Why study semantic change?

Research on semantic change

- ... is concerned with
  - the description of meaning changes
  - the classification of meaning changes
- via detecting
  - the reasons/motives/causes of semantic change
  - the mechanisms/types of semantic change
  - the consequences/effects of semantic change

Research questions

- given the the form-meaning pair in a lexeme:
  - What changes did the meaning of the lexeme undergo?
- given a conceptual structure, or a meaning:
  - What lexemes can it be expressed by?
- given a concept:
  - What paths of semantic change can be found to or from other concepts?

HS Semantic Change: Introduction

- Structure of the course:
- Theoretical background
- Pre-structuralist historical semantics/Traditional Semantics
- Structuralist Semantics
- Post-Structuralist Historical Semantics
Historical Linguistics: the study of language change

- all living languages undergo change over time
- Historical Linguistics is concerned with the description AND the explanation of language change
- language change is obvious but still considered mysterious to some extent

Rudi Keller (1985)

- Invisible hand explanation (student oral presentation)

Linguistic change

- two major sub-issues:
  - Why should any change at all occur?
  - Why should some particular observed type of change have occurred?

Explanations for change

- Research usually NOT focused on the question: why does change in general occur?
- BUT: research usually explained why particular changes or change types occurred
- two polar positions:

Position A:

- Change is due to ‘the general tendency of human cultural products to undergo non-functional stylistic change’ (Postal 1968)
  - there is nothing to bother about, because
  - there is nothing to explain
Linguistic variety and change can be fully comprehended only from a teleological point of view (Jakobson 1961)
- every transition from one system to another necessarily bears a linguistic function
- everything is explicable

Systematicity of language change
- language change is - to some extent - regular and systematic
- EXAMPLE:
  - all long vowels were affected by GVS not only some in some words

Causes of language change
- language is 'handed down' from one generation to the next
- all children use the same physiological and cognitive endowment in learning language
- therefore the same patterns of change are repeatedly manifested in all languages

Articulatory simplification
- most sound changes have a physiological basis
- 'ease of articulation'
- examples from PDE: consonant cluster simplification:
  - <fifths>: /fIfTs/ > /fIfs/ (consonant deletion)
  - <athlete>: /&Tli:t/ > /&T@li:t/ (vowel insertion)

Spelling pronunciation
- not a physiological motivation for change
- sometimes written form of a word differs significantly from ist pronunciation
- new pronunciation reflects more closely the spelling of the word
- example: often

Analogy
- cognitive basis of change
- preference of speakers for regular patterns over irregular ones
- extension or generalisation of a regularity on the basis of inference
- example: sting/stung and swing/swung caused in some dialects the form bring/brung
Reanalysis

- particularly common in morphological change
- attempt to attribute a compound or root-affix structure to a word
- example: hamburger > ham-burger > cheeseburger, fishburger... Burger
- NOTE: there is no ham in a hamburger!!!

Language contact

- extensive borrowing and loan translations
- introduction of new phonemes or allophones

Sound changes

- variation and change are particularly noticeable in the phonology of a language
- several common types of sound change can be distinguished:
  - assimilation
  - metathesis
  - splits
  - mergers
  - .....
Examples

- loss of lexical items:
  - *eox*: OE 'hunting spear'
  - lost through cultural change
- addition of lexical items:
  - *government*, *royal...*
  - loanwords from French

Semantic change

- word meanings rarely change suddenly
- usually words develop new meanings which are related to previous ones
- these changes take place continually

Types of semantic change

- Change in denotation:
  + generalisation
  - specialisation
- Change in connotation:
  + amelioration
  - pejoration
- metonomy
- metaphor
- grammaticalisation

Semantic broadening

- also referred to as: *generalisation*, *extension*
- the meaning of a word becomes more general or more inclusive than its historically earlier form
  - *bird*: *small fowl* > *any feathered vertebrate with a beak*
  - *aunt*: *father’s sister* > *father or mother’s sister*

Semantic narrowing

- also referred to as: *specialisation*
- the meaning of a word becomes less general or less inclusive than its historically earlier form
  - *hound*: *any dog* > *a hunting breed*
  - *meat*: *any type of food* > *flesh of an animal*
  - *fowl*: *any bird* > *a domesticated bird*

Amelioration

- also referred to as: *ameliorisation*
- the meaning of a word becomes more positive or favourable
  - *pretty*: *tricky, sly, cunning* > *attractive*
  - *knight*: *boy* > *a man of honourable military rank*
**Pejoration**

- also referred to as: *deterioration*
- the meaning of a word becomes more negative or less favourable
  - *silly*: 'happy, prosperous' > 'foolish'
  - *wench*: 'girl' > 'wanton woman, prostitute'

