Intentions and intent-analysis from the linguistic perspective.

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Intention / Интенция

- an ordinary language word
- a concept and a term in philosophy of mind (it has homonyms in some other fields of humanities)
- a pseudo-term, that has been used in many humanitarian disciplines, including theoretical and computational linguistics, a sort of a hybrid of ordinary and professional senses

intention and интенция in ordinary language

• *intention* 'smth, that you want or plan to do' = намерение (Cambridge Russian-English Dictionary)

She announced her intention to resign.

I have no intention of seeing him again.

- ✔ Интенция no entries in Russian linguistic dictionaries. In NCRL 403 occurrences, mainly in literary essays and in Pelevin's fiction. More popular usage is presented in newspaper subcorpus of NCRL and in GICRL (News)
- хочу, чтобы зритель задумался и включил мозги. Это моя главная **интенция** в этом фильме.
- ...Тут какой-то дух переворота ... Все по Конституции , но **интенция** пахнет не очень приятно ", - сказал он. (О роспуске парламента)

Intention in philosophy of mind (Husserlian tradition)

- Intentionality is the capacity of mind to contain information about something in the external world and at the same time to be in relation with it.
- Intentional state (of mind) is the state of having some information about an object X or situation P and having an attitude A towards it.
- INTENSION = information about X or P («objective» content of mind)
- INTENTION = an attitude A towards it (subjective content of mind)

Exteriorization of intentional states in language use:

- Every utterance corresponds to an INTENTIONAL STATE (I-state), either really experienced or demonstrated by the Speaker (S).
- I-state (of some subject) can be overtly represented in the surface structure of an utterance by a predicate, denoting a certain mental state (attitude = intention), with 2 arguments:
- 1) the subject of I-state;
- 2) the content of I-state

The subject of I-state	The predicate of I-state	The content of I-state
I	think	this poem was written in XIX century
He	wants	to sell his car
Children	are happy (with)	gifts
You	are angry (with)	me

Alternative terminology in linguistics

- **◆** The predicate of I-state = propositional attitude psych-predicate;
- The subject + the predicate of I-state = modus, modal frame
- The content of I-state = dictum, propositional content

Language of Intentions (= Intentional language)

is a part of NL vocabulary denoting I-states, that human beings experience as **different**. It is a language of **naïve psychology**. It contains:

- Epistemic lexis (think/думать, believe/полагать, know/знать, idea/идея, doubt/сомнение et al.);
- volitive lexis (want/хотеть, intention/намерение и др.);
- emotive lexis (be afraid/ бояться, admire/восхищаться, hatred/ ненависть et al.)

Semantic decomposition of intentional language

- Studying the meaning of I-words in linguistic semantics led to decomposition of complex I-states into configurations of simple I-states, «intentional primitives», among them:
- 'know', 'think', 'want', 'intend', 'feel', 'good', 'bad'

An example

- A is afraid, that B = (a) A feels bad like the one who:
- (б) **thinks**, that it is highly probable that the event B will take place;
- (B) thinks, that B is bad for A;
- (г) thinks, that he cannot prevent B.

Implicit intentions

- The majority of what we say does not explicate subjective I-states, neither complex nor simple. But nethertheless intentions are conveyed as implicit information in the form of:
- <u>pragmatic presuppositions and implicatures</u>, e.g. Kepler died in misery → 'S **knows**, that Kepler existed and has reasons to think,that K. died in misery'
- <u>felicity conditions of speech acts</u>, e.g.,
 Come here! 'S wants C to come to him'
- <u>suppositions of questions</u>, ср. *У вас нет тараканов?* 'S doesn't **want** cockroaches to be there'
- emotional-evaluative connotations, ср., журналисты и журналюги
- -- meanings of verbs of speech acts and discourse markers: e.g: *X* blamed Y for Z, of course, unfortunately etc.

and in many other forms, described in lexical and grammatical semantics

Intent(ional)-analysis of utterance meaning

- The meaning of whatever utterance we have to analyse has two parts:
- "objective component" representing the situation or object of Istate;
- "intentional component" including all the information about the Istates of the subject, whose state of mind the utterance describes (it may be the speaker or the subject of the psych-predicate or speech act predicate)
- The aim of intent-analysis from this perspective is the extraction of all or some of intentions (= I-states) of all or some of the subjects who authored or were mentioned in a text directed at all or some of objects or situations described in it, e.g. evaluative intentions of authors of internet-posts towards renovation. This kind of analysis is being implemented.
- Thus, sentiment analysis is a particular case of intent-analysis

"Intent-analysis" as extraction of "intentions" as goals of the speaker

- Another kind of analysis of implicite information based on speech act theory that analyses utterances at 3 levels:
- **locutionary level** contains information directly encoded by purely linguistic means. It is abstracted from communicative context.
- illocutionary level contains the goal of the S which she wants to be recognized by the addressee (= communicative goal). It is often encoded indirectly and presupposes access to the context to be recognized (as in indirect speech acts, e.g. Will you pass me the salt?) Linguistic pragmatics proposed theoretic framework for calculating such goals (e.g. the notion of illocutionary force of an utterance and its felicity conditions). One may hope to implement this theory on computer.
- perlocutionary level has to do with real (strategic) goals of the speaker that may differ from communicative goal and be achieved by utterances with different communicative goals (= using different tactics), e.g. one can trey to discredit a person by informing the audience about her reprehensible deeds or by asking a question that she would't be able to answer. Such "intentions" are out of reach yet.

Psychological "Intent-analysis" (Institute of Psychology RAS)

- T. N. Ushakova and N. D. Pavlova and her colleagues claim to have the theory and instruments for the kind of analyses that can extract real «intentions» as goals.
- My doubts about such a theory is based on the fact that they do not distinguish illocutionary forces from communicative and real goals of the speaker and base their work solely on the judgements of informants, disregarding linguistic analysis of texts.