The Meaning of Meaning

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



Outline Measuring essential meaning History Definitions Emotions Problems Remeasuring meaning **Ousiograms** Extremousionyms **Dimension names** Safety bias **Applications** The Ousiometer Correspondences Characters Trait space Character space Nutshell Extra References

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



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?

¹Life goal: Never get owned by a dictionary on social media

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Meaning

Measuring essential meaning

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References

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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." PoCS @pocsvox Meaning

Measuring essential meaning History

Definitions

Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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The meaning of pings:

"A factorial study of complex auditory stimuli (passive sonar sounds)" L. M. Solomon, Unpublished doctoral dissertation, University of Illinois, , , 1954. ^[22]

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?' PoCS @pocsvox Meaning

Measuring essential meaning History

Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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aggression

From pings to things:



"The Measurement of Meaning" **3**, C by Osgood, Suci, and Tannenbaum (1957). ^[14]

THE DEMENDINALITY OF THE SEMANTIC SPACE (

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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: {weak ⇔ strong}

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

\delta "EPA framework"

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Measuring essential meaning

History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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Semantic differentials from Osgood et al.: [14]

- 1. pleasant-unpleasant
- 2. repeated-varied
- 3. smooth-rough
- 4. active-passive
- 5. beautiful-ugly
- 6. definite-uncertain
- 7. low-high
- 8. powerful-weak
- 9. steady-fluttering
- 10. soft-loud
- 11. full-empty
- 12. good-bad
- 13. rumbling-whining
- 14. solid-hollow
- 15. clear-hazy
- 16. calming-exciting
- 17. pleasing-annoying

- 18. large-small
- 19. clean-dirty
- 20. resting-busy
- 21. dull-sharp
- 22. deep-shallow
- 23. gliding-scraping
- 24. familiar-strange
- 25. soft-hard
- 26. heavy-light
- 27. wet-dry
- 28. safe-dangerous
- 29. concentrated-diffuse
- 30. pushing-pulling
- 31. labored-easy
- 32. dark-bright
- 33. even-uneven
- 34. loose-tight
- 35. relaxed-tense

- 36. colorful-colorless
- 37. hot-cold
- 38. rich-thin
- 39. obvious-subtle
- 40. wide-narrow
- 41. deliberate-careless
- 42. happy-sad
- 43. gentle-violent
- 44. mild-intense
- 45. rounded-angular
- 46. slow-fast
- 47. rugged-delicate
- 48. simple-complex
- 49. green-red
- 50. masculine-feminine

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Definitions:

- Ousiometrics: The quantitative study of the essential meaningful components of an entity, however perceived.
- Solution State State
- 🚳 To be distinguished from semantics, semiotics, ...
- ούσία is the etymological root of the word 'essence'.
- 🚳 Ousiometry, ousiometer, ousiograms, ...
- Telegnomics: The distant sensing of knowledge (~ distant reading ^[13])

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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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:^[8, 9]
 - Evaluation ~ Pleasure/Valence (~ Happiness)
 - Potency ~ Dominance
 - CACTIVITY ~ 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]

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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An Approach to Environmental Psychology

"An Approach to Environmental Psychology." **a** C by Mehrabian and Russell (1974).^[8]



"The basic emotional impact of environments" Mehrabian and Russell, Perceptual and motor skills, **38**, 283–301, 1974. ^[9]

"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." PoCS @pocsvox Meaning

Measuring essential meaning History Definitions <u>Emotions</u>

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



Major problems with measuring essential meaning:

- 1. Scale: Originally 10s and 100s of words \rightarrow 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).

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

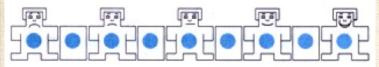
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1999 ANEW study—three 1–9 scales: [4]

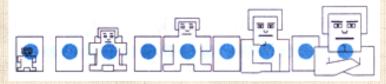
valence:



arousal:



dominance:



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Measuring essential meaning ^{History}

Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References dangeous article ar

ANEW study: Valence \sim 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:

- \circledast Problem: Expert-chosen list of \sim 1,000 words.
- Fine words but poorly cover real texts ^[16].
- Wrongly suggests Arousal and Dominance are minimal relative to Valence.

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



Remeasuring meaning:

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"Obtaining Reliable human ratings of valence, arousal, and dominance for 20,000 English words" C Saif M. Mohammad, Proceedings of The Annual Conference of the Association for Computational Linguistics (ACL), **38**, , 2018.^[11]

Moving beyond Likert scales:

- 🚳 Best-worst scaling 🗹
- Ask raters to examine n things once, and choose the best and worst according to some criterion.
- $\mathfrak{For} n = 4$, the are 6 pair comparisons of Things.
- Choosing best and worst gives 5 orderings:
 - $\tau_1>\tau_2, \tau_3>\tau_4.$
- \mathfrak{F} Things end up with scores in [0,1].

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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NRC VAD Lexicon^[11]

VAD endpoints:	Paradigm words and phrases presented to raters: ^[12]
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.

