

# The Meaning of Meaning

Last updated: 2023/08/22, 11:48:25 EDT

## Principles of Complex Systems, Vols. 1, 2, & 3D CSYS/MATH 6701, 6713, & a pretend number, 2023–2024 | @pocsvox

Prof. Peter Sheridan Dodds | @peterdodds

Computational Story Lab | Vermont Complex Systems Center  
Santa Fe Institute | University of Vermont



The PoCVerse  
**Meaning**  
1 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# These slides are brought to you by:

Sealie & Lambie Productions

The PoCVerse  
Meaning  
2 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

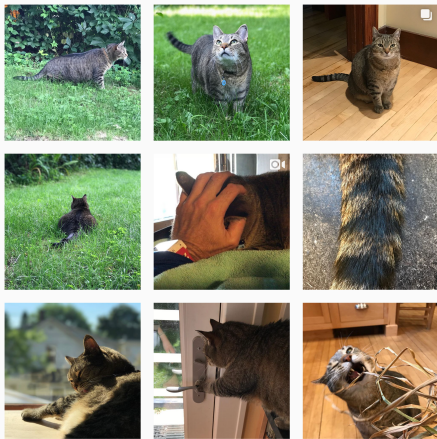
Extras



References



# These slides are also brought to you by:

## Special Guest Executive Producer



 On Instagram at [pratchett\\_the\\_cat](https://www.instagram.com/pratchett_the_cat) 

The PoCverse  
Meaning  
3 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousonyms  
Dimension names

Safety bias

Applications

The Ousimeter  
Correspondences  
Nutshell

Extras

References



# Outline

## Measuring essential meaning

History

Definitions

Emotions

## Problems

## Remeasuring meaning

## Ousiograms

Extremousionyms

Dimension names

## Safety bias

## Applications

The Ousiometer

Correspondences

Nutshell

## Extras

## References

The PoCVerse

Meaning

4 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References




# The meaning of meaning:



“Ousiometrics and Telegnomics: The essence of meaning conforms to a two-dimensional powerful-weak and dangerous-safe framework with diverse corpora presenting a safety bias” ↗

Dodds et al.,  
, 2021. [5]

## What does meaning even mean?

 From the smack-tweeting Merriam-Webster:<sup>1</sup>  
“The thing that is conveyed especially by language”

The PoCverse  
Meaning  
5 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# The meaning of meaning:



“Ousiometrics and Telegnomics: The essence of meaning conforms to a two-dimensional powerful-weak and dangerous-safe framework with diverse corpora presenting a safety bias” ↗

Dodds et al.,  
, 2021. [5]

## What does meaning even mean?

🧱 From the smack-tweeting Merriam-Webster:¹  
“The thing that is conveyed especially by language”

🧱 What are the essential characteristics of meaning?

### Measuring essential meaning

History  
Definitions  
Emotions

### Problems

Remeasuring meaning

### Ousiograms

Extremousionyms  
Dimension names

### Safety bias

### Applications

The Ousiometer  
Correspondences  
Nutshell

### Extras

### References



# The meaning of meaning:



“Ousiometrics and Telegnomics: The essence of meaning conforms to a two-dimensional powerful-weak and dangerous-safe framework with diverse corpora presenting a safety bias” ↗

Dodds et al.,  
, 2021. [5]

## What does meaning even mean?

- From the smack-tweeting Merriam-Webster:¹  
“The thing that is conveyed especially by language”
- What are the essential characteristics of meaning?
- Does essential meaning meaningfully span some kind of space?

The PoCverse  
Meaning  
5 of 77

### Measuring essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# The meaning of meaning:



“Ousiometrics and Telegnomics: The essence of meaning conforms to a two-dimensional powerful-weak and dangerous-safe framework with diverse corpora presenting a safety bias” ↗

Dodds et al.,  
, 2021. [5]

## What does meaning even mean?

- From the smack-tweeting Merriam-Webster:<sup>1</sup>  
“The thing that is conveyed especially by language”
- What are the essential characteristics of meaning?
- Does essential meaning meaningfully span some kind of space?

### Measuring essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



<sup>1</sup>Life goal: Never get owned by a dictionary on social media



# This is not easy:

## “Abed’s Uncontrollable Christmas”

The PoCverse  
Meaning  
6 of 77

### Measuring essential meaning

- History
- Definitions
- Emotions

### Problems

### Remeasuring meaning

### Ousiograms

- Extremousionyms
- Dimension names

### Safety bias

### Applications

- The Ousiometer
- Correspondences
- Nutshell

### Extras

### References





# This is not easy:

## “Abed’s Uncontrollable Christmas”

- 🧩 Abed searches for the meaning of Christmas (in stop animation)
- 🧩 Abed Nadir: [opens present] “It’s the first season of Lost on DVD.”

The PoCverse  
Meaning  
6 of 77

### Measuring essential meaning

History  
Definitions  
Emotions

### Problems

Remeasuring  
meaning

### Ousiograms

Extremousionyms  
Dimension names

### Safety bias

### Applications

The Ousiometer  
Correspondences  
Nutshell

### Extras

### References



# This is not easy:

## “Abed’s Uncontrollable Christmas”

- 🧩 Abed searches for the meaning of Christmas (in stop animation)
- 🧩 Abed Nadir: [opens present] “It’s the first season of Lost on DVD.”
- 🧩 Pierce Hawthorne: “That’s the meaning of Christmas?”

The PoCverse  
Meaning  
6 of 77

### Measuring essential meaning

History  
Definitions  
Emotions

### Problems

Remeasuring  
meaning

### Ousiograms

Extremousionyms  
Dimension names

### Safety bias

### Applications

The Ousiometer  
Correspondences  
Nutshell

### Extras

### References



# This is not easy:

## “Abed’s Uncontrollable Christmas”

- 🧱 Abed searches for the meaning of Christmas (in stop animation)
- 🧱 Abed Nadir: [opens present] “It’s the first season of Lost on DVD.”
- 🧱 Pierce Hawthorne: “That’s the meaning of Christmas?”
- 🧱 Abed Nadir: “It’s a metaphor.

The PoCVerse  
Meaning  
6 of 77

### Measuring essential meaning

History  
Definitions  
Emotions

### Problems

Remeasuring  
meaning

### Ousiograms

Extremousionyms  
Dimension names

### Safety bias

### Applications

The Ousiometer  
Correspondences  
Nutshell

### Extras

### References





# This is not easy:

## “Abed’s Uncontrollable Christmas”

- 🧱 Abed searches for the meaning of Christmas (in stop animation)
- 🧱 Abed Nadir: [opens present] “It’s the first season of Lost on DVD.”
- 🧱 Pierce Hawthorne: “That’s the meaning of Christmas?”
- 🧱 Abed Nadir: “It’s a metaphor. It represents lack of payoff.”

## “Introduction to Teaching”

### Measuring essential meaning

History  
Definitions  
Emotions

### Problems

Remeasuring  
meaning

### Ousiograms

Extremousionyms  
Dimension names

### Safety bias

### Applications

The Ousiometer  
Correspondences  
Nutshell





### Extras

### References



# This is not easy:

## “Abed's Uncontrollable Christmas”

- 
 Abed searches for the meaning of Christmas (in stop animation)
- 
 Abed Nadir: [opens present] “It’s the first season of Lost on DVD.”
- 
 Pierce Hawthorne: “That’s the meaning of Christmas?”
- 
 Abed Nadir: “It’s a metaphor. It represents lack of payoff.”

## “Introduction to Teaching”

Abed Nadir: “I thought the meaning of people was somewhere in here.

### Measuring essential meaning

History  
Definitions  
Emotions

### Problems

Remeasuring meaning

### Ousiograms

Extremousonyms  
Dimension names

### Safety bias

### Applications

The Ousimeter  
Correspondences  
Nutshell

### Extras

### References





# This is not easy:

## “Abed’s Uncontrollable Christmas”

- 🧱 Abed searches for the meaning of Christmas (in stop animation)
- 🧱 Abed Nadir: [opens present] “It’s the first season of Lost on DVD.”
- 🧱 Pierce Hawthorne: “That’s the meaning of Christmas?”
- 🧱 Abed Nadir: “It’s a metaphor. It represents lack of payoff.”

## “Introduction to Teaching”

Abed Nadir: “I thought the meaning of people was somewhere in here. Then I looked inside Nicolas Cage and I found a secret

### Measuring essential meaning

History  
Definitions  
Emotions

### Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

### Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

### Extras

### References



# This is not easy:

## "Abed's Uncontrollable Christmas"

- 🧱 Abed searches for the meaning of Christmas (in stop animation)
- 🧱 Abed Nadir: [opens present] "It's the first season of Lost on DVD."
- 🧱 Pierce Hawthorne: "That's the meaning of Christmas?"
- 🧱 Abed Nadir: "It's a metaphor. It represents lack of payoff."

## "Introduction to Teaching"

Abed Nadir: "I thought the meaning of people was somewhere in here. Then I looked inside Nicolas Cage and I found a secret—people are random and pointless."

### Measuring essential meaning

History

Definitions

Emotions

### Problems

### Remeasuring meaning

### Ousiograms

Extremousionyms

Dimension names

### Safety bias

### Applications

The Ousiometer

Correspondences

Nutshell

### Extras

### References



# Outline

## Measuring essential meaning

### History

Definitions

Emotions

### Problems

### Remeasuring meaning

### Ousiograms

Extremousionyms

Dimension names

### Safety bias

### Applications

The Ousiometer

Correspondences

Nutshell

### Extras

### References

The PoCVerse

Meaning

7 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

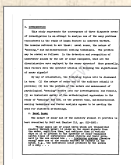
Nutshell


Extras

References



# The meaning of pings:






“A factorial study of complex auditory stimuli (passive sonar sounds)” 

L. M. Solomon,

Unpublished Doctoral Dissertation, University of Illinois, , ,  
1954. <sup>[22]</sup>

## From the introduction:

“This study represents the convergence of three disparate areas of investigation in an attempt to analyze one of the many problems encountered in the study of human factors in undersea warfare. The domains referred to are these:

-  naval sonar,
-  the nature of “meaning,”
-  and multidimensional scaling techniques.

The problem may be stated as follows: In the detection and recognition of underwater sounds by the use of sonar equipment, what are the discriminative cues employed by the sonar operator?

More generally, what factors does the operator utilize in decoding the significance of sonar signals?

The PoCSverse  
Meaning  
8 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

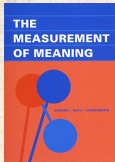
Applications  
The Ousiometer  
Correspondences  
Nutshell



Extras

References



# From pings to things:



“The Measurement of Meaning”    
by Osgood, Suci, and Tannenbaum (1957). <sup>[13]</sup>




Osgood et al. used semantic differentials  and factor analysis to identify a basis of three variables for meaning-space:

Table 4  
UNBIASED CENTROID FACTOR LOADINGS AND COMMUNITIES (EIGENVALUES FIRST)

	I	II	III	IV	V	VI	VII	VIII	IX
1. pleasant-unpleasant	.08	.50	-.00	.33	-.07	-.24	.10	-.20	.23
2. pleasant-pleasant	.24	.16	.24	.52	.20	-.15	.04	.50	.21
3. meaningful	.22	.02	.53	.19	-.24	-.08	.07	.48	.14
4. interesting	.07	-.05	.23	.27	-.65	.23	.10	.18	.58
5. beautiful	.26	.56	.00	.22	-.25	-.15	-.15	-.16	.54
6. worthwhile-unworth.	.22	.14	.36	.20	.33	.24	.18	.03	.44
7. low-high	.22	-.40	.26	.07	.26	-.25	.17	-.08	.50
8. powerful-weak	.13	-.40	.22	-.03	-.26	.46	.00	-.20	.58
9. important-unimportant	.25	.01	.26	.21	.15	.16	.07	.04	.51
10. useful	.10	.41	-.27	.23	.07	-.20	.06	.11	.47
11. interesting	.43	-.20	.29	.06	-.13	-.06	.07	.04	.43
12. good	.30	.20	.16	-.16	-.10	-.11	.10	-.16	.50
13. interesting	.40	-.46	-.18	.14	-.04	-.07	.04	.04	.50
14. interesting	.35	.17	.48	-.13	.23	-.25	.22	-.07	.40
15. interesting	.20	.13	-.08	-.24	.21	-.29	.06	.26	.50
17. meaningfulness	.41	.30	.06	.13	-.37	-.07	.01	-.16	.27
18. important	.12	-.01	.02	.33	-.20	-.32	.03	.02	.37
19. interesting	.33	.31	.22	-.33	-.20	-.32	.03	.02	.37
20. interesting	.40	.21	.42	-.02	.02	-.06	-.04	.13	.27
21. interesting	.42	-.07	-.28	-.11	.06	-.06	-.02	.04	.50
22. interesting	.24	-.40	-.02	-.33	.20	-.32	.03	.02	.37
23. interesting	.30	.20	.02	-.33	.20	-.32	.03	.02	.37
24. interesting	.43	.14	.11	.26	-.13	.19	.09	.24	.50
25. interesting	.21	.20	.28	.02	-.07	-.07	.13	.35	.35
26. interesting	.42	-.20	-.11	-.02	.04	.02	.22	.11	.41
27. interesting	.30	-.13	.11	.24	.13	.08	-.14	.24	.50
28. interesting	.24	.42	-.11	.32	-.07	.06	.41	.13	.43
29. interesting	.21	.42	-.01	.24	-.24	-.24	.01	.24	.50
30. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
31. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
32. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
33. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
34. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
35. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
36. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
37. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
38. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
39. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
40. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
41. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
42. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
43. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
44. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
45. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
46. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
47. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
48. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
49. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50
50. interesting	.31	-.01	.24	.24	.24	.24	.01	.24	.50

The PoCverse  
Meaning  
9 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References




# From pings to things:



## “The Measurement of Meaning” by Osgood, Suci, and Tannenbaum (1957). <sup>[13]</sup>



Osgood et al. used semantic differentials  and factor analysis to identify a basis of three variables for meaning-space:



Evaluation: {bad ⇔ good}

The PoCverse  
Meaning  
9 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

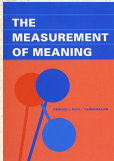
References



Table 4  
UNBIASED CENTRO-PATH (LOADED) AND COMMUNITIES (UNBIASED) (FIRST)

