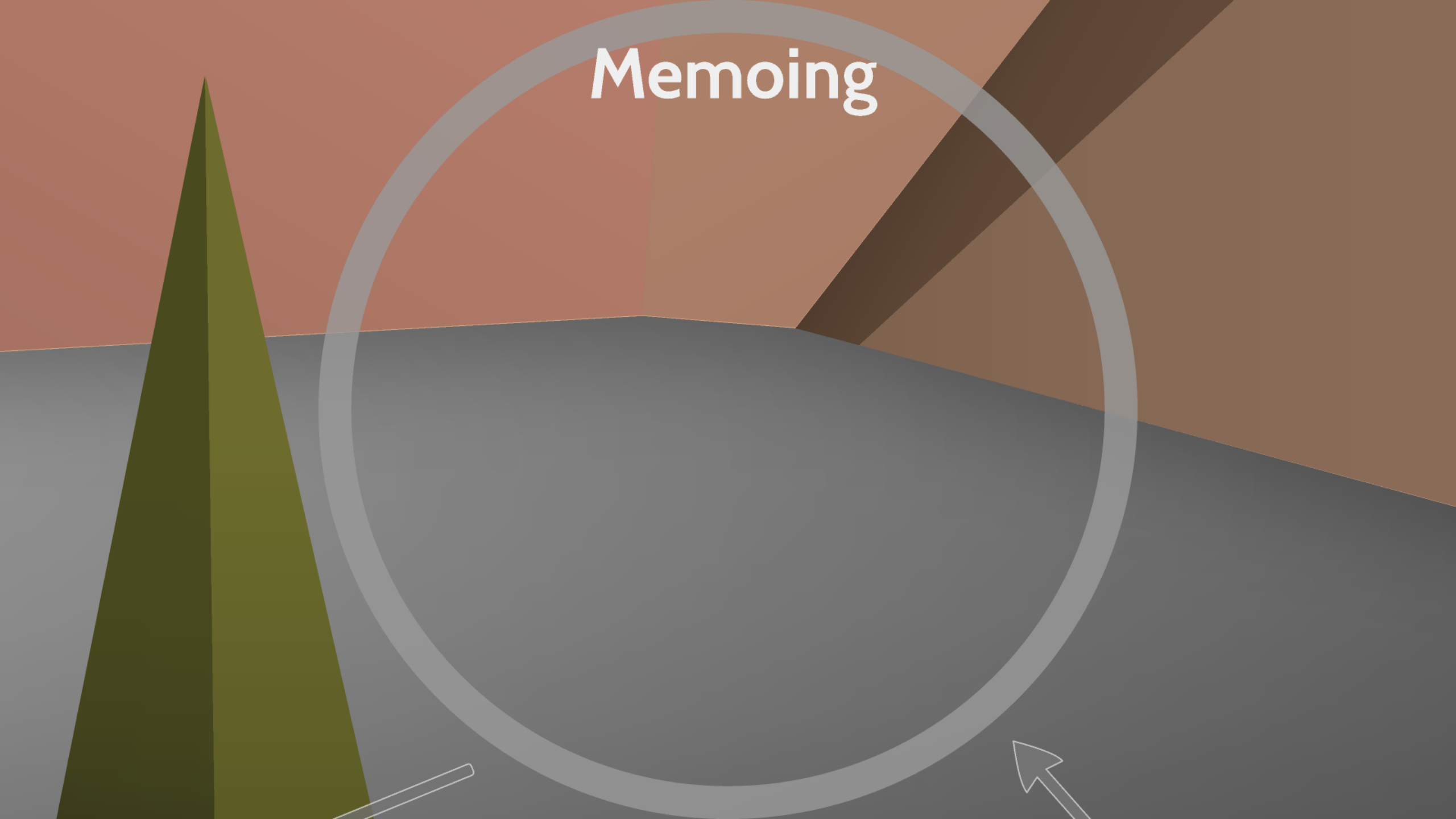
Code 1 = (a set of real number < n) - too broad