**Weakening**

- also referred to as: *distortion (verbicide)*
- the meaning of a word becomes less forceful
- caused by exaggeration
  - *crucify*: 'to kill by nailing to a cross' > 'to cause pain'
  - *tremendous, monstrous...*

**Semantic shift**

- sometimes total shift of meaning: shift to opposite
- usually: a word loses some aspect of its former meaning, taking on a partially new, but realted meaning
  - *bead*: 'prayer' > 'prayer bead' > 'bead'
  - *immoral*: 'not customary' > 'unethical'

**Metaphor**

- figure of speech based on a perceived similarity between distinct objects or actions
- one of the most striking and most important mechanisms of semantic change
- usually involves a word with a concrete meaning taking on a more abstract sense
- the meaning of many English words have been extended through metaphor

**Examples: metaphoric extension of meaning**

- *grasp*: 'to understand'
- *high*: 'on drugs'
- *down*: 'depressed'
- *sharp*: 'clever, smart'
Traditional Semantics

- Names: Michel Bréal (1897), Gustaf Stern (1931)
- late 19th and early 20th century
- closely connected to etymology
- important part of philological research as the importance of semantic relationships became apparent in reconstruction

- interest in semantic change is mirrored by the interest in the flexibility of linguistic categories
- acknowledgement of the fact that language is constantly changing
- acknowledgement of the importance of psychology in the study of meaning
- analysis of the qualitative links in the semasiological structures seen from a diachronic angle

The semasiological approach

- focus on the development of polysemies or split into homonymies
- while the form is more or less kept constant
- e.g. silly

- mainly concerned with the classification of changes and the discovery of semantic laws
- observation and analysis of individual mechanisms of change
- the cause of semantic change is taken to be the effort of individual speakers to communicate and express their thoughts
- external structures are not taken into account (i.e. the fact that lexemes are parts of larger structures, such as a lexical field)

The semantic development of silly

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OE *saelig* - 'happy', 'blessed'

ME *seely* - 'innocent', 'deserving of compassion', 'weak', 'feeble', 'simple, ignorant', feeble-minded

EME *silly* - 'deserving of compassion', 'foolish', 'empty-headed'

cf. Hughes 1989: 10

Gustaf Stern (1931)

- Classification of semantic change (cf. also Algeo 1990):
  - substitution
  - analogy
  - shortening
  - nomination
  - transfer
  - permutation
  - adequation
**Substitution**
- sense-changes due to external, non-linguistic causes
- Examples: *ship, to travel*
- cause of change because of the development of technique and other cultural factors
- change lies outside language and speech activity
- non-psychic cause

**Analogy**
- Example: *fast (adj.) and fast (adv.)*
- the adverb shows a continuous development from the ME sense 'firmly, immovably' to the later sense 'quick'
- the adjective has two almost contradictory meanings 'quick' and 'immovable', with no intermediate senses to serve as links
- thus: when the adverb had acquired the new sense, it was probably by analogy extended to the adjective

**Shortening**
- a word is omitted from a compound expression, the remaining word has to take over the total of the original meaning
- if the omission becomes habitual, the remaining word may undergo a sense-change
- Example: *private soldier, common soldier* =>
  - adjective has acquired nominal character and can therefore take a plural ending

**Nomination**
- a name is *intentionally* transferred from one referent to another
- thus, metaphors are intentionally chosen for their power of expression when the speaker tries make an impression on the hearer

**(Regular) Transfer**
- *unintentional* transfer
- based on similarity between the original or primary referent of the world and the new (secondary) referent
- condition is the speaker's perception of the similarity
- similarity in shape (*leaf: for thin objects*)
- or function (*bed: foundation of a steam-machine*)

**Permutation**
- Example: *beads (ME bedes (prayers)) > PDE beads (little balls)*
- prayers were said by means of the little balls on a rosary
- close relationship between the word 'beads' with primary meaning 'prayers' and the notion of 'balls'
**Adequation**

- an adaption of the meaning to the actual characteristics of the referents which the word is employed to denote
- Example: *horn*; originally 'an animal's horn'; then used for producing signals or music
- the notion of the purpose became the predominant element of the meaning 'horn' when applied to such objects
- eventually the word could be transferred to similar instruments manufactured from other materials

**Meaning**

- meaning is determined by three factors:
  - the objective reference (the referent)
  - the subjective apprehension (the subject, i.e. the speaker or the hearer)
  - the traditional range (the word)
- any change has as its immediate cause a change in one of these three relations

**Modification of referential relation:**

- substitution
- nominations
- transfers

**Modification of subjective relation:**

- permutations
- adequations

**Modification of verbal relation**

- analogies
- shortenings

**Further causes**

- external, non-linguistic vs. linguistic, psychic factors
- intentional vs. unintentional
External factors