	I	II	III	IV	V	VI	VII	VIII	IX
1. pleasant-unpleasant	.08	.35	-.05	.33	-.07	-.24	.12	-.20	-.23
2. rambunctious	.24	.16	.24	.52	.20	-.11	.04	.35	.21
3. successful	.22	.02	.53	.19	-.24	-.05	.07	.43	.18
4. interesting	.07	-.05	.23	.27	-.65	.23	.10	.18	.28
5. beautiful	.28	.56	.00	.72	-.27	-.15	-.15	-.16	.24
6. sophisticated	.22	.14	.35	.20	.33	.24	.18	.03	.44
7. low-key	.25	-.40	.26	.07	.26	-.25	.17	-.04	.50
8. powerful	.15	-.40	.32	-.03	-.26	.16	.40	-.20	.58
9. sophisticated	.25	.41	.26	.21	.16	.02	.17	.04	.33
10. neutral	.10	.41	-.27	.23	.07	-.25	.06	.11	.47
11. literary	.43	-.25	.28	-.06	-.11	-.06	.07	.04	.43
12. popular	.30	.30	.16	-.16	-.14	-.11	.16	-.10	.50
13. sophisticated	.50	-.46	-.18	.14	.04	-.07	.04	.04	.43
14. simple	.35	.17	.46	-.13	.23	.23	.22	-.07	.40
15. simple	.28	.13	.58	-.24	.21	.23	.30	-.06	.26
16. sophisticated	.41	.30	.06	.13	-.27	-.27	.11	-.16	.27
17. sophisticated	.18	-.01	.02	.53	.26	.27	.22	-.14	.43
18. simple	.53	.31	.22	-.33	-.20	-.32	.03	.02	.37
19. sophisticated	.40	.21	.42	.02	.12	.05	-.04	.13	.37
20. simple	.42	-.07	-.28	-.11	.36	-.06	-.03	.04	.35
21. sophisticated	.24	-.45	-.02	-.33	.35	-.03	-.04	-.06	.52
22. simple	.30	.25	-.02	.25	.38	.02	-.23	.40	.29
23. sophisticated	.43	.14	.11	.26	-.13	.19	.09	.04	.24
24. simple	.21	.28	.28	.02	-.07	.07	.13	.35	.35
25. sophisticated	.45	-.26	-.02	-.11	-.02	.04	.02	.22	.11
26. simple	.35	-.13	.11	.24	.13	.08	-.14	.24	.24
27. sophisticated	.24	.42	-.11	.32	-.07	.46	.11	.13	.43
28. simple	.21	.41	.42	-.20	-.24	-.29	.16	.16	.26
29. sophisticated	.31	-.01	.04	-.25	.19	-.09	.02	.10	.45
30. simple	.09	.28	.19	.11	-.11	-.14	-.07	.41	.41
31. sophisticated	.35	-.36	-.15	.14	.14	-.42	-.27	-.10	.24
32. simple	.20	.21	.15	.05	.02	-.29	-.30	.10	.34
33. sophisticated	.21	.04	-.43	.10	-.27	.20	-.38	-.11	.41
34. simple	.02	.44	.40	-.28	.29	.00	.08	.14	.24
35. sophisticated	.29	.14	.23	.05	-.28	-.20	-.15	.17	.30
36. simple	.14	.17	.30	.22	.05	-.17	.04	.22	.21
37. sophisticated	.40	-.16	.06	-.20	-.11	-.20	-.26	.17	.41
38. simple	.24	.24	.24	-.24	-.17	.20	.13	.17	.27
39. sophisticated	.35	-.28	.44	.01	.01	-.40	-.20	.11	.41
40. simple	.35	-.07	.42	-.06	.13	-.30	.28	.25	.39
41. sophisticated	.12	.24	-.11	-.11	-.05	-.16	.10	.17	.27
42. simple	.25	.34	.44	.26	.02	.40	.14	.14	.33
43. sophisticated	.28	.29	.42	.16	.04	.48	.28	.15	.47
44. simple	.41	-.11	-.17	.10	.03	.44	-.18	-.03	.28
45. sophisticated	.27	-.11	-.17	.16	.13	.11	.16	.49	.49
46. simple	.36	-.24	.19	.12	-.02	-.40	-.27	-.12	.32
47. sophisticated	.14	.25	.17	-.28	-.28	-.11	.12	.09	.29
48. simple	.47	-.02	-.28	.11	.07	.32	.16	.19	.16
49. sophisticated	.46	-.24	.11	.07	-.09	-.10	-.10	-.10	.26




# From pings to things:



“The Measurement of Meaning”    
by Osgood, Suci, and Tannenbaum (1957). <sup>[13]</sup>



Osgood et al. used semantic differentials  and factor analysis to identify a basis of three variables for meaning-space:



**Evaluation:** {bad ⇔ good}



**Potency:** {weak ⇔ strong}

Table 4  
CORRELATED CONTENT FACTOR LOADINGS AND COMMUNITIES (ROUNDER FIRST)

	I	II	III	IV	V	VI	VII	VIII	IX
1. pleasant-unpleasant	.08	.35	-.05	.33	-.07	-.24	.12	-.20	.23
2. remembered-forgotten	.24	.16	.24	.52	.20	-.15	.04	.26	.21
3. successful-unsuccessful	.22	.02	-.33	.19	-.24	-.05	.07	.45	.24
4. interesting-uninteresting	.07	-.05	.23	.27	-.65	.23	.10	.13	.28
5. beautiful-ugly	.26	.26	.00	.22	-.25	-.15	-.15	-.16	.24
6. worthwhile-unworthwhile	.22	.14	.35	.20	.33	.24	.18	.03	.44
7. low-high	.25	-.01	.26	.07	.26	-.15	.07	-.04	.25
8. powerful-weak	.13	-.40	.32	-.03	-.26	.45	.00	-.20	.58
9. new-old-fashioned	.25	.01	.26	.21	.16	.02	.04	.21	.31
10. modern-old	.10	.41	-.27	.23	.07	-.25	.06	.11	.47
11. literary-unliterary	.43	-.25	.28	-.06	-.13	-.04	.07	.04	.43
12. popular-unpopular	.30	.20	.16	-.16	-.14	-.12	.16	-.10	.20
13. modern-old-fashioned	.40	-.46	-.18	.04	-.07	.04	.06	.04	.83
14. new-old	.35	.17	.45	-.13	.23	-.25	.22	-.07	.40
15. literary-unliterary	.28	.33	-.28	-.24	.21	-.23	-.06	.26	.36
17. meaningful-unmeaningful	.41	.30	.06	.13	-.37	-.27	.01	-.16	.27
18. important-unimportant	.21	-.01	.02	.03	.26	.27	.02	-.14	.42
19. literary-unliterary	.33	.31	.22	-.33	-.20	-.32	.03	.02	.37
20. popular-unpopular	.40	.21	.42	.02	.12	.05	-.04	.13	.37
21. literary-unliterary	.42	-.27	.28	-.21	.36	-.06	-.03	.04	.35
22. important-unimportant	.24	-.46	-.02	-.33	.25	-.04	-.06	-.06	.62
23. meaningful-unmeaningful	.30	.25	-.05	.25	.38	.02	-.23	.08	.39
24. new-old-fashioned	.43	.14	.14	-.21	.06	-.13	.19	.09	.24
25. new-old	.21	.28	.28	.02	-.07	-.07	.13	.35	.35
26. modern-old	.45	-.26	-.05	-.11	-.03	.04	.02	.22	.11
27. popular-unpopular	.35	-.13	.13	.24	.13	.08	-.14	.24	.36
28. new-old-fashioned	.24	.42	-.11	.32	-.07	.04	.07	.13	.43
29. new-old	.25	.41	.41	.20	-.06	-.06	.06	.06	.26
30. meaningful-unmeaningful	.31	-.01	.04	-.25	.19	-.09	.02	.12	.09
31. literary-unliterary	.40	.28	.19	.11	-.11	-.14	.07	.41	.21
32. dark-bright	.35	-.06	.15	.14	.14	-.21	-.27	-.10	.24
33. successful-unsuccessful	.21	.23	.15	.05	.22	.29	-.09	.10	.85
34. low-high	.21	.04	-.43	.10	-.27	.20	-.38	-.13	.41
35. interesting-uninteresting	.24	-.43	.40	-.28	.29	.07	.06	.14	.24
36. colorful-uncolorful	.29	.14	.23	.05	.28	-.20	-.15	.17	.30
37. beautiful-ugly	.41	.17	.39	.22	.05	-.17	.04	.02	.41
38. new-old	.40	-.16	.20	-.15	-.21	-.26	.17	.41	.41
39. interesting-uninteresting	.24	.28	-.24	-.17	.23	-.03	.13	.27	.27
40. new-old	.38	-.07	.42	-.06	.13	-.30	.28	.25	.39
41. important-unimportant	.12	.24	-.11	-.11	-.05	-.05	.16	.07	.27
42. new-old	.25	.34	.24	.02	.03	.14	.14	.33	.33
43. new-old-fashioned	.28	.29	.42	.16	.04	.02	.08	.15	.47
44. new-old	.41	-.13	-.17	.19	.03	.84	-.11	-.03	.29
45. new-old	.27	-.11	-.17	.16	.13	.11	.16	.49	.49
47. happy-sad	.36	-.24	.19	.12	-.02	-.82	-.07	-.12	.32
48. happy-sad	.14	.25	.17	-.26	-.28	-.41	.12	.09	.09
49. good-bad	.47	-.02	-.28	.11	.07	.32	.16	.19	.16
50. new-old-fashioned	.46	-.24	.11	.37	.09	-.10	-.13	-.08	.26

The PoCverse  
Meaning  
9 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

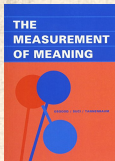
Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References





# From pings to things:



## “The Measurement of Meaning” by Osgood, Suci, and Tannenbaum (1957). <sup>[13]</sup>



Osgood et al. used semantic differentials   and factor analysis to identify a basis of three variables for meaning-space:



**Evaluation:** {bad  $\Leftrightarrow$  good}



**Potency:** {weak  $\Leftrightarrow$  strong}



**Activity:** {passive  $\Leftrightarrow$  active}

THE DIMENSIONALITY OF THE SEMANTIC SPACE 67

Table 4  
CORRELATED CENTROID FACTOR LOADINGS AND COMMUNITIES (EIGENVALUES FIRST)

	I	II	III	IV	V	VI	VII	VIII	IX
1. pleasant-unpleasant	.08	.50	-.00	.33	-.07	-.24	.10	-.20	.25
2. remembered-forgotten	.24	.16	.24	.52	.20	-.15	.04	.50	.21
3. successful-unsuccessful	.22	.02	-.53	.19	-.24	-.00	.07	.48	.14
4. interesting-uninteresting	.17	-.05	.23	.27	-.65	.23	.10	.18	.58
5. beautiful-ugly	.26	.56	.00	.22	-.25	-.15	-.15	-.14	.24
6. worthwhile-unworthwhile	.22	.14	.36	.20	.33	.24	.18	.03	.44
7. low-high	.25	-.01	.26	.07	.26	-.15	.07	-.04	.55
8. powerful-weak	.15	-.40	.32	-.03	-.26	.46	.00	-.20	.58
9. important-unimportant	.25	.01	.26	.21	.16	.02	.08	.23	.33
10. useful	.16	.41	-.27	.23	.17	-.20	.06	.11	.47
11. lively-dull	.43	-.26	.28	-.06	-.13	-.06	.07	.04	.43
12. good-bad	.30	.20	.16	-.16	-.14	-.11	.10	-.16	.50
13. well-known	.40	-.46	-.18	.04	.04	-.07	.04	.04	.63
14. nice-awful	.35	.17	.46	-.13	.23	-.25	.22	-.07	.40
15. nice-awful	.26	.13	.48	-.24	.21	-.29	.06	.26	.36
16. interesting-uninteresting	.41	.36	.06	.13	-.37	-.07	.01	-.16	.07
17. meaningful-unmeaningful	.25	-.01	.02	.33	.20	-.27	.14	.43	.21
18. important-unimportant	.33	.31	.22	-.33	-.20	-.32	.03	.02	.37
19. important-unimportant	.40	.21	.42	.02	.12	.05	-.04	.13	.37
20. interesting-uninteresting	.41	.07	.28	-.11	.36	-.06	-.03	.04	.36
21. interesting-uninteresting	.24	-.46	-.02	-.33	.36	-.03	-.04	-.06	.62
22. interesting-uninteresting	.30	.20	-.02	.25	.38	.02	-.23	.60	.39
23. interesting-uninteresting	.43	.14	.11	.26	-.13	.19	.09	.04	.34
24. interesting-uninteresting	.21	.26	.28	.02	-.07	-.07	-.13	.35	.35
25. interesting-uninteresting	.26	-.05	-.11	-.03	.04	.03	.22	.21	.11
26. interesting-uninteresting	.29	.42	-.11	.32	-.07	.04	.07	.13	.43
27. interesting-uninteresting	.29	.42	-.11	.32	-.07	.04	.07	.13	.43
28. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
29. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
30. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
31. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
32. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
33. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
34. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
35. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
36. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
37. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
38. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
39. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
40. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
41. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
42. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
43. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
44. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
45. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
46. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
47. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
48. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
49. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43
50. interesting-uninteresting	.31	.42	-.11	.32	-.07	.04	.07	.13	.43

The PoCverse  
Meaning  
9 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras



References






# From pings to things:



"The Measurement of Meaning"    
by Osgood, Suci, and Tannenbaum (1957). [13]



Osgood et al. used semantic differentials  and factor analysis to identify a basis of three variables for meaning-space:



Evaluation: {bad  $\Leftrightarrow$  good}



Potency: {weak  $\Leftrightarrow$  strong}



Activity: {passive  $\Leftrightarrow$  active}



100s of students, 10s of things, 50 semantic differentials

Table 4

UNSCALED CUBIC FACTOR LOADINGS AND COMMUNITIES (EIGENVALUES)

	I	II	III	IV	V	VI	VII	VIII	$\lambda$
1. pleasant-unpleasant	.08	.90	-.80	.31	-.07	-.24	.10	-.20	.25
2. rambles-terse	.24	.16	.24	.82	.20	-.11	.04	-.50	.21
3. smooth-rough	.22	.80	-.55	.19	-.24	-.10	-.07	.48	.24
4. intricate-simple	.07	-.95	.23	.27	-.65	.24	.10	-.10	.24
5. beautiful-ugly	.26	.86	-.80	.22	-.27	-.15	-.11	-.16	.24
6. sophisticated-sophisticated	.22	.14	.36	.20	.31	.24	.18	.03	.44
7. low-high	.22	-.80	.20	.77	.20	-.25	-.17	-.04	.55
8. powerful-weak	.15	-.80	.32	-.01	-.26	.46	.80	-.30	.58
9. simple-complex	.22	.80	-.20	.21	.16	.82	-.04	.23	.61
10. formal-informal	.16	.81	-.27	.23	.07	-.20	.80	-.11	.47
11. literary	.43	-.20	.28	-.06	-.11	-.06	.07	-.04	.43
12. peaceful	.30	.20	.16	-.16	-.16	-.11	.11	-.16	.50
13. soft-hard	.40	-.80	.18	.04	-.07	.68	.68	.81	.61
14. old-new	.35	.17	.46	-.13	.23	.28	-.25	-.07	.40
15. slow-fast	.26	.13	-.08	.24	.21	.29	.80	.26	.26
16. intelligent-stupid	.21	.80	-.24	.21	.21	.21	.21	.21	.21
17. strong-weak	.41	.30	.06	.13	-.37	-.87	.81	-.16	.57
18. elegant	.21	-.81	.02	.19	.26	-.27	-.14	-.81	.52
19. slow-dry	.33	.31	.23	-.31	-.30	-.32	.03	.02	.37
20. soft-heavy	.40	.21	.42	-.02	.12	.80	-.04	.11	.37
21. fast-slow	.42	-.87	-.28	-.11	.86	-.06	-.02	.04	.39
22. simple-complex	.24	-.80	-.02	.11	.20	-.20	-.04	-.04	.62
23. old-new	.30	.20	-.02	.25	.30	.80	-.20	.60	.39
24. hard-soft	.43	.14	.21	.36	-.11	.19	.09	.04	.34
25. white	.21	.20	.28	.80	-.07	-.07	-.13	.35	.35
26. noisy-quiet	.42	-.80	-.11	-.03	.04	.92	.32	-.11	.41
27. ready	.30	-.13	.24	.13	.28	.80	.44	.24	.24
28. old-new	.29	.42	-.18	.32	-.07	.48	.47	.13	.43
29. smooth-rough	.25	.41	.80	-.24	.21	.21	.21	.21	.21
30. formal-informal	.21	-.81	.24	.28	.19	-.89	.12	.09	.69
31. literary	.89	.08	.19	.11	-.11	-.11	-.07	.41	.41
32. dark-light	.35	-.96	.13	.14	.14	-.81	-.87	-.10	.24
33. energetic	.22	.15	.80	-.23	.61	.80	-.10	.84	.34
34. low-high	.21	.04	-.43	-.20	-.27	.20	.28	-.11	.41
35. soft-hard	.24	.43	.80	-.28	.79	.20	.06	.14	.24
36. soft-heavy	.29	.14	.20	.80	.28	.20	-.10	.17	.30
37. formal	.42	.11	.80	-.20	.11	.20	.17	.21	.32
38. soft-hard	.40	-.10	.20	.11	.20	-.20	.17	.41	.41
39. simple-complex	.42	.10	.20	.11	.20	.20	.17	.21	.32
40. soft-heavy	.38	.07	.42	.86	.13	.20	.28	.25	.39
41. soft-heavy	.35	.07	.41	.11	.19	.20	.28	.17	.37
42. soft-hard	.38	.43	.80	-.26	.03	.14	.14	.14	.33
43. soft-hard	.28	.42	.80	-.26	.03	.14	.14	.14	.33
44. simple-complex	.41	-.11	.17	.19	.19	.84	-.18	-.03	.29
45. slow-fast	.27	.27	.80	-.18	.11	.11	.11	.08	.08
46. simple-complex	.36	-.28	.19	.12	.02	-.80	-.27	-.12	.32
47. simple-complex	.14	.27	.17	.28	-.28	.11	.11	.08	.08
48. simple-complex	.37	-.03	.28	.11	.07	.20	.16	.19	.16
49. simple-complex	.36	-.24	.11	.07	.20	.16	.19	.16	.16