Code 2 = (a set of rational number < n) - too broad

Code 3 = (a set of positive integer < n) - precise

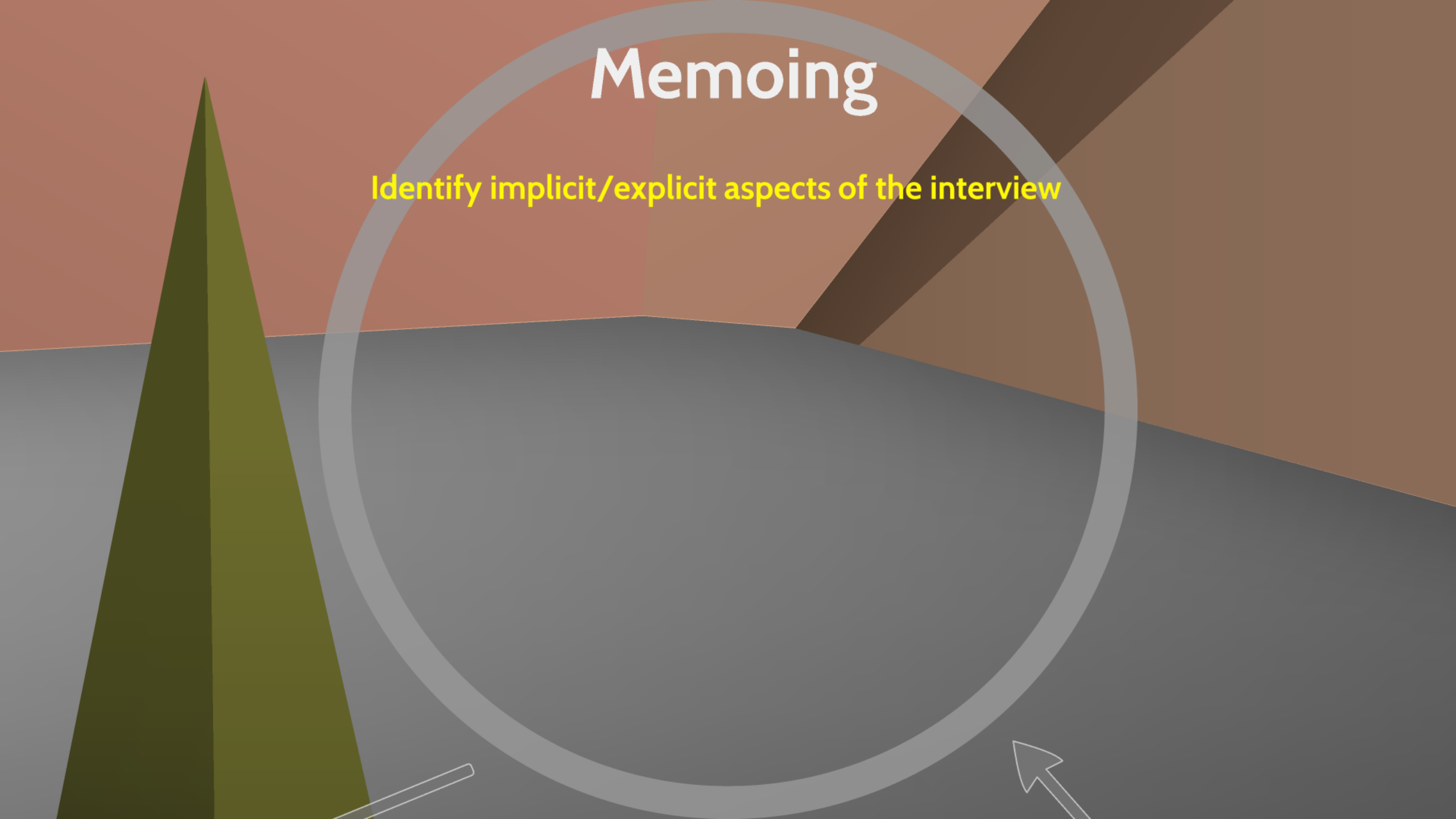





Memoing

Memoing

Identify implicit/explicit aspects of the interview



Memoing

Identify implicit/explicit aspects of the interview

Memoing

Identify implicit/explicit aspects of the interview

Notes its pattern and significance

Memoing

Identify implicit/explicit aspects of the interview