- the changes of a referent depend altogether on factors outside language and the speech activity
- language only registers the change
- example: substitution (ship)

Linguistic factors

- changes are psychic processes
- occurring in conjunction with the speech activity or
- in the production or comprehension of speech
- example: the other six classes of change

Unintentional processes

- due to the automatic action of spontaneous psychic processes
- only the simplest psychic processes can be involved
- starts spontaneously from some initial impulse and passes off unperceived

Intentional processes

- speaker intervenes
- an arbitrary factor is introduced which may cut across all ordinary psychic combinations

Scheme of classification

- A: External causes:
  - Substitution
- B: Linguistic causes:
  - I. Shift of verbal relation:
    - a: Analogy
    - b: Shortening
  - II. Shift of referential relation:
    - a: Nomination
    - b: Transfer
  - III. Shift of subjective relation:
    - a: Permutation
    - b: Adequation

Structuralism

- Ferdinand de Saussure, 'founding father' of structuralism
- every language has a unique pattern, consists of units
- the units can be identified only in terms of their relationship with other units in the same language
Structuralist Semantics

- general lack of interest in historical matters
- decline of interest in diachronic semantics
- stricter distinction between diachrony and synchrony
- focus on synchronic stability rather than on flexible change

Structuralist Semantics

- autonomous approach to linguistic semantics
- psychological structure is disregarded
  -=> 'anti-psychological mood'
- language as an autonomous sign system
- introduction of „ordinary structural criteria into semantics“ (Ullmann 1964: 237)
- other names: Trier, Weisgerber, Voyles, Lipka

Stephen Ullmann

- an interim report on a new and vigorous science (259)
- record of past achievements (ibid.)
- formulation of problems (ibid.)
- growing interest in semantics

Structuralist perspectives on meaning

- lexical meaning has to be seen in relation to expressions in the same language
- relationship between linguistic form and extra-linguistic "reality'/ referent denied
- dichotomy of the linguistic sign
- semantic components (features) are parallel to phonetic components in phonology
  (analogy from phonology)

Structuralist perspectives on meaning

- meaning can be explained as the sum of necessary and sufficient features
- individual word meaning is determined only relative to some contrast set
  – associative field
  – componential analysis
  – lexical field

Structuralist perspectives on semantic change

- change of meaning is change in the features considered necessary and sufficient
Componential analysis

- also: *semantic decomposition*
- semantic analysis in terms of semantic components or features
- features usually presented as a matter of opposition
- pairs of positive and negative features

Componential analysis

- entities are grouped into natural classes
- useful for representing similarities among and differences between semantically related words
- limits???

Componential analysis

- Man: [+HUMAN]; [-FEMALE]; [+ADULT]
- Boy: [+HUMAN]; [-FEMALE]; [-ADULT]
- Woman: [+HUMAN]; [+FEMALE]; [+ADULT]
- Girl: [+HUMAN]; [+FEMALE]; [-ADULT]

Associative field

- Saussure, Bally
- connections between *senses* and/or *form/ names*
- network of associations based on similarity or contiguity
- open
- subjective

Lexical field theory

- Trier
- first manifestation of structuralist semantics
- ‘conceptual spheres’
- => oral presentation

Lexical field theory

- attention shifted to conceptual categories and the recruitment of lexemes to the categories
- i.e.: onomasiological approach
**Onomasiological approach**
- the focus is on the development or restructuring of coded representations of a particular domain
- recruitment of new lexemes to represent the concept
- e.g. *colour, kinship terms, intellect*

**Lexical field**
- sets of semantically related words
- relationships:
  - synonymy
  - antonymy
  - hyponomy
  - incompatibility

**Lexical field and semantic change**
- semantic change affects the structure of lexical fields
- change in the meaning of one word in the field requires changes in the meaning of the other words
- partial synonymy - lexical gaps (Lehrer)
- parallel semantic changes (Lehrer)

**Parallel Semantic Changes (Lehrer)**
- animal metaphors: *ape, baboon, gorilla*
- the animal word which entered the domain most recently (*gorilla*), acquired a new metaphorical meaning (brute‘)
- triggering mechanism: facilitates change in other members of the set
- earlier metaphorical meanings become obsolete

**Structuralist Semantics and Semantic Change**
- Ullmann (1962): Chapter 8, Change of Meaning
- Why is meaning „the least resistant to change“? (p.193)

**Factors facilitating semantic change**
- child language
- vagueness
- loss of motivation
- polysemy
- ambiguous contexts
- structure of the vocabulary
**Child language**
- discontinuous passing on of language
- misconceptions
- e.g. *soul, bead*

**Vagueness**
- phonetic, morphological structure and syntactic use of words are strictly defined and less liable to change than their meaning

**Loss of motivation**
- loss of transparency
- etymological root/connection obscured
- e.g. *lord (<hlafweard); lady (<hlafdige)*

**Polysemy**
- flexibility of word meaning
- e.g. *funny*

**Ambiguous contexts**
- a word may have different senses
- in some instances the meaning of the sentence as a whole unaffected
- e.g. *beads*
- ambiguous context $\iff$ polysemy?

