

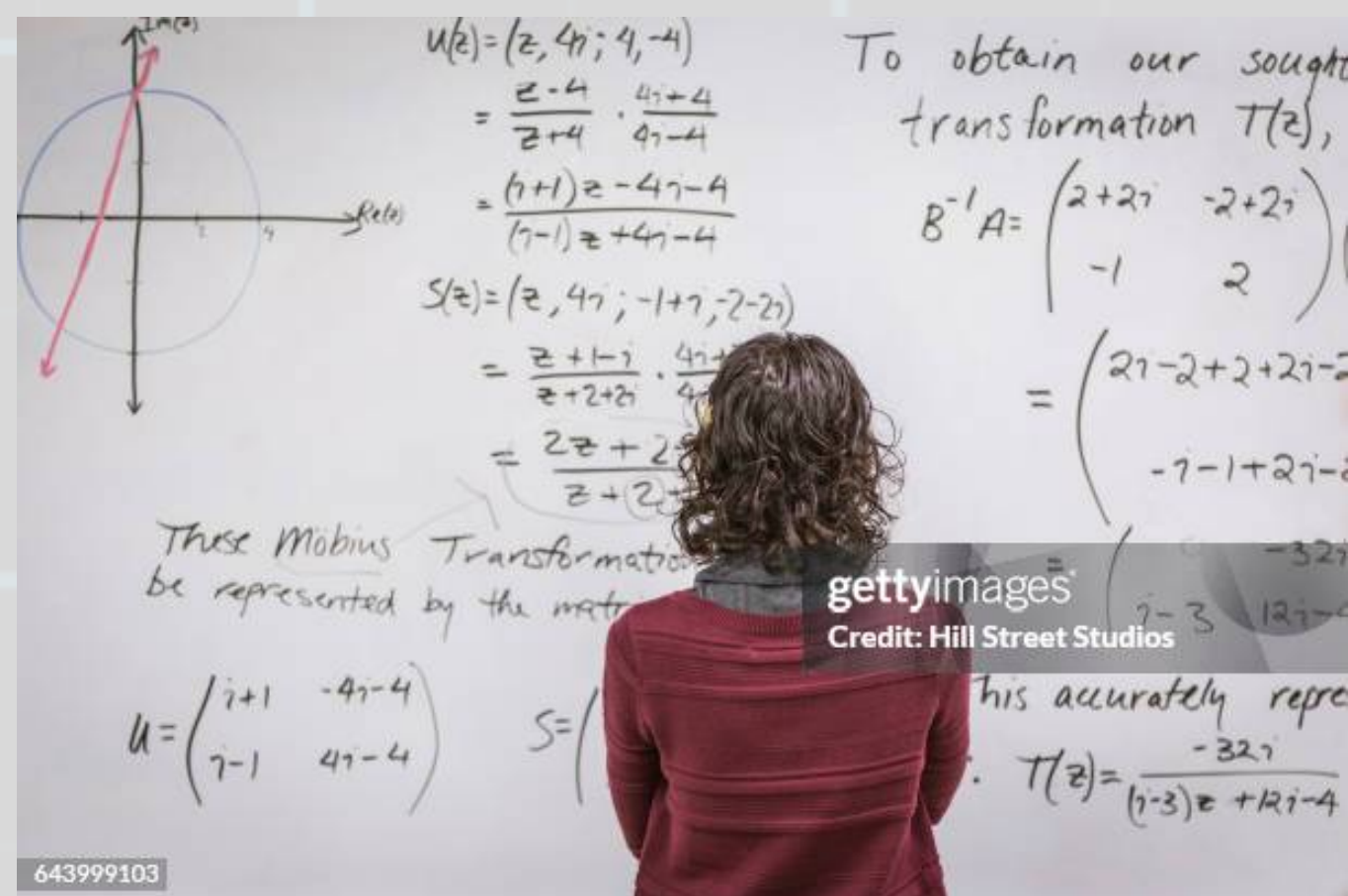
# How to Do Qualitative Analysis Like a Robot 🤖