Notes its pattern and significance

Comments on variations, interconnections

Memoing

Identify implicit/explicit aspects of the interview

Notes its pattern and significance

Comments on variations, interconnections

Records reflective notes

Memoing

Identify implicit/explicit aspects of the interview

Notes its pattern and significance

Comments on variations, interconnections

Records reflective notes

Should be dated and referenced

Memoing

Identify implicit/explicit aspects of the interview

Notes its pattern and significance

Comments on variations, interconnections

Records reflective notes

Should be dated and referenced

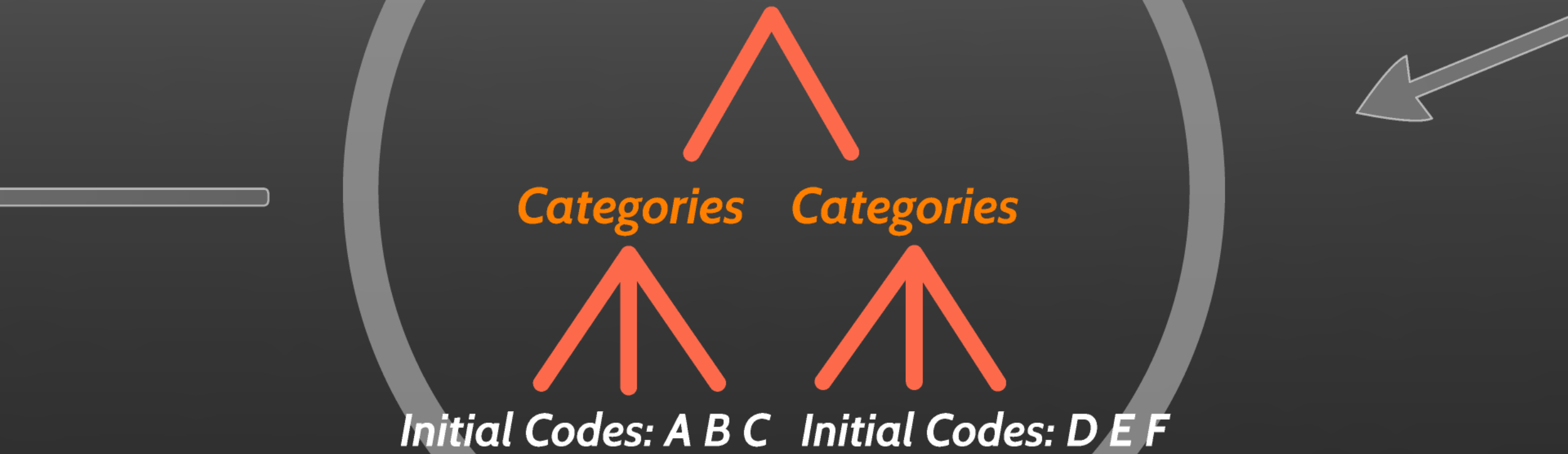
Records about concepts and relationship

Hierarchical Codes

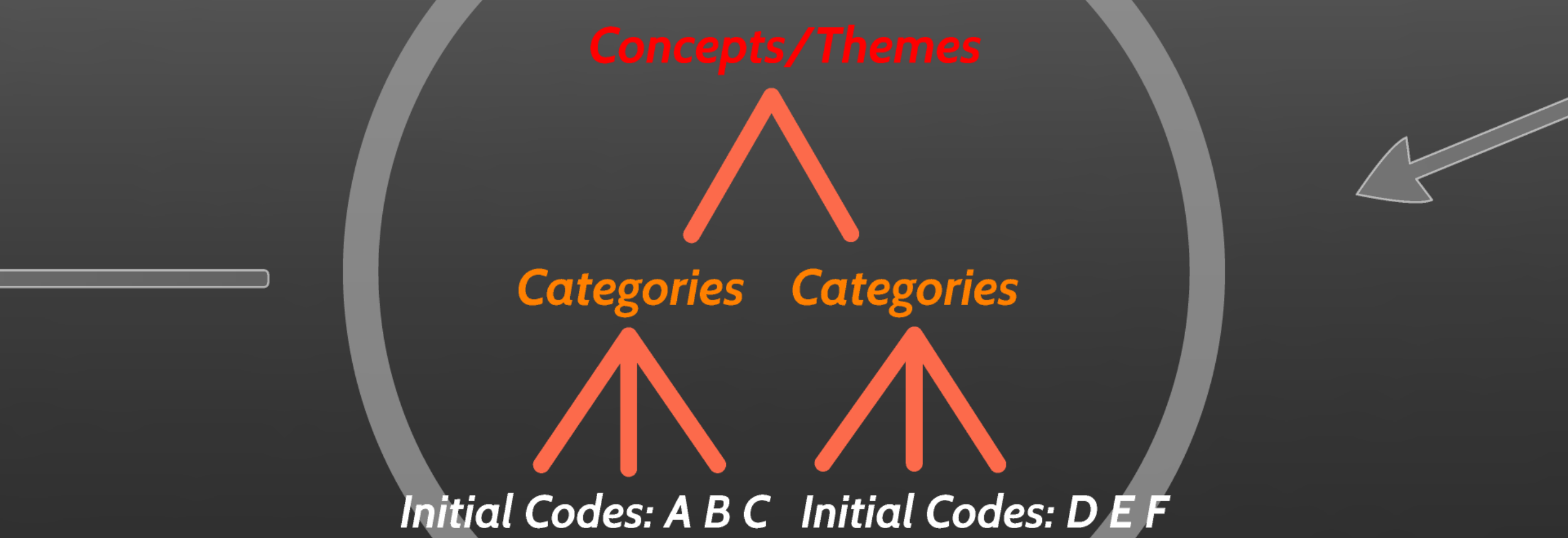
Hierarchical Codes

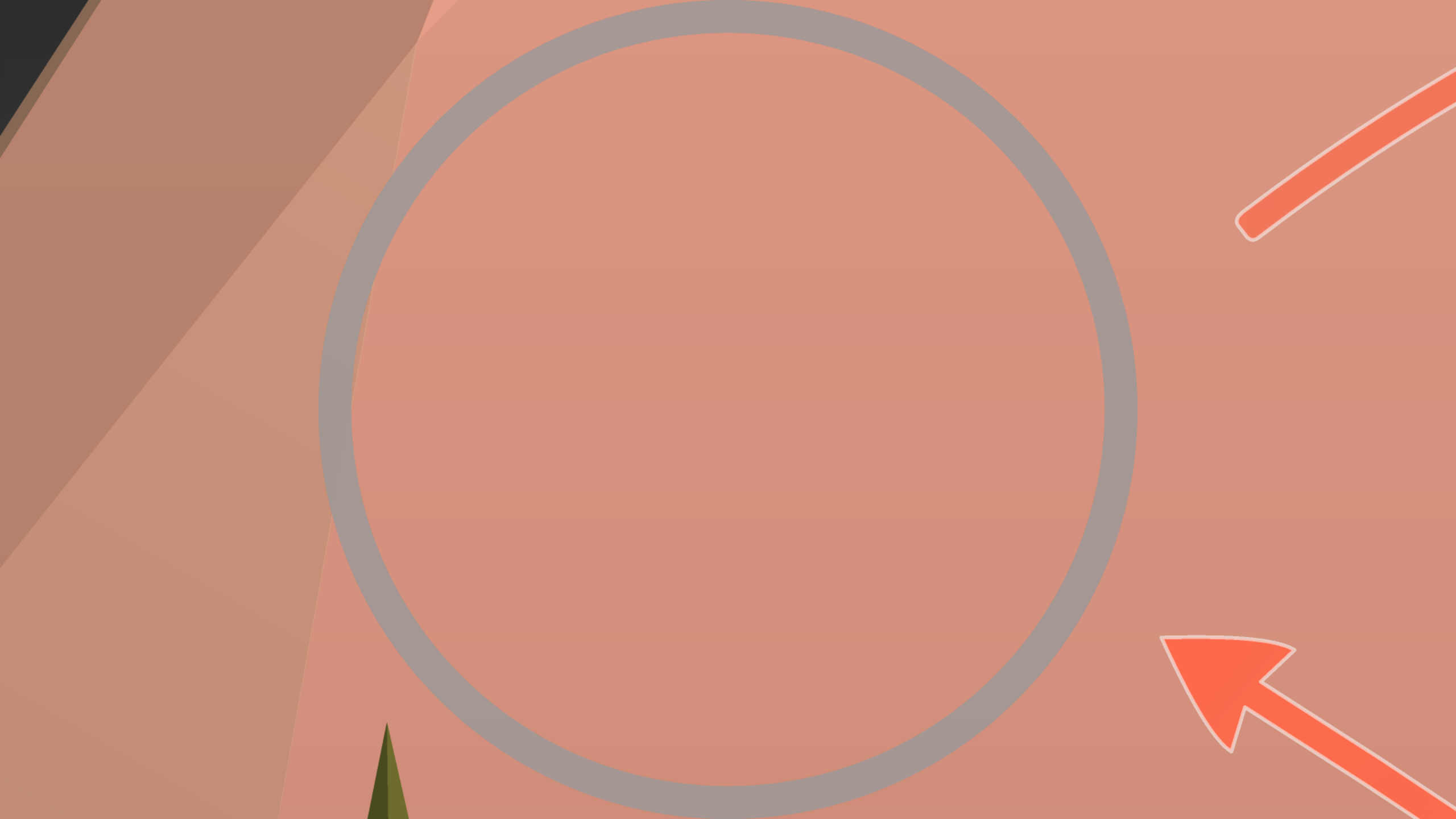
Initial Codes: A B C Initial Codes: D E F