NRC VAD study: 20,007 words:

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Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



Standard correlations suggests a bit of Barney Rubble:

$$\begin{split} R(V,A) &\simeq -0.268 \\ R(A,D) &\simeq 0.302 \\ R(D,V) &\simeq 0.488 \end{split}$$

The Delicious English Muffin of Meaning:¹

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

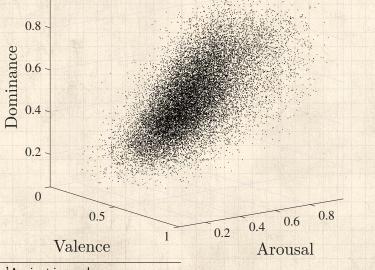
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Safety bias

Applications The Ouslometer Correspondences Characters Trait space Character space Nutshell

Extra

¹Apricot jam, always.



$R(D,V) \simeq 0.488$

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Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

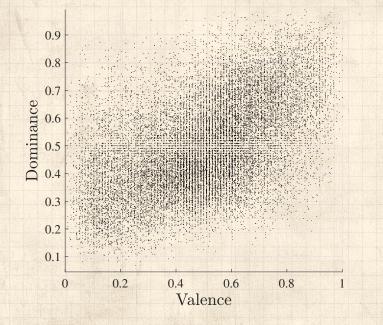
Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References dang@ous philipperous dumutede dumutede killer aggression



Release the Hounds by which we mean Singular Value Decomposition:

Variance explained:

- line was a state of the state o
- \lambda Apply SVD.
- \clubsuit 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.

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Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

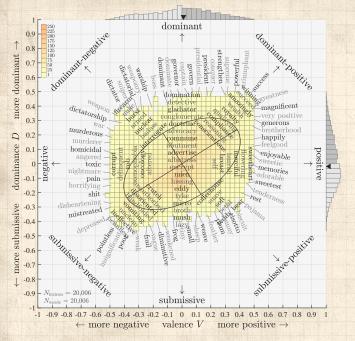
Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

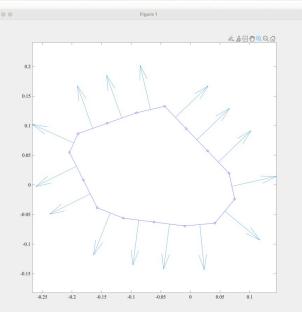
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Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

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Building ousiograms (2021/01/31):



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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

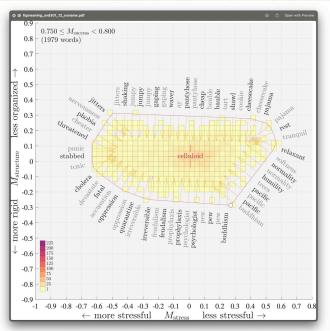
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Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

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PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

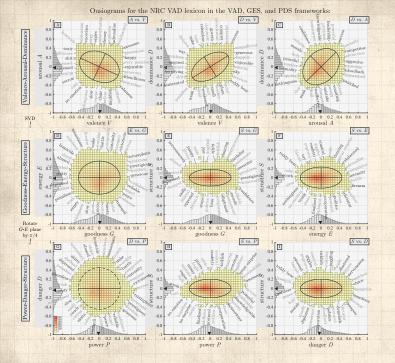
Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References dangeous putussite dangeous putussite dangeous dangeous



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

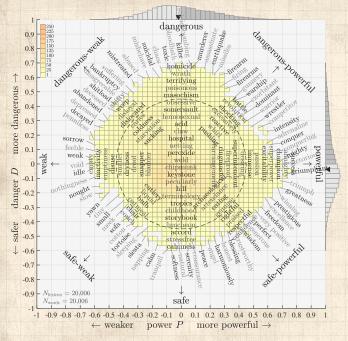
Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

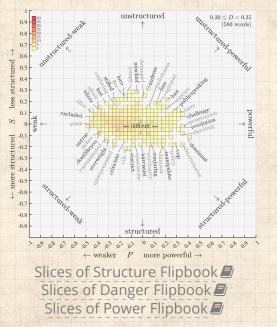
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Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

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Ousiometric slices:



Extremonyms: Synousionyms and Antousionyms:

Powerful-Safe (Good) to Weak-Dangerous (Bad) axis:										
Synousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure	
Anchor: wisdom	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-Safe (Good) to Weak-Dangerous (Bad) axis:

Powerful to Weak axis:

Synousionyms	Valence	Arousal	Dominance	Goodness	Energy	Structure	Power	Danger	Structure
Anchor: success	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	
Anchor: volcanic	-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
Anchor: homicide	-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

Etymological, taxonomic, and nomenclatural madnesses:

- Physics: Power was once sometimes called Activity
- Danger I and Dominance trace back to Dominus I (~ 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)

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



Connections between meaning dimensions:

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

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

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

From types to tokens: [7]

- 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.
- 🚓 A set of distinct corpora:
 - English fiction from Google Books (120 years). [10, 15]
 - Jane Austen's novels.
 - 📦 Sherlock Holmes stories.
 - New York Times (20 years). [19]
 - Vikipedia (2019/03).^[20]
 - RadioTalk: Transcriptions of talk radio.^[3]
 - Twitter through Storywrangler.^[1]

