THE STRUCTURE OF ENGLISH

Berg

from sound to spelling

- 1. Orthography
- 1.1. The status of orthography in linguistics
- 1.2. The relationship between speech and writing
- 1.2.1. Dependence hypothesis
- 1.2.2. Independence hypothesis
- 1.2.3. The interdependence hypothesis
- 1.2.4. The impoverished nature of writing
- 1.3. Shallow versus deep orthography
- 1.4. English as a deep orthographic language

divergence from spelling to sound

ergenee	nom spennig to sound	from sound to spennig
	<ea> - /e/ "bread"</ea>	/i:/ - <ea> "speak"</ea>
	<ea> - /i:/ "sea"</ea>	/i:/ - <e> "she"</e>
	<ea> - /e)/ "great"</ea>	/i:/ - <ae> "encyclopaedic"</ae>
		/i:/ - <ee> "heed"</ee>
		/i:/- <ie> "brief"</ie>
	<gh> - /g/ "ghost"</gh>	/i:/ - <ey> "key"</ey>
	<gh> - /f/ "rough"</gh>	/i:/ - <ei> "receive"</ei>
	<gh>-↓ "daughter"</gh>	/i:/- <oe> "phoenix"</oe>
		/i:/ - <eo> "people"</eo>
		/i:/ - <i> "ski"</i>
		/i:/ - <ay> "quay"</ay>

1.5. Spelling rules

- 1.5.1. Complementary distribution of <i> and <y> as well as <u> and <w>
- 1.5.2. Gemination
- 1.5.3. Haplology (Anti-gemination)
- 1.5.4. Final <e> deletion
- 1.5.5. <k> insertion
- 1.5.6. Resistance of spelling to pronunciation differences
- 1.6. Reasons for the discrepancy between pronunciation and spelling
- 1.6.1. Differential change rate / The conservative nature of spelling

Example	Chaucer (1380)	Shakespeare (1600)	nowadays
name	[na:m(∴)	n↔:m	ne m]
sweet	[swe:t	swi:t	swi:t]
time	[ti:m(∴)	t∴)m	ta m]
moon	[mo:n	mu:n	mu:n]

1.6.2. Language contact

 $\langle g \rangle - \langle g \rangle$ "get" (North Germanic) <h>"hill" (native word stock)

 $\langle g \rangle - /d | / "gem" (French "la gemme" [])$ <h>"hour" (Latin)

 $(\langle g \rangle - /i/$ (native word stock, Old English "gifan")

- 1.6.3. Susceptibility of spelling to non-phonological influences
- 1.6.4. Variable codification (or no codification)
- 1.7. Spelling Reforms
- 1.8. Spelling pronunciation (SP) / Phonetic spelling (PS)
 - SP: forehead $[f\Box r]d$ ~ $[f \dashv :hed]$

language [læ|g]d|] -> $[læ|g\leftarrow]d|$]

corpse $[k \downarrow :s] \rightarrow [k \downarrow :ps]$

PS: through ~ thru

five (of the clock) -> five o' clock

M.E. son \rightarrow sound

1.9. Quantitative analyses of the relationship between spelling and sound

1.9.1. From letter to sound: consistency of body, rime, and shell pronunciation

vowel (isolated: 0.72) preceded by onset: 0.81 (n.s.)

followed by coda: 0.92 (s.)

- onset (isolated: 0.98) followed by vowel: 0.99 (n.s.) followed by coda: 0.99 (n.s.)
- preceded by vowel: 0.99 (n.s.) coda (isolated: 0.98) preceded by onset: 0.99 (n.s.)
- 1.9.2. From sound to letter: consistency of body, rime, and shell spelling
- vowel (isolated: 0.53) preceded by onset: 0.65 (s.) followed by coda: 0.74 (s.)
- onset (isolated: 0.91) followed by vowel: 0.94 (s.) followed by coda: 0.94 (n.s.)
- preceded by onset: 0.88 (n.s.) coda (isolated: 0.82)

preceded by vowel: 0.92 (s.)