The PoCverse

Meaning

9 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousonyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

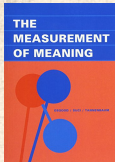
Nutshell

Extras

References




# From pings to things:



## “The Measurement of Meaning” by Osgood, Suci, and Tannenbaum (1957). <sup>[13]</sup>



Osgood et al. used semantic differentials  and factor analysis to identify a basis of three variables for meaning-space:



**Evaluation:** {bad ⇔ good}



**Potency:** {weak ⇔ strong}



**Activity:** {passive ⇔ active}



100s of students, 10s of things, 50 semantic differentials



“EPA framework”

Table 4  
UNSCALED CENTROID FACTOR LOADINGS AND COMMUNITIES (EIGENVALUES IN PARENTHESES)

	I	II	III	IV	V	VI	VII	VIII	IX
1. pleasant-unpleasant	.08	.35	-.05	.33	-.07	-.24	.12	-.20	.23
2. pleasant-pleasant	.24	.16	.24	.52	.20	-.15	.04	-.26	.21
3. successful-unsuccessful	.22	.02	-.33	.19	-.24	-.05	-.07	.45	.18
4. interesting-uninteresting	.07	-.05	.23	.27	-.65	.23	.10	-.18	.24
5. beautiful-ugly	.26	.36	.00	.22	-.27	-.15	-.15	-.16	.24
6. worthwhile-unworthwhile	.22	.14	.36	.20	.33	.24	.18	.03	.44
7. low-high	.22	-.40	-.26	.07	.26	-.15	-.17	-.04	.55
8. powerful-weak	.13	-.40	.32	-.03	-.26	.45	.02	-.20	.58
9. simple-complex	.22	.01	.26	.21	.15	.16	.17	.04	.33
10. normal-abnormal	.16	.41	-.27	.23	.07	-.26	.06	.11	.47
11. lively-dull	.43	-.25	.28	-.06	-.13	-.06	.07	.04	.43
12. good-bad	.30	.20	.16	-.16	-.16	-.12	.10	-.16	.50
13. good-evil	.30	-.46	-.18	.04	-.02	.08	.04	.04	.50
14. good-better	.35	.17	-.45	-.13	.23	-.25	.22	-.07	.40
15. nice-ugly	.26	.33	-.28	-.24	.21	-.29	-.06	.26	.36
16. interesting-uninteresting	.41	.30	.06	.13	-.37	-.27	.01	-.16	.27
17. meaningful-unmeaningful	.41	.30	.06	.13	-.37	-.27	.01	-.16	.27
18. important-unimportant	.33	.21	-.02	-.33	-.20	.32	.03	.02	.37
19. smart-dumb	.33	.21	-.02	-.33	-.20	.32	.03	.02	.37
20. useful-useless	.40	.21	.42	.02	.12	.05	-.04	.13	.37
21. fair-unfair	.42	-.27	-.28	-.11	.36	-.05	-.02	.04	.35
22. important-unimportant	.24	-.40	-.03	-.33	-.20	.32	.03	.02	.37
23. interesting-uninteresting	.30	.20	.05	.25	.38	.02	-.23	.08	.39
24. kind-unkind	.43	.14	.21	.36	-.13	.19	.09	.04	.34
25. white-black	.21	.28	.28	.02	-.07	-.07	-.13	.35	.35
26. more-less	.42	-.06	-.11	.03	.04	.02	.32	.22	.11
27. ready-unready	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
28. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
29. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
30. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
31. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
32. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
33. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
34. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
35. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
36. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
37. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
38. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
39. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
40. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
41. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
42. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
43. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
44. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
45. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
46. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
47. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
48. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
49. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43
50. safe-dangerous	.24	.42	-.18	.32	-.07	.08	.47	.13	.43

The PoCverse  
Meaning  
9 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



## Semantic differentials from Osgood et al.:<sup>[13]</sup>

- |                        |                          |                         |
|------------------------|--------------------------|-------------------------|
| 1. pleasant-unpleasant | 18. large-small          | 36. colorful-colorless  |
| 2. repeated-varied     | 19. clean-dirty          | 37. hot-cold            |
| 3. smooth-rough        | 20. resting-busy         | 38. rich-thin           |
| 4. active-passive      | 21. dull-sharp           | 39. obvious-subtle      |
| 5. beautiful-ugly      | 22. deep-shallow         | 40. wide-narrow         |
| 6. definite-uncertain  | 23. gliding-scraping     | 41. deliberate-careless |
| 7. low-high            | 24. familiar-strange     | 42. happy-sad           |
| 8. powerful-weak       | 25. soft-hard            | 43. gentle-violent      |
| 9. steady-fluttering   | 26. heavy-light          | 44. mild-intense        |
| 10. soft-loud          | 27. wet-dry              | 45. rounded-angular     |
| 11. full-empty         | 28. safe-dangerous       | 46. slow-fast           |
| 12. good-bad           | 29. concentrated-diffuse | 47. rugged-delicate     |
| 13. rumbling-whining   | 30. pushing-pulling      | 48. simple-complex      |
| 14. solid-hollow       | 31. labored-easy         | 49. green-red           |
| 15. clear-hazy         | 32. dark-bright          | 50. masculine-feminine  |
| 16. calming-exciting   | 33. even-uneven          |                         |
| 17. pleasing-annoying  | 34. loose-tight          |                         |
|                        | 35. relaxed-tense        |                         |

# Outline

## Measuring essential meaning

History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References

The PoCSverse

Meaning

11 of 77

Measuring essential meaning

History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References



## Definitions:



Ousiometrics: The quantitative study of the **essential meaningful components** of an entity, however perceived.

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References
















## Definitions:

 Ousiometrics: The quantitative study of the **essential meaningful components** of an entity, however perceived.

 Used in philosophical and theological settings, the word 'ousia' comes from Ancient Greek οὐσία.







 To be distinguished from semantics, semiotics, ...

 οὐσία is the etymological root of the word 'essence'.

 Ousiometry, ousiometer, ousiograms, ...



## Definitions:

-  Ousiometrics: The quantitative study of the **essential meaningful components** of an entity, however perceived.
-  Used in philosophical and theological settings, the word 'ousia' comes from Ancient Greek οὐσία.
-  To be distinguished from semantics, semiotics, ...
-  οὐσία is the etymological root of the word 'essence'.
-  Ousiometry, ousiometer, ousiograms, ...
-  Telegnomics: The distant sensing of knowledge (~ distant reading<sup>[12]</sup>)



# Outline

## Measuring essential meaning

History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References

The PoCSverse

Meaning

13 of 77

Measuring essential meaning

History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References



# Essential dimensions captured by emotion:



Late 1800s: Three dimensional representation of emotion postulated by Wendt. [23, 17]

The PoCverse

Meaning

14 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras


References











# Essential dimensions captured by emotion:

 Late 1800s: Three dimensional representation of emotion postulated by Wundt. [23, 17]

 1970s: Mehrabian and Russell explicitly port EPA framework: [7, 8]


-  Evaluation ~ Pleasure/Valence (~ Happiness)
-  Potency ~ Dominance
-  Activity ~ Arousal











# Essential dimensions captured by emotion:


 Late 1800s: Three dimensional representation of emotion postulated by Wendt. [23, 17]


 1970s: Mehrabian and Russell explicitly port EPA framework: [7, 8]

 Evaluation ~ Pleasure/Valence (~ Happiness)

 Potency ~ Dominance

 Activity ~ Arousal

 VAD has become standard nomenclature even though emotion is less general than meaning.

 Explicit presumption of independence of VAD dimensions, has hardened as fact.

The PoCverse  
Meaning  
14 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias


Applications  
The Ousiometer  
Correspondences  
Nutshell


Extras


References




# Essential dimensions captured by emotion:


 Late 1800s: Three dimensional representation of emotion postulated by Wendt. [23, 17]


 1970s: Mehrabian and Russell explicitly port EPA framework: [7, 8]


 Evaluation ~ Pleasure/Valence (~ Happiness)

 Potency ~ Dominance

 Activity ~ Arousal

 VAD has become standard nomenclature even though emotion is less general than meaning.

 Explicit presumption of independence of VAD dimensions, has hardened as fact.

 Intention that VAD  $\equiv$  EPA has become lost in literature. [2]

The PoCverse  
Meaning  
14 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

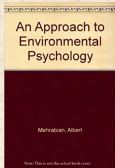
Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References





## “An Approach to Environmental Psychology.” [a](#) [↗](#)

by Mehrabian and Russell (1974). [7]



## “The basic emotional impact of environments” [↗](#)

Mehrabian and Russell,  
Perceptual and motor skills, **38**, 283–301,  
1974. [8]

*“Semantic differential studies, in particular, have shown that human judgments of diverse samples of stimuli can be characterized in terms of three dimensions: evaluation, activity, and potency. We have termed the corresponding emotional responses pleasure, arousal, and dominance.”*

*“Thus, each dimension is, in principle, functionally independent of the other two; none of the three dimensions could be subsumed by the others.”*

The PoCSverse  
Meaning  
15 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Major problems with measuring essential meaning:

1. **Scale:** Originally 10s and 100s of words → now 10,000s + online rating.

The PoCverse  
Meaning  
16 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Major problems with measuring essential meaning:

1. **Scale:** Originally 10s and 100s of words → now 10,000s + online rating.
2. **The focus on types alone and not tokens:**  
Missing the forest for the book of tree species.

The PoCverse  
Meaning  
16 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Major problems with measuring essential meaning:

1. **Scale:** Originally 10s and 100s of words → now 10,000s + online rating.
2. **The focus on types alone and not tokens:**  
Missing the forest for the book of tree species.
3. **The use of Likert scales for semantic differentials:** Solid but can be improved upon.

The PoCverse  
Meaning  
16 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Major problems with measuring essential meaning:

1. **Scale:** Originally 10s and 100s of words → now 10,000s + online rating.
2. **The focus on types alone and not tokens:** Missing the forest for the book of tree species.
3. **The use of Likert scales for semantic differentials:** Solid but can be improved upon.
4. **Limitations of factor analysis for a large number of categorical dimensions:** Ousiograms will help sort things out.

The PoCverse  
Meaning  
16 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Major problems with measuring essential meaning:

1. **Scale:** Originally 10s and 100s of words → now 10,000s + online rating.
2. **The focus on types alone and not tokens:** Missing the forest for the book of tree species.
3. **The use of Likert scales for semantic differentials:** Solid but can be improved upon.
4. **Limitations of factor analysis for a large number of categorical dimensions:** Ousiograms will help sort things out.
5. **The misalignment between expert-chosen, end-point descriptors and dimensions of essential meaning:** How to guide raters to score VAD dimensions?

The PoCverse  
Meaning  
16 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousimeter  
Correspondences  
Nutshell

Extras

References





# Major problems with measuring essential meaning:

1. **Scale:** Originally 10s and 100s of words → now 10,000s + online rating.
2. **The focus on types alone and not tokens:** Missing the forest for the book of tree species.
3. **The use of Likert scales for semantic differentials:** Solid but can be improved upon.
4. **Limitations of factor analysis for a large number of categorical dimensions:** Ousiograms will help sort things out.
5. **The misalignment between expert-chosen, end-point descriptors and dimensions of essential meaning:** How to guide raters to score VAD dimensions?  
Solution is to always perform factor analysis (SVD).

The PoCVerse  
Meaning  
16 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

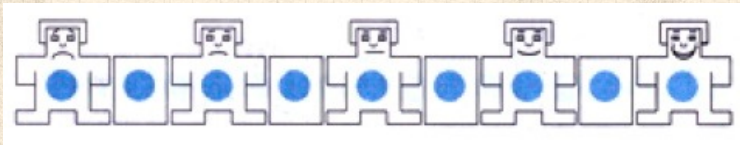
Extras

References

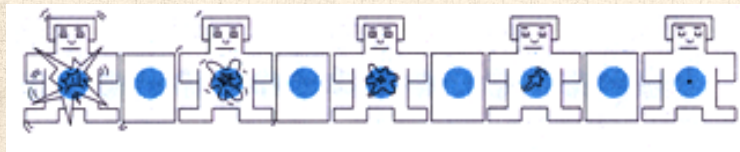


# 1999 ANEW study—three 1–9 scales: [4]

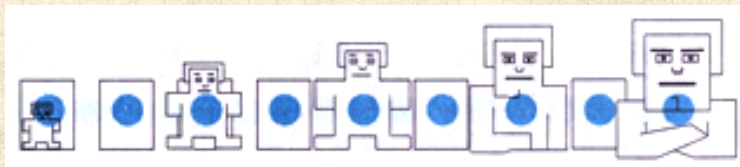
valence:



arousal:



dominance:



The PoCverse  
Meaning  
17 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousonyms  
Dimension names

Safety bias

Applications

The Ousiometer  
Correspondences  
Nutshell

Extras

References

dangerous  
murderer  
toxic  
Chaos  
killer  
aggression  
crucifixion  
lurid  
outburst  
squander  
murderer  
toxic  
murderer  
assassinate  
earl  
diplomat  
mi.

# ANEW study: Valence ~ Happiness:



Valence scale presented to participants as a 'happy-unhappy scale.'

The PoCVerse

Meaning

18 of 77

Measuring essential meaning

History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References



# ANEW study: Valence ~ Happiness:

Valence scale presented to participants as a 'happy-unhappy scale.'

Participants were further told:

"At one extreme of this scale, you are happy, pleased, satisfied, contented, hopeful. ...

The PoCVerse  
Meaning  
18 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# ANEW study: Valence ~ Happiness:

Valence scale presented to participants as a 'happy-unhappy scale.'

Participants were further told:

"At one extreme of this scale, you are happy, pleased, satisfied, contented, hopeful. ...

The other end of the scale is when you feel completely unhappy, annoyed, unsatisfied, melancholic, despaired, or bored."

The PoCVerse  
Meaning  
18 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# ANEW study: Valence ~ Happiness:



Valence scale presented to participants as a 'happy-unhappy scale.'



Participants were further told:

"At one extreme of this scale, you are happy, pleased, satisfied, contented, hopeful. ...

The other end of the scale is when you feel completely unhappy, annoyed, unsatisfied, melancholic, despaired, or bored."



The Hedonometer was always about essential meaning.

The PoCSverse  
Meaning  
18 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousigrams  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousimeter  
Correspondences  
Nutshell

Extras

References



# ANEW study: Valence ~ Happiness:

Valence scale presented to participants as a 'happy-unhappy scale.'

Participants were further told:

"At one extreme of this scale, you are happy, pleased, satisfied, contented, hopeful. ...

The other end of the scale is when you feel completely unhappy, annoyed, unsatisfied, melancholic, despaired, or bored."

The Hedonometer was always about essential meaning.

## We now know that ANEW is a no-no:

The PoCVerse  
Meaning  
18 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



## ANEW study: Valence ~ Happiness:

Valence scale presented to participants as a 'happy-unhappy scale.'

Participants were further told:

"At one extreme of this scale, you are happy, pleased, satisfied, contented, hopeful. ...

The other end of the scale is when you feel completely unhappy, annoyed, unsatisfied, melancholic, despaired, or bored."

The Hedonometer was always about essential meaning.

## We now know that ANEW is a no-no:

Problem: Expert-chosen list of ~ 1,000 words.

The PoCVerse  
Meaning  
18 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousimeter  
Correspondences  
Nutshell

Extras

References





## ANEW study: Valence ~ Happiness:

Valence scale presented to participants as a 'happy-unhappy scale.'

Participants were further told:

"At one extreme of this scale, you are happy, pleased, satisfied, contented, hopeful. ...

The other end of the scale is when you feel completely unhappy, annoyed, unsatisfied, melancholic, despaired, or bored."

The Hedonometer was always about essential meaning.

## We now know that ANEW is a no-no:

Problem: Expert-chosen list of ~ 1,000 words.

Fine words but poorly cover real texts <sup>[16]</sup>.

The PoCVerse  
Meaning  
18 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



## ANEW study: Valence ~ Happiness:

Valence scale presented to participants as a 'happy-unhappy scale.'

