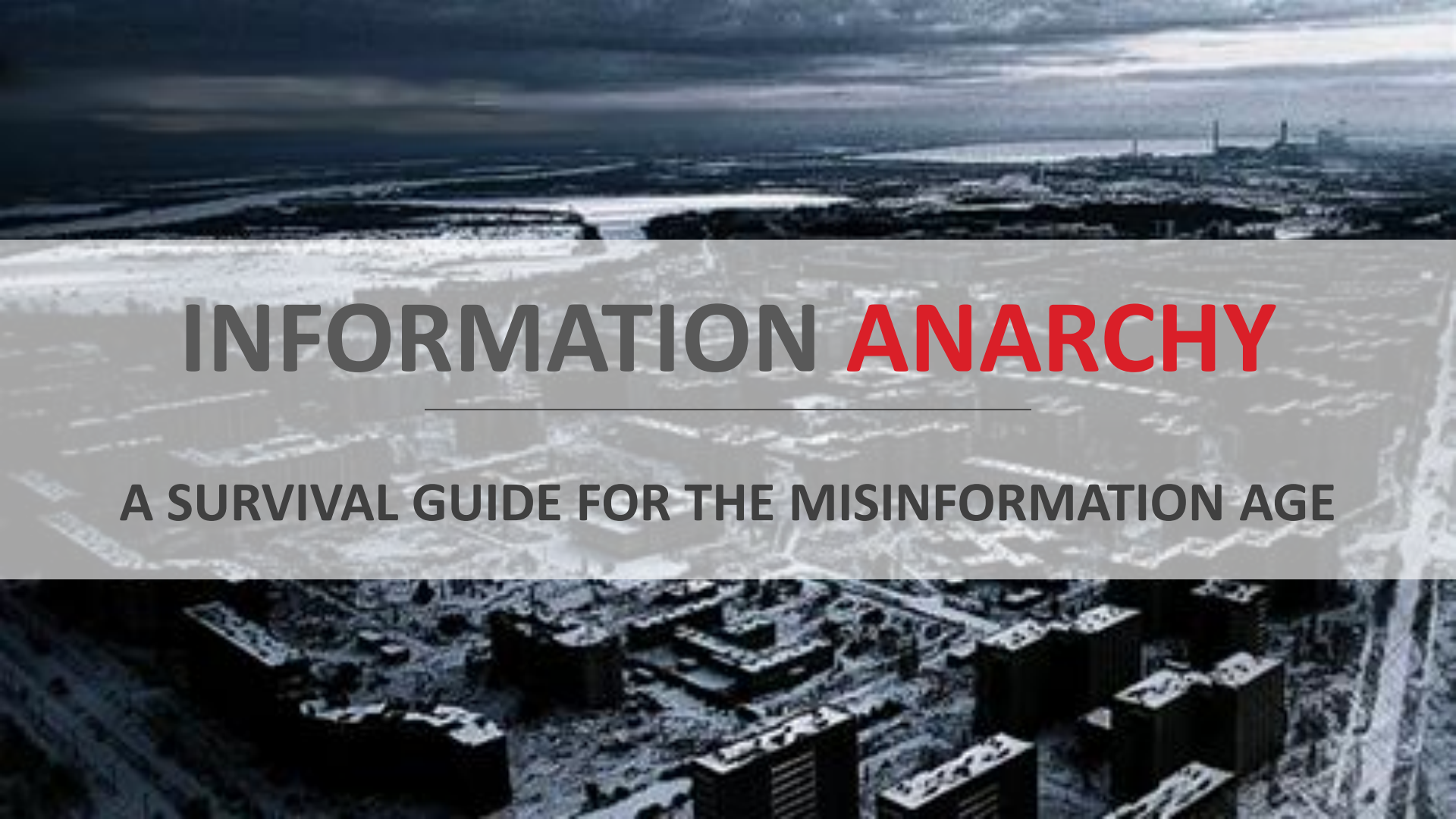


INFORMATION ANARCHY

A SURVIVAL GUIDE FOR THE MISINFORMATION AGE

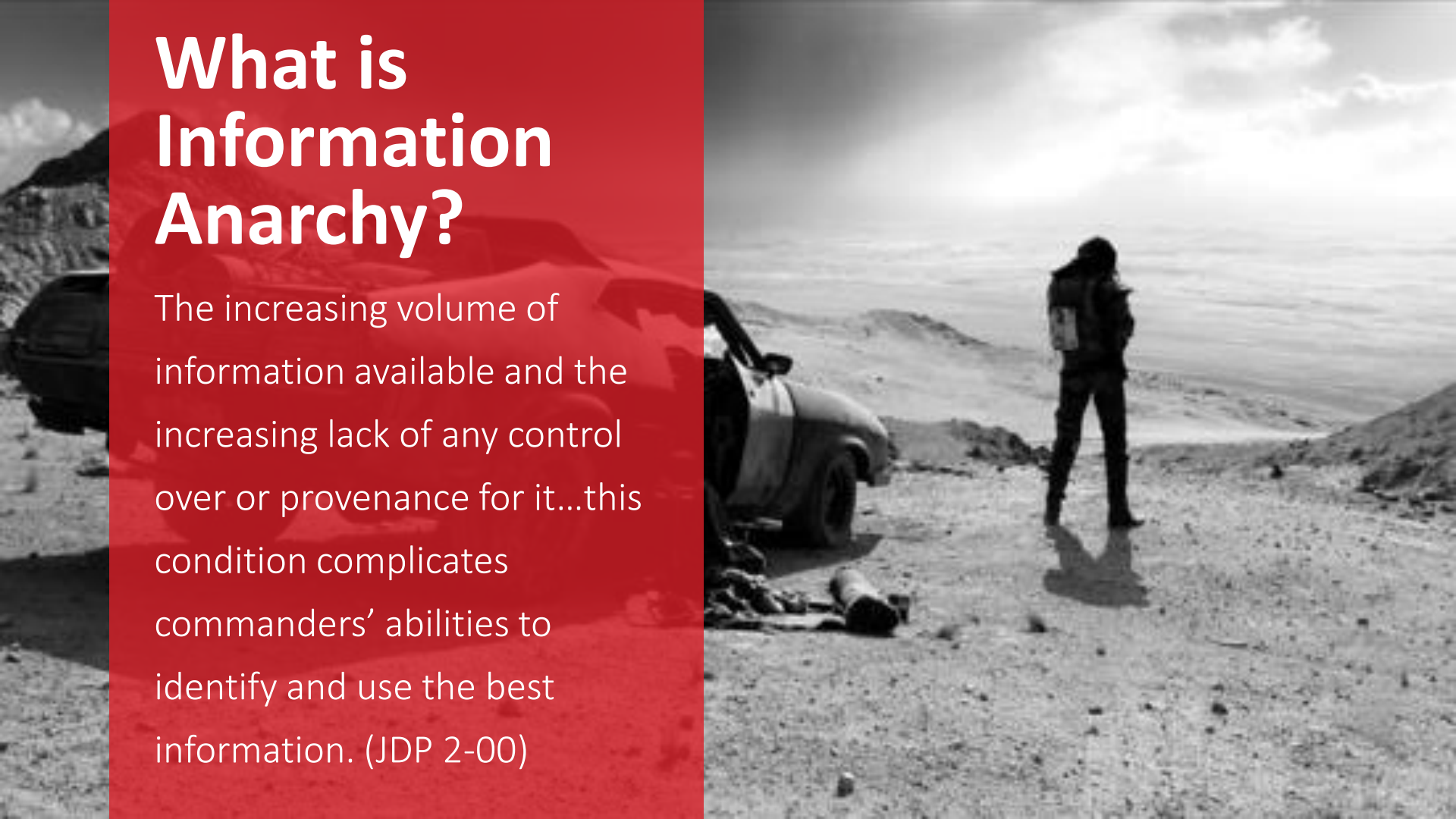
TOTALLY NOT AN ANARCHIST

REBEKAH BROWN
@PDXBEK

- SANS Instructor and co-author FOR578
- Rapid7 Threat Intelligence Lead
- Co-Author Intelligence-Driven Incident Response
- Currently writing a Master's Thesis (aka losing her mind)
- Player of random musical instruments

What is Information Anarchy?

The increasing volume of information available and the increasing lack of any control over or provenance for it…this condition complicates commanders' abilities to identify and use the best information. (JDP 2-00)



How did we
get here?

Information Monarchy

Information is created by and available to those in power.

Information Revolution

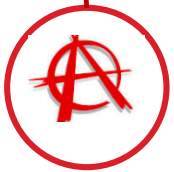
Learning increases, more people want access to information.