INFO 6201

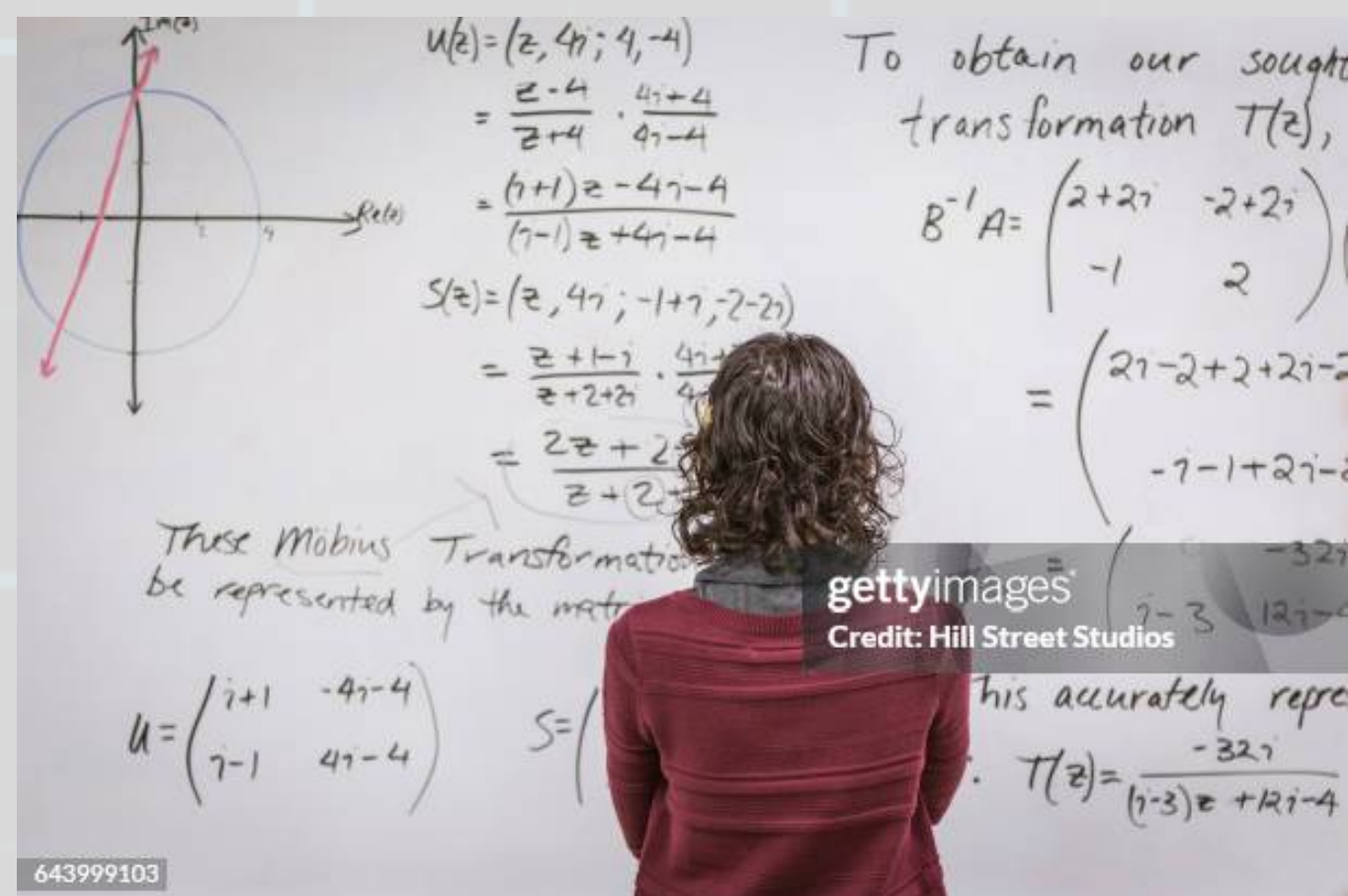
Benjamin Freixas Emery / 2024-12-11

**How I like to do work:**

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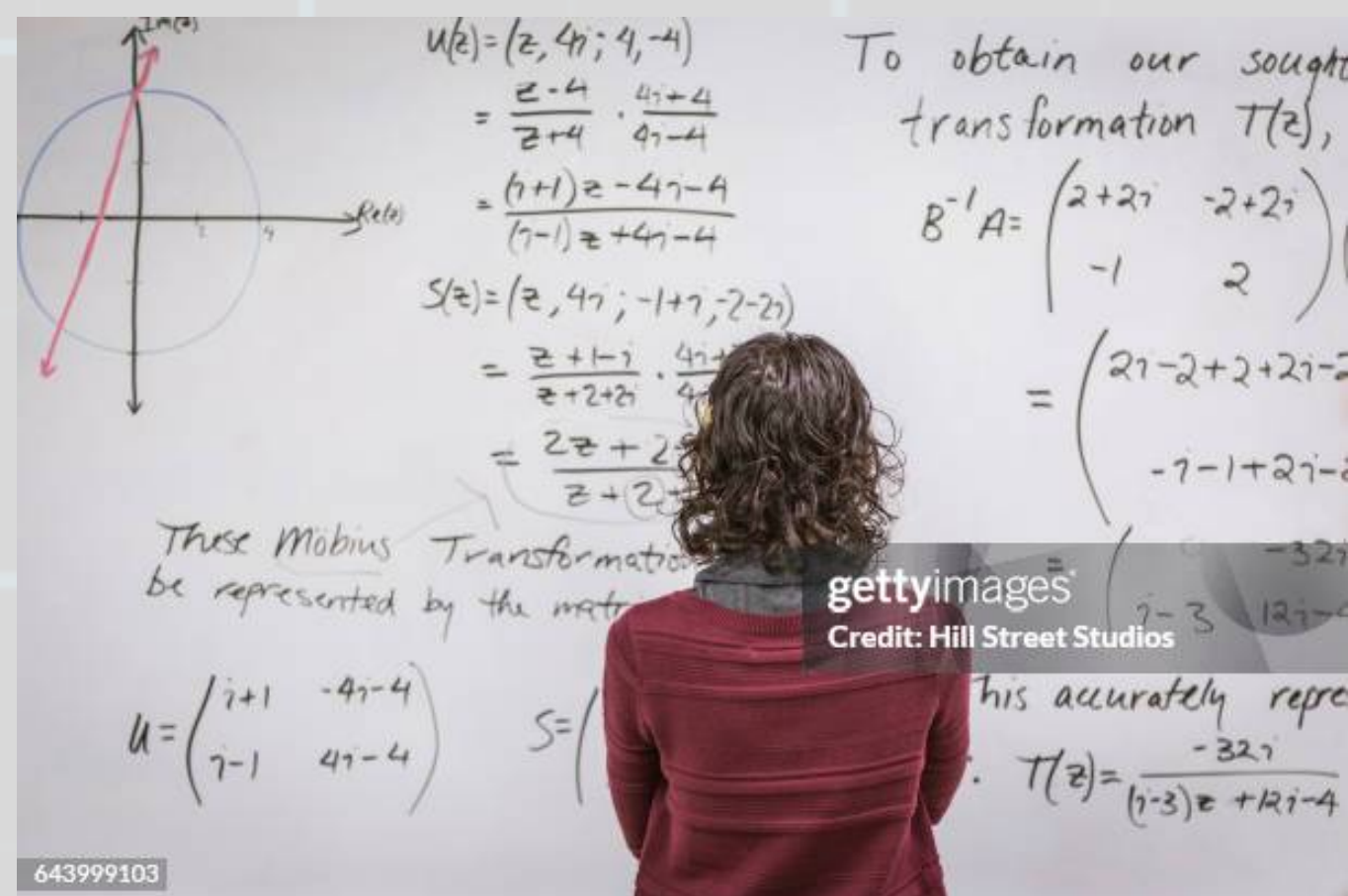


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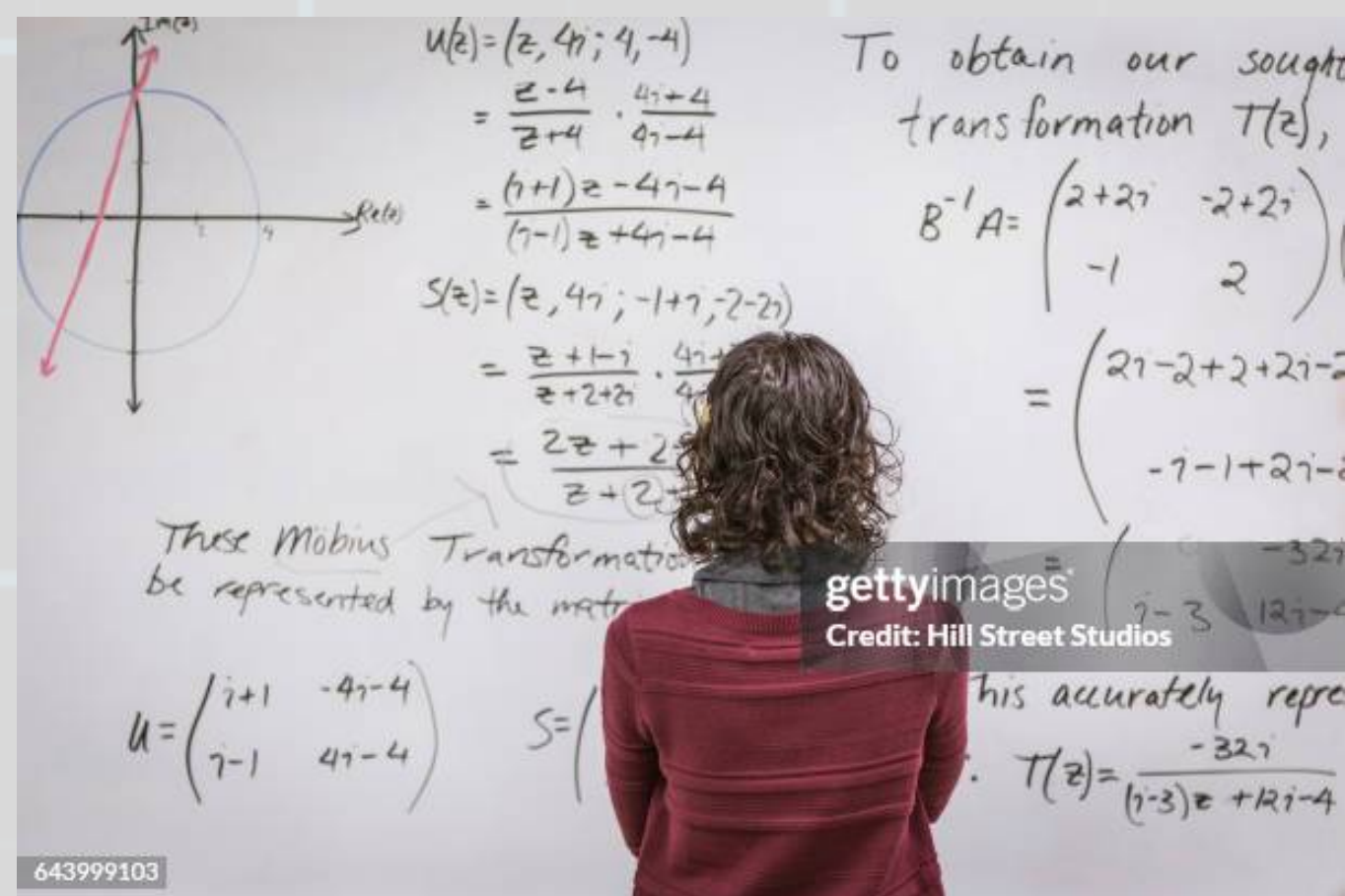
cool!