Hierarchical Codes



Hierarchical Codes





How do you manage your staff at work?

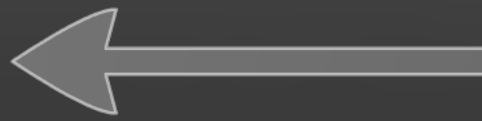
Interview transcripts:

I have been a production manager for almost 30 years. I manage my department by taking control over all decisions. I allow little input from my workers, since I know more about the production process than they do. I have found that most of my workers lack ambition, are lazy and dislike responsibility. As a manager, I need to work harder in this company because I need to direct them using my authority – otherwise they will be lazy. They seem to be uncreative at work, taking no initiative at all. Despite their laziness, sometimes I have been able to achieve reasonable production targets by continually monitoring and directing them. Basically, my workers have to be controlled if they are to deliver what's needed to achieve weekly production targets. Since my subordinates' interest in their job is solely to make money and get home as early as they can, I direct them autocratically, make decisions unilaterally and closely supervise them to achieve production targets.

The application of Thematic Analysis

Douglas McGregor
Theory X & Y

William Ouchi
Theory Z



The application of Thematic Analysis

Codes can be derived; based on a priory theory/relevant literature

Douglas McGregor
Theory X & Y

William Ouchi
Theory Z

The application of Thematic Analysis

Codes can be derived; based on a priory theory/relevant literature

Douglas McGregor
Theory X & Y

the Management Theory

William Ouchi
Theory Z

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Douglas McGregor
Theory X & Y

