



Emotion and rationality in annual reports: A semantic domain analysis

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Outline

-
- Discourse analysis
 - Previous discourse analytical work on annual reports
 - Emotion and rationality
 - as factors in investor behaviour
 - in annual reports
 - Data and methods
 - Results
 - Conclusions and implications

Discourse analysis

Discourse

- is language use as social practice
- is based on and creates knowledge
- represents aspects of the world; constructs identities and relations; consists of meaningful, cohesive texts
- e.g. accounting discourse



social field

Discourse analysis

Context analysis – discourse practice and social: **Why** are these actors etc. represented, and why in this way?

Macro-level

social context (situational, institutional, societal)

Meso-level

discourse practice context (production, distribution, reception, adaptation)

Micro-level

text

Text analysis -
content: **What**
actors, entities and
events are
represented?

Text analysis -
semiotic: **How** are
actors etc.
represented?

Annual reports

- format/macro-genre combining various genres: highlights, chairman's statement, CEO review, financial review etc.
- little regulation in UK compared to US



Munro 2014

- target readers: analysts and investors
- informative and persuasive purposes

Discourse analysis and annual reports: Previous work

Sentiment analysis to predict future financial performance: e.g. Hájek and Olej 2013

Diachronic change in UK annual reports, 1965-2004 (Beattie et al. 2008):

- increase in page length, voluntary and narrative information
- ubiquitous impression management through selectivity, graphical measurement distortion and manipulation of the length of time series

Interdiscursivity in annual reports (Bhatia 2010):

- accounting, economics, public relations and legal discourse in different sections
- different functions
- strategic position lends credibility to public relations discourse in chairman's statement

Discourse analysis and annual reports: Previous work

Narrative structure in annual reports including ambiguous results (Jameson 2000): aim to make readers co-construct investment story through

- nonlinear structure
- dramatization through contrasting narrators
- variety of subgenres
- combination of verbal and visual discourse

Readers' response may depend on intellectual understanding as well as emotional interaction with the narrator persona.

Rhetorical organisation of chairman's statements in three moves (Skulstad 1996):

1. establishing relationships between the chairman, the company and the readers
2. maintaining confidence
3. reinforcing relationships already established

Discourse analysis and annual reports: Previous work

Word frequencies in operating and financial reports (Rutherford 2005):
required neutrality disregarded in favour of evaluative (positive) lexis
(‘assets’, ‘profit’, ‘up’), especially for poorly performing companies: positive
bias as default

Collocates and semantic preference in discussion of the financial crisis
in CSR reports (Lischinsky 2011):

abstract actors (‘demand’, ‘markets’), negative impact (‘affect’, ‘hit’) and
intensifiers (‘severely’, ‘sustained’) background social actors and
consequences

Strategies of impression management and obfuscation in chairmen’s
statements (Merkl-Davies and Koller 2012):

STRATEGY	passivisation	referential vagueness	grammatical metaphor	conceptual metaphor and metonymy
linguistic features	passive voice (and social actor deletion)	plural pronoun usage	nominalisation; replacing social with grammatical actors (and intransitive or ergative verbs)	(a) Metaphor (personification) (b) Metonymy: Specified replaced by collective social actors
effect	Social actors and their responsibilities are backgrounded.	A collective social actor is incompletely defined.	Processes are presented as facts.	(a) Social actors and their responsibilities are backgrounded. (b) Specific social actors and their responsibilities are backgrounded.
example	"The job cuts <u>were justified</u> as part of structural reorganisation."	" <u>Our</u> people are part of <u>our</u> success."	"Increasing <u>demand</u> for oil explains price rises in consumer goods." "The <u>move</u> took three hours."	(a) Trends <u>show</u> that... (b) <u>Management Headquarters</u> yesterday announced that...

Emotion and rationality

As factors in investor behaviour

rational investor > homo economicus

Behavioural finance:

- asserts that there is little empirical evidence for rational economics and efficient financial markets
- links behavioural characteristics of top executives (e.g. confidence level) and their decision-making
- explains financial phenomena based on non-rational behaviour amongst investors
 - investor mood: influenced by unrelated events (weather, sports events)
 - trading activity and portfolio choice: disposition effect, familiarity hypothesis (individual investors), word-of-mouth effect
 - asset pricing: e.g. optimism, overconfidence > self-attribution bias; overreaction to signal strength

Emotion and rationality

In annual reports

Corporate discourse as increasingly drawing on emotion (Koller 2011):

- reflexivity as management tool
- companies as institutions that provide meaning
- emotional investment in, and identification with, organisation making employees controllable – and vulnerable

Annual reports combining rational ('logos'), credibility ('ethos'), affective ('pathos') appeals

explicit argument
structure ('in
conclusion', 'on the
other hand')

credible persona
through emphasis
(*'definitely'*),
hedging (*'it is
possible'*), first
person singular

aligning company and
reader through evaluation
(*'hopefully'*), direct
address, anticipated
questions, hedging

