SLOVENSKI STANDARD
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Upravljanje z jezikovnimi viri - Ogrodje za semantično označevanje (SemAF) - 2. del: Dialogi

Language resource management -- Semantic annotation framework (SemAF) -- Part 2: Dialogue acts

Gestion des ressources langagières -- Cadre d'annotation sémantique (SemAF) -- Partie 2: Actes de dialogue

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Language resource management — Semantic annotation framework (SemAF) —

Part 2: Dialogue acts

Gestion des ressources langagières — Cadre d'annotation sémantique (SemAF) —

Partie 2: Actes de dialogue

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 24617-2 was prepared by Technical Committee ISO/TC 37, *Terminology and other language and content resources*, Subcommittee SC 4, *Language resource management*.

ISO 24617 consists of the following parts, under the general title: *Language resource management — Semantic annotation framework:*

— *Part 1: Time and events (SemAF-Time, ISO-TimeML)*

— *Part 2: Dialogue acts*

The following parts are under preparation:

— *Part 3: Named entities (SemAF-NE)*

— *Part 4: Semantic roles (SemAF-SRL)*

— *Part 5: Discourse structure (SemAF-DS)*

— *Part 6: Principles of semantic annotation (SemAF-Basics)*

— *Part 7: Spatial information (ISO-Space)*

— *Part 8: Semantic relations in discourse (SemAF-DRel)*

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Language resource management — Semantic annotation framework (SemAF) —

Part 2: Dialogue acts

1 Scope

This part of ISO 24617 provides a set of empirically and theoretically well-motivated concepts for dialogue annotation, a formal language for expressing dialogue annotations — the dialogue act markup language (DiAML) — and a method for segmenting a dialogue into semantic units. This allows the manual or automatic annotation of dialogue segments with information about the communicative actions which the participants perform by their contributions to the dialogue. It supports multidimensional annotation, in which units in dialogue are viewed as having multiple communicative functions. The DiAML language has an XML-based representation format and a formal semantics which makes it possible to apply inference to DiAML representations.

This part of ISO 24617 specifies data categories for reference sets of communicative functions and dimensions of dialogue analysis and provides principles and guidelines for extending these sets or selecting coherent subsets of them. Additionally, it provides guidelines for annotators and annotated examples. It is applicable to spoken, written and multimodal dialogues involving two or more participants.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12620:2009, *Terminology and other language resources — Specification of data categories and management of a Data Category Registry for language resources*

ISO 24610-1:2006, *Language resource management — Feature structures — Part 1: Feature structure representation*

ISO 24612:2011, *Language resource management — Linguistic annotation framework*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.[1)]

1) In this document, “he”, “him” and “his” are used in a generic sense, without implying any gender-related distinctions.

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3.1
addressee
dialogue (3.5) *participant* (3.13) oriented to by the *sender* (3.18) in a manner to suggest that his *utterances* (3.22) are particularly intended for this participant and that some response is therefore anticipated from this participant, more so than from the other participants

Note to entry: This definition is a *de facto* standard in the linguistics literature. It has been slightly modified here, in replacing “speaker” by “sender” and avoiding the use of ambiguous pronouns. Goffman's original definition says: “dialogue participant oriented to by the speaker in a manner to suggest that his utterances are particularly intended for him and that some response is therefore anticipated from him/her, more so than from the other participants”.

[SOURCE: Goffman (1981).]

3.2
allo-feedback act
feedback act (3.8) where the *sender* (3.18) elicits information about the *addressee*'s (3.1) processing of an *utterance* (3.22) that the sender contributed to the *dialogue* (3.5) or where the sender provides information about his perceived processing by the addressee of an utterance that the sender contributed to the dialogue before

EXAMPLE A: Now move up.

B: Slightly northeast you mean?

A: Slightly yeah.

A performs an allo-feedback act signalling that he thinks B understood his first utterance correctly.

3.3
auto-feedback act
feedback act (3.8) where the *sender* (3.18) provides information about his own processing of an utterance (3.22) contributed to the *dialogue* (3.5) by another *participant* (3.13)

EXAMPLE B's utterance in the example dialogue fragment in (3.2) signals that he is uncertain whether he understood the previous utterance correctly.

3.4
communicative function
property of certain stretches of communicative behaviour, describing how the behaviour changes the *information state* (3.12) of an understander of the behaviour

Note to entry: A communicative function may be “qualified”, i.e. one or more **qualifiers** (3.14) may be associated with it. For example, an answer may be qualified as “uncertain” and the acceptance of a request may be “conditional”. See 10.3 for explanation and examples.

3.5
dialogue
exchange of *utterances* (3.22) between two or more persons or artificial conversational systems

3.6
dialogue act
communicative activity of a *dialogue* (3.5) *participant* (3.13), interpreted as having a certain *communicative function* (3.4) and *semantic content* (3.16)

Note to entry: A dialogue act may also have certain *functional dependence relations* (3.10), *rhetorical relations* (3.15) and *feedback dependence relations* (3.9) with other units in a *dialogue* (3.5).

3.7
dimension
class of *dialogue acts* (3.6) that are concerned with a particular aspect of communication, corresponding to a particular category of semantic content

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