Handout 1
Language and Linguistics

1 Language
What distinguishes human lg from other lg’s? (Hockett: 1960 after http://www.ling.mq.edu.au/rmannell/animal_communication/)

Arbitrariness: There is an arbitrary relationship between a signal and its meaning. That is, the signal, is related to the meaning by convention or by instinct but has no inherent relationship with the meaning. This can be seen in different words in different languages referring to the same meaning, or to different calls of different sub-species of a single bird species having the same meaning.

Discreteness: Language can be said to be built up from discrete units (eg. phonemes in human language). Exchanging such discrete units causes a change in the meaning of a signal. This is an abrupt change, rather than a continuous change of meaning (eg. "cat" doesn't gradually change in meaning to "bat", but changes abruptly in meaning at some point. Speech loudness and pitch can, on the other hand be changed continuously without abrupt changes of meaning.

Displacement: Communicating about things or events that are distant in time or space. Bee dancing is an example of this.

Productivity: Language is an open system. We can produce potentially an infinite number of different messages by combining the elements differently. This is not a feature of, for example, the calls of gibbons that have a finite number of calls and thus a closed system of communication.

Traditional transmission: Each generation needs to learn the system of communication from the preceding generation. Many species produce the same uniform calls regardless of where they live in the range (even a range spanning several continents). Such systems can be assumed to be defined by instinct and thus by genetics. Some animals, on the other hand fail to develop the calls of their species when raised in isolation.

Duality of patterning: Large numbers of meaningful signals (eg. morphemes or words) produced from a small number of meaningless units (eg. phonemes). Human language is very unusual in this respect. Apes, for example, do not share this feature in their natural communication systems.

If you analyse the table in http://www.ling.mq.edu.au/rmannell/animal_communication/hockett.html you will notice that no animals are known to produce language that would meet all Hockett’s criteria. You will also notice that there is not a single criterion that would be known to distinguish all human languages from all animal languages. Notice however that traditional transmission and duality of patterning are can potentially constitute such criteria if enough evidence is accumulated.

Vocal-auditory channel: sounds emitted from the mouth and perceived by the auditory system. This applies to many animal communication systems, but there are many exceptions. Also, it does not apply to human sign language, which meets all the other 12 requirements. It also does not apply to written language.

Broadcast transmission and directional reception: this requires that the recipient can tell the direction that the signal comes from and thus the originator of the signal.

Rapid fading (transitoriness): Signal last a short time. This is true of all systems involving sound. It doesn't take into account the tape recorder and is also not true for written language. It tends not to apply to animal signals involving chemicals and smells which often fade slowly.

Interchangeability: All utterances that are understood can be produced. This is different to some communication systems where, for example, males produce one set of behaviours and females another and they are unable to interchange these messages so that males use the female signal and vice versa.

Total feedback: The sender of a message also perceives the message. That is, you hear what you say. This is not always true for some kinds of animal displays.

Specialisation: The signal produced is specialised for communication and is not the side effect of some other behaviour (eg. the panting of a dog incidentally produces the panting sound).

Semanticity: There is a fixed relationship between a signal and a meaning.
Linguistics - the study of human language: its structure, meaning, production and reception.

**Theoretical Linguistics:** finds and describes generalities within/between languages

- **Phonetics** - the study of the different sounds that are employed across all human languages
- **Phonology** - the study of patterns of a language's basic sounds
- **Morphology** - the study of the internal structure of words
- **Syntax** - the study of how words combine to form grammatical sentences
- **Semantics** - the study of the meaning of words (lexical semantics), and how these combine to form the meanings of sentences; and
- **Pragmatics** - the study of how utterances are used (literally, figuratively, or otherwise) in communicative acts
- **Sociolinguistics** – the interaction of the language and the society in which it is spoken
- **Psycholinguistics** – the behaviour of human beings in their production and perception of the language
- **Stylistics** - the study of style in languages
- **Dialectology** – study of the variation of a language in different regions and social classes
- **Linguistic Typology** - the study of the grammatical features that are employed across all human languages
- **Historical linguistics** - the study of language change

**Applied Linguistics** (in broad sense): uses linguistic theory to address real-world problems

- **Language teaching** – teaching a foreign language (= applied linguistics in narrow sense)
- **Speech therapy and speech pathology** - helping people to overcome speech difficulties
- **Translation and interpreting** - cross-linguistic and cross-cultural communication
- **Computational linguistics** – speech recognition and synthesis, language understanding, processing, translation and generation.
- **Lexicography** – writing language reference books (dictionaries, thesauruses)

Phonetics and Phonology

**Phonetics** - the study of human speech. It is concerned with how speech sounds can be categorised, how they are generated in the human vocal tract, why they each sound different to a listener, and how a listener is able to recognise them.