Hyland 1998

In closing, let me say a few words on the **deeper meaning** of this model of continuous transformation to **higher value**, at this particular moment in history. As I have noted, an innovation model does not present an easy path, especially in an industry as fast-changing as ours. But once you are clear on your choice, it shapes everything you do [...] And for IBM, it means **something more**. [...] The era opening before us offers a historic opportunity for both businesses and societies to pursue this **higher purpose**. A vast new natural resource is being unleashed—promising to do for our century what steam, electricity and fossil fuels did for the Industrial Age. The economic and societal potential of this new gusher of data is incalculable. It is the opportunity of our lifetime—and IBMers are determined to seize it. It is in this spirit that I express my deep pride in the worldwide IBM team for bringing us to where we are, and my gratitude to you, our shareholders, for your unwavering support. I hope you share our excitement about your company's performance and the way in which IBMers are building **a smarter planet** and **a brighter future**.

from annual letter to investors, signed by CEO, 2012
<http://www.ibm.com/annualreport/2012/letter-from-the-chairman.html>

Data: the annual reports corpus

- annual reports for 2012
- ca. 450 companies listed on London Stock Exchange, various industries
- number and type of companies differ across sections

Business reviews	418,294
CEO reviews	834,533
Chairman's statements	865,020
Corporate governance reports	1,751,293
Directors' remuneration reports	2,112,429
Financial reviews	1,586,154
Highlights	113,635
Operating reviews	652,597
TOTAL (words)	8,333,955

Lexical analysis:	frequency of words, keyness, concordances, collocations
Part-of-speech analysis (CLAWS 7):	frequency of PoS (and words), keyness
Semantic analysis (USAS):	frequency of semantic tags (and words), keyness, word lists and concordances, word-semantic tag collocations

‘Broadsweep’ searches:

- Each word/lexical unit is associated with a series of USAS tags, based on an underlying manually assembled lexicon of ca. 56,000 words and ca. 19,000 multi-word units.
- The default search for a USAS tag returns the words/lexical units where that tag is listed first, based on likely first rank (92% accuracy)
- A broadsweep search for a USAS tag returns all the words/lexical units that are associated with that tag, regardless of where it occurs in the sequence.

Wmatrix: list and broad-list

Semtag	Frequency	Relative Frequency			
Z5	234502	30.31	Concordance	List	Broad-list
Z8	41155	5.32	Concordance	List	Broad-list
Z99	31193	4.03	Concordance	List	Broad-list
N1	22954	2.97	Concordance	List	Broad-list
A1.1.1	15161	1.96	Concordance	List	Broad-list
I2.2	14346	1.85	Concordance	List	Broad-list
A3+	12289	1.59	Concordance	List	Broad-list
T1.3	11429	1.48	Concordance	List	Broad-list
I2.1	10548	1.36	Concordance	List	Broad-list
M6	10130	1.31	Concordance	List	Broad-list
A9+	9930	1.28	Concordance	List	Broad-list
N5	9492	1.23	Concordance	List	Broad-list
Z2	9312	1.20	Concordance	List	Broad-list
I1.1	8942	1.16	Concordance	List	Broad-list
S5+	8371	1.08	Concordance	List	Broad-list
S7.1+	8131	1.05	Concordance	List	Broad-list
X7+	7784	1.01	Concordance	List	Broad-list
O2	7714	1.00	Concordance	List	Broad-list
A2.1+	6507	0.84	Concordance	List	Broad-list
T2++	6460	0.83	Concordance	List	Broad-list
S8+	6419	0.83	Concordance	List	Broad-list
A2.2	6313	0.82	Concordance	List	Broad-list

Using Wmatrix (USAS): default searches

Word	Semtag	Frequency	Relative Frequency	
interest	X5.2+	413	0.05	Concordance
energy	X5.2+	374	0.05	Concordance
exciting	X5.2+	138	0.02	Concordance
active	X5.2+	130	0.02	Concordance
highlights	X5.2+	76	0.01	Concordance
interests	X5.2+	74	0.01	Concordance
dedicated	X5.2+	68	0.01	Concordance
actively	X5.2+	64	0.01	Concordance
dedication	X5.2+	44	0.01	Concordance
dynamic	X5.2+	41	0.01	Concordance
excited	X5.2+	39	0.01	Concordance
incentive	X5.2+	29	0.00	Concordance
passion	X5.2+	28	0.00	Concordance
enthusiasm	X5.2+	28	0.00	Concordance
interesting	X5.2+	18	0.00	Concordance
diligence	X5.2+	17	0.00	Concordance
proactive	X5.2+	16	0.00	Concordance
proactively	X5.2+	16	0.00	Concordance
interested	X5.2+	14	0.00	Concordance
keen	X5.2+	13	0.00	Concordance
incentives	X5.2+	13	0.00	Concordance
impressed	X5.2+	12	0.00	Concordance

Summary information:

Number of types shown: 85

Total frequency of types shown: 1841
(0.24%)

Total frequency overall: 773774

Number of items shown with a given frequency:

