

Unit 7: Data Annotation

Confirming annotation quality

Lesson 51

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Overview of unit

Objectives:

- Understand how to approach data annotation (whether automated or manual)
- Know how to run a small human annotation task

1. Typologies
2. Building a typology
3. Applying a typology – human coding
4. Confirming an annotation
5. Applying a typology – classifier

Lesson overview

Objectives

- Understand ways to compute coder agreement
- How to handle disagreements

Outline

- The problem
- Cohen's kappa
- Handling disagreements

Score: $\frac{4}{6}$

- <
- ① bad agreement
 - ② disagreement kind
 - ③ random agreement

The problem

2 coders

Tweet	Type of weather	
It's pouring outside.	R	R
Just came inside soaking wet.	R	A (ambiguous weather)
Blizzard conditions out there! #hotchocolatetime	S	A
Going to get wet catching the bus today!	A	A
Sunglasses weather. Can't wait to take a walk.	SUN	SUN
Pouring myself some cereal this morning.	X	X

✓
x
x
✓
✓
✓

2 codings

Some agreements

Cohen's kappa

A way of scoring how good the agreement between two coders' annotations are.

$$\kappa \equiv \frac{p_o - p_e}{1 - p_e}$$

→ negative result
just means your
typology is
really bad

eg if $\kappa = 0.25$
you are
25% better than
random

Interpreting annotator agreement

- Confusing typology

- Bad coder
*Appear many times
in disagreements*

- Tricky cases

- Human error

*hard to
differentiate*



*what types mistakes happened around?
Which codes made mistakes?*

tells us

*- multiple coders
getting the same
thing wrong*

Lesson wrap-up

Takeaways

- Just like everything else in annotation... verifying quality involves work
- Must follow up with annotators and spend time with annotations

Up next

- Automated annotation