

```

181     name="Scale",
182     min=0.01, max=1000.0,
183     default=1.0,
184 )
185
186 def execute(self, context):
187
188     # get the folder
189     folder_path = (os.path.dirname(self.filepath))
190
191     # get objects selected in the viewport
192     viewport_selection = bpy.context.selected_objects
193
194     # get export objects
195     obj_export_list = viewport_selection
196     if self.use_selection_setting == False:
197         obj_export_list = [i for i in bpy.context.scene.objects]
198
199     # deselect all objects
200     bpy.ops.object.select_all(action='DESELECT')
201
202     for item in obj_export_list:
203         item.select = True
204         if item.type == 'MESH':
205             file_path = os.path.join(folder_path, "{}.obj".format(item.name))
206             bpy.ops.export_scene.obj(filepath=file_path, use_selection=True,
207                                    axis_forward=self.axis_forward_setting,
208                                    axis_up=self.axis_up_setting,
209                                    use_animation=self.use_animation_setting,
210                                    use_mesh_modifiers=self.use_mesh_modifiers_setting,
211                                    use_edges=self.use_edges_setting,
212                                    use_smooth_groups=self.use_smooth_groups_setting,
213                                    use_smooth_groups_bitflags=self.use_smooth_groups_bitflags_setting,

```

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Vienna, 28.01.2017

Coding Society

Introduction to computer-assisted qualitative
analysis with ATLAS.ti

Schedule

- 10:00 Welcome & Introduction
- 10:15 Grounded Theory
- 10:45 Break*
- 11:00 Coding on Paper
- 11:15 ATLAS.ti Intro
- 12:00 How is the Mac version different?
- 12:15 Working together on our example material
- 13:15 Lunch Break*
- 14:15 Working on own stuff
- 15:30 Closing Discussion
- 15:45 Fin!*

What is CAQDAS? What can it do for us?

- ▶ CAQDAS = Computer-Assisted Qualitative Data Analysis Software
- ▶ order: organise & structure collected data
- ▶ analyse: code your data, make notes and memos
- ▶ arrange: relate our data to each other
- ▶ teamwork! (depending on software)

...and what not?

- ▶ Methodological considerations have to be made a priori
- ▶ No supplement for reflexive analysis and thinking
- ▶ Performative aspects of software

Various software & programmes

- ▶ ATLAS.ti
- ▶ Express Scribe
- ▶ MAXQDA
- ▶ Nvivo
- ▶ QCAmap (online tool)
- ▶ ...

ATLAS.ti vs. other software

- ▶ Several other similar software available
- ▶ ATLAS.ti quite established
- ▶ ATLAS.ti available on University of Vienna computers and (fairly) cheap student licences available for students (ZID)

Coding as a key element

- ▶ What does coding mean?
- ▶ How is coding conceptualised?
- ▶ How is it done?

Grounded Theory

“[Grounded Theory] is not a description of a kind of theory. Rather it represents a general way of generating theory (or, even more generically, a way of having ideas on the basis of empirical research)”

(Atkinson, Coffey & Delamont, 2003, p. 150)

History of Grounded Theory

- ▶ Developed by Strauss & Glaser in the 1960s
- ▶ Roots: Pragmatism, Symbolic Interactionism and the Chicago School
- ▶ Describe complex social contexts/situations
- ▶ Core idea: **bridging empirical data and theory**

Basic approach of Grounded Theory

“[...] the discovery of theory from data”
(Glaser & Strauss, 1967, p. 1)

- ▶ Find categories in data
- ▶ Relate the categories to each other
- ▶ Finally: build theory

Coding in Grounded Theory (I)

“Coding means naming segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of data.”