# How I like to do work:



cool!

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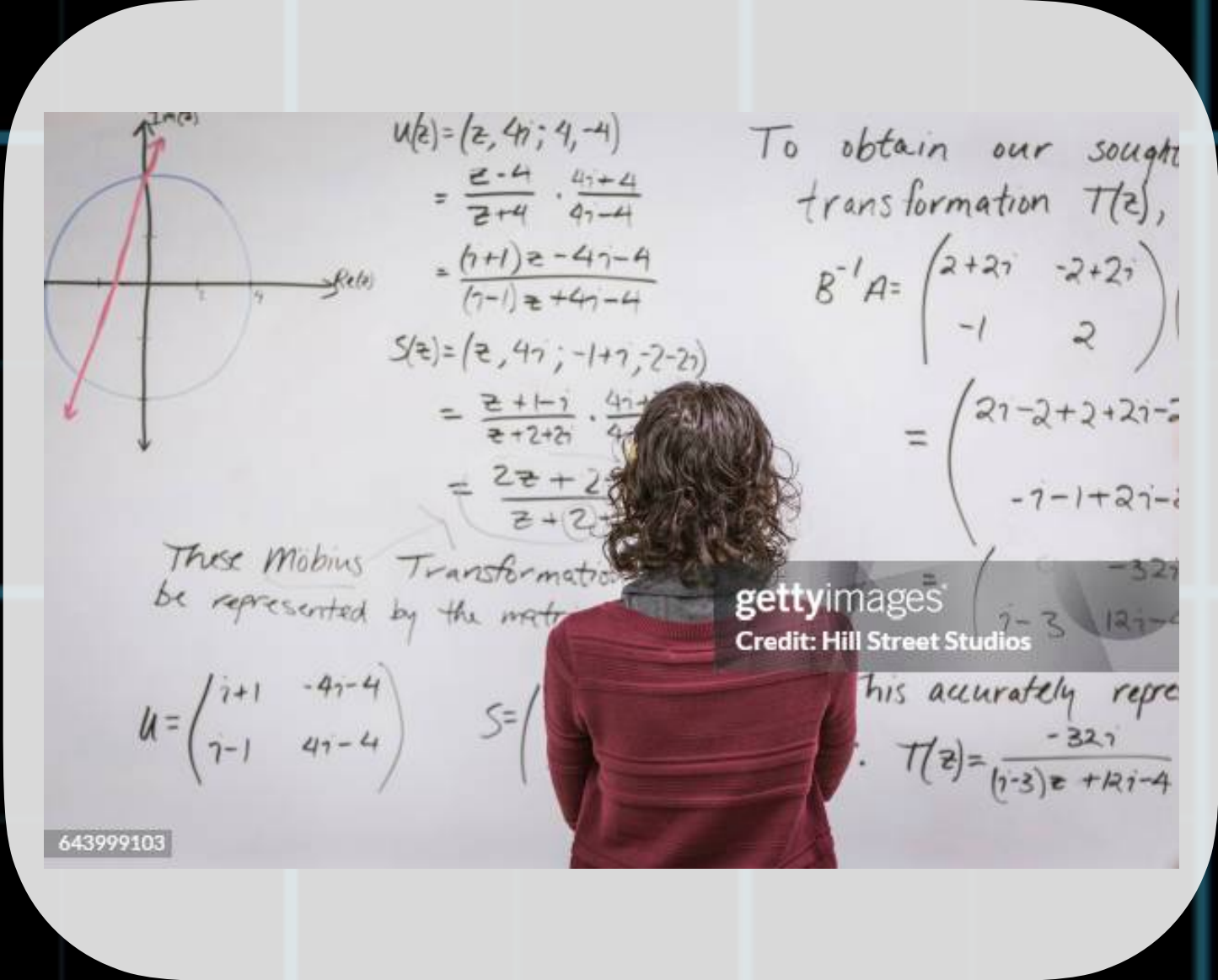


cool!



neat!