- 2. Phonology
- 2.1. Segmental phonology
- 2.1.1. Consonant system
- 2.1.2. Vowel system
- 2.1.3. A quantitative analysis
- 2.1.4. Functional load
- 2.1.5. Clusters
- 2.1.6. Sonority
- 2.1.6.1. Sonority sequencing principle
- 2.1.6.2. Sonority contour principle
- 2.1.6.3. Sonority reversal
- 2.1.7. Case study: The problem of /r/
- 2.1.8. Suprasegmental phonology
- 2.2.1. Syllable structure
- 2.2.2. Syllabification
- 2.2.2.1. Criteria
- 2.2.2.1.1. Phonotactics
- 2.2.2.1.2. Morphology
- 2.2.2.1.3. Stress
- 2.2.2.1.4. Vowel length
- 2.2.2.1.5. Sonority
- 2.2.2.1.6. Onset maximization
- 2.2.2.2. Syllabification of single intervocalic consonants
- 2.2.2.3. Syllabification of intervocalic consonant clusters
- 2.2.2.4. Resyllabification
- 2.2.2.5. Why syllabification?
- 2.2.3. Stress
- 2.2.3.1. Fixed vs. free stress
- 2.2.3.2. Distinctiveness of stress
- 2.2.3.3. Quantity-sensitivity

The sensitivity of stress to phonological weight

Sensitivity	+	-	0	Total
Length				
Disyllabic words	121 (27.4%)	63 (14.3%)	257 (58.3%)	441
Trisyllabic words	24 (8.9%)	79 (29.2%)	168 (62.0%)	271

- 2.2.3.4. Stress rules
- 2.2.3.5. Stress clash
- 2.2.4. Rhythm
- 2.2.4.1. Principle of rhythmic alternation
- 2.2.4.2 Syllable timing
- 2.2.4.3. Stress timing
- 2.2.5. Connected speech
- 2.2.5.1. Strong vs. weak forms
- 3. Morphophonology
- 3.1. The phenomenon: Allomorphy
- 3.2. Stem-induced affix allomorphy vs. affix-induced stem allomorphy
- 3.3. Prefix vs. suffix allomorphy
- 3.4. Directionality
- 3.5. Allomorphy in inflection
- 3.6. Allomorphy in derivation
- 3.7. Comparison of allomorphy in inflection and derivation
- 3.8. Why allomorphy?
- 3.9. Advantages and one disadvantage of allomorphy
- 4. Morphology
- 4.1. Introduction
- 4.1.1. English as an isolating language
- 4.1.2. Word-based morphology
- 4.1.3. The suffixing preference
- 4.1.4. Weak fusionality
- 4.2. Inflection
- 4.2.1. Inflectional morphemes

possessive -s

third person singular -s

plural -s

comparative/superlative --er/-est

past tense --ed

past participle -ed

present participle -- ing

progressive -- ing

gerund -- ing (in some cases)

adverbial -ly

- 4.2.2. Grammatical categories coded by inflectional suffixes
 - person on verbs

tense on verbs

aspect on verbs

number on nouns

possessive on nouns

case on pronouns

number on pronouns

gender on pronouns

4.2.3. Status of possessive marker

- 4.3. Derivation
- 4.3.1. Modifier-head structure
- 4.4. Compounding
- 4.5. Productivity
- 4.6. Branching direction

4.6.1. Prefix-Stem-Suffix,	e.g. un-grace-ful	right-branching	
	e.g. dis-grace-ful	left-branching	
4.6.2. Stem-Stem-Stem,	e.g. air traffic control	left-branching	
	e.g. bank interest rate	right-branching	
4.6.3. Stem-Stem-Suffix,	e.g. good-natur-ed	right-branching	
4.6.4. Stem-Suffix-Stem,	e.g. swimm-ing pool	left-branching	
4.6.5. Stem-Suffix-Suffix,	e.g. develop-ment-al	left-branching	
4.6.6. More complex structures			

5. Lexicology

5.1. The mixed nature of the lexicon

to think – to reflect – to meditate

- to rise to ascend
- great large big
- short-brief
- beam-ray
- snake serpent
- breast pectoral
- Is English a Romance language?