(Charmaz, 2006, p. 43)

Coding in Grounded Theory (II)

- ▶ Coding: think about the data we gathered and our research question
- ▶ First step from moving beyond statements to analytic interpretation
- ▶ Coding in different rounds

Initial/Open coding

- ▶ Go through your data, line by line, or word by word, segment by segment
- ▶ Be fast, quick, and open minded :-)
- ▶ Strauss: Code actions, not topics – use the gerund!

describing vs. description

In-vivo codes

- ▶ Symbolic markers of meanings and views
- ▶ Takes into account material/participants' perspectives
- ▶ Analytically tricky, but good for implicit meanings!
- ▶ Useful in-vivo codes (Charmaz, 2006):
 - ▶ General, well-known terms that condense meaning
 - ▶ Innovative terms capturing meanings and/or experiences
 - ▶ Insider terms specific for a particular group/theme that reflects perspective

Focused coding

- ▶ Compare codes with data
- ▶ Compare codes with codes
- ▶ What codes make sense analytically?
- ▶ Goal: Create/identify categories

Axial coding

- ▶ Refine and differentiate categories from focus coding: core category
- ▶ General aim:
 - ▶ Build relations between categories
 - ▶ How these relations relate to formal and contextual aspects

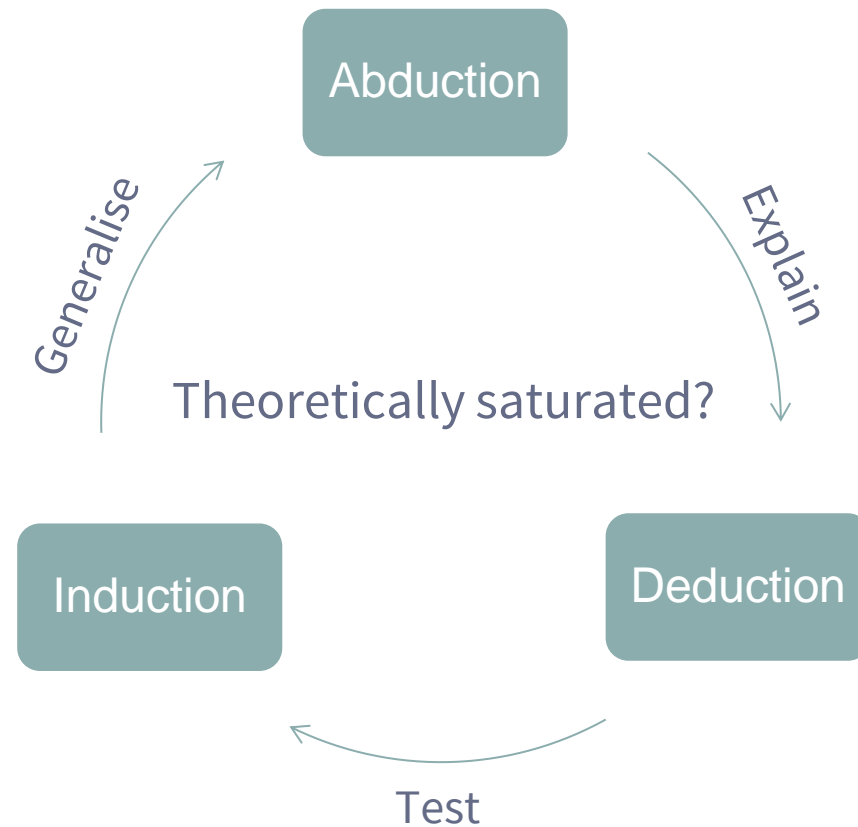
Selective/Theoretical Coding

- ▶ Last step of the coding process
- ▶ Similar to axis coding, but more abstract!
- ▶ “Integrate” other coding steps and find red thread/story line
- ▶ Goal: Condense your findings to one sentence!

Theoretical Sampling (I)

- ▶ Informed selection of:
 - ▶ Cases
 - ▶ Empirical material
- ▶ Asks the question(s):
 - ▶ Where is my not yet grounded theory?
 - ▶ Where would I find *deviant* cases?

Theoretical Sampling (II)



Break time!

Coding exercise

Research question:

How is the relation between body and security conceptualised in the case of self-tracking fitness devices?

What can we do with ATLAS.ti?

- ▶ Sorting data and systematisation (e.g. coding)
- ▶ Organising (big amounts of) data (e.g. relating codes through mapping)
- ▶ Easily find specific parts of our data
- ▶ Writing notes (comments, memos) linked to our data

What can we analyse?