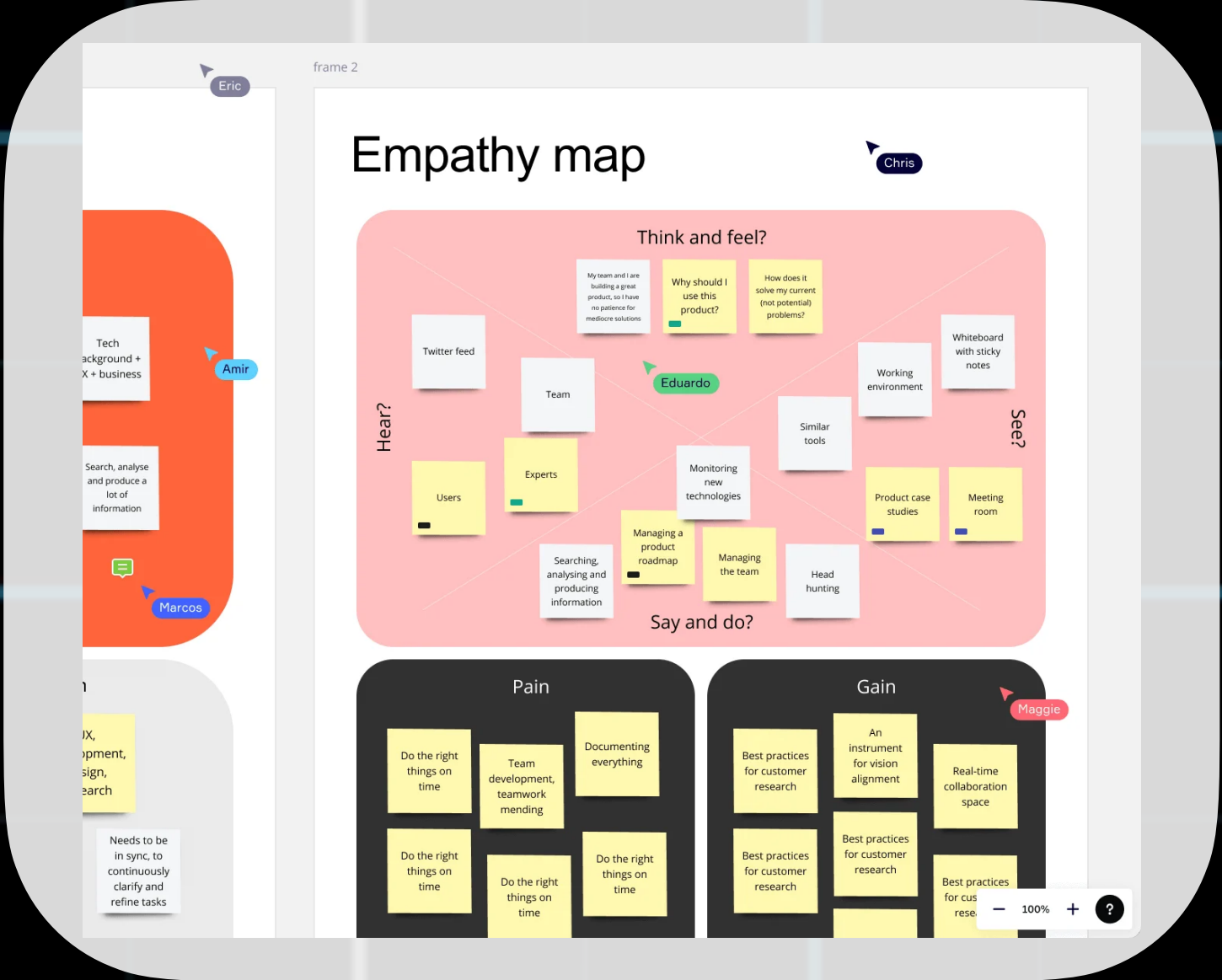
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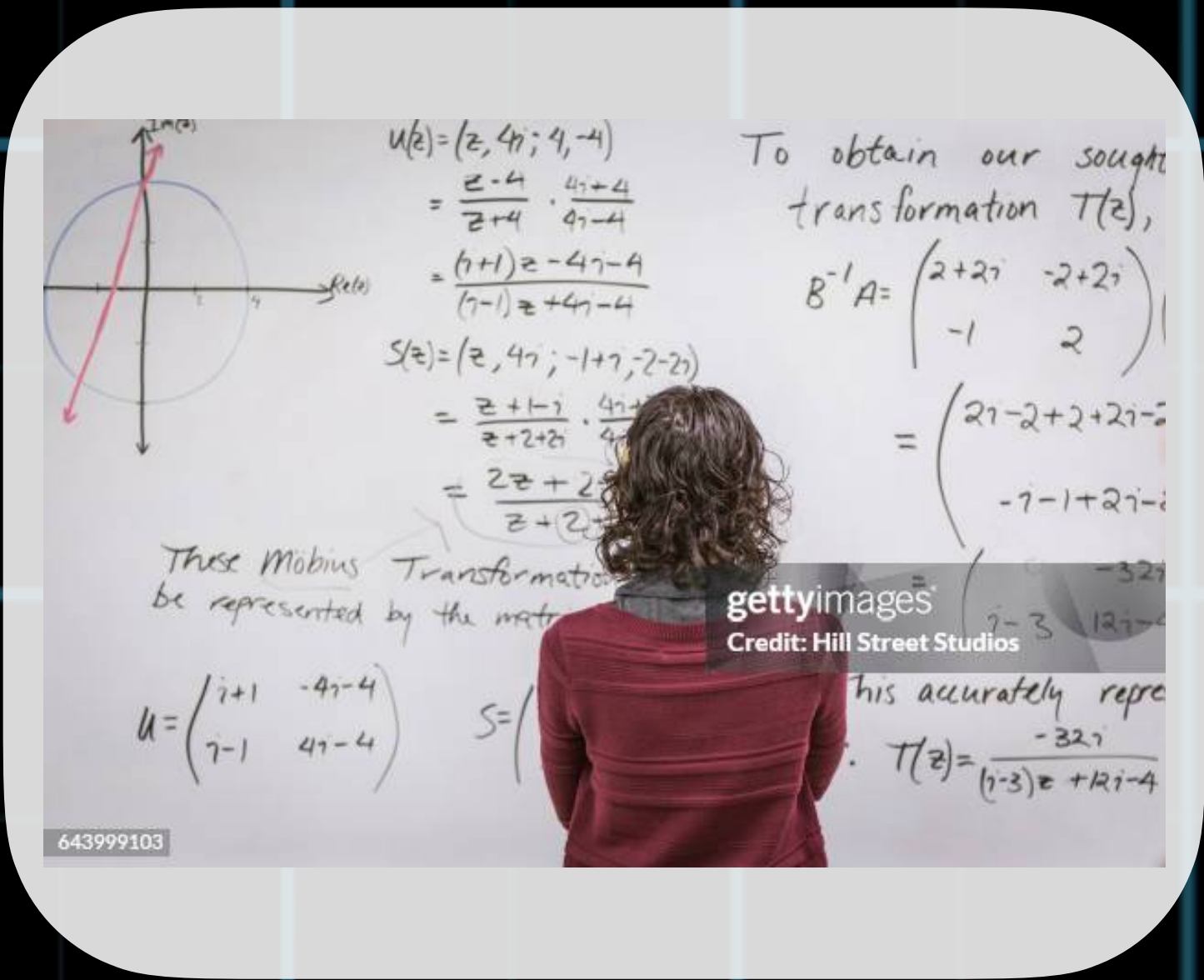
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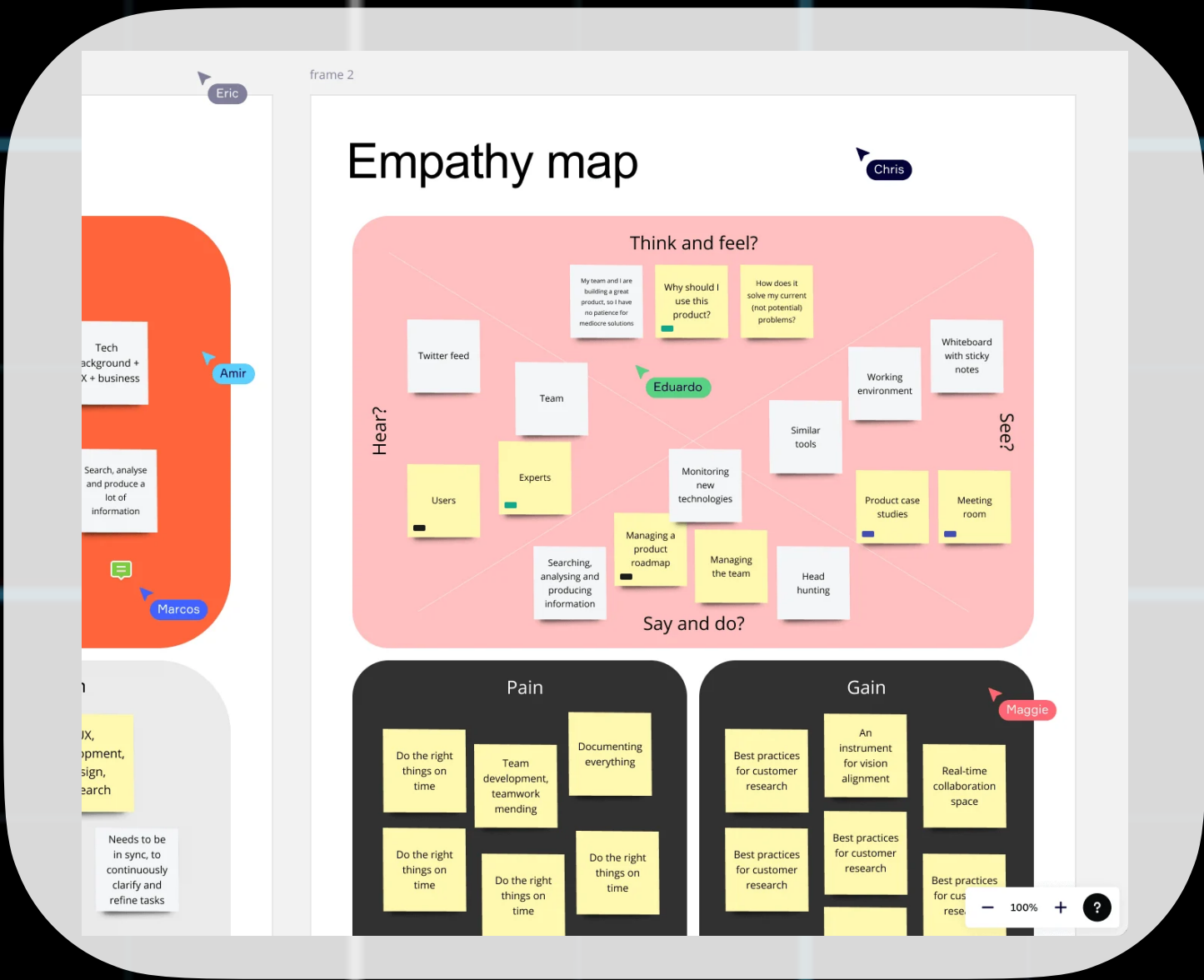
# How I like to do work:



cool!



neat!



ew!

# How someone else has put it

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**The Plain  
Person's Guide**

~/> \_

**to Plain Text  
Social Science**

**Kieran Healy**

# How someone else has put it

- Kieren Healy's "Plain Text Social Science" outlines doing social science in plain text documents (.txt, etc)

The Plain  
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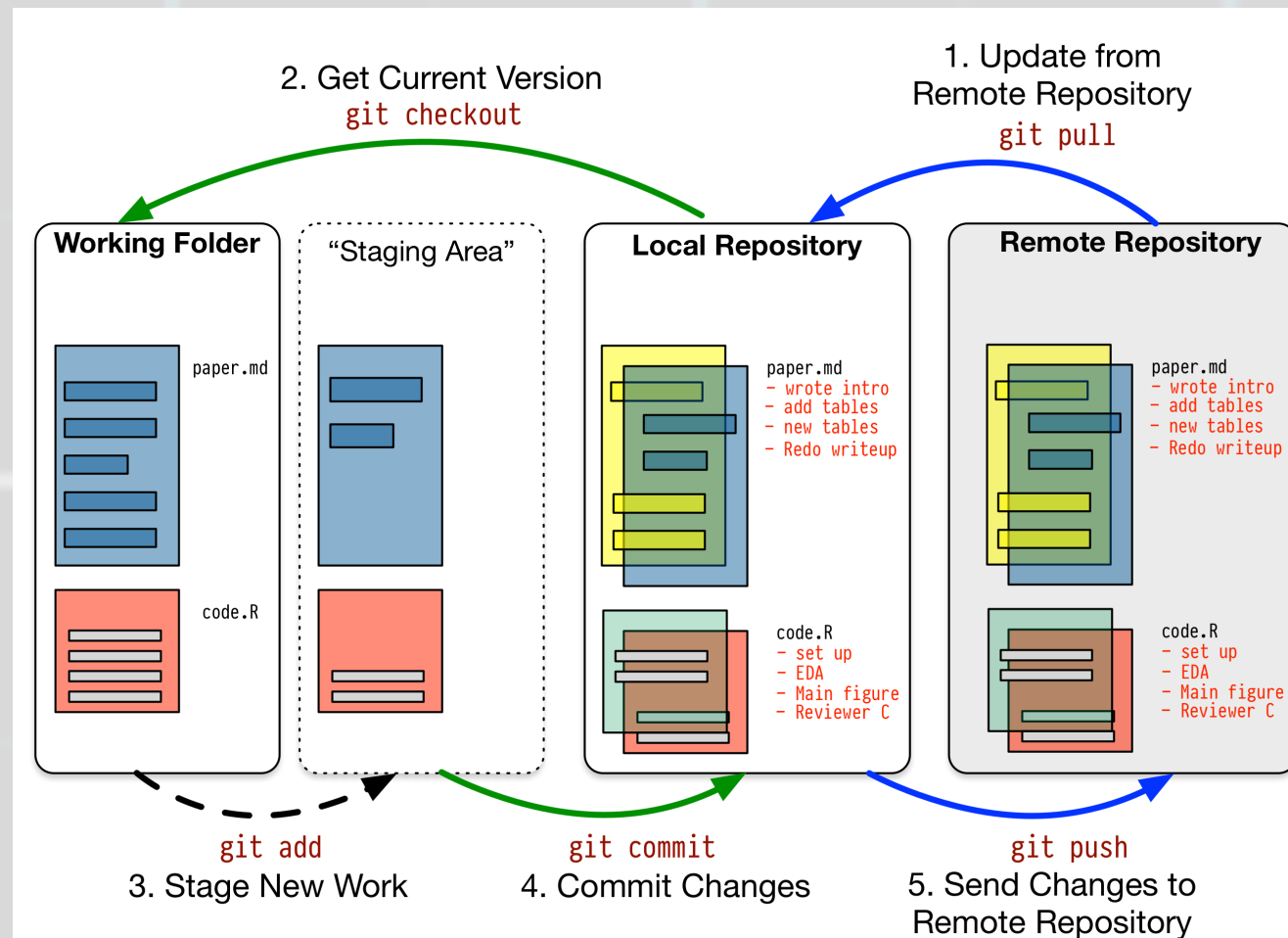
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## The Plain Person's Guide