Frequency	Types	Tokens
1	32 (37.65%)	32 (1.74%)
2	7 (8.24%)	14 (0.76%)
3	10 (11.76%)	30 (1.63%)
4	1 (1.18%)	4 (0.22%)
5	3 (3.53%)	15 (0.81%)
6	3 (3.53%)	18 (0.98%)
7	(0.00%)	(0.00%)
8	3 (3.53%)	24 (1.30%)
9	2 (2.35%)	18 (0.98%)
10	1 (1.18%)	10 (0.54%)
> 10	23 (27.06%)	1676 (91.04%)

word list X5.2 (interested, excited, energetic), whole corpus

Using Wmatrix (USAS): 'broad sweep' searches

Word	Semtag	Frequency	Relative Frequency	
strong	S1.2.5+	1214	0.16	Concordance
interest	X5.2+	413	0.05	Concordance
energy	X5.2+	374	0.05	Concordance
drive	M3	247	0.03	Concordance
driven	M3	216	0.03	Concordance
great	A5.1+	195	0.03	Concordance
ebitda	I1.1	186	0.02	Concordance
eld	T3+	140	0.02	Concordance
exciting	X5.2+	138	0.02	Concordance
active	X5.2+	130	0.02	Concordance
open	A10+	117	0.02	Concordance
driving	M3	97	0.01	Concordance
life	L1+	88	0.01	Concordance
initiative	A1.1.1	74	0.01	Concordance
interests	X5.2+	74	0.01	Concordance
heart	B1	70	0.01	Concordance
dedicated	X5.2+	68	0.01	Concordance
actively	X5.2+	64	0.01	Concordance
driving	N5+++	61	0.01	Concordance
highlights	X5.2+	55	0.01	Concordance
vital	A11.1+	53	0.01	Concordance
big	N3.2+	51	0.01	Concordance

Summary information:

Number of types shown: 305

Total frequency of types shown: 5296
(0.68%)

Total frequency overall: 773774

Number of items shown with a given frequency:

Frequency	Types	Tokens
1	196 (64.26%)	196 (3.70%)
2	20 (6.56%)	40 (0.76%)
3	13 (4.26%)	39 (0.74%)
4	5 (1.64%)	20 (0.38%)
5	7 (2.30%)	35 (0.66%)
6	2 (0.66%)	12 (0.23%)
7	1 (0.33%)	7 (0.13%)
8	3 (0.98%)	24 (0.45%)
9	4 (1.31%)	36 (0.68%)
10	2 (0.66%)	20 (0.38%)
> 10	52 (17.05%)	4867 (91.90%)

Extracting semantic domain data: concordancing USAS tags

70 occurrences.

sibilities to the communities we serve at the heart of what we do ; To be a creator of highly valu
ur marketing insight business , back into the heart of Tesco . Brand & Marketing : making sure th
sibilities to the communities we serve at the heart of what we do We have reinforced our commitmen
core business involves two vital roles in the heart of the community : providing customers with sa
ut our responsibilities to communities at the heart of what we do in a huge variety of ways : I wa
sions in this web world as they remain at the heart of the organisation , the primary driver of al
e . Here to help Customer service lies at the heart of our philosophy , we go way beyond the tile
phasis on organic growth initiatives . At the heart of our strategy , we have two key goals . 1 .
benchmarking and analytics , which are at the heart of i-graduates business , are a cornerstone of
red across multiple channels , must be at the heart of our business . We express our vision as fol
rface providing superior heat transfer is the heart of our heat exchangers . The technology contin
t an all time low . This thinking lies at the heart of the Unilever Sustainable Living Plan (USLP
tes our Compass strategy with the USLP at its heart . Re-establishing trust with citizens and meet
hether it be the consumer or the SME , at the heart of everything we do . With this in mind , we h
size of Minas Moatize . It is located in the heart of the highly prospective coal basin of the So
t Our Vision clearly puts our customers at the heart of everything we do . Our purpose is to provid
ith us in 2013 . Service excellence is at the heart of our business . That means we deliver approx
ities also centre on putting customers at the heart of our business , allowing them to bet how and
RATEGY . Customer Putting the customer at the heart of everything we do Strategy : Betfair started

Focus on emotion and rationality tags

A general and abstract terms	B the body and the individual	C arts and crafts	E emotion
F food and farming	G government and public	H architecture, housing and the home	I money and commerce in industry
K entertainment, sports and games	L life and living things	M movement, location, travel and transport	N numbers and measurement
O substances, materials, objects and equipment	P education	Q language and communication	S social actions, states and processes
T Time	W world and environment	X psychological actions, states and processes	Y science and technology
Z names and grammar			

Focus on emotion and rationality tags

		X2	Mental actions and processes		
		X2.1	Thought, belief		
		X2.1-	Without thinking		
		X2.2	Knowledge		
		X2.2+	Knowledgeable		
		X2.2-	No knowledge		
		X2.3	Learn		
		X2.3+	Learning		
		X2.4	Investigate, examine, test, search		
		X2.4+	Double-check		
		X2.4-	Not examined		
		X2.5	Understand	X4	Mental object
		X2.5+	Understanding	X4.1	Mental object: Conceptual object
		X2.5-	Not understanding	X4.1-	Themeless
		X2.6	Expect	X4.2	Mental object: Means, method
		X2.6+	Expected	X5	Attention
		X2.6-	Unexpected	X5.1	Attention
E1	Emotional Actions, States			X5.1+	Attentive
E1+	Emotional			X5.1-	Inattentive
E1-	Unemotional			X5.2	Interest/boredom/excited/energetic
E2	Liking			X5.2+	Interested/excited/energetic
E2+	Like			X5.2-	Uninterested/bored/unenergetic
E2-	Dislike			X6	Deciding
E3	Calm/Violent/Angry			X6+	Decided
E3+	Calm			X6-	Undecided
E3-	Violent/Angry			X7	Wanting; planning; choosing
E4	Happiness and Contentment			X7+	Wanted
E4.1	Happy/sad			X7-	Unwanted
E4.1+	Happy			X8	Trying
E4.1-	Sad			X8+	Trying hard
E4.2	Contentment			X8-	Not trying
E4.2+	Content			X9	Ability
E4.2-	Discontent			X9.1	Ability and intelligence
E5	Bravery and Fear			X9.1+	Able/intelligent
E5+	Bravery			X9.1-	Inability/unintelligence
E5-	Fear/shock				
E6	Worry and confidence				
E6+	Confident				
E6-	Worry				