Participants were further told:

"At one extreme of this scale, you are happy, pleased, satisfied, contented, hopeful. ...

The other end of the scale is when you feel completely unhappy, annoyed, unsatisfied, melancholic, despaired, or bored."

The Hedonometer was always about essential meaning.

## We now know that ANEW is a no-no:

Problem: Expert-chosen list of ~ 1,000 words.

Fine words but poorly cover real texts <sup>[16]</sup>.

Wrongly suggests Arousal and Dominance are minimal relative to Valence.

The PoCSverse  
Meaning  
18 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Remeasuring meaning:

“Obtaining Reliable human ratings of valence, arousal, and dominance for 20,000 English words” ↗

Saif M. Mohammad,  
Proceedings of The Annual Conference of  
the Association for Computational  
Linguistics (ACL), **38**, , 2018. [10]

Moving beyond Likert scales:



The PoCSverse  
Meaning  
19 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousonyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References






# Remeasuring meaning:




“Obtaining Reliable human ratings of valence, arousal, and dominance for 20,000 English words”<sup>[10]</sup>

Saif M. Mohammad,  
Proceedings of The Annual Conference of  
the Association for Computational  
Linguistics (ACL), **38**, , 2018. <sup>[10]</sup>

## Moving beyond Likert scales:

 Best-worst scaling<sup>[10]</sup>

 Ask raters to examine  $n$  things once, and choose the best and worst according to some criterion.

The PoCverse  
Meaning  
19 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications

The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Remeasuring meaning:

“Obtaining Reliable human ratings of valence, arousal, and dominance for 20,000 English words” ↗

Saif M. Mohammad,  
Proceedings of The Annual Conference of  
the Association for Computational  
Linguistics (ACL), **38**, , 2018. [10]



## Moving beyond Likert scales:

🧱 Best-worst scaling ↗

🧱 Ask raters to examine  $n$  things once, and choose the best and worst according to some criterion.

🧱 For  $n = 4$ , there are 6 pair comparisons of Things.

The PoCverse  
Meaning  
19 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Remeasuring meaning:

“Obtaining Reliable human ratings of valence, arousal, and dominance for 20,000 English words” ↗

Saif M. Mohammad,  
Proceedings of The Annual Conference of  
the Association for Computational  
Linguistics (ACL), **38**, , 2018. <sup>[10]</sup>



## Moving beyond Likert scales:

🧱 Best-worst scaling ↗

🧱 Ask raters to examine  $n$  things once, and choose the best and worst according to some criterion.

🧱 For  $n = 4$ , there are 6 pairwise comparisons of Things.

🧱 Choosing best and worst gives 5 orderings:

$$\tau_1 > \tau_2, \tau_3 > \tau_4.$$

The PoCverse  
Meaning  
19 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Remeasuring meaning:

“Obtaining Reliable human ratings of valence, arousal, and dominance for 20,000 English words” ↗

Saif M. Mohammad,  
Proceedings of The Annual Conference of  
the Association for Computational  
Linguistics (ACL), **38**, , 2018. <sup>[10]</sup>



## Moving beyond Likert scales:

🧩 Best-worst scaling ↗

🧩 Ask raters to examine  $n$  things once, and choose the best and worst according to some criterion.

🧩 For  $n = 4$ , there are 6 pair comparisons of Things.

🧩 Choosing best and worst gives 5 orderings:

$$\tau_1 > \tau_2, \tau_3 > \tau_4.$$

🧩 Things end up with scores in  $[0, 1]$ .

The PoCverse  
Meaning  
19 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References





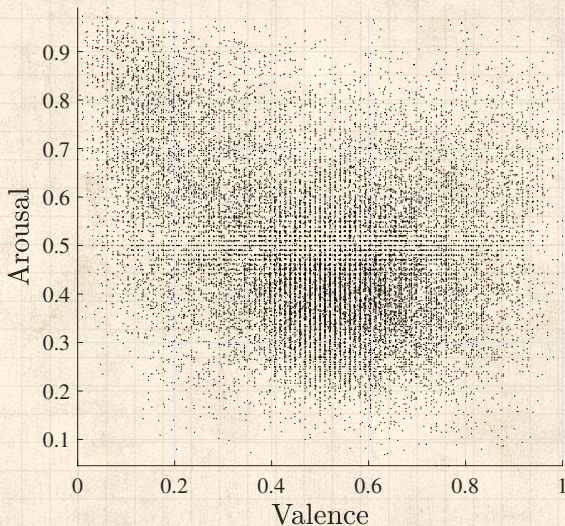
## NRC VAD Lexicon <sup>[10]</sup>

<b>VAD endpoints:</b>	<b>Paradigm words and phrases presented to raters:</b> <sup>[11]</sup>
highest valence	happiness, pleasure, positiveness, satisfaction, contentedness, hopefulness
lowest valence	unhappiness, annoyance, negativeness, dissatisfaction, melancholy, despair
highest arousal	arousal, activeness, stimulation, frenzy, jitteriness, alertness
lowest arousal	unarousal, passiveness, relaxation, calmness, sluggishness, dullness, sleepiness
highest dominance	dominant, in control of the situation, powerful, influential, important, autonomous
lowest dominance	submissive, controlled by outside factors, weak, influenced, cared-for, guided

Major problem 5: Imposing dimensions through clouds of endpoint descriptors.



# The Delicious English Muffin of Meaning:<sup>1</sup>



```
cd ~/work/psychology/2021-01emotion-intensity/  
figures/.  
matlab  
figmeaning VAD3d001 demo
```

<sup>1</sup>Apricot jam, always

The PoCverse  
Meaning  
22 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

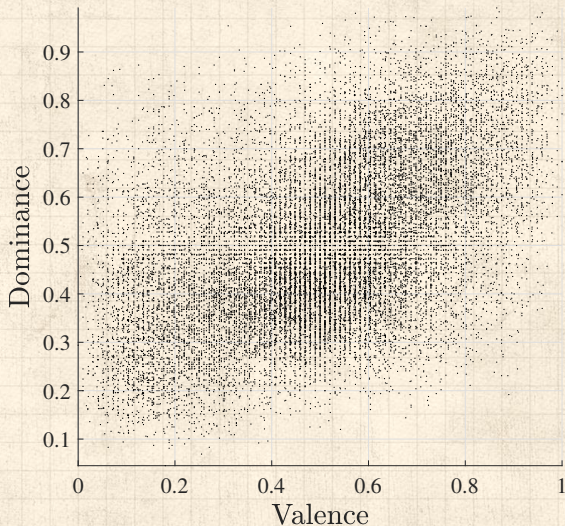
Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# The Delicious English Muffin of Meaning:<sup>1</sup>



```
cd ~/work/psychology/2021-01emotion-intensity/  
figures/.  
matlab  
figmeaning VAD3d001 demo
```

<sup>1</sup>Apricot jam, always

The PoCverse  
Meaning  
22 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

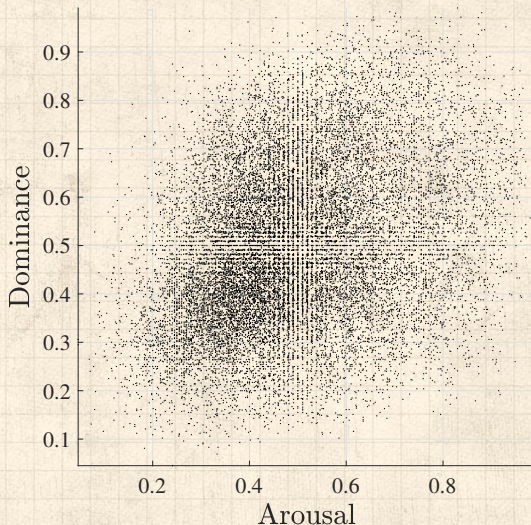
Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# The Delicious English Muffin of Meaning:<sup>1</sup>



```
cd ~/work/psychology/2021-01emotion-intensity/  
figures/.  
matlab  
figmeaning VAD3d001 demo
```

<sup>1</sup>Apricot jam, always

The PoCverse  
Meaning  
22 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

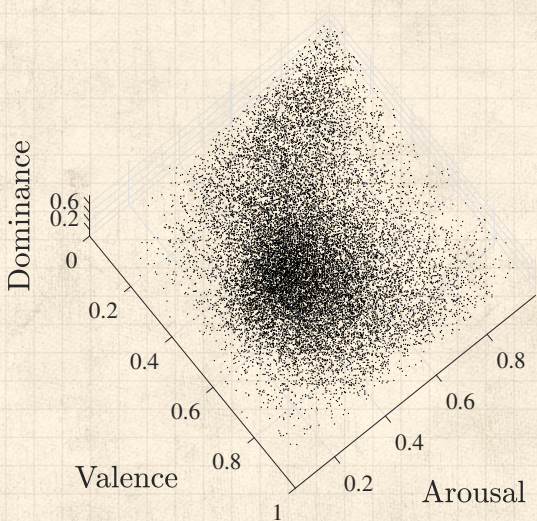
Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# The Delicious English Muffin of Meaning:<sup>1</sup>



```
cd ~/work/psychology/2021-01emotion-intensity/  
figures/.
```

```
matlab
```

```
figmeaning_VAD3d001_demo
```

<sup>1</sup>Apricot jam always

The PoCverse  
Meaning  
22 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

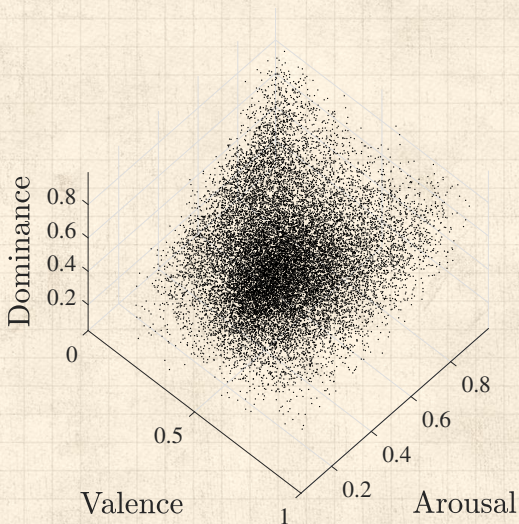
Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# The Delicious English Muffin of Meaning:<sup>1</sup>



```
cd ~/work/psychology/2021-01-emotion-intensity/  
figures/.  
matlab  
figmeaning VAD3d001_demo
```

<sup>1</sup>Apricot jam, always

The PoCverse  
Meaning  
22 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

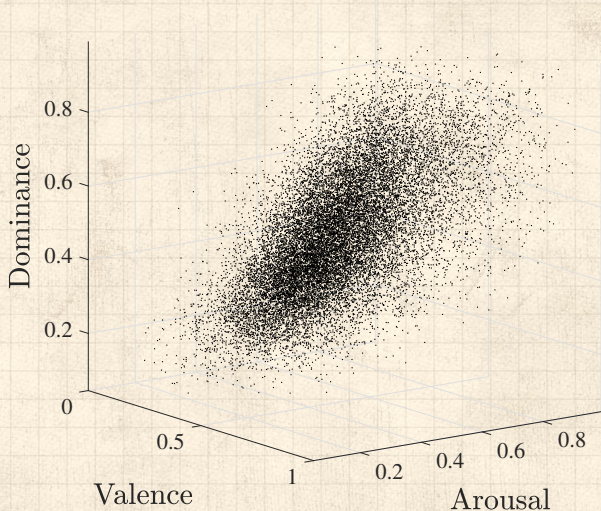
Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# The Delicious English Muffin of Meaning:<sup>1</sup>



```
cd ~/work/psychology/2021-01-emotion-intensity/  
figures/.
```

```
matlab
```

```
figmeaning_VAD3d001_demo
```

<sup>1</sup>Apricot jam, always

The PoCVerse  
Meaning  
22 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousimeter  
Correspondences  
Nutshell

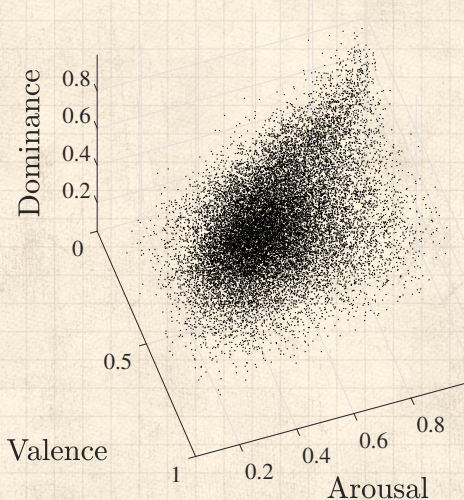
Extras

References





# The Delicious English Muffin of Meaning:<sup>1</sup>



```
cd ~/work/psychology/2021-01emotion-intensity/  
figures/.  
matlab  
figmeaning_VAD3d001_demo
```

<sup>1</sup>Apricot jam, always

The PoCVerse  
Meaning  
22 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

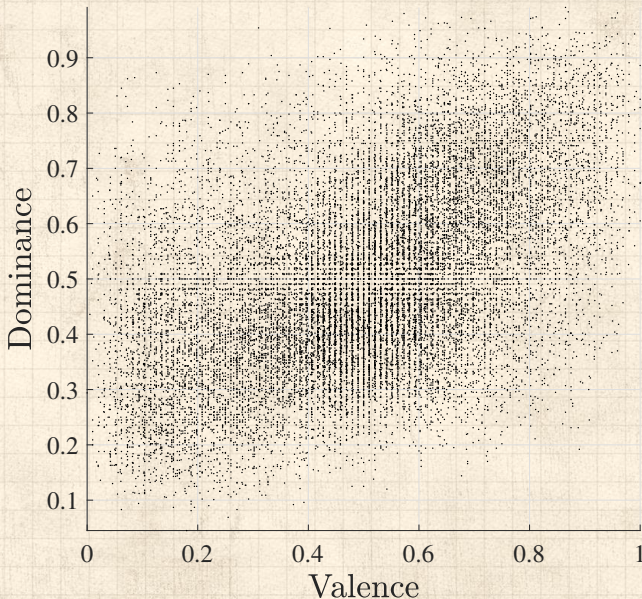
Applications  
The Ousimeter  
Correspondences  
Nutshell

Extras

References



$$R(D, V) \simeq 0.488$$



The PoCverse  
Meaning  
23 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Release the Hounds by which we mean Singular Value Decomposition:

Variance explained:

The PoCverse  
Meaning  
24 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousionyms  
Dimension names

Safety bias

Applications

The Ousiometer  
Correspondences  
Nutshell


Extras

References



# Release the Hounds by which we mean Singular Value Decomposition:

Variance explained:

 VAD: 44.4%, 28.0%, and 27.6%.

The PoCverse  
Meaning  
24 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell


Extras


References



# Release the Hounds by which we mean Singular Value Decomposition:

## Variance explained:

 VAD: 44.4%, 28.0%, and 27.6%.

 Apply SVD.

The PoCverse

Meaning

24 of 77

Measuring essential meaning

History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References



# Release the Hounds by which we mean Singular Value Decomposition:

## Variance explained:

🧱 VAD: 44.4%, 28.0%, and 27.6%.

🧱 Apply SVD.

🧱 Singular values:  $\sigma_1 \simeq 34.1$ ,  $\sigma_2 \simeq 27.2$ , and  $\sigma_3 \simeq 13.8$ ,

The PoCverse  
Meaning  
24 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References





# Release the Hounds by which we mean Singular Value Decomposition:

## Variance explained:

- 🧱 VAD: 44.4%, 28.0%, and 27.6%.
- 🧱 Apply SVD.
- 🧱 Singular values:  $\sigma_1 \simeq 34.1$ ,  $\sigma_2 \simeq 27.2$ , and  $\sigma_3 \simeq 13.8$ ,
- 🧱 For what will be Goodness-Energy-Structure (GES):  
55.6%, 35.3%, and 9.1%
- 🧱 Rotate in G-E plane by  $\pi/4$  for what will be  
Power-Danger-Structure (PDS)  
45.5%, 45.5%, 9.1%

The PoCVerse

Meaning

24 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousonyms

Dimension names

Safety bias

Applications

The Ousimeter

Correspondences

Nutshell

Extras

References





# Release the Hounds by which we mean Singular Value Decomposition:

## Variance explained:

- 🧱 VAD: 44.4%, 28.0%, and 27.6%.
- 🧱 Apply SVD.
- 🧱 Singular values:  $\sigma_1 \simeq 34.1$ ,  $\sigma_2 \simeq 27.2$ , and  $\sigma_3 \simeq 13.8$ ,
- 🧱 For what will be Goodness-Energy-Structure (GES): 55.6%, 35.3%, and 9.1%
- 🧱 Rotate in G-E plane by  $\pi/4$  for what will be Power-Danger-Structure (PDS) 45.5%, 45.5%, 9.1%
- 🧱 Interpretability enhancements: Ousiograms.