- **Articulatory phonetics** - the study of how humans use their vocal apparatus to speak
- **Acoustic phonetics** - the study of the quality of the sounds (sound waves) used to signal different pronunciations
- **Auditory phonetics** – the study of how speech sounds are perceived by the ear, auditory nerve, and brain
- **Experimental phonetics** - the general field of study in which instruments are used to study speech production and perception

**Phonology** - the study of the organisation of speech sounds (between or within languages, between or within words etc) in a language. The phonological system of a language includes
- an inventory of sounds and their features, and
- rules which specify how sounds interact with each other.

<table>
<thead>
<tr>
<th>Phonetics …</th>
<th>Phonology …</th>
</tr>
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<tbody>
<tr>
<td>Is the basis for phonological analysis</td>
<td>Is the basis for further work in morphology, syntax, discourse and orthography</td>
</tr>
<tr>
<td>Analyzes the production of all human speech sounds, regardless of language</td>
<td>Analyzes the sound patterns of a particular language by determining which phonetic sounds are significant, and explaining how these sounds are interpreted by the native speaker</td>
</tr>
</tbody>
</table>
4 Accents

**Accents** – accents mark speakers as a member of a group by their pronunciation of the standard language. These groups may be geographical, socio-economic (class), ethnic, or second language speakers (e.g. Regional accents, Non-native accents)

E.g. Polish accent (non-native accent; listen to a sample [here](http://en.wikipedia.org/wiki/Phonetics) recognized by e.g.:
- 'th' pronounced as 'd', 't'; 'v', 'f' or 's', 'z'. E.g. think → sink
- voiced consonants at the end of a word or before voiceless stops may become voiceless. E.g. bed → bet
- no differentiating between vowels like [iː] and [ɪ] or [ɛ] and [æ]. E.g. "man" and "men" are pronounced [men].

E.g. British vs. American accent (regional accents) distinguished by e.g.:

<table>
<thead>
<tr>
<th></th>
<th>Br</th>
<th>AmE</th>
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<tbody>
<tr>
<td>t and d;</td>
<td>alveolar plosive;</td>
<td>alveolar flap;</td>
</tr>
<tr>
<td>atom and Adam</td>
<td>not homophonomous</td>
<td>often homophonomous</td>
</tr>
<tr>
<td>non-prevocalic r</td>
<td>only preserves it when it</td>
<td>preserved - &quot;r&quot; in all</td>
</tr>
<tr>
<td></td>
<td>is followed by a vowel</td>
<td>occurrences</td>
</tr>
<tr>
<td>awl and all, as well as</td>
<td>distinct in British English</td>
<td>not distinct; the so-called</td>
</tr>
<tr>
<td>caught and cot</td>
<td></td>
<td>cot-caught merger</td>
</tr>
<tr>
<td>yod dropping e.g. in</td>
<td>yes. pronounced as</td>
<td>no. pronounced as</td>
</tr>
<tr>
<td>assume, dew, news (c.f.</td>
<td>/əˈʃjuː : m/</td>
<td>/əˈsuː : m/</td>
</tr>
<tr>
<td>few, music)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patriot /a/</td>
<td>Patriot /ei/</td>
</tr>
<tr>
<td></td>
<td>Zenith /e/</td>
<td>Zenith /i:/</td>
</tr>
<tr>
<td></td>
<td>Vitamin /i/</td>
<td>Vitamin /ai/</td>
</tr>
</tbody>
</table>

You will learn about some more differences when you get more acquainted with phonetic transcription.

**Dialect** - a variety differing in pronunciation, vocabulary and grammar. Dialects are usually spoken by a group united by geography, class etc.

**Reference varieties** – varieties of English used over wide areas, used by people of high social class and seen as suitable to teach to foreign learners. Reference variety for US accent is **General American** (a Mid-Western and West Coast accent, also used by some high prestige speakers outside this region). In Britain it is **RP** (Received Pronunciation - developed in the private boarding schools of the nineteenth century and associated with high prestige groups in England). General American vs. African American Vernacular English (Ebonics) sample downloadable [here](http://encilopedia.laborlawtalk.com/Linguistics).

References