Results: whole corpus

294 semantic tags with relative frequency ≥ 0.01

15 semantic tags with relative frequency ≥ 1

Semantic tag	Relative frequency	Semantic tag	Relative frequency
Numbers	4.0	Existing	1.45
In power	3.26	Wanted (X7+)	1.33
Pronouns	3.2	Belonging to a group	1.30
Money and pay	2.01	Quantities	1.22
Time: period	1.94	Location and direction	1.15
Business: generally	1.78	Getting and possession	1.13
General actions, making	1.56	Money: generally	1.05
		Speech acts	1.01

Results: whole corpus vs. CEO reviews

Significantly **overused** (key) semantic domains in whole corpus vs. CEO reviews:

Top 10: In power, Money and pay, Numbers, Participating, Speech acts (e.g. report*, accounting), Personal names, Money generally, Negative, Danger (e.g. risk*, exposure*), Suitable

Emotion: Worry

Rationality: Wanted; Conceptual object; Investigate, test, examine, search; Thought, belief; Interested, excited, energetic; Knowledgeable

Results: whole corpus vs. CEO reviews

Significantly **underused** semantic domains in whole corpus vs. CEO reviews, i.e. overused in CEO reviews:

Top 10: Pronouns; Business: selling; Size: big; Time: new and young; Degree: boosters (e.g. extremely, very); Objects generally (e.g. product*); Time: beginning; Geographical names; Vehicles and transport on land (e.g. platform*, driv*, cycle); Tough, strong

Emotion: Happy; Confident; Content; Like; Sad; Violent, angry

Rationality: Attentive; Sensory: sight; Expected; Success; Knowledge; Means, method; Trying hard; Understanding

Results: CEO reviews

310 semantic tags with relative frequency ≥ 0.01

Industry-specific tags (e.g. telecoms, gas)

General semantic domain	Relative frequency	Highest rank	Percentage of tags realised
Numbers and measurement	10.05	4	100%
Money and commerce in industry	6.55	6	85%
Time	5.25	8	100%
Psychological actions, states and processes	4.34	17	43%
Emotion	0.31	134	50%

Results: CEO reviews

Semantic domain 'Psychological actions, states and processes'

Tag	Relative frequency	Frequent words
Wanted	1.01	aim*, goal*, target*, strateg*, programme, design*, objective*, planning
Investigate, examine, test, search	0.43	research, review, study, prove*, analysis, survey*, test, monitor
Mental object: Means, method	0.31	approach*, channel*, framework*, model*, method*, process*, scheme*, solution*, structure*, system*, tool*, way*
Knowledgeable	0.28	inform*, experience*, expertise, know*, recogni*, identif*
Able, intelligent	0.25	(cap)abilit*, experience*, expertise, skill*, strong/strength*, talent*, professional

Results: CEO reviews

Semantic domain 'Psychological actions, states and processes'

Tag	Relative frequency	Frequent words
Attentive	0.24	focus*, application*, concentrat*, highlight*
Thought, belief	0.22	advance*, assum*, belief/believ*, consider, face*/facing, outlook
Understanding	0.10	saw/see*, recogni*, understand*, realis*, understanding, insight*
Mental object: Conceptual object	0.10	concept*, criteria, ideas, ideal*, propos*, view, vision
Knowledge	0.07	source*, evidence, fact