~/> \_

## to Plain Text Social Science

Kieran Healy



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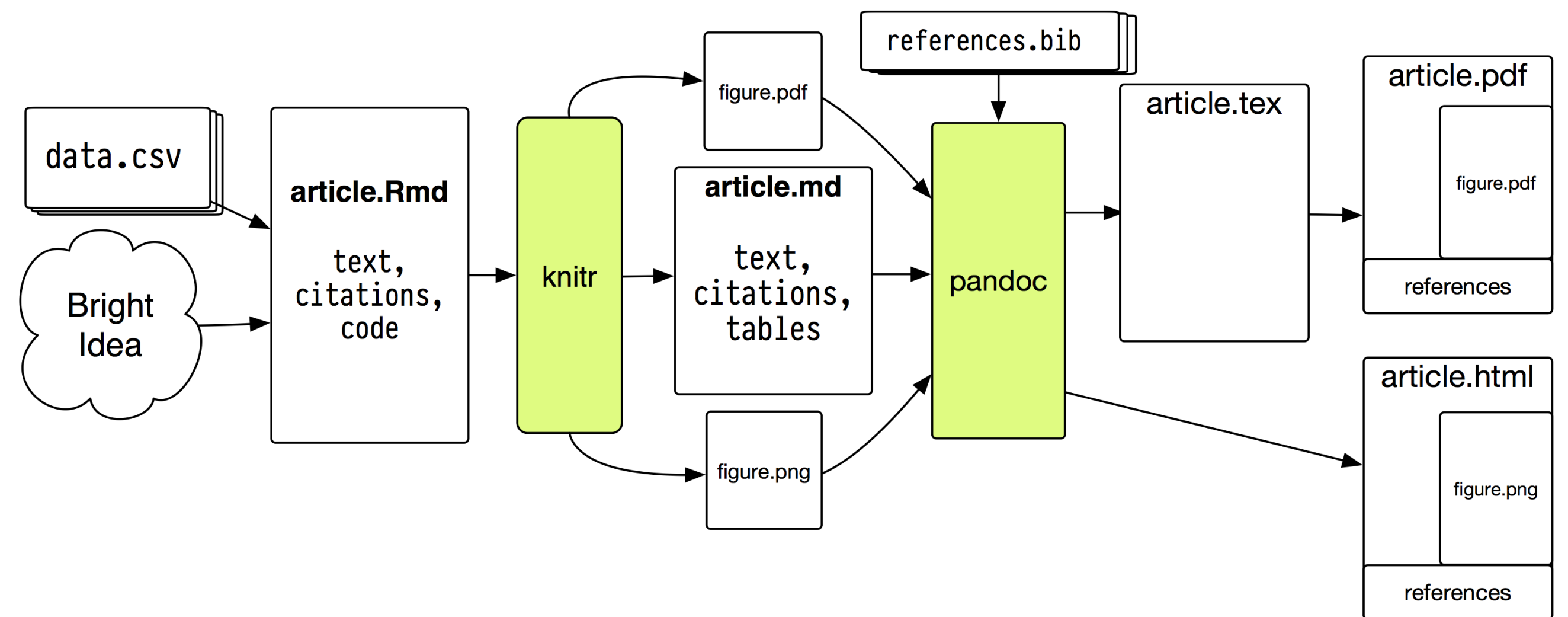
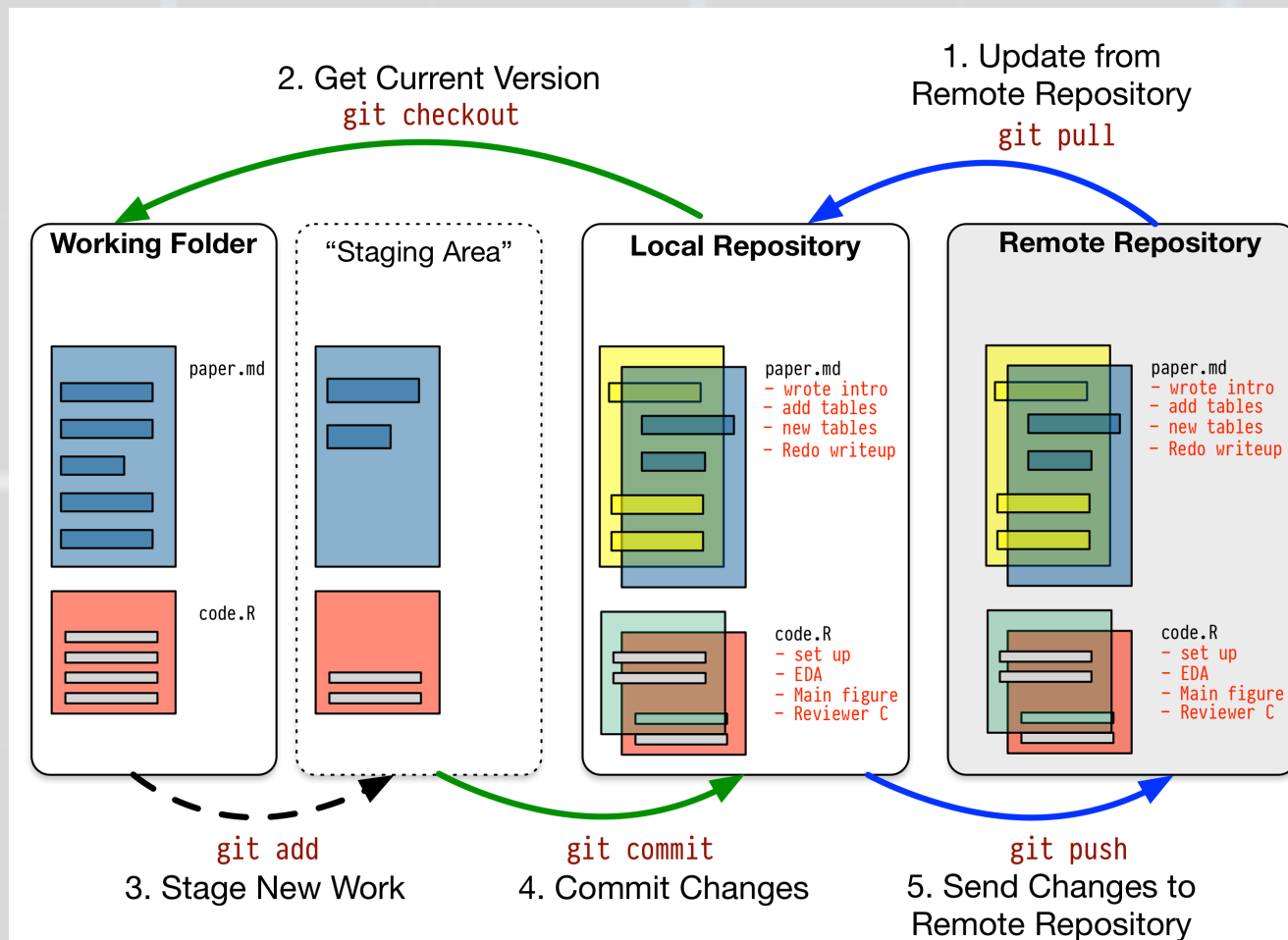
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## The Plain Person's Guide

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## to Plain Text Social Science

Kieran Healy



# Applying this to qualitative work

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# Applying this to qualitative work



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# Applying this to qualitative work