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

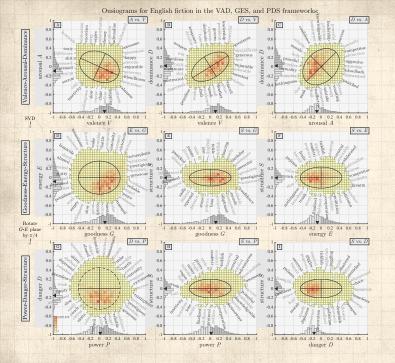
Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References

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aggression



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

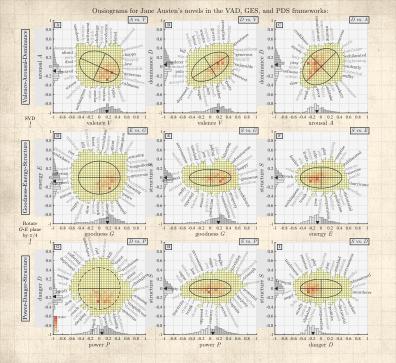
Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

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@pocsvox Meaning

PoCS

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

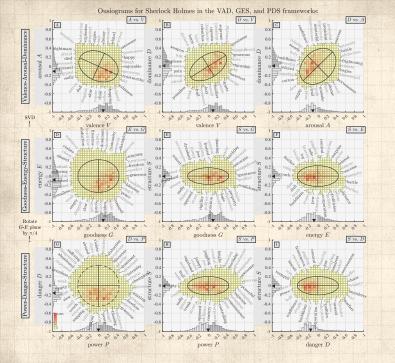
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Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

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PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

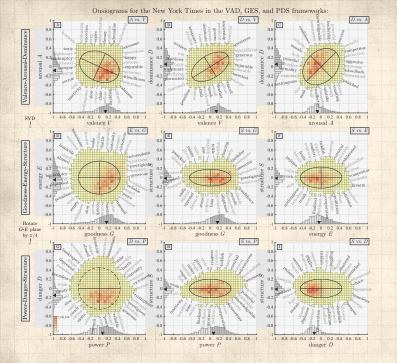
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Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

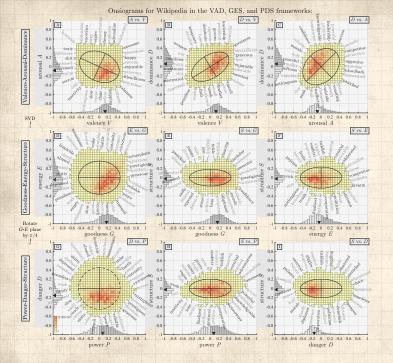
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Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

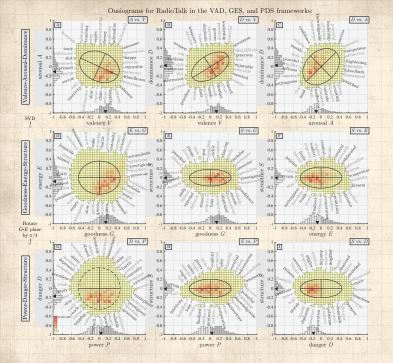
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Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

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Measuring essential meaning History Definitions Emotions

Problems

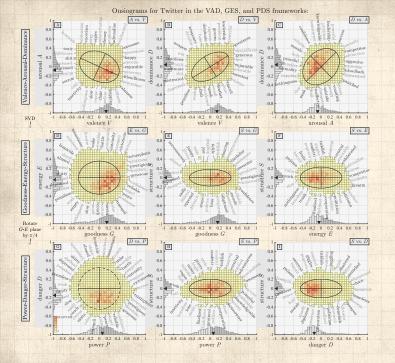
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Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



Measuring essential meaning History Definitions Emotions

Problems

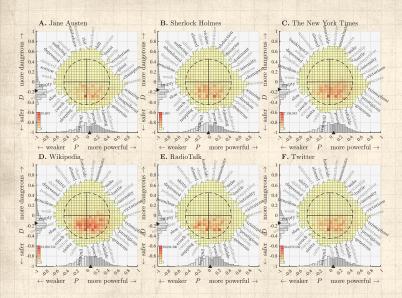
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Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

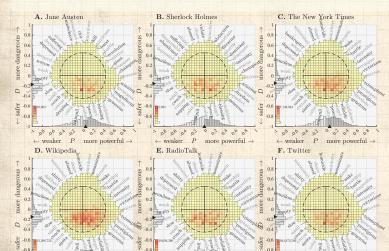
Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

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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'.