The PoCVerse  
Meaning  
24 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

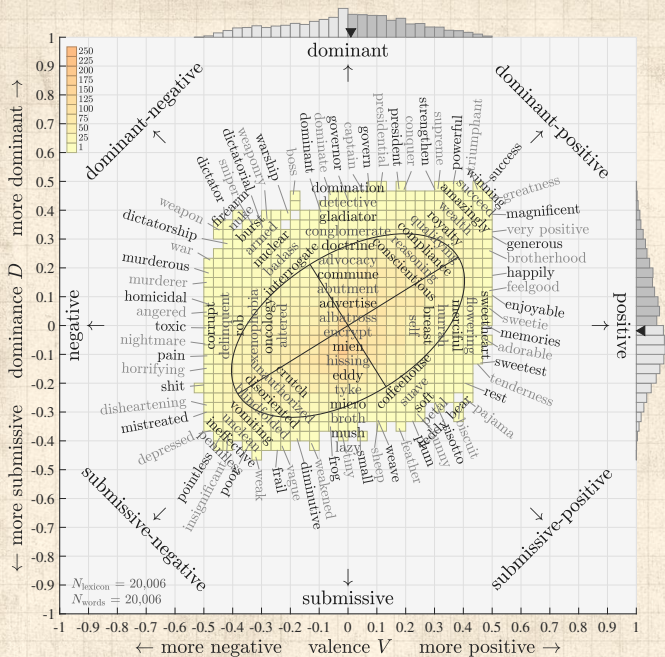
Applications  
The Ousimeter  
Correspondences  
Nutshell

Extras

References



~ valence-dominance ouosiogram for the NRC VAD lexicon ~



The PoCVerse

Meaning  
25 of 77

Measuring  
essential meaning

- History
- Definitions
- Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications

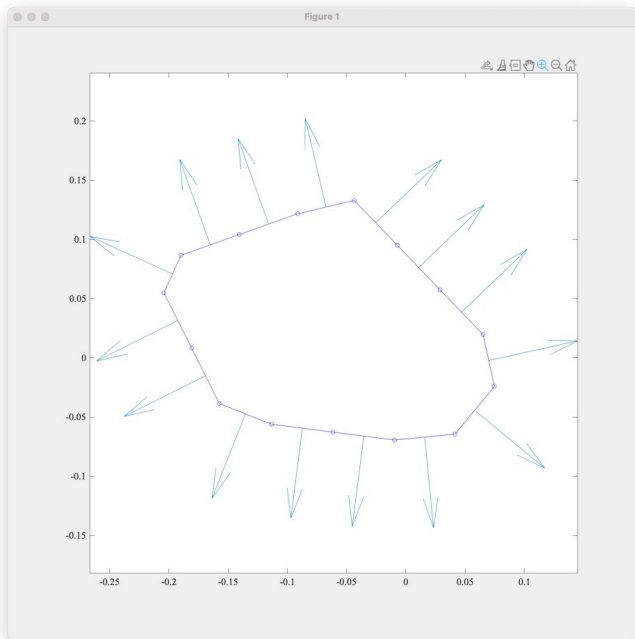
- The Ousiometer
- Correspondences
- Nutshell

Extras

References



# Building ousiograms (2021/01/31):



The PoCverse

Meaning

26 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousonyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

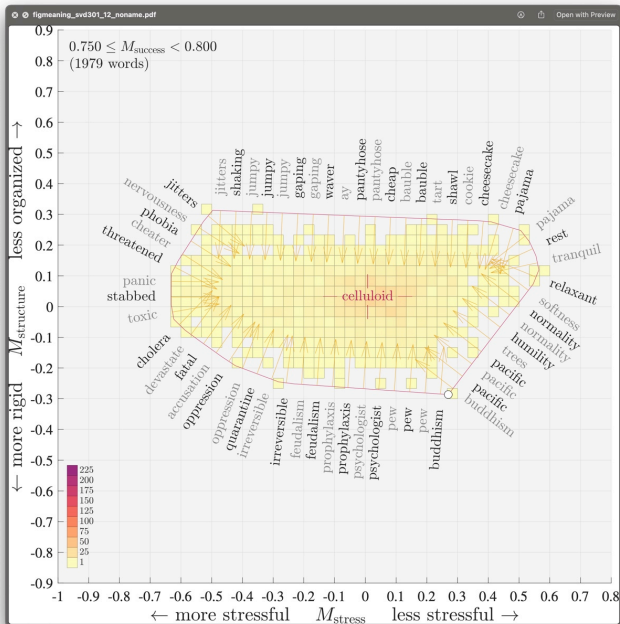
Nutshell

Extras

References



# Building ousiograms (2021/01/31):



The PoCverse  
Meaning  
27 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousonyms  
Dimension names

Safety bias

Applications

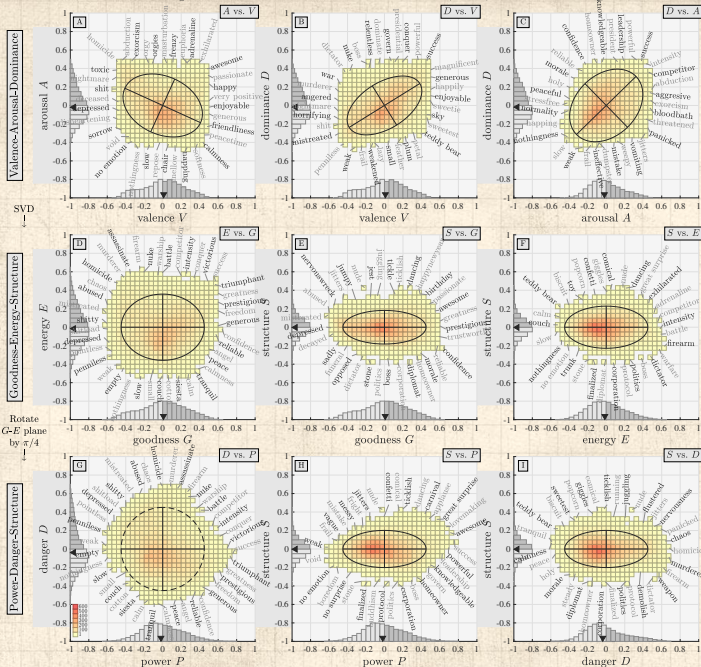
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Ousiograms for the NRC VAD lexicon in the VAD, GES, and PDS frameworks:



The PoCverse  
**Meaning**  
28 of 77

Measuring  
essential meaning

- History
- Definitions
- Emotions

Problems

Remeasuring  
meaning

**Ousiograms**

- Extremousonyms
- Dimension names

Safety bias

Applications

- The Ousiometer
- Correspondences
- Nutshell

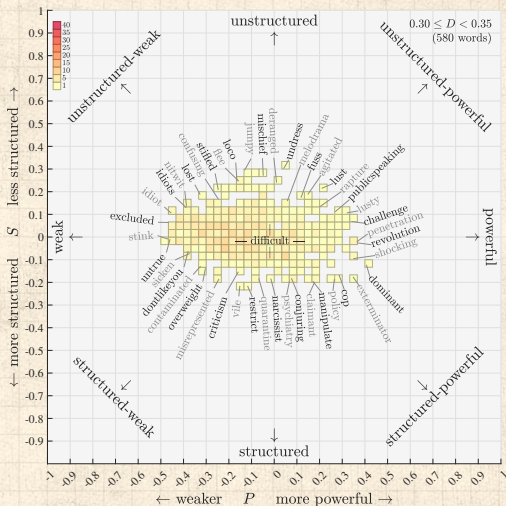
Extras

References






# Ousiometric slices:



Slices of Structure Flipbook 

Slices of Danger Flipbook 

Slices of Power Flipbook 

The PoCSverse

**Meaning**

31 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

**Ousiograms**

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References





The PoCSverse

**Meaning**

32 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

**Ousiograms**

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References



The PoCSverse

**Meaning**

33 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

**Ousiograms**

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References



# Outline

## Measuring essential meaning

History

Definitions

Emotions

## Problems

## Remeasuring meaning

## Ousiograms

Extremousionyms

Dimension names

## Safety bias

## Applications

The Ousiometer

Correspondences

Nutshell

## Extras

## References

The PoCSverse

**Meaning**

34 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References



# Extremonyms: Synousionyms and Antousionyms:

## Powerful-Safe (Good) to Weak-Dangerous (Bad) axis:

Synousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
<b>Anchor: wisdom</b>	0.430	-0.198	0.371	0.579	-0.031	-0.158	0.388	-0.432	-0.158
education	0.396	-0.225	0.340	0.539	-0.065	-0.167	0.336	-0.427	-0.167
healthy	0.438	-0.181	0.318	0.558	-0.047	-0.108	0.362	-0.428	-0.108
trustworthy	0.469	-0.185	0.324	0.589	-0.052	-0.100	0.379	-0.453	-0.100
reliable	0.412	-0.259	0.375	0.575	-0.076	-0.202	0.353	-0.460	-0.202
Antousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
bullshit	-0.458	0.176	-0.317	-0.575	0.046	0.095	-0.373	0.439	0.095
shitty	-0.480	0.179	-0.337	-0.604	0.042	0.100	-0.397	0.456	0.100
nauseate	-0.438	0.160	-0.324	-0.558	0.026	0.101	-0.376	0.413	0.101
weeping	-0.418	0.188	-0.332	-0.549	0.042	0.131	-0.359	0.418	0.131
shame	-0.440	0.170	-0.345	-0.572	0.023	0.120	-0.388	0.421	0.120
diarrhea	-0.408	0.184	-0.357	-0.552	0.023	0.151	-0.374	0.407	0.151

## Powerful to Weak axis:

Synousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
<b>Anchor: success</b>	0.459	0.380	0.481	0.571	0.501	0.095	0.758	-0.050	0.095
almighty	0.438	0.374	0.458	0.543	0.487	0.098	0.728	-0.040	0.098
triumphant	0.449	0.337	0.472	0.565	0.462	0.073	0.726	-0.072	0.073
champion	0.390	0.380	0.445	0.494	0.492	0.087	0.698	-0.001	0.087
victorious	0.384	0.386	0.446	0.489	0.499	0.087	0.698	0.007	0.087
Antousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
sorrow	-0.448	-0.265	-0.336	-0.509	-0.329	-0.127	-0.593	0.127	-0.127
tasteless	-0.354	-0.304	-0.352	-0.430	-0.385	-0.092	-0.576	0.032	-0.092
idle	-0.321	-0.333	-0.388	-0.414	-0.434	-0.068	-0.600	-0.014	-0.068
empty	-0.312	-0.317	-0.419	-0.424	-0.439	-0.033	-0.610	-0.011	-0.033
void	-0.365	-0.337	-0.370	-0.443	-0.420	-0.103	-0.611	0.016	-0.103

# Extremonyms: Synousionyms and Antousionyms:

## Dangerous-Powerful (High Energy) to Safe-Weak (Low Energy) axis:

Synousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
<b>Anchor: volcanic</b>	-0.156	0.410	0.281	-0.061	0.515	-0.045	0.322	0.407	-0.045
shelling	-0.163	0.417	0.273	-0.072	0.518	-0.039	0.316	0.417	-0.039
artillery	-0.150	0.412	0.294	-0.050	0.523	-0.050	0.335	0.405	-0.050
wild	-0.188	0.422	0.250	-0.105	0.514	-0.032	0.289	0.438	-0.032
rifles	-0.163	0.364	0.265	-0.068	0.470	-0.062	0.284	0.380	-0.062
Antousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
couch	0.094	-0.418	-0.302	-0.002	-0.524	0.025	-0.372	-0.369	0.025
mellow	0.133	-0.431	-0.235	0.066	-0.504	-0.009	-0.310	-0.403	-0.009
pillow	0.163	-0.372	-0.305	0.049	-0.498	0.085	-0.317	-0.387	0.085
tortoise	0.173	-0.422	-0.250	0.092	-0.511	0.025	-0.297	-0.427	0.025
quilt	0.143	-0.377	-0.274	0.048	-0.482	0.052	-0.307	-0.375	0.052
cotton	0.139	-0.429	-0.260	0.059	-0.517	0.012	-0.324	-0.407	0.012

## Dangerous to Safe axis:

Synousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
<b>Anchor: homicide</b>	-0.490	0.473	0.018	-0.485	0.478	0.011	-0.005	0.681	0.011
killer	-0.459	0.471	0.043	-0.446	0.485	0.008	0.028	0.658	0.008
psychopath	-0.460	0.443	0.036	-0.446	0.458	-0.003	0.009	0.640	-0.003
bloodshed	-0.452	0.442	0.025	-0.444	0.450	0.008	0.004	0.633	0.008
violate	-0.439	0.470	0.019	-0.440	0.468	0.033	0.020	0.642	0.033
Antousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
natural	0.354	-0.382	-0.019	0.354	-0.382	-0.026	-0.020	-0.520	-0.026
tranquil	0.417	-0.406	-0.145	0.351	-0.480	0.078	-0.091	-0.588	0.078
softness	0.375	-0.414	-0.098	0.338	-0.455	0.021	-0.082	-0.561	0.021
serenity	0.400	-0.378	0.057	0.429	-0.345	-0.054	0.060	-0.547	-0.054
comfortable	0.427	-0.337	-0.027	0.406	-0.361	0.039	0.032	-0.542	0.039
calmness	0.434	-0.395	-0.106	0.383	-0.453	0.065	-0.049	-0.591	0.065

# Outline

## Measuring essential meaning

History

Definitions

Emotions

## Problems

## Remeasuring meaning

## Ousiograms

Extremousionyms

Dimension names

## Safety bias

## Applications

The Ousiometer

Correspondences

Nutshell

## Extras

## References

The PoCSverse

**Meaning**

37 of 77

Measuring essential meaning

History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences


Nutshell

Extras

References



# Etymological, taxonomic, and nomenclatural madnesses:

 Physics: Power was once sometimes called Activity

The PoCVerse  
Meaning  
38 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Etymological, taxonomic, and nomenclatural madnesses:



Physics: Power was once sometimes called Activity



Danger ↗ and Dominance trace back to Dominus ↗  
(~ lord/ruler/person of power)

The PoCverse

**Meaning**

38 of 77

Measuring essential meaning

History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References





# Etymological, taxonomic, and nomenclatural madnesses:

- 📦 Physics: Power was once sometimes called Activity
- 📦 Danger ↗ and Dominance trace back to Dominus ↗  
(~ lord/ruler/person of power)
- 📦 Framing words for EPA, VAD, etc., matter greatly.

The PoCverse

Meaning

38 of 77

Measuring essential meaning

History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences


Nutshell


Extras


References



# Etymological, taxonomic, and nomenclatural madnesses:

 Physics: Power was once sometimes called Activity

 Danger and Dominance trace back to Dominus (~ lord/ruler/person of power)

 Framing words for EPA, VAD, etc., matter greatly.

## Other descriptors that don't hold up:

Measuring essential meaning

- History
- Definitions
- Emotions

Problems

Remeasuring meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

- The Ousiometer
- Correspondences
- Nutshell

Extras

References



# Etymological, taxonomic, and nomenclatural madnesses:

- 📦 Physics: Power was once sometimes called Activity
- 📦 Danger ↗ and Dominance trace back to Dominus ↗  
(~ lord/ruler/person of power)
- 📦 Framing words for EPA, VAD, etc., matter greatly.

## Other descriptors that don't hold up:

- 📦 Success-Stress-Structure.

The PoCSverse  
Meaning  
38 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Etymological, taxonomic, and nomenclatural madnesses:

- 🧱 Physics: Power was once sometimes called Activity
- 🧱 Danger ↗ and Dominance trace back to Dominus ↗  
(~ lord/ruler/person of power)
- 🧱 Framing words for EPA, VAD, etc., matter greatly.