Information Democracy

There are multiple ways to get news, with competition comes the push for ratings.

Social Media

You can say anything you want and pass it as a fact. Seriously, anything. Try it.



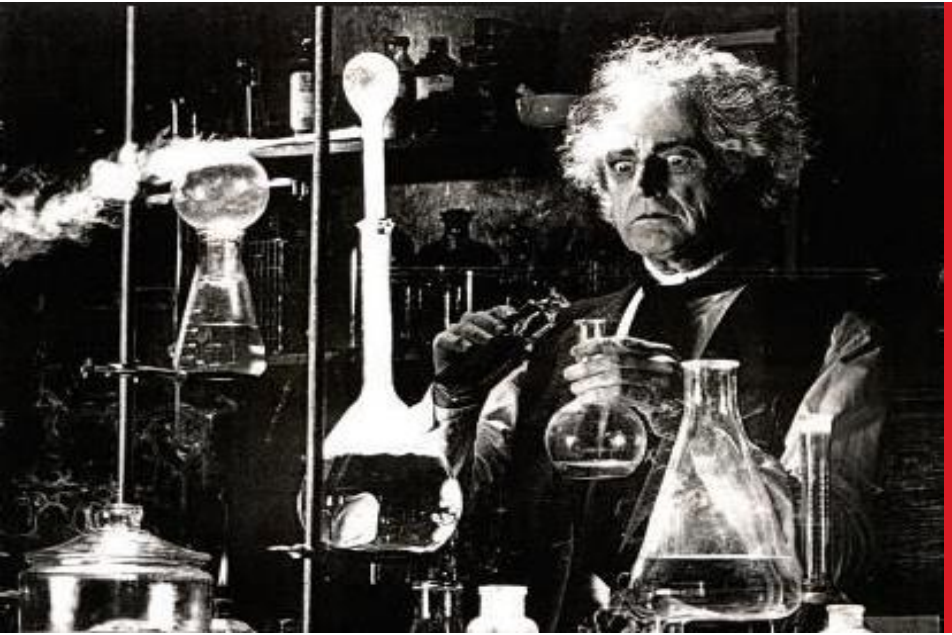
Information Anarchy

So much information exist, legitimate, illegitimate, and incorrect, that it is difficult to know what is real

INNOCENT MISTAKES

- Mistakes happen, even when research is thorough.
- New information can be introduced.
- Mistakes *should* be corrected when identified.