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

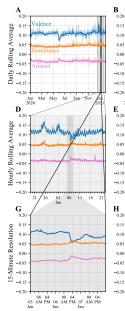
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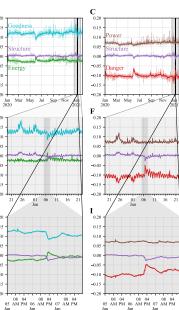
dangerous

aggression

Extra References

Prototype ousiometer—Twitter:





PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer

Correspondence: Characters

Trait space

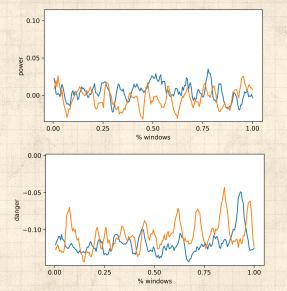
Character space

Nutshell

Extra



Prototype ousiometer—Harry Potter:



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

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

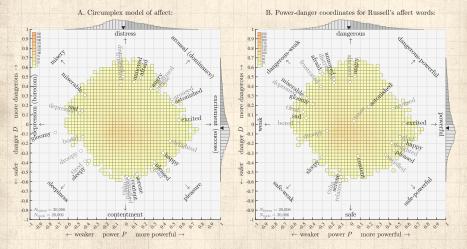
Applications The Ousiometer

Characters Trait space Character space Nutshell

Extra

References dangerous prendon view during and the second se

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



Dungeons & Dragons—Two alignment C axes for character:

PoCS @pocsvox Meaning

Measuring essential meaning

Problems

Remeasuring meaning

Ousiograms

Applications Correspondences

Extra

References angerous aggression



lawful neutpal You expect me to watch you doing that without telling on you?



I AWILLI EVI Call me Craig, and call blackmail a day at the mall with Craig.

I only entered this to get back at Vicki for not lending me a pencil.

neutpal evil



chaotic good If loving worms is stutid I don't wanna be smart

lawful good

Kind people are always kind, not just

when it's easy



chaotic neutral We're at the mercy of each other and ourselves



chaotic evil I'm gonna deep fry your dog and eat your momma's face!

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

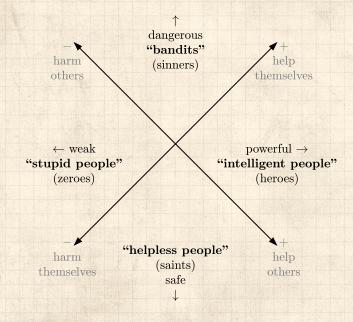


TPHE DELITPA I don't believe in dibs, or love at first sight, or love, or best friends, or doing things,

¹From this Reddit thread **C**, where, naturally, the choices are enthusiastically debated.

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

Aligns with rotated version of Cipolla's C Basic Laws of Human Stupidity:



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters

Character space Nutshell

Extra

References dangeous philipperous dangeous philipperous dangeous da

Who is Pratchett the Cat?

PoCS @pocsvox Meaning

> Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences

Characters Trait space Character space Nutshell

Extra



The Open-Source Psychometrics Project: https://openpsychometrics.org

Statistical "Which Character" Personality Quiz

This is an interactive personality quiz that will match you to fictional characte on similarity of description.

Background

When the creator of this website would tell people that he published pers..., people would usually ask him if he ment that he worked at BuzzFeed on their 'Whin personality quizzes. And he would have to explain that he did not and had never bear that style of test. These quizzes are very fin, as evidenced by their externe popular meaningful, two people who get the same result on a typical example of these tests much more in concern than two randomy paired individuals. So for the longest more scientific, but all sully, 'Which Character' are You'rest.

This test was created by getting more than 3 million volunteers to desdifferent adjective based scales. This created a database of descriptic ratings are compared against these profiles and the closest match is f this quiz works and was developed can be found <u>here</u>. There is also a the biases of self-report, and a version for courbles.

Test Instructions

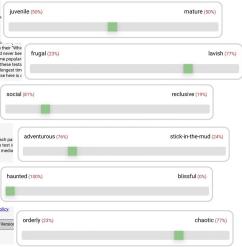
The test is made of pairs of adjectives with a slider between them. For each pa dragging the slider to where you fall on the spectrum between them. This test is select how many questions you want to do using the version option. The media reccomended version is 185 seconds (~3 minutes).

Participation

This interactive program is provided for entertainment and information psychological advice or a screening tool of any kind and comes withou particular purpose.

At the end of the survey you will be asked for consent to include your r agree your responses may be used and shared per the website privacy policy.

Begin assessment



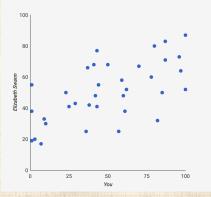
Use the slider to indicate where you fall on this spectrum:

The best match between the self assessment you provided and the profile of a fictional character as rated by other people who have taken this survey is the character Elizabeth Swann (Pirates of the Caribbean).



83% match

Your traits versus their traits are graphed below (click on points for labels).