## Other descriptors that don't hold up:

- 🧱 Success-Stress-Structure.
- 🧱 Energy/Flourishing/Thriving-Threat

The PoCSverse  
Meaning  
38 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Etymological, taxonomic, and nomenclatural madnesses:

- 🧱 Physics: Power was once sometimes called Activity
- 🧱 Danger ↗ and Dominance trace back to Dominus ↗  
(~ lord/ruler/person of power)
- 🧱 Framing words for EPA, VAD, etc., matter greatly.

## Other descriptors that don't hold up:

- 🧱 Success-Stress-Structure.
- 🧱 Energy/Flourishing/Thriving-Threat
- 🧱 Power-Order/Chaos-Gravity/Seriousness

The PoCVerse  
Meaning  
38 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# Etymological, taxonomic, and nomenclatural madnesses:

- 🧱 Physics: Power was once sometimes called Activity
- 🧱 Danger ↗ and Dominance trace back to Dominus ↗  
(~ lord/ruler/person of power)
- 🧱 Framing words for EPA, VAD, etc., matter greatly.

## Other descriptors that don't hold up:

- 🧱 Success-Stress-Structure.
- 🧱 Energy/Flourishing/Thriving-Threat
- 🧱 Power-Order/Chaos-Gravity/Seriousness

## After much staring at the ceiling:

The PoCverse  
Meaning  
38 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



## Etymological, taxonomic, and nomenclatural madneses:

- 🧱 Physics: Power was once sometimes called Activity
- 🧱 Danger ↗ and Dominance trace back to Dominus ↗  
(~ lord/ruler/person of power)
- 🧱 Framing words for EPA, VAD, etc., matter greatly.

## Other descriptors that don't hold up:

- 🧱 Success-Stress-Structure.
- 🧱 Energy/Flourishing/Thriving-Threat
- 🧱 Power-Order/Chaos-Gravity/Seriousness

## After much staring at the ceiling:

- 🧱 Goodness-Energy-Structure (GES) (still fails)

The PoCVerse  
Meaning  
38 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



## Etymological, taxonomic, and nomenclatural madnesses:

- 🧱 Physics: Power was once sometimes called Activity
- 🧱 Danger ↗ and Dominance trace back to Dominus ↗  
(~ lord/ruler/person of power)
- 🧱 Framing words for EPA, VAD, etc., matter greatly.

## Other descriptors that don't hold up:

- 🧱 Success-Stress-Structure.
- 🧱 Energy/Flourishing/Thriving-Threat
- 🧱 Power-Order/Chaos-Gravity/Seriousness

## After much staring at the ceiling:

- 🧱 Goodness-Energy-Structure (GES) (still fails)
- 🧱 Power-Danger-Structure (PDS) (succeeds)

The PoCverse  
Meaning  
38 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References





## Connections between meaning dimensions:

$$\begin{bmatrix} \text{Goodness} \\ \text{Energy} \\ \text{Structure} \end{bmatrix} \approx \begin{bmatrix} +0.86 & -0.15 & +0.48 \\ -0.16 & +0.83 & +0.54 \\ +0.48 & +0.55 & -0.69 \end{bmatrix} \begin{bmatrix} \text{Valence} \\ \text{Arousal} \\ \text{Dominance} \end{bmatrix}$$

$$\begin{bmatrix} \text{Power} \\ \text{Danger} \\ \text{Structure} \end{bmatrix} \approx \begin{bmatrix} 0.53 & 0.45 & 0.72 \\ -0.70 & 0.71 & 0.07 \\ 0.48 & 0.55 & -0.69 \end{bmatrix} \begin{bmatrix} \text{Valence} \\ \text{Arousal} \\ \text{Dominance} \end{bmatrix}$$

$$\begin{bmatrix} \text{Power} \\ \text{Danger} \end{bmatrix} = \frac{1}{\sqrt{2}} \begin{bmatrix} 1 & 1 \\ -1 & 1 \end{bmatrix} \begin{bmatrix} \text{Goodness} \\ \text{Energy} \end{bmatrix} \quad (1)$$



# From types to tokens: [15, ?]

- ❏ Analysis so far is for a lexicon of types: Each word counts once.
- ❏ Must consider how words are used in real texts by frequency: Tokens.

The PoCVerse  
Meaning  
40 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell




Extras

References



dangerous  
murderer  
murder  
killer  
aggression  
crucifixion  
lurid  
outburst  
squander  
assassinate  
militant  
climb  
toxic

# From types to tokens: [15, ?]

-  Analysis so far is for a lexicon of types: Each word counts once.
-  Must consider how words are used in real texts by frequency: Tokens.
-  Rebuild ousiograms with usage frequency incorporated.

The PoCverse  
Meaning  
40 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremouisionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

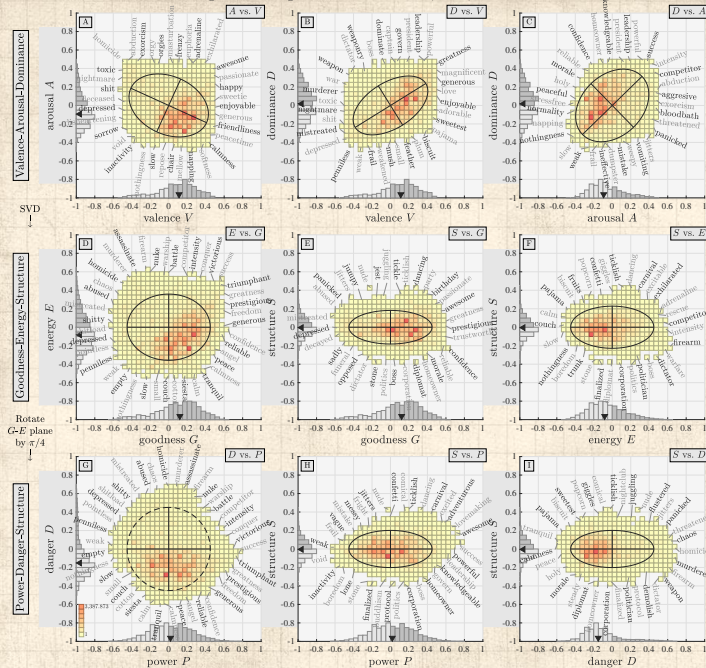
Extras

References





Ousiograms for English fiction in the VAD, GES, and PDS frameworks:



The PoCverse  
**Meaning**  
 41 of 77

Measuring  
 essential meaning  
 History  
 Definitions  
 Emotions

Problems

Remeasuring  
 meaning

Ousiograms  
 Extremousonyms  
 Dimension names

Safety bias

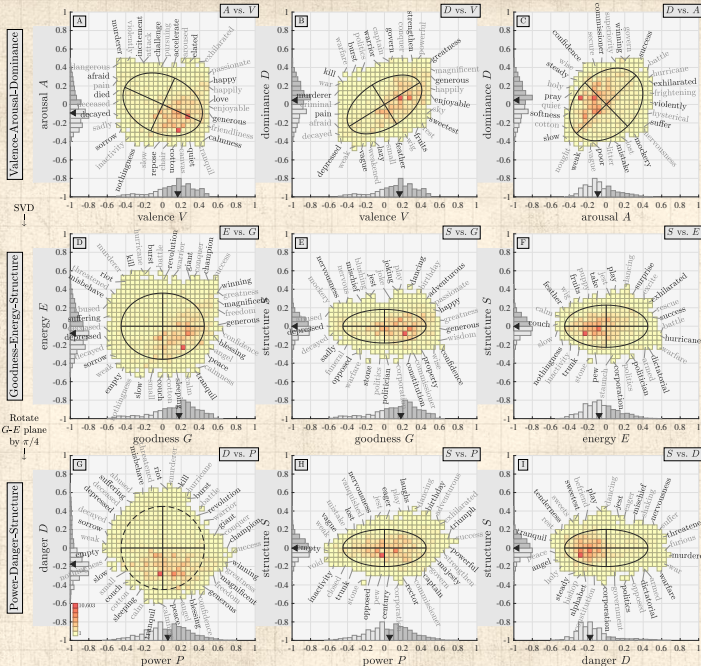
Applications  
 The Ousiometer  
 Correspondences  
 Nutshell

Extras

References



Ousiograms for Jane Austen's novels in the VAD, GES, and PDS frameworks:



The PoCverse

Meaning  
42 of 77

Meaning  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremouisionyms  
Dimension names

Safety bias

Applications

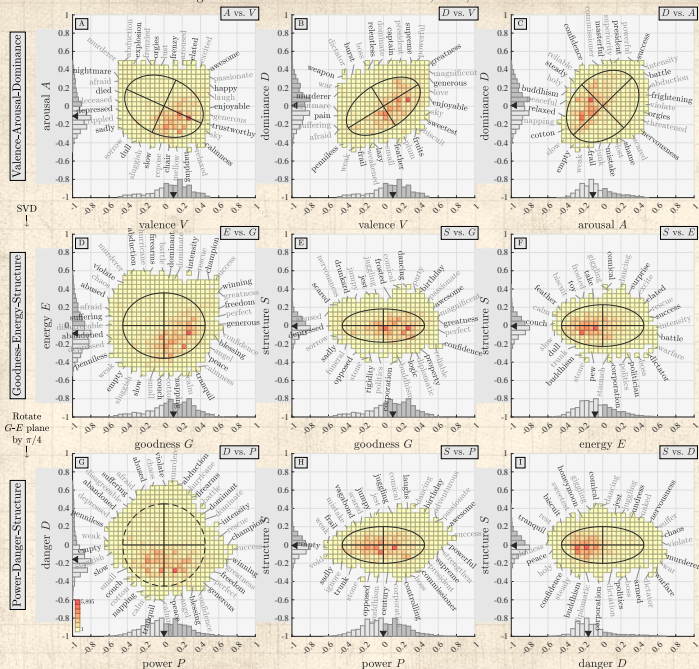
The Ousiometer  
Correspondences  
Nutshell

Extras

References



Ousiograms for Sherlock Holmes in the VAD, GES, and PDS frameworks:



The PoCVerse

**Meaning**  
43 of 77

Essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring meaning

Ousiograms

Extremouionyms  
Dimension names

**Safety bias**

Applications

The Ousiometer  
Correspondences  
Nutshell

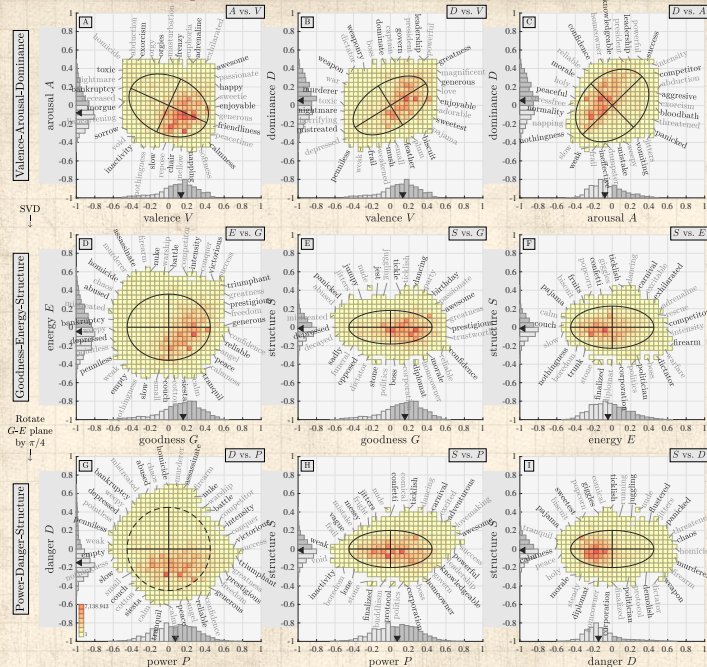
Extras

References





Ousiograms for the New York Times in the VAD, GES, and PDS frameworks:



The PoCverse  
Meaning  
44 of 77

Measuring  
essential meaning  
History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

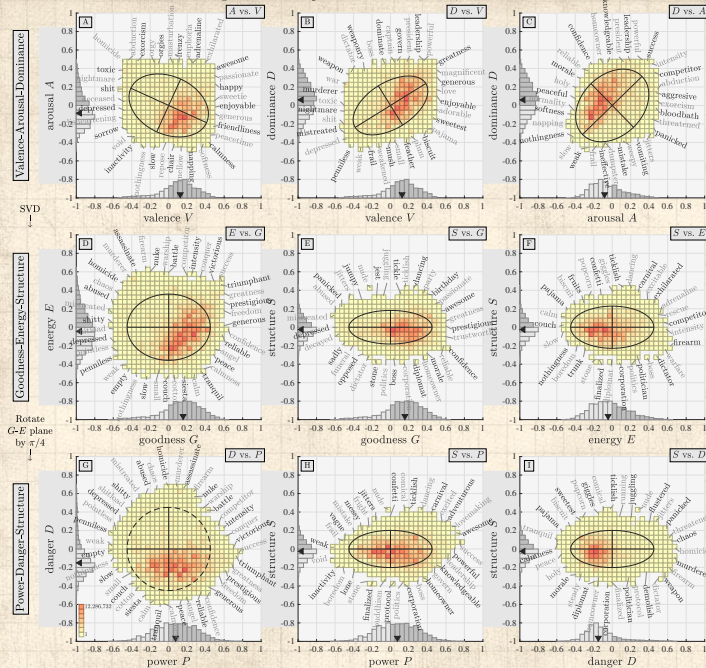
Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



Ousiograms for Wikipedia in the VAD, GES, and PDS frameworks:



The PoCVerse  
**Meaning**  
 45 of 77

Measuring  
 essential meaning  
 History  
 Definitions  
 Emotions

Problems

Remeasuring  
 meaning

Ousiograms  
 Extremousionyms  
 Dimension names

Safety bias

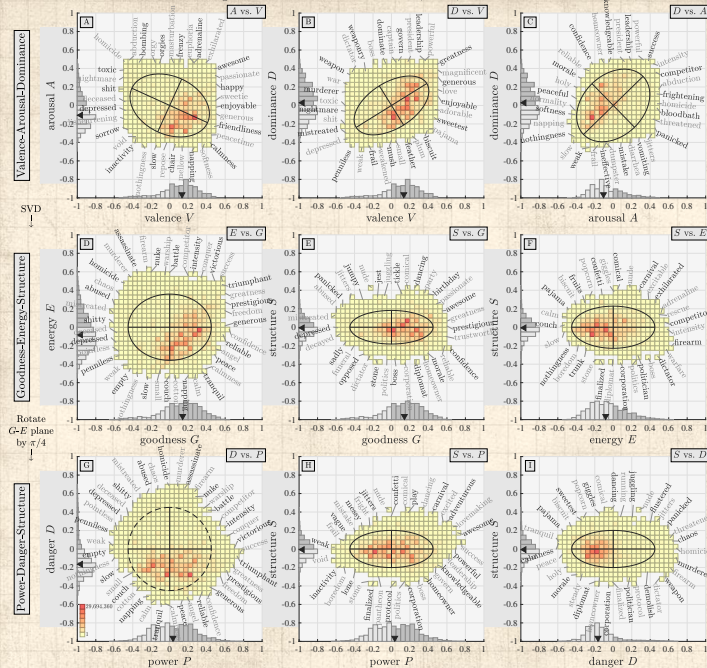
Applications  
 The Ousiometer  
 Correspondences  
 Nutshell

Extras

References



Ousiograms for RadioTalk in the VAD, GES, and PDS frameworks:



The PoCverse  
**Meaning**  
 46 of 77

Measuring  
 essential meaning  
 History  
 Definitions  
 Emotions

Problems

Remeasuring  
 meaning

Ousiograms  
 Extremousionyms  
 Dimension names

Safety bias

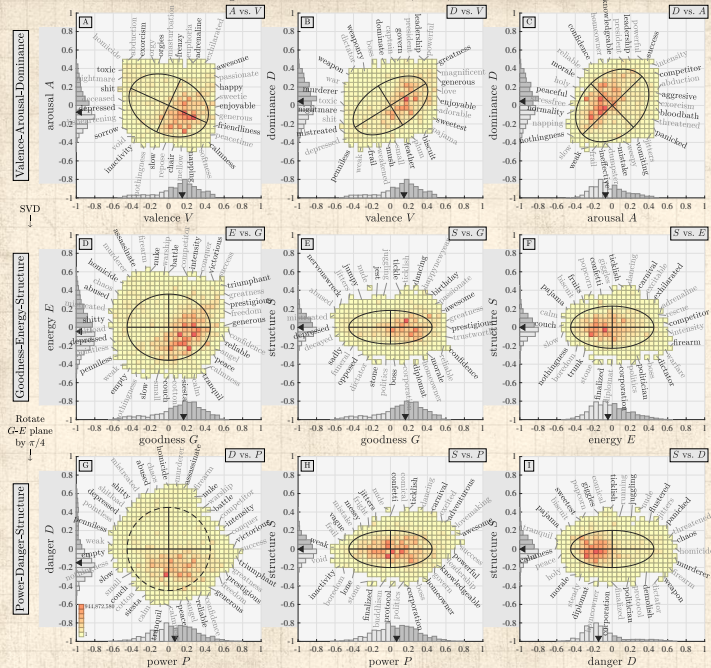
Applications  
 The Ousiometer  
 Correspondences  
 Nutshell

Extras

References



Ousiograms for Twitter in the VAD, GES, and PDS frameworks:



The PoCverse  
**Meaning**  
 47 of 77

Measuring  
 essential meaning  
 History  
 Definitions  
 Emotions

Problems

Remeasuring  
 meaning

Ousiograms  
 Extremousionyms  
 Dimension names

Safety bias

Applications  
 The Ousiometer  
 Correspondences  
 Nutshell

Extras

References



Measuring  
 essential meaning

- History
- Definitions
- Emotions

Problems

Remeasuring  
 meaning

Ousiograms

- Extremousionyms
- Dimension names

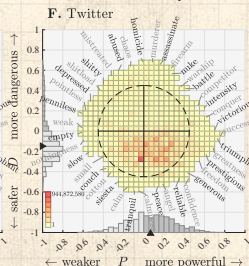
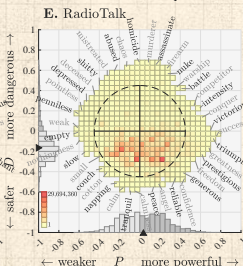
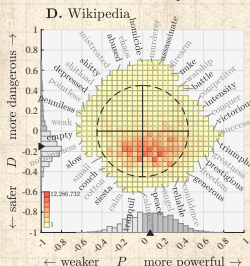
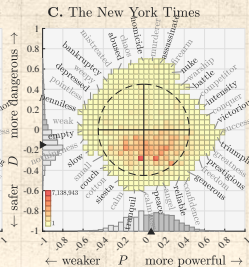
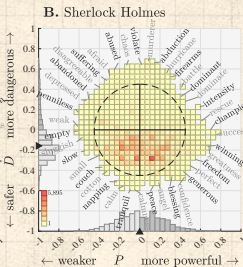
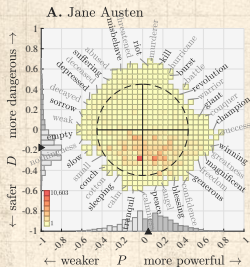
Safety bias

Applications


- The Ousiometer
- Correspondences
- Nutshell

Extras

References



# A special thing has happened:

 The PDS framework emerged only from analyzing a lexicon (types).

The PoCverse  
Meaning  
49 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

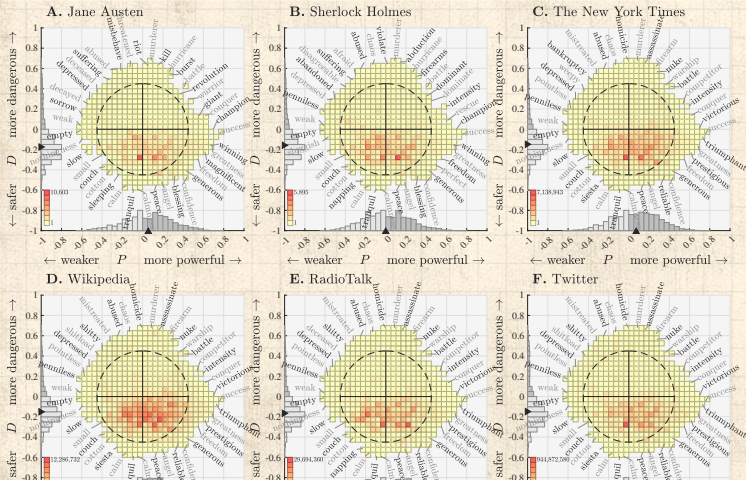
Ousiograms  
Extremousonyms  
Dimension names

Safety bias


Applications  
The Ousiometer  
Correspondences  
Nutshell


Extras

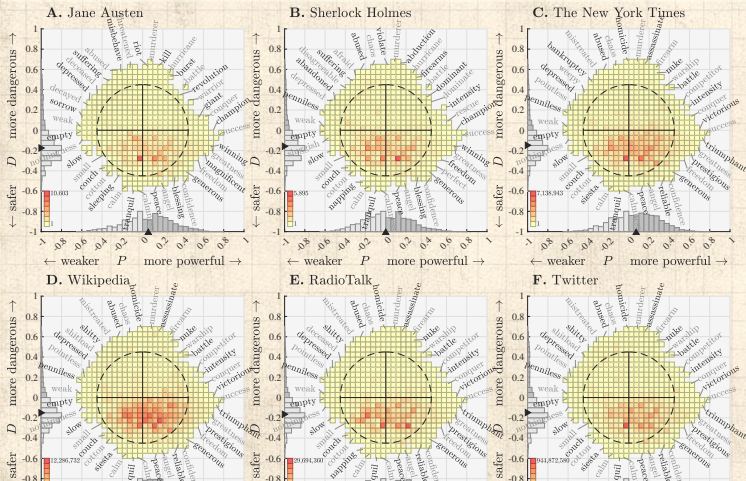
References



# A special thing has happened:

 The PDS framework emerged only from analyzing a lexicon (types).

 Applying PDS framework to disparate corpora (tokens) reveals a linguistic 'safety bias'.



The PoCverse  
Meaning  
49 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousigrams  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousimeter  
Correspondences  
Nutshell

Extras

References



# Outline

## Measuring essential meaning

History

Definitions

Emotions

## Problems

## Remeasuring meaning

## Ousiograms

Extremousionyms

Dimension names

## Safety bias

## Applications

The Ousiometer

Correspondences

Nutshell

## Extras

## References

The PoCSverse

**Meaning**

50 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

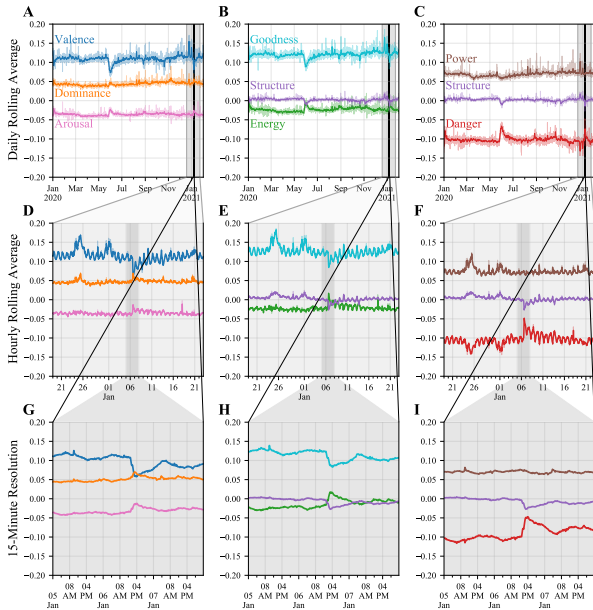
Extras

References





# Prototype ousiometer—Twitter:



The PoCverse  
**Meaning**  
 51 of 77

Measuring  
 essential meaning

History  
 Definitions  
 Emotions

Problems

Remeasuring  
 meaning

Ousigrams  
 Extremousoynms  
 Dimension names

Safety bias

Applications

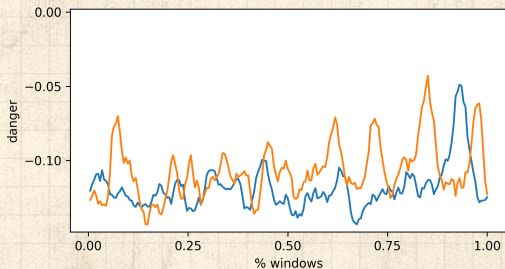
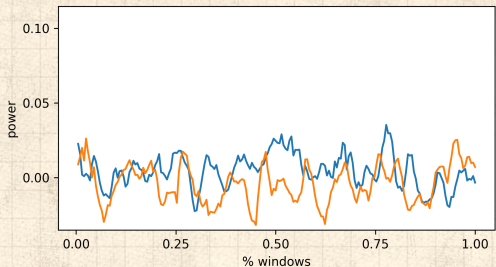
The Ousimeter  
 Correspondences  
 Nutshell

Extras

References



# Prototype ousiometer—Harry Potter:



Blue: Harry Potter and the Half-Blood Prince  
Orange: Harry Potter and the Deathly Hallows

The PoCverse

**Meaning**

52 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousonyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

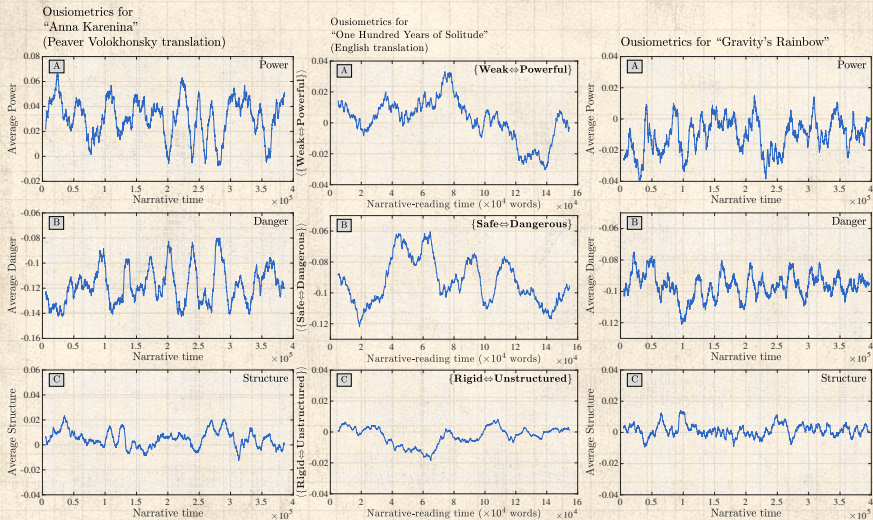
Nutshell

Extras

References



# Power and Danger time series for books:



# Prototype ousiometer—Terry Pratchett's Discworld:

The PoCVerse  
Meaning  
54 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

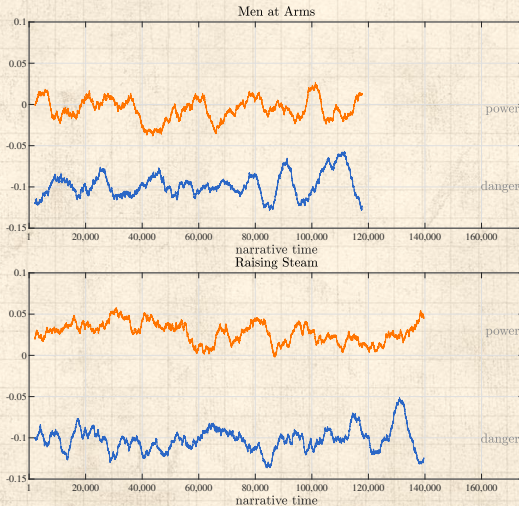
Safety bias

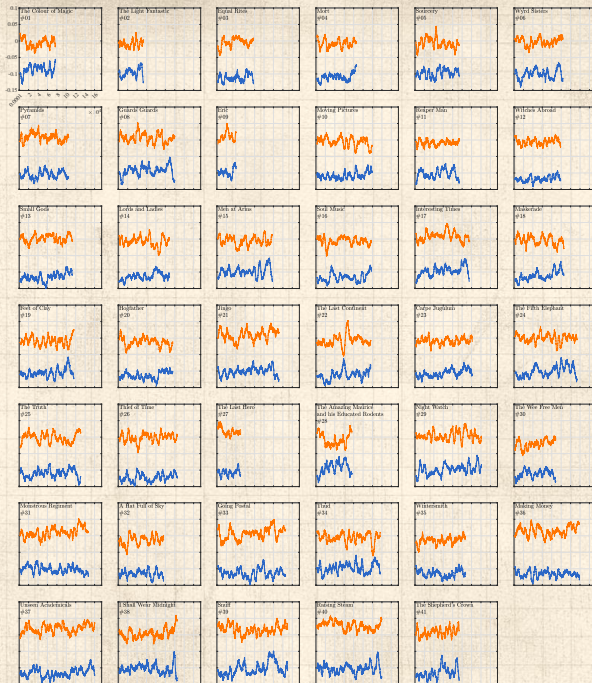
Applications

The Ousiometer  
Correspondences  
Nutshell

Extras

References





The PoCVerse  
**Meaning**  
 55 of 77

Measuring  
 essential meaning

- History
- Definitions
- Emotions

Problems

Remeasuring  
 meaning

Ousiograms  
 Extremousonyms  
 Dimension names

Safety bias

Applications

- The Ousiometer
- Correspondences
- Nutshell

Extras

References





# The PoCVerse Meaning 56 of 77

Measuring  
essential meaning

- History
- Definitions
- Emotions

Problems

Remeasuring  
meaning

Ousigrams

- Extremousonyms
- Dimension names

Safety bias

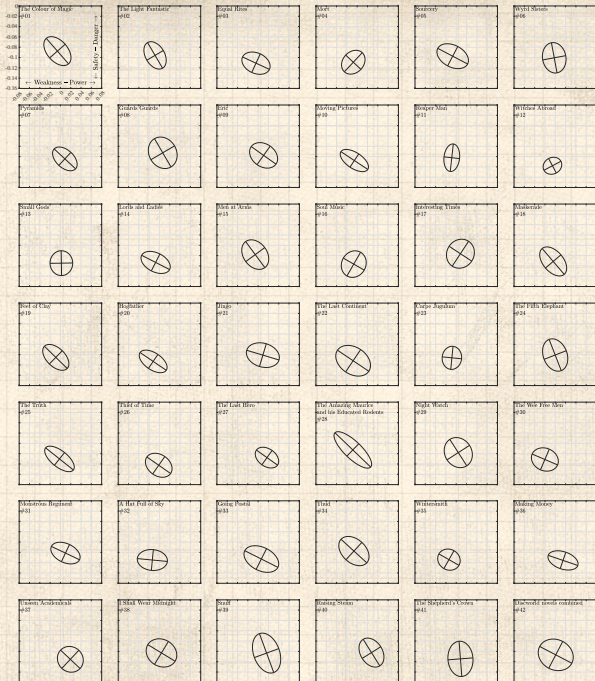
Applications

- The Ousimeter
- Correspondences
- Nutshell

Extras

References





# The PoCverse Meaning 57 of 77

## Measuring essential meaning

- History
- Definitions
- Emotions

## Problems

## Remeasuring meaning

## Ousigrams Extremousonyms Dimension names

## Safety bias

## Applications

- The Ousimeter
- Correspondences
- Nutshell

## Extras

## References



# Outline

## Measuring essential meaning

History

Definitions

Emotions

## Problems

## Remeasuring meaning

## Ousiograms

Extremousionyms

Dimension names

## Safety bias

## Applications

The Ousiometer

Correspondences

Nutshell

## Extras

## References

The PoCSverse

**Meaning**

58 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

Nutshell

Extras

References

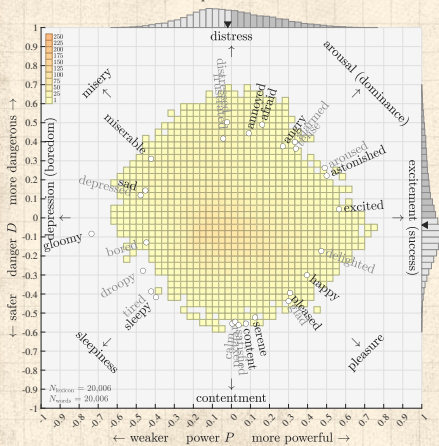




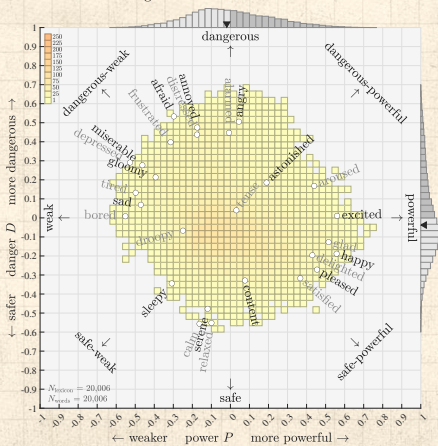


Rough agreement with Russell's circumplex model, [18] which itself doesn't disagree with a 2- $d$  orthogonal framework.