HYPOTHESIS AS FACTS



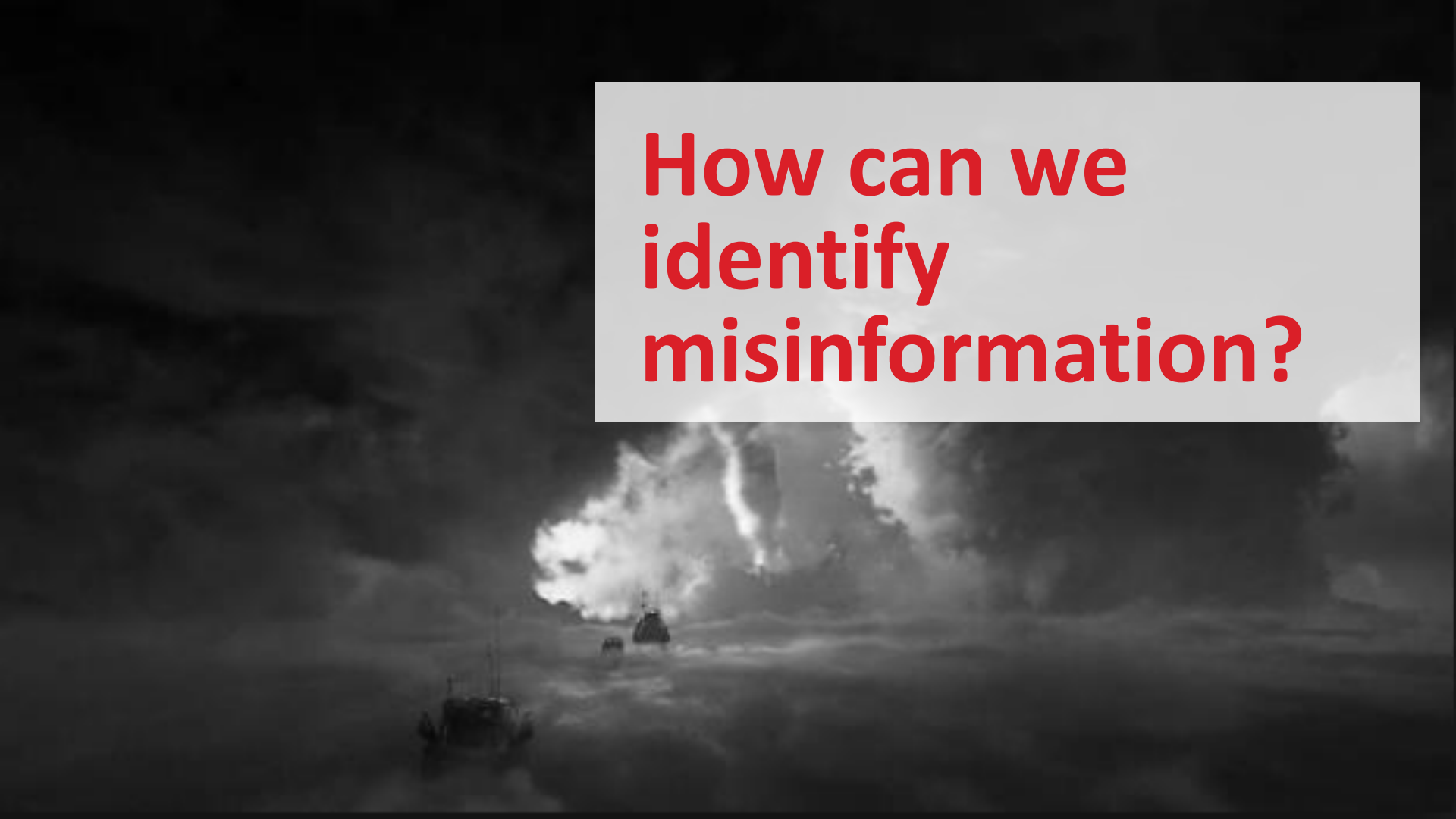
- An idea may be valid but needs to be tested
- Rushing to get information out skips testing and validation
- Theories can be misrepresented as facts

PUSHING AN AGENDA

- Fear, Uncertainty, and Doubt improves ratings
- Companies looking to increase business and brand
- Support political, economical, religious stances

INTENTIONAL DISINFORMATION

- Conveying false information to an adversary
- Involves active measures – fabrication of documents, planting or leaking false information, etc.


How can we identify misinformation?

SOURCING

Where did the information come from?

Can you access the source material?

Was a structured analytic method used?

LINGUISTIC METHODS

Words indicating Sourcing

(according to, as per, as the report states)

Explanatory Phrases

(because, in fact, therefore)