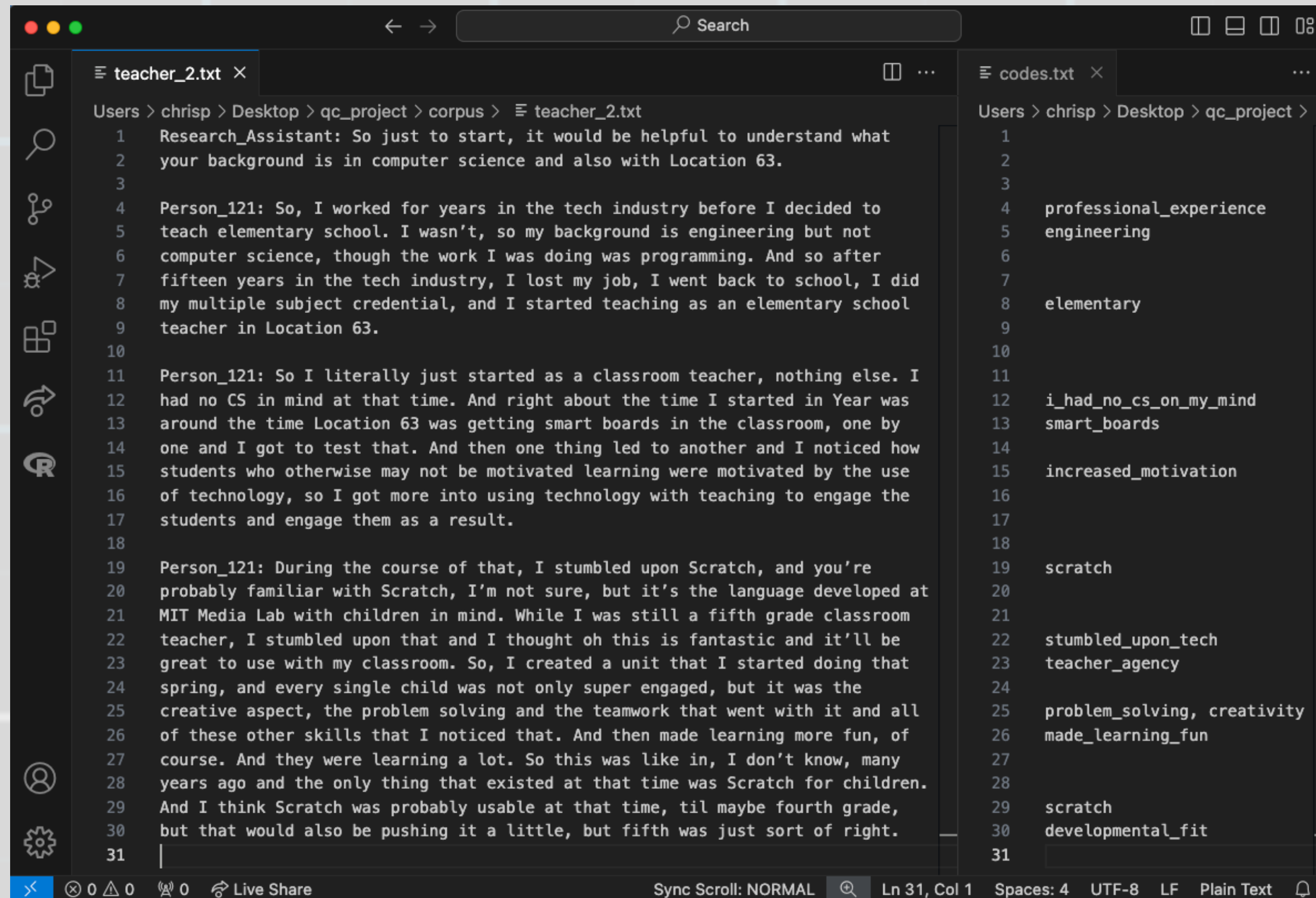


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```
% pip install qualitative coding
```

# Applying this to qualitative work

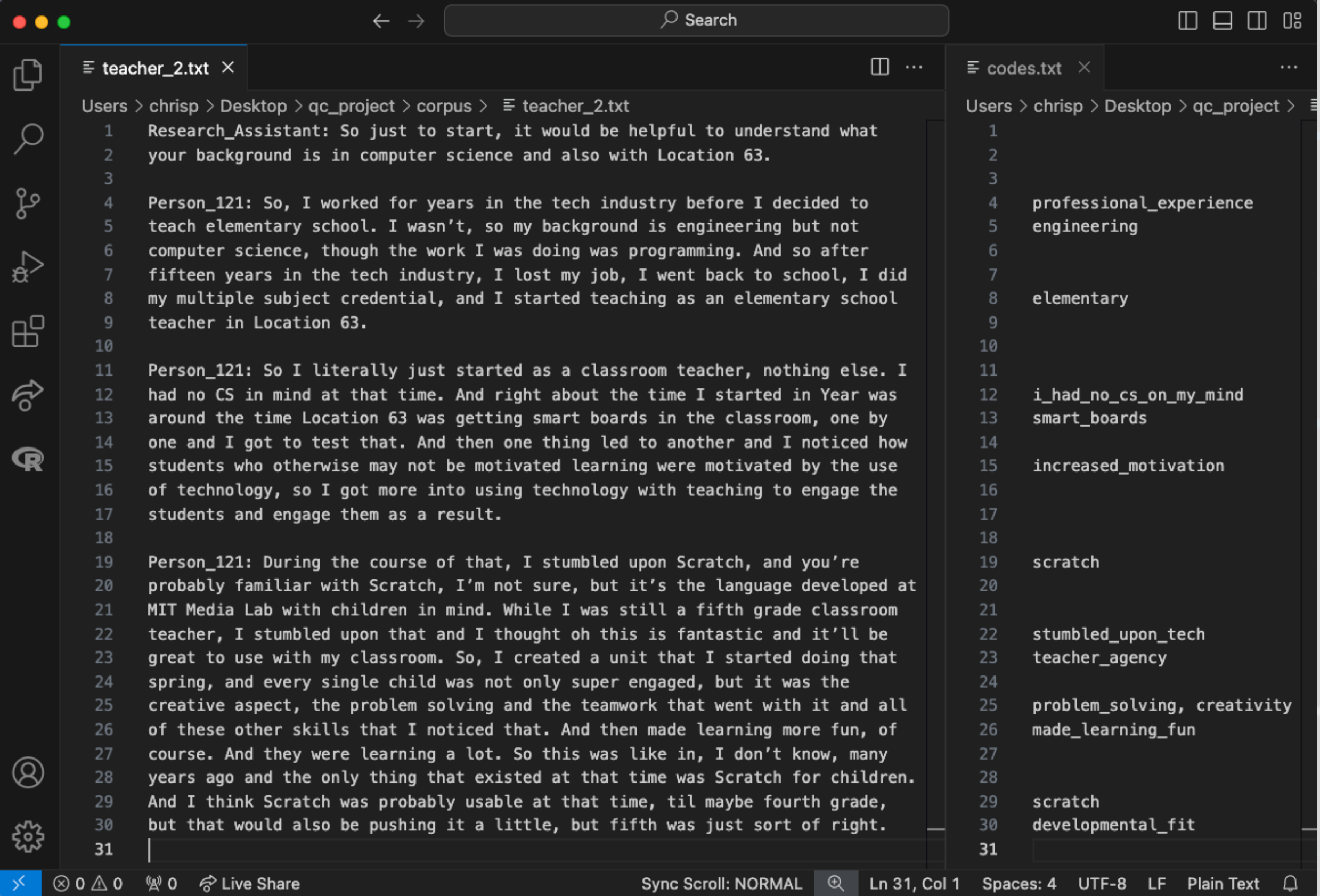


The screenshot displays the qualitative-coding application interface. On the left, a text editor window titled 'teacher\_2.txt' shows a transcript of a conversation. The transcript includes a Research Assistant's opening question, followed by three paragraphs from 'Person\_121' discussing their background in computer science, their transition to teaching, and their experience with Scratch. On the right, a 'codes.txt' window lists the codes assigned to the text segments. The codes are: 'professional\_experience' and 'engineering' for the first paragraph; 'elementary' for the second paragraph; and 'i\_had\_no\_cs\_on\_my\_mind', 'smart\_boards', 'increased\_motivation', 'scratch', 'stumbled\_upon\_tech', 'teacher\_agency', 'problem\_solving, creativity', 'made\_learning\_fun', 'scratch', and 'developmental\_fit' for the third paragraph. The application's status bar at the bottom indicates 'Ln 31, Col 1', 'Spaces: 4', 'UTF-8', 'LF', and 'Plain Text'.