5.2. Structural differences between the Germanic and the Latinate vocabulary

Germanic	Latinate

register	basic	"bookish"
word length	monosyllabic or weak	polysyllabic
	final syllables ("fiddle")	
different phonolo-	voicing alternation	
gical processes	house – houses	
stress alternation	to believe – the belief	to record – the record
		to transfer – the transfer
stress shift through	-ness: tender-ness	-ity: native-ity
affixation	-hood: brother-hood	-ette: cigar-ette
affix change follow	v- marked – unmarked	mobile – immobile
ing affixation		
stem change follow	v- happy – happiness	please – pleasure
ing affixation	king – kingdom	infant – infancy
nominalization	through gerund:	through derivational affixes:
	to go – the going	to depart – departure
	to come – the coming	to arrive – arrival
	to build – the building	to construct – the construction
phrasal verbs	to take after	
	to be taken in	
morphological struc	ture to go in	to enter
of verbs	to go up	to ascend
	to go forward	to advance

"pseudomorphemes"	unworthy		attend – pretend		
			compose – expose		
			prefer – refer		
Dative shift	He built her a l	house	*He constructed her a house.		
	He sent her a l	etter.	*He conveyed her a letter.		
	He gave her m	uch money.	*He donated her much mone	y.	
5.3. Word length					
number of p	honemes	number	of syllables		
1	0%	1	31.1%		
2	0.3%	2	36.3%		
3	9.3%	3	20.3%		
4	16.2%	4	9.5%		
5	18.4%	5	2.5%		
6	14.9%	6	0.3%		
7	13.3%				
8	9.7%	average: 2	,17 syllables		
9	7.6%				
10	4.6%				
11	2.6%				
12	1.9%				
13	1.0%				
14	0.1%				
15	0.1%				

average 6.27 phonemes

- 5.4. Frequency stratification (Denes 1963)
 - 13 words make up 25%,
 - 67 words make up 50%
 - 331 words make up 75% of the words in the sample
- 5.5. Word classes
- 5.6. Verb + particle combinations (complex verbs)
- 5.6.1. Intransitive phrasal verbs: to wake up, to wise up, to eat out
- 5.6.2. Transitive phrasal verbs: to mess s.th. up, to take s.th. up, to take s.o. out

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5.6.3. Prepositional verb: to insist on, to deal with, to take after s.o.

5.6.4. Phrasal-prepositional verb: to put up with s.th., to take s.th. out on s.b., to get s.th. over with, to get away with s.th.

5.6.5. Phrasal vs. prepositional verbs

5.6.5. Phrasal vs. prepositional veros				
Phrasal Verb	Prepositional Verb			
He slipped on the jacket.	She slipped on a banana peel			
5.6.6. Degrees of metaphoricity				
basic: to look at, to look around				
slightly metaphorical: to look ahe	ead, to look back			
strongly metaphorical: to look af	ter, to look forward to, to look	down on, to look for,		
to look up to.				
5.7. Lexical features: Count vs. mass i	nouns			
- the furniture - *a furniture/*the	- the furniture - *a furniture/*the furnitures			
- the information - *an informatio	- the information - *an information/*the informations			
- snow – snows				
- water – waters				
- rain – rains				
Totally uncountable	In-between	Fully countable		

information	knowledge	cake
outskirts	cattle	dog
furniture	people ("persons")	car

Conversion from mass to count: He ordered three coffees.

Conversion from count to mass: A cattle lorry crashed. There was cow all over the place. It was disgusting.

6. Morphosyntax

7. Syntax

- 7.1. Survey of major characteristics
- 7.1.1. English as a fixed word order language

Basic constituent order: SVO = 89,8% 'I cleaned the carpet.'

OSV = 10,2% 'What did you clean?'