Words of Uncertainty

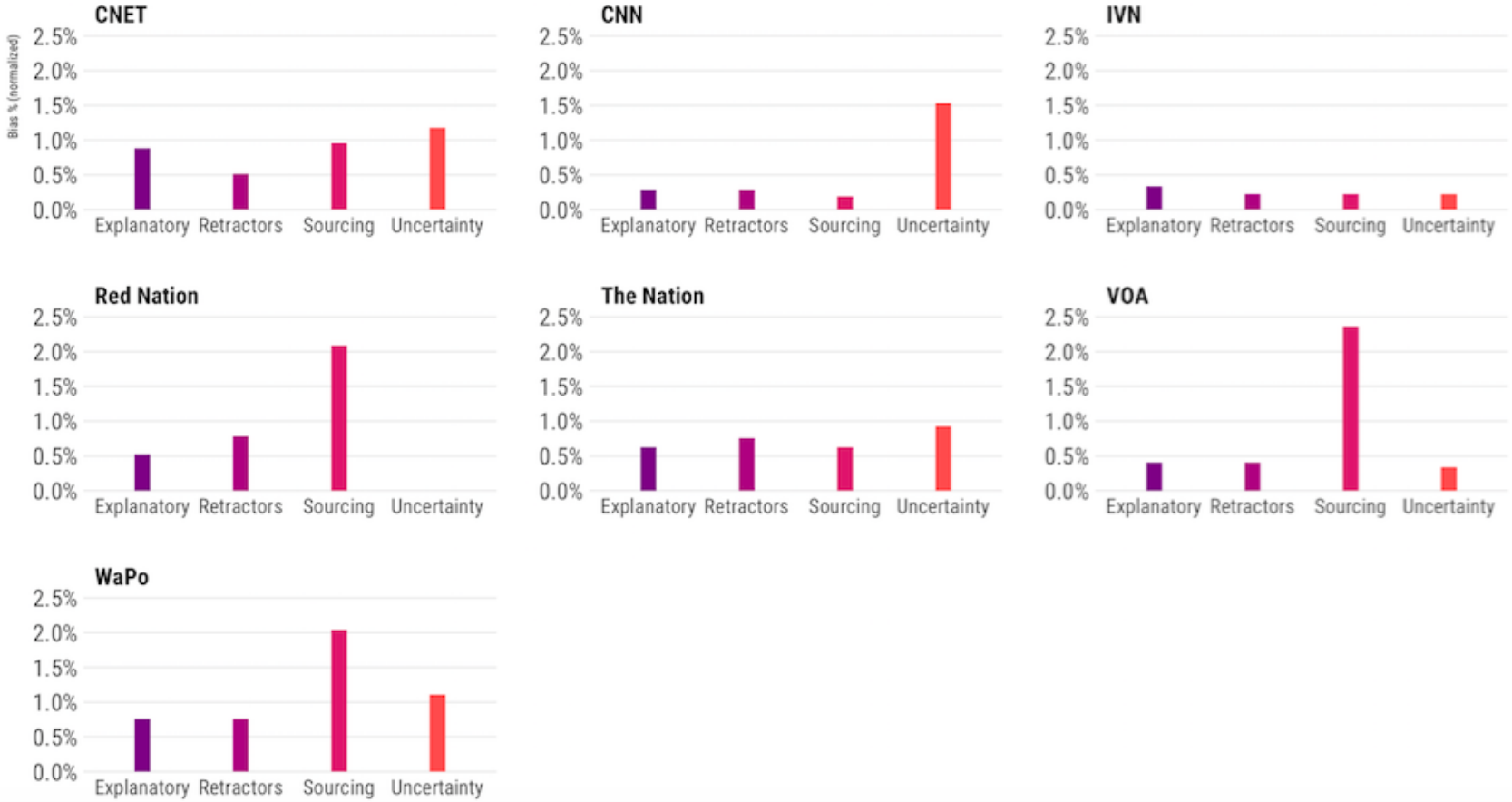
(possibly, could, might)

Retratactors

(however, although, on the other hand)

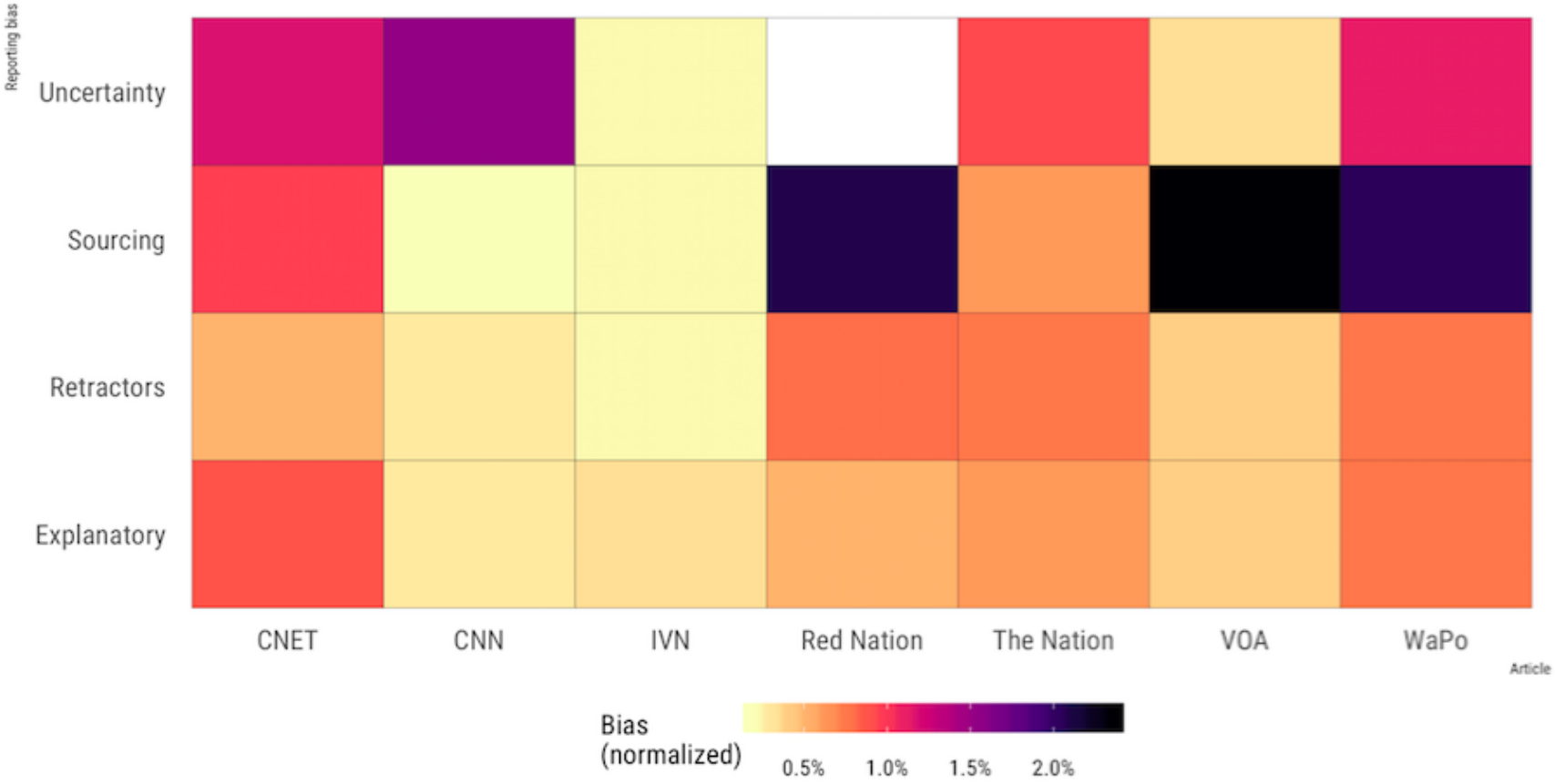
Comparing Reporting Bias Across Corpus Elements