```
Users > chrisp > Desktop > qc_project > corpus > teacher_2.txt
1 Research_Assistant: So just to start, it would be helpful to understand what
2 your background is in computer science and also with Location 63.
3
4 Person_121: So, I worked for years in the tech industry before I decided to
5 teach elementary school. I wasn't, so my background is engineering but not
6 computer science, though the work I was doing was programming. And so after
7 fifteen years in the tech industry, I lost my job, I went back to school, I did
8 my multiple subject credential, and I started teaching as an elementary school
9 teacher in Location 63.
10
11 Person_121: So I literally just started as a classroom teacher, nothing else. I
12 had no CS in mind at that time. And right about the time I started in Year was
13 around the time Location 63 was getting smart boards in the classroom, one by
14 one and I got to test that. And then one thing led to another and I noticed how
15 students who otherwise may not be motivated learning were motivated by the use
16 of technology, so I got more into using technology with teaching to engage the
17 students and engage them as a result.
18
19 Person_121: During the course of that, I stumbled upon Scratch, and you're
20 probably familiar with Scratch, I'm not sure, but it's the language developed at
21 MIT Media Lab with children in mind. While I was still a fifth grade classroom
22 teacher, I stumbled upon that and I thought oh this is fantastic and it'll be
23 great to use with my classroom. So, I created a unit that I started doing that
24 spring, and every single child was not only super engaged, but it was the
25 creative aspect, the problem solving and the teamwork that went with it and all
26 of these other skills that I noticed that. And then made learning more fun, of
27 course. And they were learning a lot. So this was like in, I don't know, many
28 years ago and the only thing that existed at that time was Scratch for children.
29 And I think Scratch was probably usable at that time, til maybe fourth grade,
30 but that would also be pushing it a little, but fifth was just sort of right.
31 |

Users > chrisp > Desktop > qc_project > codes.txt
1
2
3
4 professional_experience
5 engineering
6
7
8 elementary
9
10
11
12 i_had_no_cs_on_my_mind
13 smart_boards
14
15 increased_motivation
16
17
18
19 scratch
20
21
22 stumbled_upon_tech
23 teacher_agency
24
25 problem_solving, creativity
26 made_learning_fun
27
28
29 scratch
30 developmental_fit
31
```

# Applying this to qualitative work



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15 increased_motivation
16
17
18
19 scratch
20
21
22 stumbled_upon_tech
23 teacher_agency
24
25 problem_solving, creativity
26 made_learning_fun
27
28
29 scratch
30 developmental_fit
31
```

% qc codes stats

Code	Count
creativity	1
developmental_fit	1
elementary	1
engineering	1
i_had_no_cs_on_my_mind	1
increased_motivation	1
made_learning_fun	1
problem_solving	1
professional_experience	1
scratch	2
smart_boards	1
stumbled_upon_tech	1
teacher_agency	1

# Applying this to qualitative work

# Applying this to qualitative work

```
% code codebook.yaml
```

# Applying this to qualitative work

`% code codebook.yaml`

- creativity
- developmental\_fit
- elementary
- engineering
- i\_had\_no\_cs\_on\_my\_mind
- increased\_motivation
- made\_learning\_fun
- problem\_solving
- professional\_experience
- scratch
- smart\_boards
- stumbled\_upon\_tech
- teacher\_agency

# Applying this to qualitative work

`% code codebook.yaml`

- creativity
- developmental\_fit
- elementary
- engineering
- i\_had\_no\_cs\_on\_my\_mind
- increased\_motivation
- made\_learning\_fun
- problem\_solving
- professional\_experience
- scratch
- smart\_boards
- stumbled\_upon\_tech
- teacher\_agency



- **reasons\_for\_teaching\_cs:**
  - creativity
  - increased\_motivation
  - made\_learning\_fun
  - problem\_solving
- **teacher\_identity:**
  - elementary
  - engineering
  - professional\_experience
- **technologies:**
  - scratch
  - smart\_boards
- **trajectory:**
  - developmental\_fit
  - i\_had\_no\_cs\_on\_my\_mind
  - stumbled\_upon\_tech
  - teacher\_agency

# Applying this to qualitative work

# Applying this to qualitative work

```
% qc codes stats -ra
```

Code	Count	Total
reasons_for_teaching_cs	0	4
. creativity	1	1
. increased_motivation	1	1
. made_learning_fun	1	1
. problem_solving	1	1
teacher_identity	0	3
. elementary	1	1
. engineering	1	1
. professional_experience	1	1
technologies	0	3
. scratch	2	2
. smart_boards	1	1
trajectory	0	4
. developmental_fit	1	1
. i_had_no_cs_on_my_mind	1	1
. stumbled_upon_tech	1	1
. teacher_agency	1	1

# Applying this to qualitative work

# Applying this to qualitative work

```
% qc codes find trajectory -r
```

```
teacher_2.txt (4)
```

```
=====
[9:14]
```

Person\_121: So I literally just started as a classroom teacher, nothing else. I had no CS in mind at that time. And right about the time I started in Year was around the time Location 63 was getting smart boards in the classroom, one by one and I got to test that. And then one thing led to another and I noticed how

i\_had\_no\_cs\_on\_my\_mind

[19:25]  
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stumbled\_upon\_tech  
teacher\_agency

[27:30]  
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developmental\_fit

# In conclusion,

# In conclusion,

- Should you be using this?

# In conclusion,

- Should you be using this?
  - Nah.

# In conclusion,

- Should you be using this?
  - Nah.
  - But there are legitimate strengths

# In conclusion,

- Should you be using this?
  - Nah.
  - But there are legitimate strengths
  - And maybe aesthetic / organizational appeal