7.1.2. English as a typical SVO language

- 7.1.2.1. Prepositions rather than postpositions
- 7.1.2.2. Phrasal and clausal proforms ("so")
- 7.1.2.3. Frequent use of passive
- 7.1.2.4. Frequent use of (modal) auxiliaries
- 7.1.2.5. Middle (between active and passive voice) expressed through pronouns
- 7.1.2.6. Sentence adverbials
- 7.1.2.7. Coordination is often accompanied by ellipsis
- 7.1.2.8. Frequent use of hypotaxis
- 7.1.2.9. Phonology: Closed syllables rather than open syllables
- 7.1.2.10. Morphophonology: Umlaut rather than vowel harmony
- 7.1.3. English as a strongly configurational language
- 7.1.3.1. Rigidity of SVO order
- 7.1.3.2. No discontinuity within VPs
- 7.1.3.3. No discontinuity within NPs
- 7.1.3.4. No discontinuity within PPs
- 7.1.3.5. Few deviations from SVO
- 7.1.3.6. Pro-VP
- 7.1.3.7. Main vs. subordinate clauses: Distinction between conjunctions and adverbs
- 7.1.4. English as a predominantly right-branching language
 - SVO, Preposition NP, Determiner Adjective Noun
- 7.1.5. English as an inconsistent head-modifier order language
- 7.1.5.1. Modifier Head
 - Article Noun: the toy $% \left({{{\mathbf{F}}_{{\mathbf{F}}}} \right)$
 - Adjective Noun: high heels
 - Adverb Adjective: deeply impressed
 - Adverb Adverb: very much
 - Possessive Determiner Noun: my shoes

7.1.5.2. Head – Modifier

- Antecedent Relative Clause: the time I spent with them
- Verb Object: He saw the doctor.
- Preposition NP: behind the curtain
- Question word Clause: What is it about?
- Comparison adjective Comparison clause or NP: older than Mary (was)
- 7.1.6. English as an obligatory-subject language

7.1.6.1. No PRO-drop

- 7.1.6.2. Semantically empty subjects: It is raining.
- 7.1.6.3. Verbs of cognition, liking and experiencing require subject case
- 7.1.7. English as a functionally flexible language ("a soft-boundary language")
- 7.1.7.1. Word class ADJ: a round table
 - N: a new round of peace talks
 - V: They rounded a bend.
 - P: round the corner

ADV: People were standing round.

- 7.1.7.2. Transitive vs. intransitive
 - Intransitive verbs used transitively

The trees haven't grown much. – She grows potatoes.

You must run hard. – He runs a business.

She walked home. – She walked the dog.

- Transitive verbs used intransitively

Ed was writing a letter. – Ed was writing.

Pat was eating breakfast. – Pat was eating.

Florian studied the article. – Florian studied.

7.1.7.3. Thematic roles of subject

Prototypical case: Agent: Peter left the church.

Non-prototypical cases: Location: The villa sleeps ten.

Time: Tomorrow will be closed in most places.

Instrument: This ad will sell us a lot of dog food.

Possessor: The car burst a tyre.

Source: The dead bird was dripping blood.

- 7.1.7.4. Voice He beat his wife. He was beaten by his wife.
- 7.1.7.4.1. Possessive NPs the victory of the army the defeat of the army the shooting of the prisoners
- 7.1.7.4.2. Verbs This report aims / is aimed at demonstrating the increasing incidence of cancer.

Each of these claims has met / has been met with some criticism.

Dialectal differences: They were heading (BE) / headed (AE) for disaster.

7.1.7.4.3. Participial adjectives: a slanting line – a slanted line

a well-behaved child

7.1.7.4.4. Compounding: honey bee – chocolate bar

7.1.7.4.5. Derivation: employer – employee

trainer – trainee

but: escapee, returnee, absentee

believable, likeable. but: suitable, perishable

7.1.7.4.6. Middle Verbs: The book sells well.

This word translates easily into German. The door opened slowly.

7.1.8. English as a continuous language Exceptions:

7.1.8.1. Progressive aspect, Passive Voice, Complex Tenses

7.1.8.2. Phrasal Verbs with transitive objects

He looked the word up in the dictionary.

He looked it up in the dictionary.

7.1.8.3. Comparison

Such communities are likely to be more linguistically conservative.

7.2. Word order other than basic

7.2.1. Premodifying adjectives: evaluative adjectives: fantastic, nice, awful nominal adjectives: electrical engineer, marginal note age/colour: a new/green painting colour/participle: a grey/crumbling tower participle/provenance: a crumbling/Chinese tower

general adjective/participle: a small/carved statue

Rule: general adjective - age - colour - participle - provenance N

e.g. an intricate old purple interlocking Chinese design

7.2.2. Complex Verb groups: He may have been being killed.

Modal tense voice aspect verb

7.3. Special constructions

7.3.1. Raising

7.3.1.1. Negation raising: I think John is not honest. – I don't think John is honest.

7.3.1.2. Subject-to-subject raising: John seems to be ill. – It seems that John is ill.

7.3.1.3. Subject-to-object raising: I believe John to be ill. - I believe that John is ill.

7.3.1.4. Object-to-subject raising: Linguistics is boring to study. – It is boring to study linguistics.

7.3.2. Clefting

7.3.2.1. Cleft sentences: It is his callousness that I will ignore.

It's Vicki who made the announcement.