- ▶ Documents of different kind:
 - ▶ Interview transcripts, field notes, papers, etc.
 - ▶ .pdf, .doc, .txt, etc.
- ▶ Images, pictures, graphs, etc.
- ▶ Video (restricted)
- ▶ Audio material (restricted)
- ▶ ...

Getting started: The basics (I)

▶ **Hermeneutic Unit (HU)**

- ▶ Main body of our project: it provides the structure of our project in ATLAS.ti
- ▶ Bundles all our material (data, codes, links, comments, memos, ...)

▶ **Primary Documents**

- ▶ = our data, so the material we analyse.
- ▶ Primary documents are part of the hermeneutic unit.
- ▶ **Beware:** To save the HU with the Primary Documents use “Save Bundle Copy”!

Getting started: The basics (II)

▶ **Quotations**

- ▶ “Extracts” of our data (text passages, words, part of an image, etc.)

▶ **Codes**

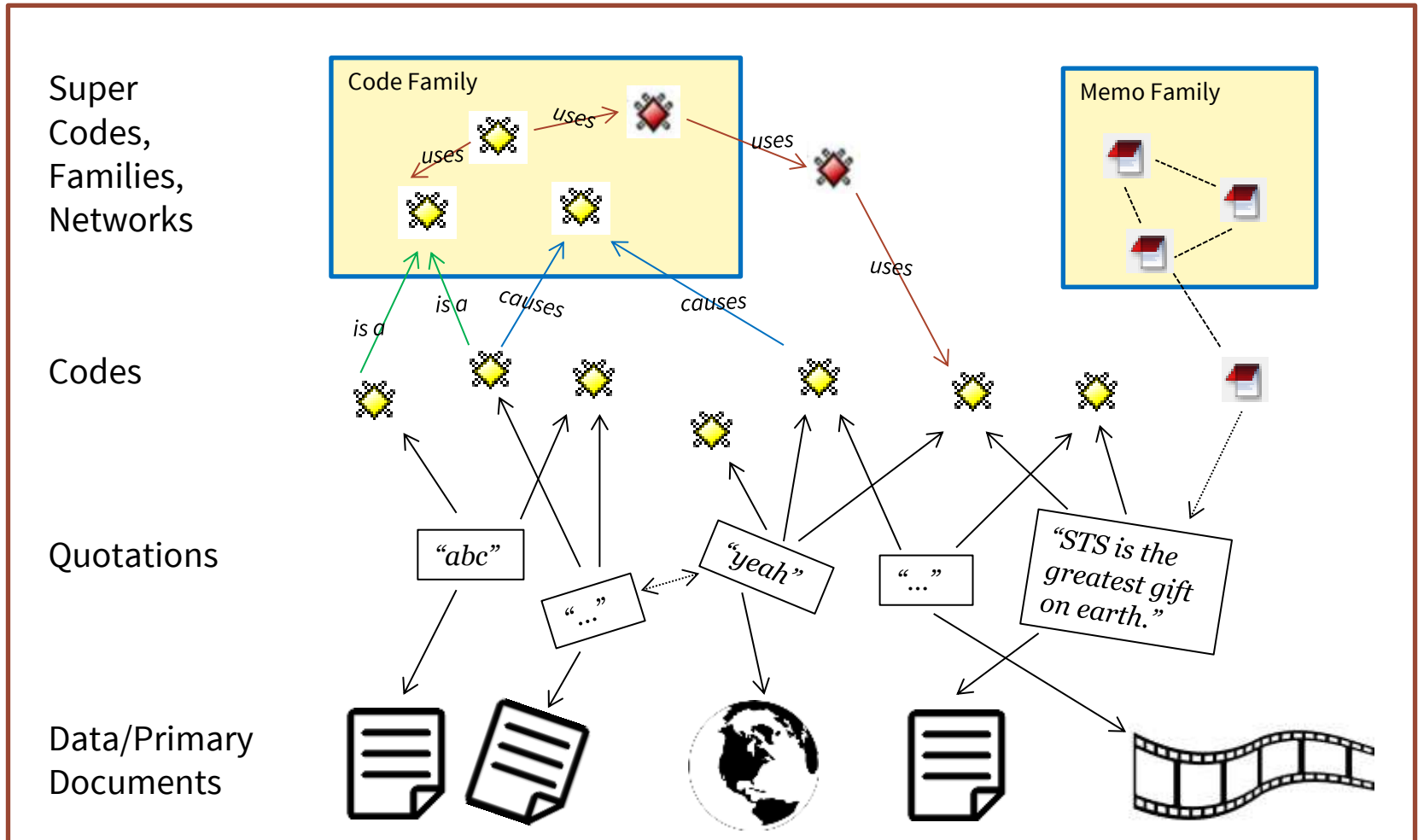
- ▶ Abstraction and interpretation of quotations/parts of quotations
- ▶ First interpretations
- ▶ Codes (own label) and In-Vivo Codes (label name = quotation)