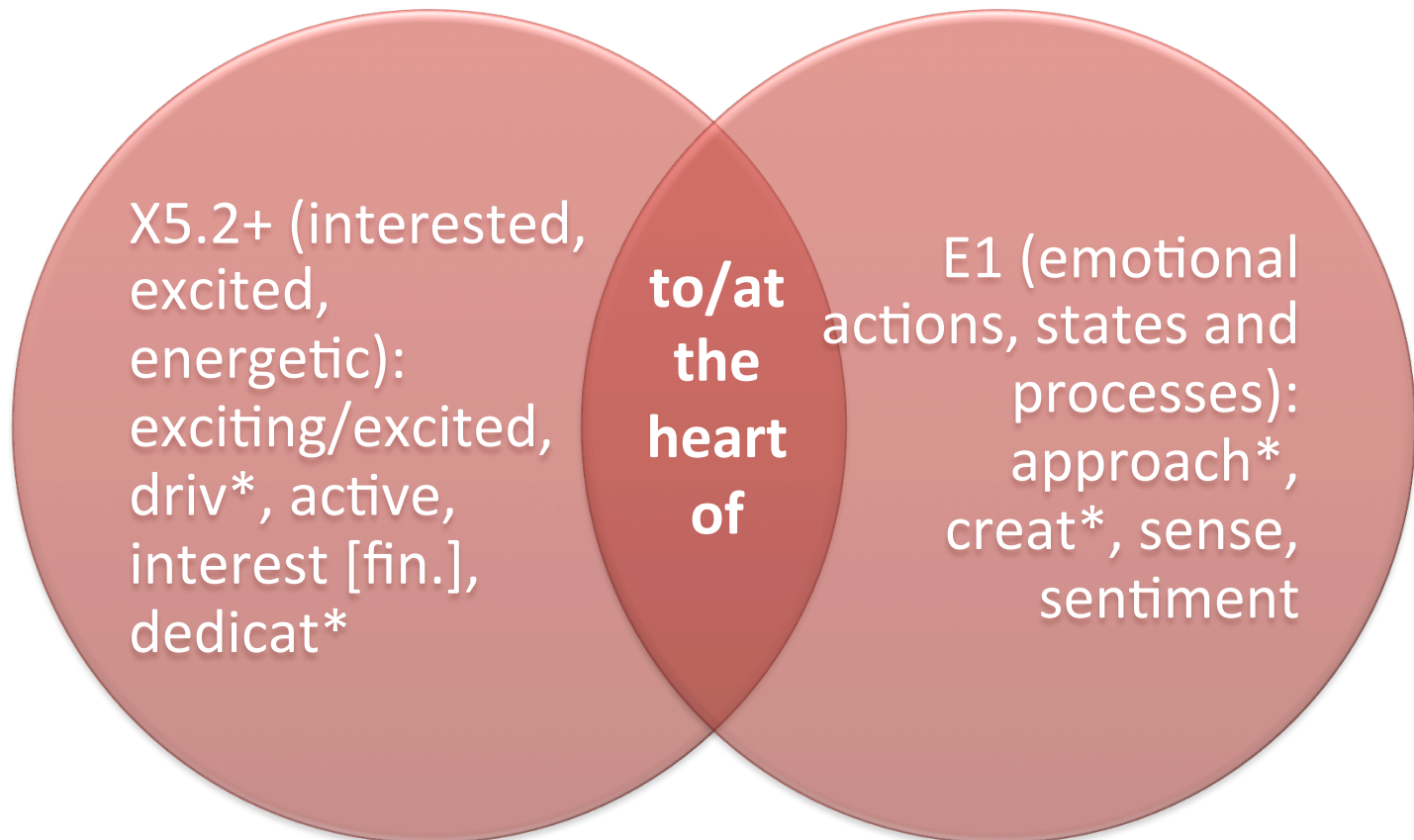
Results: CEO reviews

Semantic domain 'Emotion'

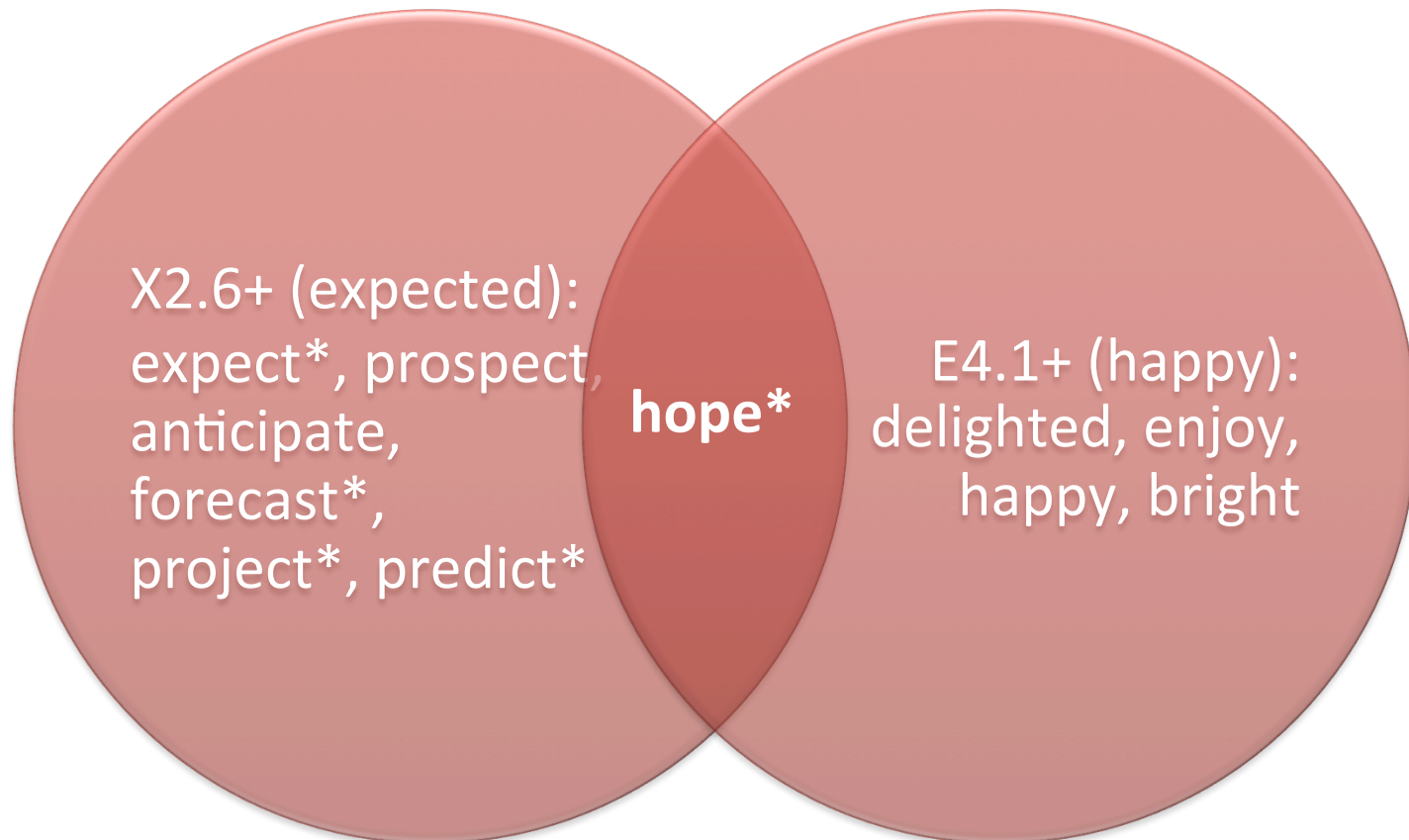
Tag	Relative frequency	Frequent words
Content	0.08	pleas*, content, satisf*, grateful, happy, fulfil*, rewarding
Like	0.06	pleas*, like, approv*, popular, enjoy*
Confident	0.04	confiden*, secur*, trust*
Happy	0.02	delighted, hope, enjoy, happy, bright, hopeful
Violent, angry	0.02	force*, hit*, aggressive*, threat*
Worry	0.02	concern*, under pressure
Sad	0.01	suffer*, regret*, depressed [markets]
Discontent	0.01	disappoint*
Emotional actions, states and processes	0.01	to/at the heart of, sense, sentiment