It was yesterday that Pete flunked his orals.

- 7.3.2.2. Pseudoclefts: What I will ignore is his callousness.What Robbie needs most is someone to talk to. Here is where the accident took place.
- 7.3.3. Extraposition: To hear him curse shocked me. -> It shocked me to hear him curse.You must find working here exciting. -> You must find it exciting working here.

7.3.4. Dislocation

- 7.3.4.1. Left-dislocation: Steve, he likes beans.
- 7.3.4.2. Right-dislocation: He nearly ran over me, that crazy bum.
- 7.4. Clause types
- 7.4.1. Survey
- 7.4.1.1. Declarative: I love her.
- 7.4.1.2. Imperative: Open the door. Be careful. Everybody stand still. You be careful.
- 7.4.1.3. Interrogative: Two types: wh-interrogative vs. yes/no interrogative
- 7.4.1.4. Exclamative: How well she sings!

Ambiguous: How much remains to be done? Or: How much remains to be done!

7.4.2. The relationship between clause types and discourse function

7.4.2.1. Interrogative functioning as imperative: Can you tell me what time it is.

7.4.2.2. Interrogative functioning as exclamative: Wasn't it a marvellous concert!

Would you believe it!

7.4.2.3. Interrogative functioning as declarative: rhetorical questions: Would anyone be so stupid as to believe it!

7.4.2.4. Declarative functioning as imperative: It needs to be done. I want you to do it. You open the door.

7.4.2.5. Declarative functioning as interrogative: You've got the tickets?

7.5. Inversion and do-support

7.5.1. Do-support - in questions: Does he like squid?

- in negatives: I don't like squid.

- in inversion: At no time did I leave the front door unlocked.

7.5.2. Inversion - in questions: Is he a good swimmer?

- in negatives (negated element fronted): At no time must the front door be left unlocked.
- in conditional clauses: Were we to withdraw our support, they would be indignant.

7.6. Verb complementation

Three options: a) finite subordinate clause: Tests have proved that the system works.

b) infinitival clause: She ordered her guests to leave.

c) gerund clause (with or without preposition): She stopped him (from)

leaving. She thanked her mother for staying.

Choice of complementation is partly semantically motivated.

- Different options create different meanings: He stopped smoking. He stopped to light a cigarette.
- Different options but no meaning difference: I believe that he is an honest man. -

I believe him to be an honest man.

Choice of complementation depends on verb type: Cognitive verbs: I think that it's true.

7.7. Control: Subject vs. object control

a) I promised Cathy to be there on time/to help her out.

b) The traveller asked the innkeeper to wake him up at 5 o' clock.

c) The coach promised the goalkeeper to be allowed to play the second halftime.

d) The traveller asked the innkeeper to be awaked at 5 o' clock.

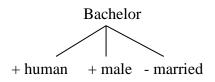
e) Johnny asked the teacher to go to the bathroom.

8. Semantics

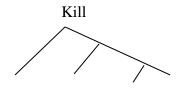
8.1. No internal structure of semantic content of words

Bachelor: + human, + male, - married, (+ young)

Widower: + human, + male, wife deceased



Hierarchical approach fails: "to kill": to cause somebody to become not alive



cause become not alive

Three problems: a) "kill" is not synonymous with "cause to be dead"

b) the semantic components are not really semantic but lexical

c) the structure is syntactic (like sentence structure) rather than semantic.

8.2. Categories and their internal structure

A robin is a bird.

A penguin is a bird.

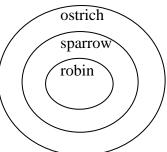
A sparrow is a bird.

A turkey is a bird.

An ostrich is a bird.