Comparing Reporting Bias Across Corpus Elements



Reporting Bias Matrix for Selected Corpus

(Darker colors mean larger bias when compared to other articles in the corpus)



LINGUISTIC ANALYSIS

HIGH

Words indicating Sourcing

(according to, as per, as the report states)

Words of Uncertainty

(possibly, could, might)

Hypothesis as a Fact

LINGUISTIC ANALYSIS

HIGH

Words indicating Sourcing

(according to, as per, as the report states)

Pushing an Agenda

LOW

Words of Uncertainty

(possibly, could, might)

Explanatory Phrases

(because, in fact, therefore

LINGUISTIC ANALYSIS

LOW

Words indicating Sourcing

(according to, as per, as the report states)

Explanatory Phrases

(because, in fact, therefore

Words of Uncertainty

(possibly, could, might)

Retratactors

(however, although, on the other hand)

Pushing an Agenda

LINGUISTIC ANALYSIS

HIGH

Words of Uncertainty (possibly, could, might)

Retratactors (however, although, on the other hand)

LOW

Words indicating Sourcing (according to, as per, as the report states)

Explanatory Phrases (because, in fact, therefore

Disinformation

Integrative Complexity

A scoring system for measuring the complexity of human thought on a scale from 1 (very simply) to 7 (very complex). It looks at structure instead of content.

Integrative Complexity

The capacity to identify that there is more than one way to look at an issue (differentiation)

The ability to form conceptual links among these perspectives and to integrate them into a coherent overall judgment (integration)

Complexity Analysis

Be wary of words like “always” and “never”

Look for counterpoints or arguments to be preemptively addressed

Look for synthesis of multiple data sources or analytic methods

Look for complexity across the entire text, not just in the author’s area of expertise

Surviving in the misinformation age:

- Sourcing
- Content
- Structure

THE BAR
RAISE ~~HELL~~

Want to learn more?

- **https://github.com/PDXBek/Misinformation**

- *A Dictionary of Linguistics and Phonetics, 6th ed* **– Dave Crystal**
- *Thematic Proximity in Content Analysis* **- Andreas Armborst**
- *Motivation and Personality: Handbook of Thematic Content Analysis* **– Smith, Atkinson, McClelland**
- *Automated Integrative Complexity,* **Lucian Gideon Conway III**
- Countering Russian Information Operations in the Age of Social Media **https://www.cfr.org/report/countering-russian-information-operations-age-social-media**