Results: CEO reviews

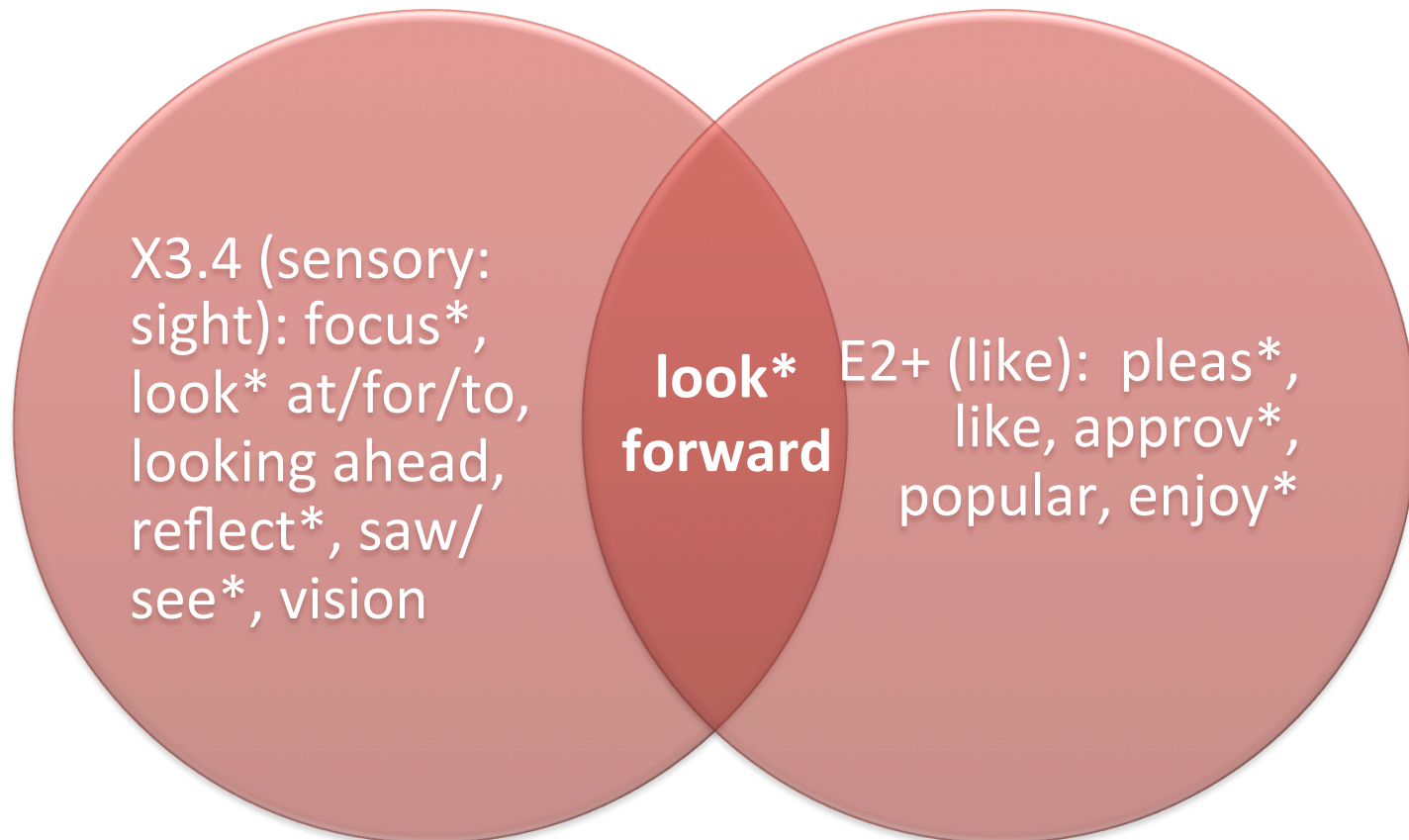
Overlap between emotion (E) and rationality (X), cf. overlap between ethos and pathos (Hyland 1998)