The prototype structure of a lexical category: a structure of concentric circles





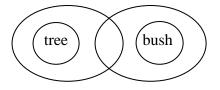
This structure is valid for <u>all</u> linguistic categories, e.g. the category /t/ in phonology /t/: a voiceless aspirated alveolar stop.

- voiceless -> voiced, e.g. writer -> rider
- aspirated -> unaspirated, e.g. in clusters with initial /s/, [t=] "still"
- alveolar -> dental, e.g. "eighth" [t°]
- stop -> affricate, e.g. utterance-finally ,,What" [ts], as an ejective

8.3. The network structure of categories: Between-category structure

Organization on the horizontal and vertical axes

Horizontal axis: how are different categories on the same level related to one another? Vertical axis: how are different categories on different levels related to one another? Horizontal organization: categories shade into each other



Vertical organization: categories exist at different levels of abstraction

Superordinate level: furniture musical instrument vegetables Basic level: chair cabbage guitar Subordinate level: kitchen chair 12-string guitar red cabbage 8.4. Semantic relations - synonymy: e.g. almost - nearly - antonymy, e.g. thick - thin, young - old - meronymy, e.g. wheel - car, finger - hand - hyponymy/hyperonymy, e.g. tool hammer saw chisel screwdriver sledgehammer hacksaw jigsaw 8.5. Word fields: e.g. The wordfield of laughter

Verb	1	2	3	4	5	6	7
laugh	+	+					
smile	+	+					
chuckle	+	+	(+)	+	-	-	
giggle	+		-				
grin	+		+	+	+	+	
smirk	+	-					+
sneer	+	-					
snicker	+	+					

- 1. Facial expression with a focus on lips
- 2. Positive attitude towards addressee
- 3. Sex of speaker (male: +)
- 4. Number of interactants (single: +)

- 5. Directionality (teleological: +, causal: -)
- 6. Intensity of contact (autistic: -)
- 7. Social rank of producer (superior: +)

- Bar-Ilan, Laly & Ruth A. Berman (2007): Developing register differentiation: The Latinate-Germanic divide in English. In: Linguistics 45, 1-35.
- Berndt, Rita Sloan, James A. Reggia & Charlotte C. Mitchum (1987): Empirically derived probabilities for grapheme-to-phoneme correspondences in English. In: Behavior Research Methods, Instruments, and Computers 19, 1-9.
- Brinton, Laurel (2000): The structure of Modern English: A linguistic introduction.

Amsterdam: Benjamins.

Carney, Edward (1994): A survey of English spelling. London: Routledge.

Crystal, David (1987): The Cambridge encyclopedia of language. Cambridge: Cambridge University Press.

Crystal, David, (1988): The English language. London: Penguin.

Denes, Peter B. (1963): On the statistics of spoken English. In: Journal of the Acoustical Society of America 35, 892-904.

Harris, John (1994): English sound structure. Oxford: Blackwell.

Kessler, Brett & Rebecca Treiman (2001): Relationships between sounds and letters in English monosyllables. In: Journal of Memory and Language 44, 592-617.

König, Ekkehard (1994): English. In: Ekkehard König & Johan van der Auwera (eds.): The Germanic languages (pp. 532-565). London: Routledge.

Lehmann, Winfried P. (1978): English: a characteristic SVO language. In: Winfried P.

Lehmann (ed.): Syntactic typology (pp. 169-222). Austin: University of Texas Press.

Leisi, Ernst (1974): Das heutige Englisch. Heidelberg: Winter.

Marchand, Hans (1969): The categories and types of present-day English word-formation. Munich: Beck.

Moessner, Lilo (1978): Morphophonologie. Tübingen: Niemeyer.

Plank, Frans (1983): Transparent versus functional encoding of grammatical relations: a parameter for syntactic change and typology. In: Linguistische Berichte 86, 1-13.

Roberts, A. Hood (1965): A statistical linguistic analysis of American English. The Hague: Mouton.

Scheler, Manfred (177): Der englische Wortschatz. Berlin: Schmidt.

Spencer, Andrew (1996): Phonology. Oxford: Blackwell.

Thompson, Sandra A. (1978): Modern English from a typological point of view: some

implications of the function of word order. In: Linguistische Berichte 54, 19-35.

Venetzky, Richard L. (1979): The structure of English orthography. The Hague: Mouton.