▶ **Connecting** quotations and codes

Getting started: The basics (III)

- ▶ **Grouping** codes to **Code Families**
- ▶ **Memos**
 - ▶ Notes on our project, parts of the project, etc.
 - ▶ Should help us find theories (cf. Grounded Theory)
- ▶ **Comments**
 - ▶ Notes on our codes

Hermeneutic Unit (HU)



It's all about the family...

▶ Code Families

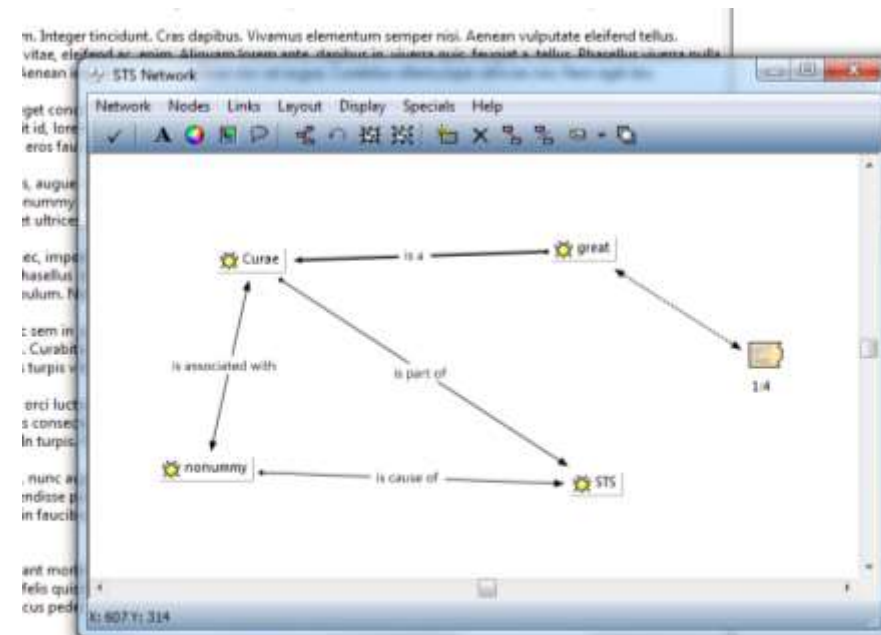
- ▶ Allow us to group (and thus organise!) our codes
- ▶ Possibility to create categories (cf. Grounded Theory)

▶ Memo Families

- ▶ Allow us to group our memos

▶ Networks

- ▶ Help us to visualise our codes, quotations, memos, etc.
- ▶ Relating codes, quotations, memos, etc. to each other



Lunch break time!

How is the Mac version different? (I)

- ▶ Design differences
- ▶ Does not (yet) support team projects
- ▶ Decide wisely:
 - ▶ Bi-directional project transfer between the Windows and Mac version currently not fully supported (ATLAS.ti says: “expected in January 2017” – but who knows...)
 - ▶ At the moment only transfer from Windows to Mac possible, but not the other way round!