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences

Characters Trait space Character space Nutshell

Extra References

dangerous and and a statistic statistics in the statistic statistics in the statistic statistic

Fictional characters most like Pratchett the Cat:

- 1. Elizabeth Swann (Pirates of the Caribbean): 83%
- 2. Daenerys Targaryen (Game of Thrones): 82%
- 3. Margaery Tyrell (Game of Thrones): 82%
- 4. Francisco d'Anconia (Atlas Shrugged): 82%
- 5. Dr. Hannibal Lecter (Hannibal): 82%
- 6. Audrey Horne (Twin Peaks): 81%
- 7. Princess Anna Karenina (Anna Karenina): 81%
- 8. Danny Ocean (Ocean's 11): 81%
- 9. Ragnar Lothbrok (Vikings): 81%
- 10. Olenna Tyrell (Game of Thrones): 80%

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences

Characters Trait space Character space Nutshell

Extra



Fictional characters least like Pratchett the Cat:

- 1988. Cyril Figgis (Archer): 22%
- 1989. Kermit (Shameless): 22%
- 1990. Stu (The Hangover): 22%
- 1991. George Michael Bluth (Arrested Dev.): 21%
- 1992. Morty Smith (Rick and Morty): 21%
- 1993. Louis Tully (Ghostbusters): 21%
- 1994. Lenny (After Life): 21%
- 1995. Eric Forman (That 70's Show): 20%
- 1996. Milhouse Van Houten (The Simpsons): 19%
- 1997. Alan Harper (Two and Half Men): 19%
- 1998. Pete Hornberger (30 Rock): 19%
- 1999. Chip Dove (Jennifer's Body): 17%
- 2000. Stuart Bloom (The Big Bang Theory): 16%

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences

Characters Trait space Character space Nutshell

References

aggression

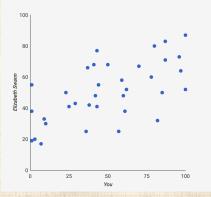
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PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

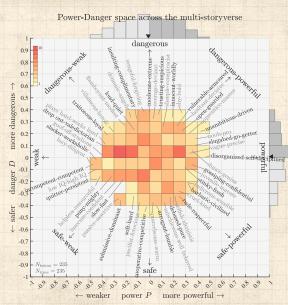
Safety bias

Applications The Ousiometer Correspondences

Characters Trait space Character space Nutshell

Extra References

dangerous and and a statistic statistics in the statistic statistics in the statistic statistic



Source: https://openpsychometrics.org

PoCS @pocsvox

Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

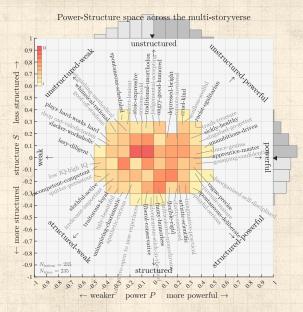
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Applications The Ousiometer Correspondences Characters

Trait space Character space

Extra

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PoCS @pocsvox

Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

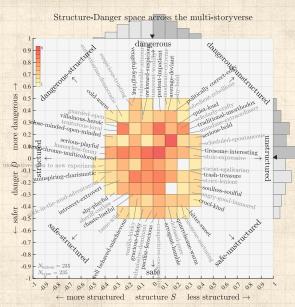
Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters

Trait space Character space

Extra



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PoCS @pocsvox

Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

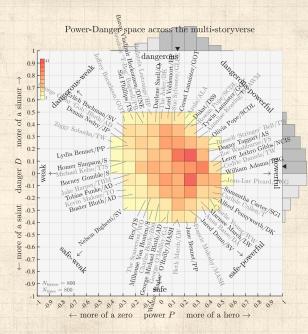
Safety bias

Applications The Ousiometer Correspondences Characters

Trait space Character space

Extra





PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

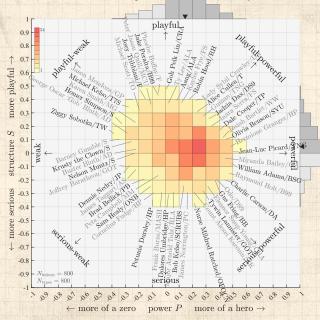
Applications The Ousiometer Correspondences Characters Trait space

Character space

Extra

Action of the second se

Power-Structure space across the multi-storyverse



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

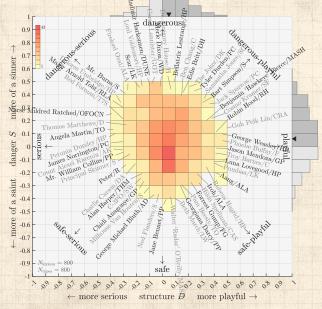
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Applications The Ousiometer Correspondences Characters Trait space

Character space

Extra

Structure-Danger space across the multi-storyverse



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

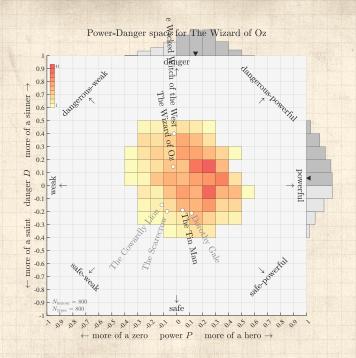
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Character space

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

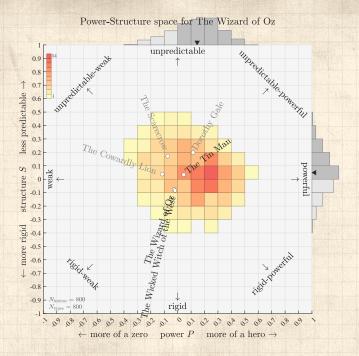
Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra



Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

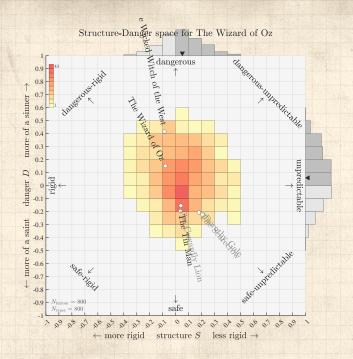
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Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

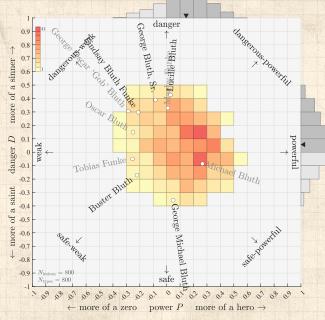
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangerous approximation and the second s

Power-Danger space for Arrested Development



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

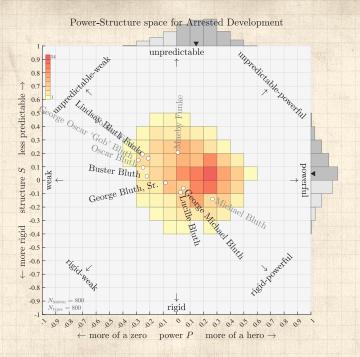
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Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

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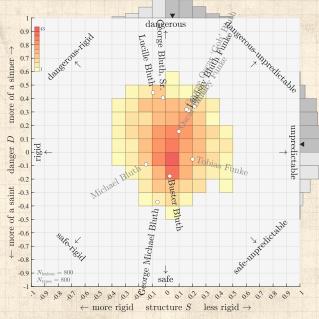
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangerous automatical durante duran

Structure-Danger space for Arrested Development



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

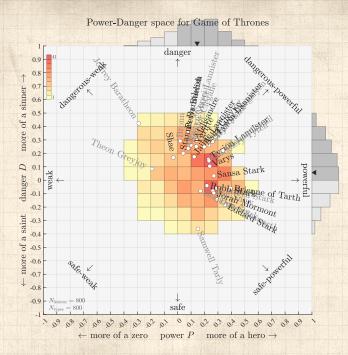
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Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dang@ous.autorung purgerous dungerous dungero



@pocsvox Meaning

PoCS

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

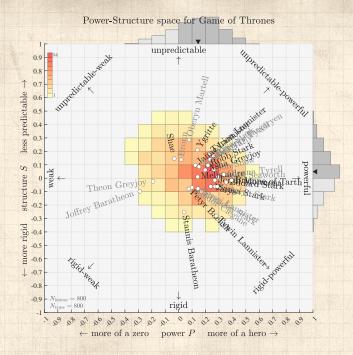
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Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

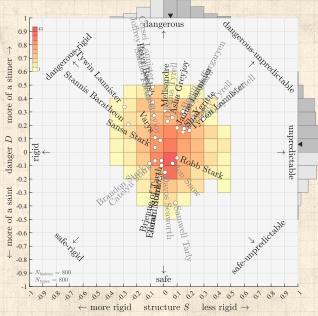
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangeous antiput and antiduce killer aggression

Structure-Danger space for Game of Thrones



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

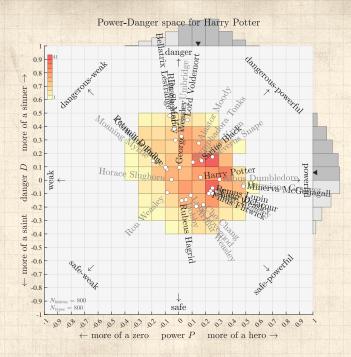
Safety bias

Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

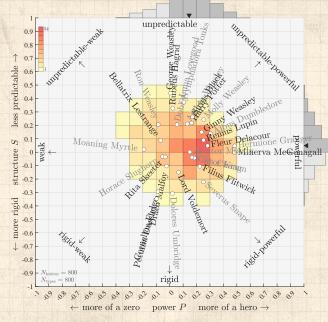
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

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Power-Structure space for Harry Potter



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

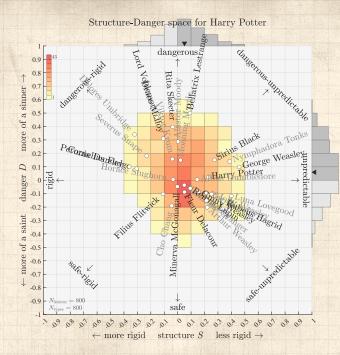
Safety bias

Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangeous antiput and antiduce killer aggression



Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

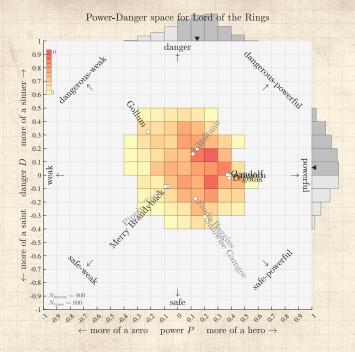
Safety bias

Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dang@ous.aupungtrom the state of the state of



Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

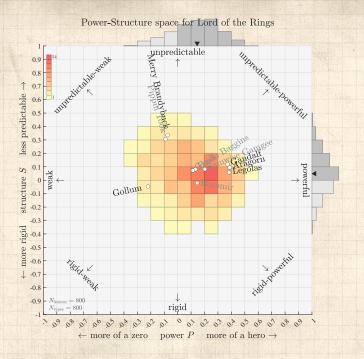
Safety bias

Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

Action of the second se



Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

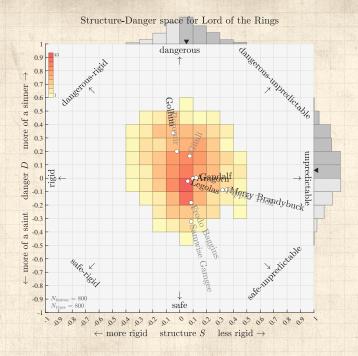
Safety bias

Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangerous optimility : "ut dangerous dangerous dangerous killer aggression



Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

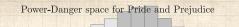
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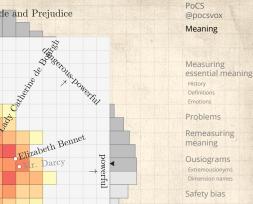
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangeous production production duration durati



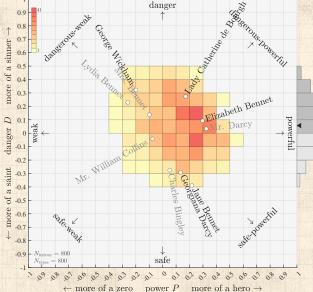


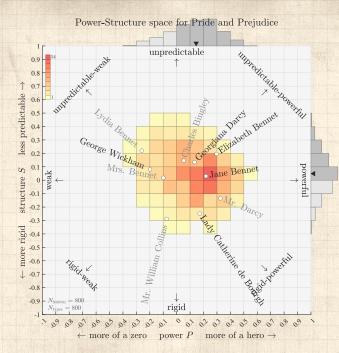
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangerous artifution dangerous artifution dangerous artifution dangerous artifution dangerous artifution aggression





Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

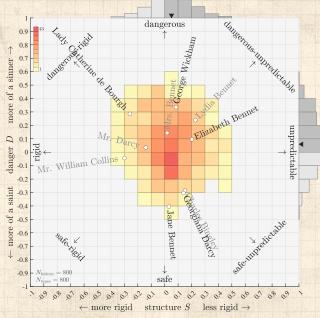
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangeous antiput and antiduce killer aggression

Structure-Danger space for Pride and Prejudice



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

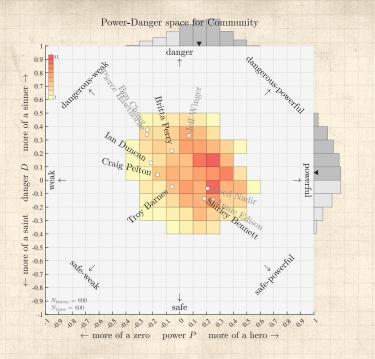
Safety bias

Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

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Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

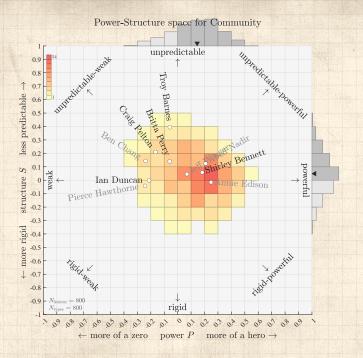
Safety bias

Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangerous optimility : "ut dangerous dangerous dangerous killer aggression



Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

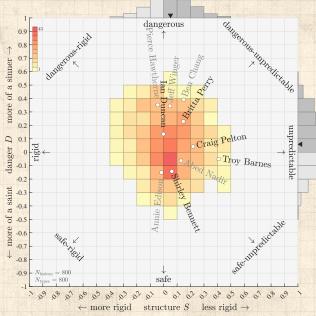
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dangerous puttingunation dangerous dangerous killer aggression

Structure-Danger space for Community



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

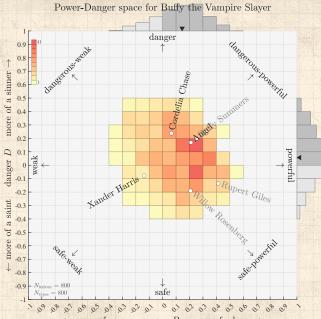
Safety bias

Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dang@ous_purgences purgences dang@ous_purgences dang@ous_pu