**Structure of the vocabulary**
- the lexicon of a language consists of an infinite number of units
- flexible structure as opposed to the phonemic and syntactic system
U’s classification of types of semantic change has been very influential for decades the most popular and important theory in the domain of semantic change especially in recognising the central role of metaphor and metonymy.

Metaphor as the supreme source of expressiveness in language vocabulary of a language is conceived as an unstable structure in which individual words can acquire and lose meaning with the utmost ease. Ullmann distinguishes between three aspects of semantic change: causes, nature (and conditions), consequences or effects.

I. The Causes

- infinite multiplicity of causes
- unique causes:
  - *moneta > mint, money < monnaie*
  - *croissant*
- without close linking of linguistics and the history of civilisation, the origin of some words would remain unknown (money) or simplified (*croissant*)

I. The Causes: major causes

- linguistic causes
- historical causes
- social causes
- psychological causes
- foreign influence
- the need for a new name

Linguistic causes

- habitual collocations may permanently affect the meaning of terms involved
- the sense of the one word may be transferred to another because of co-occurrence in many contexts
  - *e.g.: French negation: passus > ne...pas; persona > ne..... personne, personne (nobody)*

Historical causes

- language sometimes more conservative than civilization
- objects, institutions ideas, scientific concepts change in the course of time while the name is retained
- *e.g.: carrus > car; parliament, humour (<cardinal humours); electricity/atom*
**Social causes**

- a word passes from ordinary language into specialised register/jargon
- acquires a more restricted sense *(specialisation)*
  - e.g.: Lat. *trahere* (to draw) > Fr. *traire* (to milk)

- words borrowed from a group-language (jargon/specialised register) into common use
- can widen their meaning *(generalisation)*
  - e.g.: *lure* (apparatus used by falconers to recall their hawks) > thing that attracts and invites

**Psychological causes**

- emotive factors: emotional ‘centres of expansion’/‘centres of attraction’
  - for metaphorisation
- taboo > euphemism: important causes of semantic change
- pseudo-euphemisms: silly (happy, blessed < cognate Germ. *selig*)

**Foreign influence**

- foreign model transferred into one’s own language
- e.g.: *Great and Lesser Bear* (constellations) from Greek, Classical Antiquity

**The need for a new name**

- denotations of new objects
- 3 strategies:
  - word-formation: *flying boats*
  - borrowing: *torpedo*
  - alter meaning of existing words: *tank*

**II. The Nature of Semantic Change**

- there must always be some connection, some *association* between the old and the new meaning
- *association* is the necessary condition of semantic change
• Saussure’s structural approach: **name and sense**
  • two categories of association:
    – association between the senses AND
    – association between the names
  • two kinds of association: **similarity** and
    **contiguity**
  • **four cardinal types of semantic change**

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**Types of semantic change**

• similarity of the senses
• contiguity of the senses
• similarity of the names
• contiguity of the names

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**Similarity of senses: metaphor**

• “paramount significance of metaphor as a creative force in language“
• basic structure consists of: the thing talked about, the thing it is compared to, the features the two have in common
• objective and emotive similarity

• the **human body** is a powerful centre of metaphorical expansion (*mouth of a river, heart of the matter*) and attraction (*Adam’s apple, apple of the eye*)
• **animals**: *cock of a gun* (inanimate object), *a dog* (to refer to humans)
• **concrete>abstract** to translate abstract experiences *space>time*
• **synaesthesia**: warm/cold voice; ...

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**Contiguity of senses: metonymy**

• spatial relation: *coxa (hip) > cuisse (thigh)*
• temporal: *mass* (church service < Lat. mittere ‘to dismiss’)
• pars pro toto: *redbreast* ‘robin’
• content after container: to drink *a glass*
• abstract words get a concrete meaning: *a beauty*

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**Similarity of names: popular etymology**

• wrong connection between two words which are phonetically similar
• form and meaning are changed
• e.g. *crayfish, boon*
**Contiguity of names: ellipsis**

- omission
- *e.g.*:
  - drawing room < withdrawing room
  - a daily < a daily newspaper

- the four types are different in scope:
  - metaphor = most important
  - metonymy = common
  - ellipsis = frequent but unimportant
  - pop etymology = marginal

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**Semantic laws?**

- regularity?
- broad tendencies:
- time by means of space
- to grasp > to understand
- concrete > abstract
- transfers from body more frequent