A. Circumplex model of affect:



B. Power-danger coordinates for Russell's affect words:



# Dungeons & Dragons—Two alignment axes for character:



1

{lawful  $\Leftrightarrow$  chaotic}  
(vertical) and  
{good  $\Leftrightarrow$  evil}  
(horizontal).

<sup>1</sup>From this [Reddit thread](#), where, naturally, the choices are enthusiastically debated.

The PoCVerse  
Meaning  
60 of 77

Measuring  
essential meaning

- History
- Definitions
- Emotions

Problems

Remeasuring  
meaning

Ousiograms

- Extremousonyms
- Dimension names

Safety bias

Applications

- The Ousiometer
- Correspondences
- Nutshell

Extras

References



lawful-good ~ structured- powerful-safe	neutral-good ~ neutral- powerful-safe	chaotic-good ~ unstructured- powerful-safe
lawful-neutral ~ structured- neutral	(true) neutral	chaotic-neutral ~ unstructured- neutral
lawful-evil ~ structured- dangerous	neutral-evil ~ neutral- dangerous	chaotic-evil ~ unstructured- dangerous



# Outline

## Measuring essential meaning

History

Definitions

Emotions

## Problems

## Remeasuring meaning

## Ousiograms

Extremousionyms

Dimension names

## Safety bias

## Applications

The Ousiometer

Correspondences

Nutshell

## Extras

## References

The PoCSverse

**Meaning**

63 of 77

Measuring  
essential meaning

History

Definitions

Emotions

Problems

Remeasuring  
meaning

Ousiograms

Extremousionyms

Dimension names

Safety bias

Applications

The Ousiometer

Correspondences

**Nutshell**


Extras


References





# Findings, observations, possibilities:

 Power-danger-structure framework emerges in distinct settings, fitting types and tokens.

 Safety bias of communication refines Pollyanna Principle of positivity

The PoCVerse  
Meaning  
64 of 77

Measuring  
essential meaning  
History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremouionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences

**Nutshell**  
.....

Extras

References



See concluding remarks in the foundational paper. <sup>[5]</sup>

# Findings, observations, possibilities:

- Power-danger-structure framework emerges in distinct settings, fitting types and tokens.
- Safety bias of communication refines Pollyanna Principle of positivity
- Happiness/Goodness = Power + Safety

The PoCVerse  
Meaning  
64 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences

**Nutshell**

Extras

References



See concluding remarks in the foundational paper. [5]



# Findings, observations, possibilities:

- Power-danger-structure framework emerges in distinct settings, fitting types and tokens.
- Safety bias of communication refines Pollyanna Principle of positivity
- Happiness/Goodness = Power + Safety
- Ousiometer can be improved and refined.

The PoCverse  
Meaning  
64 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications

The Ousiometer  
Correspondences

**Nutshell**

Extras

References

See concluding remarks in the foundational paper. [5]



# Findings, observations, possibilities:

- Power-danger-structure framework emerges in distinct settings, fitting types and tokens.
- Safety bias of communication refines Pollyanna Principle of positivity
- Happiness/Goodness = Power + Safety
- Ousimeter can be improved and refined.
- Possible: Emotions map onto powerful-safe and danger axes.

The PoCVerse  
Meaning  
64 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousimeter  
Correspondences

**Nutshell**

Extras

References



See concluding remarks in the foundational paper. [5]



# Findings, observations, possibilities:

- Power-danger-structure framework emerges in distinct settings, fitting types and tokens.
- Safety bias of communication refines Pollyanna Principle of positivity
- Happiness/Goodness = Power + Safety
- Ousiometer can be improved and refined.
- Possible: Emotions map onto powerful-safe and danger axes.
- Power-danger framework for survival.
- Possible: Telegnomics for stories—Measuring character arcs, plots.

See concluding remarks in the foundational paper. [5]

The PoCVerse  
Meaning  
64 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences

**Nutshell**  
.....

Extras

References



# Findings, observations, possibilities:

- Power-danger-structure framework emerges in distinct settings, fitting types and tokens.
- Safety bias of communication refines Pollyanna Principle of positivity
- Happiness/Goodness = Power + Safety
- Ousimeter can be improved and refined.
- Possible: Emotions map onto powerful-safe and danger axes.
- Power-danger framework for survival.
- Possible: Telegnomics for stories—Measuring character arcs, plots.
- Complement to information theory which is meaning-free. [21]

See concluding remarks in the foundational paper. [5]

The PoCSverse  
Meaning  
64 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousimeter  
Correspondences

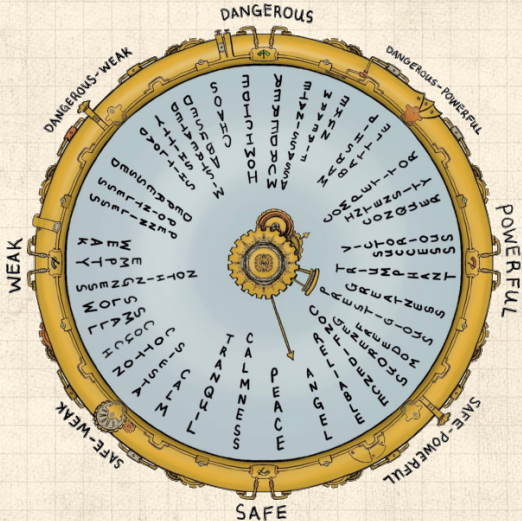
**Nutshell**

Extras

References



# The Compass of Meaning:



The PoCVerse  
**Meaning**  
 65 of 77

Measuring  
 essential meaning

- History
- Definitions
- Emotions

Problems

Remeasuring  
 meaning

Ousiograms  
 Extraneousonyms  
 Dimension names

Safety bias

Applications  
 The Ousiometer  
 Correspondences

**Nutshell**

Extras

References



Online appendices: Paper(s), flipbooks, code, ...

<https://storylab.w3.uvm.edu/ousiometrics>

Synonyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
happy	0.50	0.24	0.27	0.53	0.26	0.18	0.57	-0.16	0.18
delighted	0.44	0.16	0.18	0.44	0.17	0.17	0.44	-0.18	0.17
excited	0.41	0.43	0.21	0.39	0.40	0.29	0.56	0.04	0.29
astonished	0.01	0.28	0.07	0.00	0.27	0.10	0.18	0.19	0.10
aroused	0.21	0.45	0.17	0.19	0.43	0.23	0.43	0.19	0.23
tense	-0.10	-0.06	0.15	-0.01	0.05	-0.19	0.03	0.04	-0.19
alarmed	-0.31	0.32	-0.01	-0.32	0.31	0.03	-0.03	0.45	0.03
angry	-0.38	0.33	0.10	-0.33	0.39	-0.07	0.02	0.51	-0.07
afraid	-0.49	0.28	-0.26	-0.59	0.17	0.09	-0.32	0.52	0.09
annoyed	-0.40	0.28	-0.16	-0.46	0.21	0.07	-0.19	0.47	0.07
distressed	-0.36	0.27	-0.18	-0.43	0.19	0.10	-0.19	0.43	0.10
frustrated	-0.42	0.15	-0.25	-0.50	0.06	0.05	-0.33	0.38	0.05
miserable	-0.44	-0.04	-0.31	-0.52	-0.13	-0.02	-0.47	0.26	-0.02
sad	-0.28	-0.17	-0.35	-0.38	-0.28	0.02	-0.47	0.05	0.02
gloomy	-0.39	-0.09	-0.21	-0.43	-0.13	-0.09	-0.40	0.20	-0.09
depressed	-0.48	-0.05	-0.36	-0.58	-0.17	-0.01	-0.54	0.27	-0.01
bored	-0.35	-0.33	-0.30	-0.40	-0.38	-0.14	-0.55	-0.02	-0.14
droopy	-0.06	-0.15	-0.20	-0.13	-0.22	0.03	-0.25	-0.08	0.03
tired	-0.38	-0.18	-0.31	-0.45	-0.26	-0.07	-0.50	0.11	-0.07
sleepy	0.10	-0.37	-0.25	0.03	-0.46	0.02	-0.29	-0.36	0.02
calm	0.37	-0.40	-0.22	0.28	-0.51	0.11	-0.14	-0.56	0.11
relaxed	0.36	-0.41	-0.12	0.32	-0.46	0.03	-0.08	-0.56	0.03
satisfied	0.46	0.01	0.18	0.48	0.04	0.10	0.38	-0.30	0.10
at ease	—	—	—	—	—	—	—	—	—
ease	0.30	-0.11	-0.01	0.27	-0.15	0.09	0.10	-0.29	0.09
content	0.26	-0.20	0.06	0.29	-0.18	-0.03	0.09	-0.33	-0.03
serene	0.30	-0.37	-0.13	0.25	-0.42	0.03	-0.10	-0.48	0.03
glad	0.44	0.26	0.24	0.45	0.27	0.19	0.52	-0.10	0.19
pleased	0.44	0.05	0.29	0.51	0.13	0.03	0.47	-0.25	0.03



"Semantic differential profiles for 1,000 most frequent English words." ↗

David R. Heise,  
 Psychological Monographs: General and Applied, **79**, 1, 1965. [6]

Dimension

Scale

Evaluation

Good-Bad  
 Pleasant-Unpleasant

Activity

Active-Passive  
 Lively-Still

Potency

Strong-Weak  
 Tough-Tender

Stability

Rational-Emotional  
 Tamed-Untamed

The PoCverse  
 Meaning  
 67 of 77

Measuring  
 essential meaning  
 History  
 Definitions  
 Emotions

Problems

Remeasuring  
 meaning

Ousiograms  
 Extremousonyms  
 Dimension names

Safety bias

Applications  
 The Ousiometer  
 Correspondences  
 Nutshell

Extras

References








# References I


- [1] T. Alshaabi, J. L. Adams, M. V. Arnold, J. R. Minot, D. R. Dewhurst, A. J. Reagan, C. M. Danforth, and P. S. Dodds.

Storywrangler: A massive exploratorium for sociolinguistic, cultural, socioeconomic, and political timelines using Twitter.

[Science Advances](#), 7:eabe6534, 2021. pdf 

- [2] I. Bakker, T. Van Der Voordt, P. Vink, and J. De Boon.

Pleasure, arousal, dominance: Mehrabian and Russell revisited.

[Current Psychology](#), 33:405–421, 2014. pdf 

The PoCVerse  
Meaning  
69 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias


Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# References II

- [3] D. Beeferman, W. Brannon, and D. Roy. RadioTalk: A large-scale corpus of talk radio transcripts. [arXiv preprint arXiv:1907.07073, 2019.](#) pdf 
- [4] M. M. Bradley and P. J. Lang. Affective norms for English words (ANEW): Stimuli, instruction manual and affective ratings. Technical report c-1, University of Florida, Gainesville, FL, 1999.
- [5] P. S. Dodds, T. Alshaabi, M. I. Fudolig, J. W. Zimmerman, J. Lovato, S. Beaulieu, J. R. Minot, M. V. Arnold, A. J. Reagan, and C. M. Danforth. Ousiometrics and Telegnomics: The essence of meaning conforms to a two-dimensional powerful-weak and dangerous-safe framework

Measuring essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



## References III

with diverse corpora presenting a safety bias, 2021.

Available online at

<https://arxiv.org/abs/2110.06847>. pdf ↗

- [6] D. R. Heise.  
Semantic differential profiles for 1,000 most frequent English words.  
Psychological Monographs: General and Applied, 79(8):1, 1965. pdf ↗

- [7] A. Mehrabian and J. A. Russell.  
An Approach to Environmental Psychology.  
MIT Press, 1974.

- [8] A. Mehrabian and J. A. Russell.  
The basic emotional impact of environments.  
Perceptual and motor skills, 38:283–301, 1974.  
pdf ↗

The PoCSverse  
Meaning  
71 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias



Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



## References IV

- [9] J.-B. Michel, Y. K. Shen, A. P. Aiden, A. Veres, M. K. Gray, The Google Books Team, J. P. Pickett, D. Hoiberg, D. Clancy, P. Norvig, J. Orwant, S. Pinker, M. A. Nowak, and E. A. Lieberman. Quantitative analysis of culture using millions of digitized books. [Science Magazine, 331:176–182, 2011. pdf](#) 
- [10] S. M. Mohammad. Obtaining reliable human ratings of valence, arousal, and dominance for 20,000 English words. [In Proceedings of The Annual Conference of the Association for Computational Linguistics \(ACL\), Melbourne, Australia, 2018. pdf](#) 

The PoCSverse  
Meaning  
72 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias


Applications  
The Ousimeter  
Correspondences  
Nutshell

Extras

References



# References V

- [11] S. M. Mohammad.  
Word affect intensities.  
In Proceedings of the 11th Edition of the  
Language Resources and Evaluation Conference  
(LREC-2018), Miyazaki, Japan, 2018. pdf 
- [12] F. Moretti.  
Distant Reading.  
Verso, New York, 2013.
- [13] C. Osgood, G. Suci, and P. Tannenbaum.  
The Measurement of Meaning.  
University of Illinois, Urbana, IL, 1957.

The PoCVerse  
Meaning  
73 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell

Extras

References



# References VI

[14] E. A. Pechenick, C. M. Danforth, and P. S. Dodds. Characterizing the Google Books corpus: Strong limits to inferences of socio-cultural and linguistic evolution.

[PLoS ONE, 10:e0137041, 2015. pdf](#)

[15] C. S. S. Peirce.

Prolegomena to an apology for pragmatism.

[The Monist, 16\(4\):492–546, 1906. pdf](#)

[16] A. J. Reagan, B. F. Tivnan, J. R. Williams, C. M. Danforth, and P. S. Dodds.

Sentiment analysis methods for understanding large-scale texts: A case for using continuum-scored words and word shift graphs.

[EPJ Data Science, 6, 2017. pdf](#)

The PoCSverse  
Meaning  
74 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousonyms  
Dimension names

Safety bias

Applications  
The Ousimeter  
Correspondences  
Nutshell

Extras

References



# References VII

- [17] R. Reisenzein.  
Wundt's three-dimensional theory of emotion.  
[Poznan Studies in the Philosophy of the Sciences and the Humanities, 75:219–250, 2000.](#)
- [18] J. A. Russell.  
A circumplex model of affect.  
[Journal of Personality and Social Psychology, 39:1161, 1980.](#) pdf ↗
- [19] E. Sandhaus.  
The New York Times Annotated Corpus.  
Linguistic Data Consortium, Philadelphia, 2008.  
Available online at:  
<https://doi.org/10.35111/77ba-9x74>.

The PoCSverse  
Meaning  
75 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousiometer  
Correspondences  
Nutshell



Extras

References





# References VIII

- [20] I. Semenov.  
Wikipedia word frequency, 2019.  
<https://github.com/IlyaSemenov/wikipedia-word-frequency>, accessed 2021/04/02.
- [21] C. E. Shannon.  
A mathematical theory of communication.  
The Bell System Tech. J., 27:379–423,623–656,  
1948. [pdf](#) 
- [22] L. M. Solomon.  
A factorial study of complex auditory stimuli  
(passive sonar sounds).  
Unpublished Doctoral Dissertation, University of  
Illinois, 1954. [pdf](#) 

The PoCSverse  
Meaning  
76 of 77

Measuring  
essential meaning

History  
Definitions  
Emotions

Problems

Remeasuring  
meaning

Ousiograms  
Extremousionyms  
Dimension names

Safety bias

Applications  
The Ousimeter  
Correspondences  
Nutshell

Extras

References