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PoCS @pocsvox Meaning

Measuring essential meaning

Problems

Remeasuring meaning

Ousiograms

Safety bias

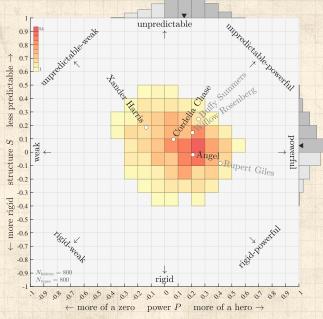
Applications Trait space

Character space Nutshell

Extra

References dangerous murderes chao aggression

Power-Structure space for Buffy the Vampire Slayer



PoCS @pocsvox Meaning

> Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

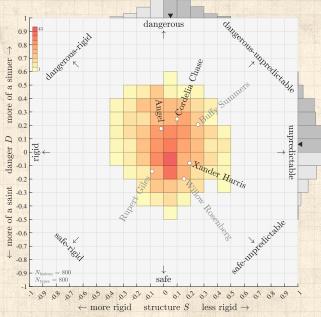
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dang@ous.approverses purporter and approverse during the second seco

Structure-Danger space for Buffy the Vampire Slayer



PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

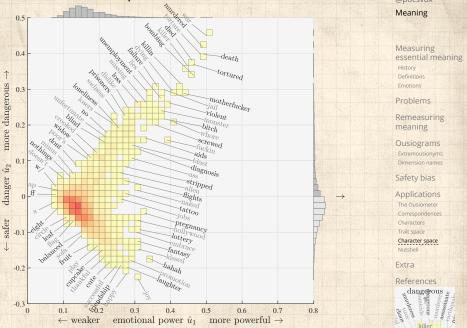
Applications The Ousiometer Correspondences Characters Trait space

Character space Nutshell

Extra

References dang@ous.approverses purporter and approverses during the second sec

Six emotions, collapsed:



[@]pocsvox Meaning

aggression

PoCS

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
 - Solution Output of the second second
- 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]

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

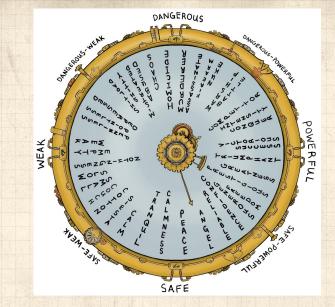
Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell Extra References

dangerous



Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References dangerous approximation of the second se

Online appendices: Paper(s), extra figures, flipbooks, code. https://storylab.w3.uvm.edu/ousiometrics

REAL PROPERTY OF CONTRACTOR									
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] PoCS @pocsvox Meaning

> Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra References dangetous under de killer aggression

Dimension

Evaluation

Activity

Potency

Stability

Scale

Good-Bad Pleasant-Unpleasant Active-Passive Lively-Still Strong-Weak Tough-Tender Rational-Emotional Tamed-Untamed

Remeasuring meaning:

Confusion and Conflation:

Person, Arrent Residence Materia

(spectrum structure in the structure in

"Pleasure, arousal, dominance: Mehrabian and Russell revisited" Bakker et al., Current Psychology, **33**, 405–421, 2014. ^[2]

Test whether EPA and VAD match.

Explore historical problems of defining end point descriptors for meaning dimensions.

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra References dangerous

References I

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



 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

 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 C

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.
- P. S. Dodds, T. Alshaabi, M. I. Fudolig, J. W.
 Zimmerman, J. Lovato, S. Beaulieu, J. R. Minot, M. V. Arnold, A. J. Reagan, R. Harp, and C. M.
 Danforth.
 Ousiometrics and Telegnomics: The essence of meaning conforms to a two-dimensional powerful-weak and dangerous-safe framework

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References dangerous proving the second multiple second dangerous proving the second dangerous the seco

References III

with diverse corpora presenting a safety bias, 2021. 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 C
- [7] G. Herdan.
 Type-Token Mathematics: A Textbook of Mathematical Linguistics.
 Mouton, The Hague, Netherlands, 1960.
- [8] A. Mehrabian and J. A. Russell. An Approach to Environmental Psychology. MIT Press, 1974.

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



References IV

[9] A. Mehrabian and J. A. Russell. The basic emotional impact of environments. <u>Perceptual and motor skills</u>, 38:283–301, 1974. pdf

[10] 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 PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra



References V

[11] 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

[12] 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 2

[13] F. Moretti. Distant Reading. Verso, New York, 2013. PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References VI

[14] C. Osgood, G. Suci, and P. Tannenbaum. <u>The Measurement of Meaning</u>. University of Illinois, Urbana, IL, 1957.

[15] 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

[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 PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References dangeous preusses dangeous preusses dangeous d

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. PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References dangerous preusses dangerous preusses dangerous dangero

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. <u>The Bell System Tech. J.</u>, 27:379–423,623–656, 1948. pdf

[22] L. M. Solomon. A factorial study of complex auditory stimuli (passive sonar sounds). <u>Unpublished doctor's dissertation, University of</u> Illinois, 1954. pdf PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

References dangerous hundre de killer aggression

References IX

[23] W. M. Wundt. Grundriss der Psychologie. Kröner, 1922.

PoCS @pocsvox Meaning

Measuring essential meaning History Definitions Emotions

Problems

Remeasuring meaning

Ousiograms Extremousionyms Dimension names

Safety bias

Applications The Ousiometer Correspondences Characters Trait space Character space Nutshell

Extra