Results: CEO reviews



Results: CEO reviews



A closer look



Annual Report & Accounts 2014

Revenue
£568.3m (2013: £546.5m)

Adjusted EBITDA¹
£106.9m (2013: £127.1m)

Adjusted profit before tax²
£84.1m (2013: £105.0m)

Statutory profit before tax
£24.4m (2013: £66.5m)

Adjusted earnings per share³
18.6p (2013: 23.0p)

Basic earnings per share
3.1p (2013: 12.9p)

Dividend per share
11.3p (2013: 11.3p)

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For financial information or to view this report online, go to: homeserveplc.com

A closer look

Strategic report Chief Executive's review



“

We have made good progress in stabilising the UK business by focusing on improving customer service, increasing retention and delivering effective marketing. Strong customer growth in the USA and Spain has contributed to the growth in total customer numbers to 5.5m. I am delighted with the significant new affinity partner signings in the USA and Spain.

The USA remains our greatest opportunity and during FY15 we intend to increase investment in marketing and business development to take advantage of this. All our businesses are progressing in line with our expectations and we are confident of making further progress in FY15.

”

Our business is built on developing long-term relationships with our affinity partners and offering our customers home assistance in respect of water, electrical and gas related emergencies and repairs.

We provide our services through the use of directly employed, franchised and sub-contract networks of engineers. We have 5.5m customers across our operations in the UK, USA, France, Spain, Italy and Germany and we are becoming ever more international as a business, with 62% of our customers based in overseas markets (2013: 54%).

We have successfully re-focused the UK business on providing a high level of service to our customers at each stage of the journey, from product design to repairing the customer's home, in order to create a sustainable business model. Our UK business closed the year with 2.1m customers and, in line with our expectations, delivered adjusted operating profit of £53.4m (2013: £78.3m).

Personalisation:

- direct gaze, eye level, medium close shot
- pull quote
- first person singular
- emotion lexis

Depersonalisation:

- decontextualised image
- mostly first person plural
- formulaic use of emotion lexis

A closer look

I am//we are//the Board was/has been pleased/delighted/confident/
satisfied that/with...

Customers who may have suffered detriment
Customers ... are at the heart of everything we do.

Affinity partner(ship)/agreement/contract/relationship
Customer satisfaction

11 occurrences.

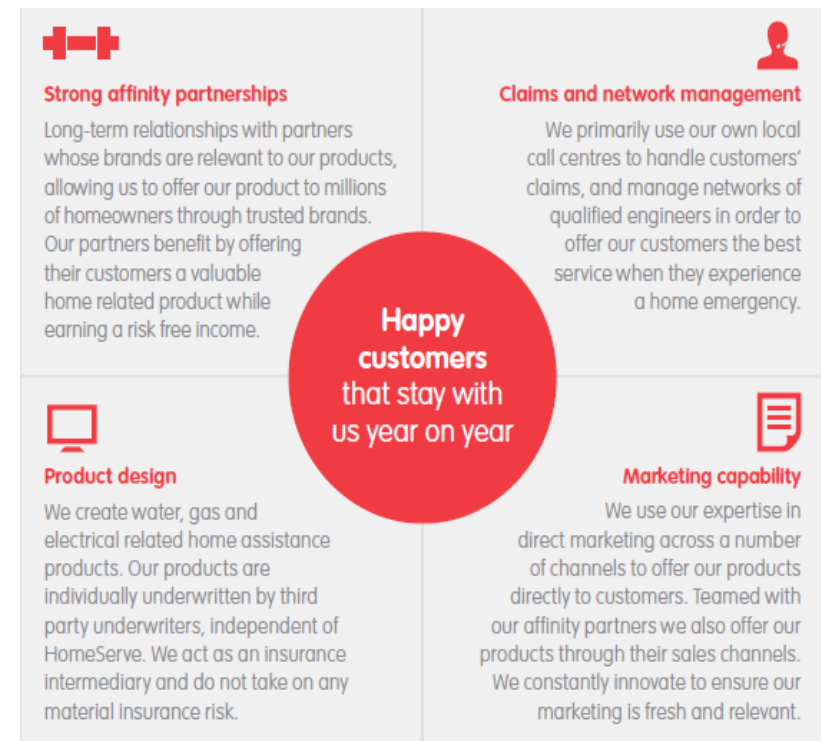
omic situation to be aware of any change in	sentiment	but the fundamental strengths of the London
derlying economy and prospective franchisee	sentiment	. We now anticipate a low percentage of fran
vents on the South African platinum mines ,	sentiment	in the UK was not much better . However , su
, there was a significant deterioration in	sentiment	towards the year end . As a result , steel a
in the reporting year . The negative macro	sentiment	affected almost all commodity markets , with
in Europe and North America . Poor end-user	sentiment	continued to dominate European markets as th
ard and delivered over the next two years .	Sentiment	remains subdued Investor and tenant sentimen
ntiment remains subdued Investor and tenant	sentiment	remains stable but subdued as economic recov
be the more resilient of the two , but when	sentiment	changes for the better , permanent can recov
th to perform strongly , condence is key to	sentiment	and this is undermined by persistent uncerta
and are encouraged by the growing positive	sentiment	towards our products and technologies . Mich

A closer look

Is the company 'outsourcing' emotions to its customers?