How is the Mac version different? (II)

- ▶ Terms: “**Families**” (Windows) = “**Groups**” (Mac)
- ▶ Mac version sometimes handier than Windows version (quicker coding)
- ▶ ...but also sometimes not: e.g. no button for writing Memos
- ▶ No “bomb button” (for moments of frustration)
- ▶ ...

What we are going to do:

We sent you a pdf of the “Smart City Wien Framework Strategy:

https://smartcity.wien.gv.at/site/files/2014/09/SmartCityWien_FrameworkStrategy_english_onepage.pdf

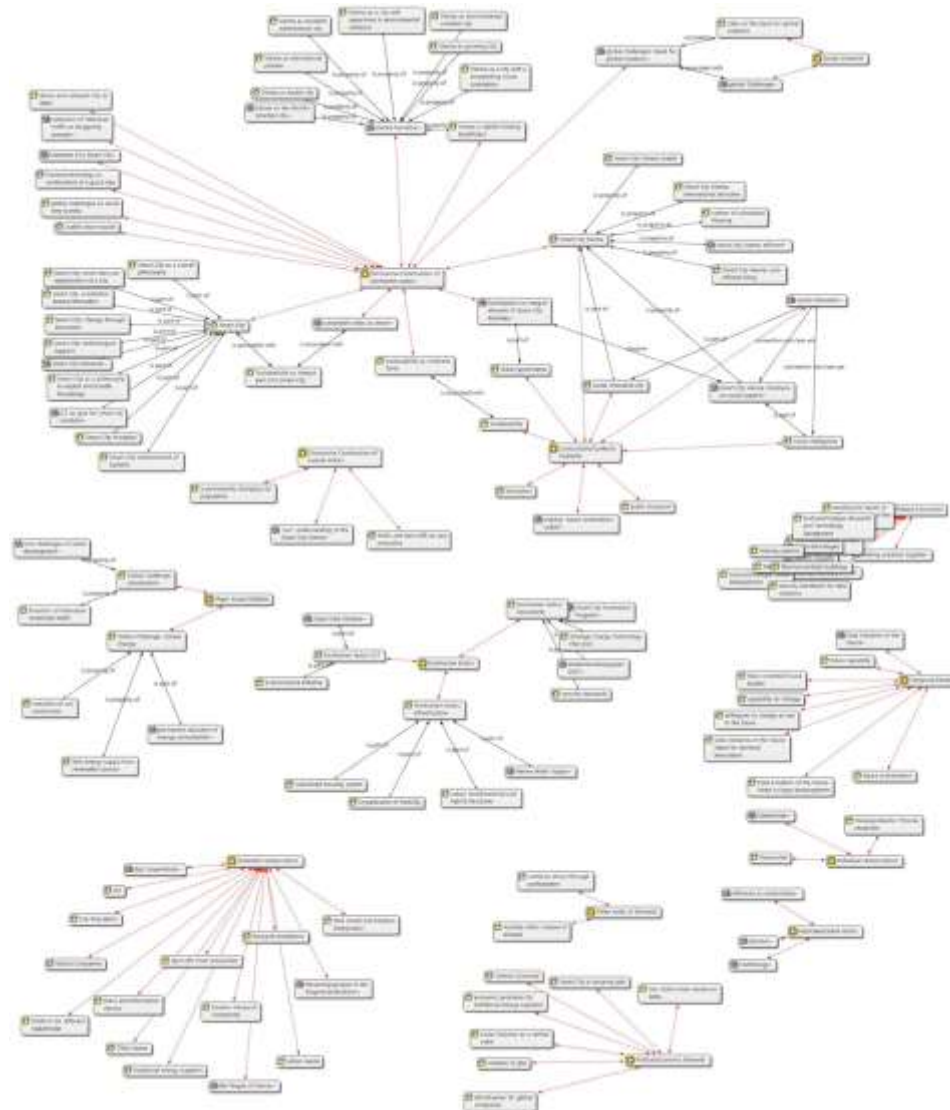
- ▶ Take a closer look at the dimension “Quality of Life” (pp. 69-79)
- ▶ **Search for the “Smart Citizen”**