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**III. The Consequences**

- Changes in range
  - extension
  - restriction
- Changes in evaluation
  - pejoration
  - amelioration

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**Changes in range**

- **restrictions:**
  - voyage ‘journey’ > sea or water’;
  - deer < ‘beast’;
  - hound < ‘dog’;
  - fowl < ‘bird’; to starve
  - < to die

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**Changes in range**

- **extensions:**
  - Lat. avunculus (mother’s brother) > uncle (all kinds of parents’ brothers);
  - arrive < Lat. arrrivare ‘come to shore’;
  - bird < OE brid ‘young bird’
Changes in evaluation

- **pejoration**: euphemisms often lead to pejorative developments: undertaker, silly, fille, mistress ...
- also associations: captivus > chêtif
- social prejudice: villain

Changes in evaluation

- **amelioration**: blame < to blaspheme
  - hyperbolic expressions: awful, dreadful ... bad, nice < Lat. nescius 'ignorant'; Germ. sehr < cognate to sore
  - social factors: knight < cognate to Germ. 'Knecht'

Summary of Ullmann

- structuralist approach; the idea that associative networks functionally underlie semantic change < semantic fields
- functional classification of semantic change
- strict separation between mechanisms and causes of change

Criticism on Ullmann

- classification excludes innovative changes due to introduction of names
- lexical borrowing accompanied by conceptual borrowing (jogging)
- general difficulty to differentiate between causes and mechanisms
Criticism on Ullmann

- historical causes and 'need for a new name' are facets of one and the same type: new concepts need to be expressed
- collocation ne...pas, is not the motivation for the semantic change but a necessary condition

Words and social change

(Hughes 1988)

- The vocabulary reflects the main social developments of the past thousand years
- traces of the differing linguistic legacies left by
  - a conquering Norman elite
  - a decimated Celtic minority
  - a partially successful invasion of Norse rivals
  - a series of four major Latin influxes

Words and social change

- there emerges a clear sociolinguistic connection between the social status or function of a speech-community and the register or tone of the verbal legacy left by it
- stratification of register:
  - ask - question - interrogate;
  - rise - mount - ascend;
  - leech - doctor - physician;
  - catty - feline
  - doggy - canine
  - horsy - equine

Anglo-Saxon/ Old English

- the native term has become narrower in meaning and frequently lost status; usually a loan-word has insinuated itself as the central term of the word-field
- in word-fields of synonyms, the primary, basic or neutral word is usually of Anglo-Saxon [or Norse] origin (house, food, clothes): basic register

Anglo-Saxon/ Old English

- deor: animal > deer
- wambe: stomach > womb;
- steorfan: to die > to starve;
- mete: food > meat;
- spillan: destroy > spill; sellan: give > sell;
- stol: throne > stool

French Norman

- reflect the prestige of their speakers, terms became the vocabulary of the upper echelons of society
  - crown, court, parliament, castle, ...
- nomenclature of meat: pig/porc; calf/veal; cow/ beef; sheep/mutton, deer/venison,
Cognitive Approaches to Semantic Change

- dynamic view of language: language is a process (Coseriu)
- innovation vs. adaption
- specific vs. general motivations
- expressivity vs. efficiency
- speaker-oriented vs. hearer-oriented

"... [language change is a consequence of inherent characteristics of the human mind and human social interaction." (Blank 1999:63)

- the efficiency of communication: the general purpose of communication and the general motivation for language change (ibid.: 65)

Blank and the homonymic clash

- Lat. gallus 'rooster' > *gat (Gascon)
- Lat. cattus 'cat' > gat (Gascon)
- Lat. vicarius 'village mayor' > bigey 'rooster' (Gascon)
- creation of metaphor: level of expressivity
- avoidance of misunderstanding: level of motivation for the adoption of innovation

Six main types of motivations for semantic change (Blank 1999)

1. new concept/need for a new name
2. abstract concepts, distant and usually invisible referents
3. sociocultural change
4. close conceptual or factual relation
5. complexity and irregularity in the lexicon
6. emotionally marked concepts

Diachronic Prototype Semantics (Geeraerts)

- cognitive model of semantic change
- structure of lexical meaning in terms of prototypical categories
- functional motivation:
  - informational density
  - structural stability
  - flexible adaptability

- prototypically organized structures are dynamic
- major interest in POLYSEMY: the synchronic reflection of diachronic-semantic change
- the synchronic links between various senses of an item coincide with diachronic mechanisms of semantic extension (metaphor/metonymy)
Two major causes of semantic change

- expressivity vs. efficiency
  - expressivity:
    - connected with pre-structuralist diachronic semantics
    - more important
  - efficiency:
    - connected with structuralist synchronic semantics
    - parasitic

