Sentiment Analysis - Affective Lexicons

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Week 12, Lecture 2

Sentiment Lexicons

- The general inquirer
- MPQA Subjectivity Cues Lexicon
- SentiWordnet
- LIWC (Linguistic Inquiry and Word Count)

The General Inquirer

Categories

- Positive (1915 words) and Negative (2291) words
- Strong vs weak, active vs passive, overstated vs understated
- pleasure, pain, virtue, vice, motivation, cognitive orientation etc.

Entry	Source	Positiv	Negativ	Pstv	Affil	Ngtv	Hostile	Strong	Power	Weak	Submit	Active	P
A	H4Lvd												
ABANDON	H4Lvd		Negativ			Ngtv				Weak			
ABANDONMENT	H4		Negativ							Weak			
ABATE	H4Lvd		Negativ										P
ABATEMENT	Lvd												
ABDICATE	H4		Negativ							Weak	Submit		P.
ABHOR	H4		Negativ				Hostile						P.
ABIDE	H4	Positiv			Affil							Active	
ABILITY	H4Lvd	Positiv						Strong					
ABJECT	H4		Negativ							Weak	Submit		P
ABLE	H4Lvd	Positiv		Pstv				Strong					
ABNORMAL	H4Lvd		Negativ			Ngtv							
ABOARD	H4Lvd												
ABOLISH	H4Lvd		Negativ			Ngtv	Hostile	Strong	Power			Active	
ABOLITION	Lvd												
ABOMINABLE	H4		Negativ					Strong					
ABORTIVE	Lvd												
ABOUND	H4	Positiv											P
ABOUT#1	H4Lvd												
ABOUT#2	H4Lvd												
ABOUT#3	H4Lvd												
ABOUT#4	H4Lvd												
ABOUT#5	H4Lvd												
ABOUT#6	H4Lvd												
ABOUT#7	H4Lvd												
ABOVE#1	H4Lvd												
ABOVE#2	H4Lvd												
ABOVE#3	H4Lvd												
ABOVE#4	H4Lvd												
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SentiWordNet

- Home page: http://sentiwordnet.isti.cnr.it/
- All Wordnet synsets automatically annotated for degrees of positivity, negativity, and neutrality/objectiveness

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Example

```
 \begin{array}{c} \textit{estimable} \ (\textit{J,3}) \ : \text{``may be computed or estimated''} \\ \text{Pos 0 Neg 0 Obj 1} \end{array}
```

estimable (J,1): "deserving of respect or high regard"
Pos .75 Neg 0 Obj .25

Other Lexicons

MPQA Subjectivity Cues Lexicon

- Home page: http://www.cs.pitt.edu/mpqa/subj_lexicon.html
- 6885 words from 8221 lemmas: 2718 positive, 4912 negative
- Each word annotated for intensity (strong, weak)

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Bing Liu Opinion Lexicon

- Bing Liu's Page on Opinion Mining
- http: //www.cs.uic.edu/~liub/FBS/opinion-lexicon-English.rar
- 6786 word: 2006 positive, 4780 negative

- Home page: http://www.liwc.net/
- 2300 words, > 70 classes

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Affective Processes

- Negative emotion (bad, weird, hate, problem, tough)
- Positive emotion (love, nice, sweet)

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Tentative (maybe, perhaps, guess), Inhibition (block, constraint)

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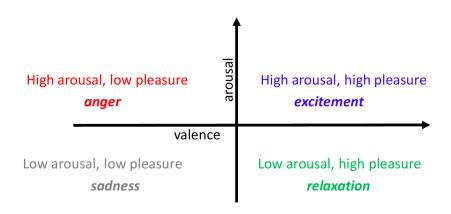
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Comes with a small fee

Valence / Arousal Dimenstions



- Warriner, Amy Beth, Victor Kuperman, and Marc Brysbaert. "Norms of valence, arousal, and dominance for 13,915 English lemmas." Behavior research methods 45.4 (2013): 1191-1207.
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Ratings for 14,000 words for emotional dimensions:

- valence (the pleasantness of the stimulus)
- arousal (the intensity of emotion provoked by the stimulus)
- dominance (the degree of control exerted by the stimulus)

valence (the pleasantness of the stimulus

- 9: happy, pleased, satisfied, contented, hopeful
- 1: unhappy, annoyed, unsatisfied, melancholic, despaired, or bored

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dominance (the degree of control exerted by the stimulus)

- 9: in control, influential, important, dominant, autonomous, or controlling
- 1: controlled, influenced, cared-for, awed, submissive, or guided

Lexicon of valence, arousal, and dominance: Examples

Valence		Arousal		Dominance		
vacation	8.53	rampage	7.56	self	7.74	
happy	8.47	tornado	7.45	incredible	7.74	
whistle	5.7	zucchini	4.18	skillet	5.33	
conscious	5.53	dressy	4.15	concur	5.29	
torture	1.4	dull	1.67	earthquake	2.14	