What we are going to do:

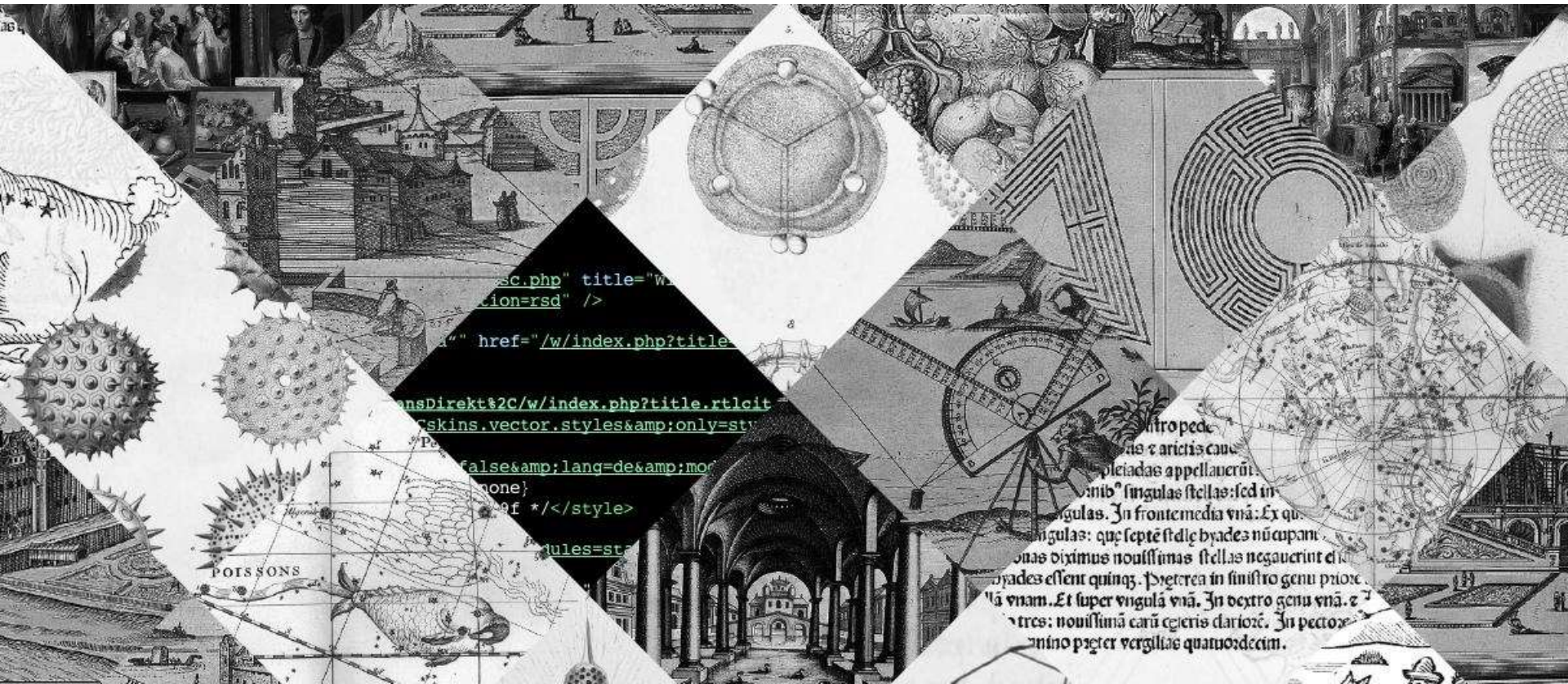
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- ▶ Take a closer look at the dimension “Quality of Life” (pp. 69-79)
- ▶ **Search for the “Smart Citizen”**

Break time!

Now it's your turn!



Let's talk!

- ▶ Where do you see issues/problems?
- ▶ How to use that created knowledge to transform it into a paper?

- Atkinson, P., Coffey, A., & Delamont, S. (2003). *Key themes in qualitative research: Continuities and changes*. New York, NY: Rowman & Littlefield.
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