- both principles are complementary:
  - expressive factors specify what instrument language is
  - efficiency factors optimize that instrument
- speaker-oriented: prototypical polysemanation
- hearer-oriented: iconicity, transparency, isomorphism

Semantic changes and prototypical structure

- changes may have their origin in different parts of the prototypical structure
- some words may develop new meanings without any damage to older meanings
- others may not

- peripheral instantiations are
  - related to the central case by similarity
  - deviate from the central case by one or more features
  - are less frequent
- dominant area is statistically and structurally dominant
- increasing flexibility diachronically
- unidirectionality of development
- increased flexibility correlates with absolute frequency

Modulations in the core cases

- changes in the referential range of a specific word meaning
- at each synchronic point, the structure of the category is characterised by a dominant core
- this core is surrounded by peripheral instantiations

Case study: leggings

- changes the concept has undergone in the first five years of its existence in Dutch
- introduction of a new concept around 1987
- category fast exhibits proto-type based flexibility
- corpus-based study: women’s magazines and catalogues
Cognition and metaphors

- "... metaphor is pervasive in everyday life..." (Lakoff/Johnson 1981: 3)
- "... our conceptual system is largely metaphorical ...“ (ibid.)
- "... language is an important source of evidence for [the conceptual system] ...“ (ibid.)

Diachronic metaphorical analysis

- Sweetser (1990); a classic of the lexical field of intellect
- Semantic Change defined as: a form historically acquires a new function to replace or augment its old ones
- within the framework of Cognitive Linguistics; i.e. a cognitice approach to meaning
- semantics related to syntax and pragmatics

- discussion of metaphor is contextualised within discussion of pragmatics
- pragmatic ambiguity
- linguistic system seen as being interwoven with the rest of our physical and cognitive selves
- parallels between child language acquisition and work on the historical development of spatial terms: both show temporal vocabulary following and emerging from spatial development

- question of regularity in semantic change
- metaphor seen as one crucial source of links between multiple senses of a single form
- polysemy because of metaphorical usage
- word-meaning is often prototype-based
- metaphor seen as major structuring force in semantic change
- the same cognitive structure underlies:
  - polysemous patterns in lexical meaning
  - historical patterns in meaning change

- motivated account of the relationship between senses of a single word and of the relationship between earlier and later senses
- reconceptualisation of the role of metaphor in language
- Cognitive Linguistics has shown that metaphor is a pervasive mode of thought, a fundamental aspect of human cognising and of human language

- changes motivated by metaphors are not abrupt and discontinuous
- source and target meanings constrain each other experientially aspects of the abstract image-schemata associated with source and target are preserved across metaphorical mappings
- lexical field of intellect reconceived as involving a mind-as-body-metaphor motivated by experience
- essential arbitrary component in the association of words with what they mean
- sequence of sounds in /si:/ is arbitrary (as opposed to e.g. *voir*)
- BUT: it is NOT arbitrary that *see* and not *kick, sit* or even *smell* is used to express knowledge and understanding
- motivated relationship
- certain semantic changes occur repeatedly in the history of IE and independently in different branches

- stage of polysemy must precede any historical shift of meaning
- historical order in which senses are added to polysemous words gives information on the directional relationship between senses
- => diachronic analysis cannot be separated from synchronic analysis

The Mind-as-Body-Metaphor

- Kurath (1921)
- IE-words for emotions are frequently derived from words referring to physical actions, sensations accompanying the relevant emotions or the organs affected
- => psychosomatic nature of emotions and inseparability of physical sensation from emotional reaction

- BUT: Sweetser argues that this is probably only the root for the tendency to derive vocabulary of the mind from vocabulary of the body
- metaphorical mappings: *bitter anger*
- metaphorical mapping motivated by prototypical cases: MORE IS UP
- equation of the physical self and the inner self

Perception verbs in English and IE

- sight
- hearing
- smell; taste; feeling

Vision/sight

- semantic sources
- target domains
- vision-intellection metaphor
Hearing

- semantic sources
- target domains
- linguistic communication
- hearing - heedfulness - internal reception - obedience

Smell, taste, feeling

- semantic sources
- target domains
- physical contact
- subjectivity
- variable

- distance = objectivity
- vision and hearing = distant senses
- closeness = subjectivity, intimacy, emotion
- taste and touch = physical contact, closeness

Regularity in Semantic Change

- Traugott/Dasher (2002): contribution to the interface between historical pragmatics and historical semantics
- language change from a discourse perspective
- driving force in processes of regular semantic change is pragmatic

Implicatures/inferences

- cognitive: information-related
- communicative/rhetorical: arise out of purposeful negotiation between speaker and addressee
- meaning: originally in the conventional "given" BUT in the course of ongoing interaction meaning is negotiated