the Management Theory

- Theory X
- Theory Y
- Theory Z

William Ouchi
Theory Z


CHICAGO PUBLIC SCHOOLS
ON STRIKE
FOR A FAIR CONTRACT
Local 1

Codes
Thematic Analysis

Codes
Thematic Analysis

lazy
lack ambition
irresponsible
uncreative
idleness

Codes
Thematic Analysis

lazy
lack ambition
irresponsible
uncreative
idleness

non participation
narrow span of control
autocratic

Codes
Thematic Analysis

lazy
lack ambition
irresponsible
uncreative
idleness

non participation
narrow span of control
autocratic

underperformance

Codes
Thematic Analysis

Input
- lazy
- lack ambition
- irresponsible
- uncreative
- idleness

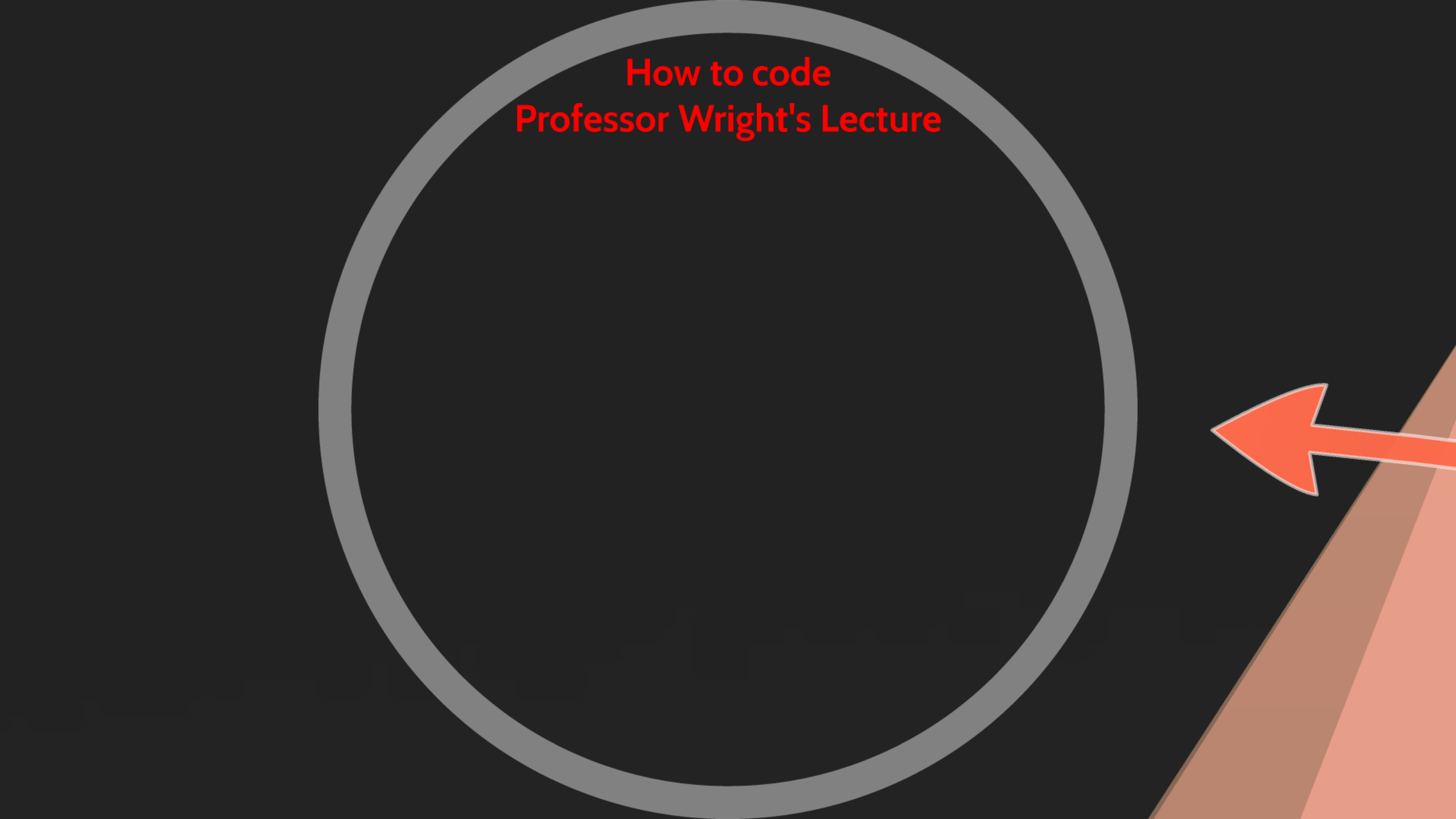
Process
- non participation
- narrow span of control
- autocratic

Output
- underperformance

Codes
Thematic Analysis

Theory X

- **Input**
  - lazy
  - lack ambition
  - irresponsible
  - uncreative
  - idleness
- **Process**
  - non participation
  - narrow span of control
  - autocratic
- **Output**
  - underperformance


How to code
Professor Wright's Lecture

How to code Professor Wright's Lecture

In reality, a researcher never studies the whole population of respondents. Could you imagine if you had to survey the whole British population to conduct a British opinion poll? You may finish the survey in 20 years! Of course, it would be implausible and costly in terms of time and resource to survey all respondents. Accordingly, in reality, it would be more efficient to select a fraction of the population. Then, a chosen sample can be used to represent every inhabitant.

How to code Professor Wright's Lecture

How to code Professor Wright's Lecture

Sampling

How to code Professor Wright's Lecture

Sampling

- **Timng**
- **Resourcing**
- **Being efficient**
- **Representing**
- **Costing**

Refs

Refs

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Thanks

Question?

Coding Theory

Using NVivo