The business model:

- centres on 'Happy customers that stay with us year on year'
- prioritises 'Products people want' [X7+]
- realises mission 'to provide an affinity branded membership service which frees our customers from the worry and inconvenience of home emergencies and repairs'



A closer look

Customer testimonials

‘I was very happy with
the service’

‘I was very happy’

‘I’m very satisfied’

‘I also felt very well *taken care of*
by customer service’

‘what a relief to be *taken care of*’

‘Engineers were very *friendly/kind*’, ‘I have
been impressed with the *kindness* of every
person’, ‘They were *kind*’, ‘The person that
came to repair [the plug] was exceptionally
kind’, ‘The engineer was a *nice* man’

A closer look

Kind(ness): S1.2/S8+

Friendly: S1.2.1+, S7.3-

Nice: O4.2+, S1.2.1+

Care: S8+

Committed: S6+

Partner: S3.1/S2mf S3.2/S2mf, S4mf

Relationship: S3.1, S3.2, A2.2 S4

S1.2 Personality traits
 S1.2.1 Approachability and Friendliness
 S1.2.1+ Informal/Friendly
 S1.2.1- Formal/Unfriendly
 S1.2.2 Avarice
 S1.2.2+ Greedy
 S1.2.2- Generous
 S1.2.3 Egoism
 S1.2.3+ Selfish
 S1.2.3- Unselfish
 S1.2.4 Politeness
 S1.2.4+ Polite
 S1.2.4- Impolite

S3 Relationship
 S3.1 Personal relationship: General
 S3.1- No personal relationship
 S3.2 Relationship: Intimacy and sex
 S3.2+ Relationship: Sexual
 S3.2- Relationship: Asexual

S6 Obligation and necessity
 S6+ Strong obligation or necessity
 S6- No obligation or necessity
 S7 Power relationship
 S7.1 Power, organizing
 S7.1+ In power
 S7.1- No power
 S7.2 Respect
 S7.2+ Respected
 S7.2- No respect
 S7.3 Competition
 S7.3+ Competitive
 S7.3- No competition
 S7.4 Permission
 S7.4+ Allowed
 S7.4- Not allowed
 S8 Helping/hindering
 S8+ Helping
 S8- Hindering

An extended concept of emotion would include relationships – and necessitate further analysis.

Conclusions and implications

Further research: industry comparison; more sections, images (not just content)

- CEO reviews contain more emotion lexis than annual reports as a whole.
- Emotion is profiled against the background of rationality.
- Emotion and rationality partly overlap.
- Emotion lexis is used in formulaic and technical ways.
- Relationship company-investors backgrounded.

Can annual reports be improved by being more genuinely emotional?
Would this be desirable? Or should they be purely metric?

Thank you – comments, questions,
suggestions?

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References

- Beattie, V., Dhanani, A. and Jones, M.J. (2004): Investigating presentational change in U.K. annual reports: A longitudinal perspective. *Journal of Business Communication* 45(2): 181-222.
- Bhatia, V.K. (2010): Interdiscursivity in professional communication. *Discourse & Communication* 21(1): 32–50.
- Hájek, P. and Olej, V. (2013): Evaluating sentiment in annual reports for financial distress prediction using neural networks and support vector machines. In: Iliadis, L., Papadopoulos, H. and Jayne, C. (eds), *Engineering Applications of Neural Networks*. Heidelberg: Springer, pp. 1-10.
- Hyland, K. (1998): Exploring corporate rhetoric: Metadiscourse in the CEO's letter. *Journal of Business Communication* 35(2): 224-245.
- Jameson, D.A. (2000): Telling the investment story: A narrative analysis of shareholder reports. *Journal of Business Communication* 37(1): 7-38.
- Koller, V. (2011): 'Hard-working, team-oriented individuals': Constructing professional identities in corporate mission statements. In: J. Angouri and M. Marra (eds) *Constructing Identities at Work*. Basingstoke: Palgrave, 103-126.
- Kress, G. and van Leeuwen, T. (2006): *Reading Images: The grammar of visual design*. 2nd ed. London: Routledge.

References

- Lischinsky, A. (2011): In times of crisis: A corpus approach to the construction of the global financial crisis in annual reports. *Critical Discourse Studies* 8(3): 153-168.
- Merkel-Davies, D.M. and Koller, V. (2012): 'Metaphoring' people out of this world: A Critical Discourse Analysis of a chairman's statement of a UK defence firm. *Accounting Forum* 36(3): 178-93.
- Munro, J. (2014): Linguistic functions of chairman and CEO statements. Unpublished coursework paper, Lancaster University.
- Rayson, P. (2008): From key words to key semantic domains. *International Journal of Corpus Linguistics* 13(4): 519-549. <http://ucrel.lancs.ac.uk/wmatrix/>
- Rayson, P., Archer, D., Piao, S.L. & McEnery, T. (2004): The UCREL semantic analysis system. Proceedings of the workshop on *Beyond Named Entity Recognition Semantic labelling for NLP tasks in association with LREC 2004*, Lisbon, Portugal, pp. 7-12.
- Rutherford, B. (2005): Genre analysis of corporate annual report narratives: A corpus linguistics-based approach. *Journal of Business Communication* 42(4): 349-378.
- Skulstad, A. S. (1996): Rhetorical organization of chairmen's statements. *International Journal of Applied Linguistics* 6(1): 43-63.
- Subrahmanyam, A. (2007): Behavioural finance: A review and synthesis. *European Financial Management* 14(1): 12-29.