Invited Inferencing Model of Semantic Change

- historically there is a path from coded meanings to utterance-token meanings to utterance-type and pragmatically polysemous meaning to new semantically polysemous and coded meanings
- pragmatic implicatures play a crucial bridging role in semantic change
- conventionalising of pragmatic meanings
Stage I: Coded meaning

\[ M_1 \uparrow C_a \]

Stage II: New coded meaning

\[ M_1 + M_2 \uparrow C_a + C_b \]

- semantic change is the result of speaker/writer’s and addressee/hearer’s negotiating meaning
- dyadic relationship between speaker and hearer
- main tendency in semantic change is towards greater subjectivity or grounding in speaker attitude and perspective
- semantic change is regular if synchronic processes of inferencing and of strategic interaction are replicated from generation to generation

Grammaticalisation and semantic bleaching

- Are senses lost or weakened in the process of grammaticalisation?
- Which aspects of meaning are preserved, which are lost?
- Lexical semantic change vs. grammaticalisation?

The development of modal verbs

- Definition of modality: little agreement
- Kiefer 1994: “The essence of modality consists in the relativization of the validity of sentence meanings to a set of possible worlds” (in Traugott/Dasher)
- modals typically express obligation or cast some doubt on the proposition

- modality expresses a perspective that considers the possibility of things being otherwise than they are
- three types of modality:
  - deontic (obligation)
  - epistemic (conclusion)
  - ability/capacity

- change originates in language use
- utterance-token meaning: speaker/writer exploits new meaning innovatively in associative stream of speech
- utterance-type meaning: there are constraints on the weighing of meanings (preferred uses, salience, relevance); innovations are conventionalised and become pragmatically polysemous meanings
- final stage: the meaning of a lexeme is linked to more than one conceptual structures = several coded meanings
Morphosyntactic categories

- languages vary considerably
- in English, modality is primarily expressed by:
  - auxiliary verbs/the 'core' set:
    - can, could, may, might, shall, should, will, would, must
  - quasi-auxiliaries:
    - be to, got to, have to, had to, ought to, need to, dare to, be supposed to, (had) better

Deontic modality

- obligation or compulsion
- also: 'root' modality
- 'concerned with the necessity or possibility of acts performed by morally responsible agents' (Lyons 1977)
- proceeds or derives from some source of cause: moral or social norms, person in authority, inner compulsion

Epistemic modality

- concerned with knowledge and belief as opposed to fact
- qualify the truth of a proposition
- expresses the speaker's degree of commitment to the truth of the proposition
  - Jane must be tired
    (the evidence suggests to me that Jane is tired; I conclude that...)
  - Jane may be tired
    (I think it is possible that Jane is tired)

Deontic modality

- involves 'language in action':
  - Jane must go, the boss requires it.
  - Jane may go, the boss said so.
- weak deontic: advisability
  - the action demanded by the subject is not only normatively wished for but is also beneficial to the subject
    - Jane ought to swim if she wants to keep fit

Epistemic modality

- epistemic modality shares characteristics with deixis
- epistemic modality indexes the degree of distance of a proposition from the actual referenced world

1. Jane is tired
   Expresses the speaker’s belief that the proposition coincides with the actual world.
2. Jane must be tired
   Expresses confidence in the close proximity of 1
3. Jane may be tired
   Indicates less confidence than 2.
4. Jane might be tired
   Indicates even less confidence and greater distance from actual world than 3.
### Ability/capacity

- facultative modality
- usually construed in terms of
  - absence from barriers of
  - or constraints on events
- *Jane can swim* (Jane is able to swim/ nothing prevents Jane from swimming)

### The semantic development if past tense modals (cf. Bybee 1995)

- the situation of English modals is parallel to the one in other languages
- predictability/regularity of diachronic development of past tense modals
- some English modal auxiliaries are historically Past Tense forms:
  - *will* > *would*
  - *shall* > *should*
  - *may* > *might*
  - *can* > *could*

  **BUT:** their meaning is NOT: [present tense modal] + [past tense]

  - hypothetica uses
  - present tense uses
  - past tense uses

### Hypothetical uses

- the most common use of past tense modals:
  - *If you had that job lined up, would Fulbright then pay up?*
    (hypothetical willingness)
  - *If you helped me, I could finish this in an hour.*
    (hypothetical ability)
  - *I mean we all want to be millionaires, but if we were of course money wouldn’t be worth anything.*
    (no additional root meaning)

### Present tense uses

- less common use of past tense modals is in present tense contexts:
  - *You should* walk around the ramparts of the old city too.
  - *I think it unlikely actually, but she might do it today.*

### Past tense uses

- least common use of past tense modals although they are Past in form:
  - *She believed Mrs. Weaver would perform ‘outstanding service’ in the post.*
  - *„I just can’t remember a time when I couldn’t swim,” she told me.*
  - ambiguous:
    - *Georg Bush couldn’t run a laundromat.*
Grammaticalisation: Tenses

- What is ‘tense’?
- conceptualisation of time
- paths of development
- there are only a limited number of major grammatical categories and each of these develops historically along a small number of paths

The semantic development of future markers (Bybee et al. 1991)

- the futures in all languages develop from a small set of lexical sources
- all future morphemes from a given source go through similar stages of development
- What is ‘future’?
  - time reference?
  - assertion
  - prediction (prototypical)

- four types or sources of future grams
  - aspectual forms
  - agent-oriented modalities
  - movement towards
  - temporal adverbs
- prediction is the prototypical use of future grams
- additional uses provide information on the semantic development

- high degree of grammaticalisation (formal aspect)
- little erosion of lexical meaning as future meaning is just one interpretation of broader semantics

Aspectual forms

- two groups:
  - expressing imperfective meaning
  - expressing perfective meaning
- original meaning determines range of future gram:
  - perfective > immediate future
  - imperfective > not immediate future

Agent-oriented modalities

- agent-oriented vs. speaker-oriented
- speaker-oriented vs. epistemic vs. mood
- agent-oriented uses are the earliest documented senses of English modals
- three agent-oriented modalities can be linked to futures:
  - desire
  - obligation
  - ability
„Futages“

- future ages = futures; semantic ages
- four stages in the semantic development of futures from modality and movement verbs
- classification based on the uses the grams have in addition to their future use

Futage 1

- grams at the beginning of development as futures
- youngest type of future
- future gram expresses agent-oriented modality in addition to future use

Futage 2

- agent-oriented modality
- intention, willingness, root possibility have generalised from a more specific source meaning

Futage 2a: intention

- intermediate stage between agent-oriented senses and the prediction or future sense
- by inference:
  - obligation
  - desire
  - examples: shall < ‘to owe’
  - will < ‘to want’

Futage 2b: root possibility

- derives from ability (enabling conditions internal to agent)
- to more general general enabling conditions (agent internal + external), including social (permission)
- ability > root possibility > permission
- example: may < ‘to be physically able’
  - can < ‘to know how to’

Futage 3

- grams have future as their only reported use
- grams only signal prediction or future
- source of gram can no longer be determined
- grams not necessarily completely devoid of modal nuances but these are less salient
Futage 4

- grams have future uses AND epistemic uses
- imperative use out of reinterpretation of a secondary speech act

Stages of development for modality senses

<table>
<thead>
<tr>
<th>Futage 1</th>
<th>Futage 2</th>
<th>Futage 3</th>
<th>Futage 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>obligation</td>
<td>desire</td>
<td>intention</td>
<td>future</td>
</tr>
<tr>
<td>probability</td>
<td>imperative</td>
<td>ability</td>
<td>root possib. future</td>
</tr>
</tbody>
</table>

Movement verbs

- verbs which signal movement towards a goal outnumber futures from modalities or temporal adverbs
- movement verbs also used as sources for other tenses (TIME-SPACE metaphor)
- lexical antecedents of future grams are either 'go‘ or 'come'
- less semantic distinctions than in modality-derived futures

Futages of movement verbs

- movement-derived futures can signal 'intention' and therefore start with Futage 2
- immediate future uses of movement verbs are also classified as Futage 2
- simple future uses are classified as Futage 3
- other uses, such as speaker-oriented, epistemic... are classified as Futage 4

Summary

- all non-aspectual future grams can be classified in four categories, i.e. futages
- these grams develop along the same or similar paths
- aspectual futures develop along an entirely different path

Form/meaning covariation

- correlation between the degree of semantic relevance of the affix-meaning to the stem and the position of the affix and ist fusion with the stem
- older grams are closer to the stem, more fused, shorter than younger grams of equal relevance
forms with higher future have significantly higher scores for the three variables (fusion, dependence, shortness)
formal and semantic information on grammatical material can be used to evaluate grammaticalisation
unidirectionality
universal pathways for the development of futures from different sources

Conclusion I

- **Causes**:  
  - language internal vs. language external  
  - historical  
  - social  
  - linguistic  
  - psychological  
  - efficiency and expressivity

Conclusion II

- **Types/mechanisms**:  
  - transfer of senses (Ullmann, Blank)  
  - transfer of names (Ullmann)  
  - semasiological and onomasiological mechanisms (Geeraerts)

Conclusion III

- **Consequences/effects**:  
  - extension  
  - restriction  
  - amelioration  
  - deterioration  
  - semantic bleaching  
  - grammaticalisation