

General aspects of narratives

Formal – structural aspects: Refer to the *text* of the narrative

Reasoning aspects: Present *arguments and conclusions* about the narrative

Semantic – analytic aspects: Refer to the *meaning* of the narrative

Ontological Approaches to Modelling Narrative

Mischa M Tuffield†, David E Millard†, Nigel R Shadbolt†
†Intelligence, Agents, Multimedia Group
University of Southampton, Southampton, UK

Narrative can be viewed as consisting of three layers.

The lowest level is the *Fabula*, this represents the raw chronological events that are being depicted.

Formal – structural aspects

The second level is the *Story*, this is the subset of the Fabula restructured into a new sequence for a particular effect, for example, to create plot lines, to build tension or expectation, or to inform the user about the background of a topic.

Reasoning aspects

At the third and highest level is the *Narrative* itself.

The Narrative is the story given form with all the added semantics of the form itself.

Semantic – analytic aspects

Flossie and the Fox

“Oh well, a fox be just a fox. That aine so scary.”

(1)

Flossie skips along and encounters a strange creature, who announces that he is a fox. Flossie looks him over carefully and says, “I just purely don’t believe it . . . I don’t believe you a fox.”

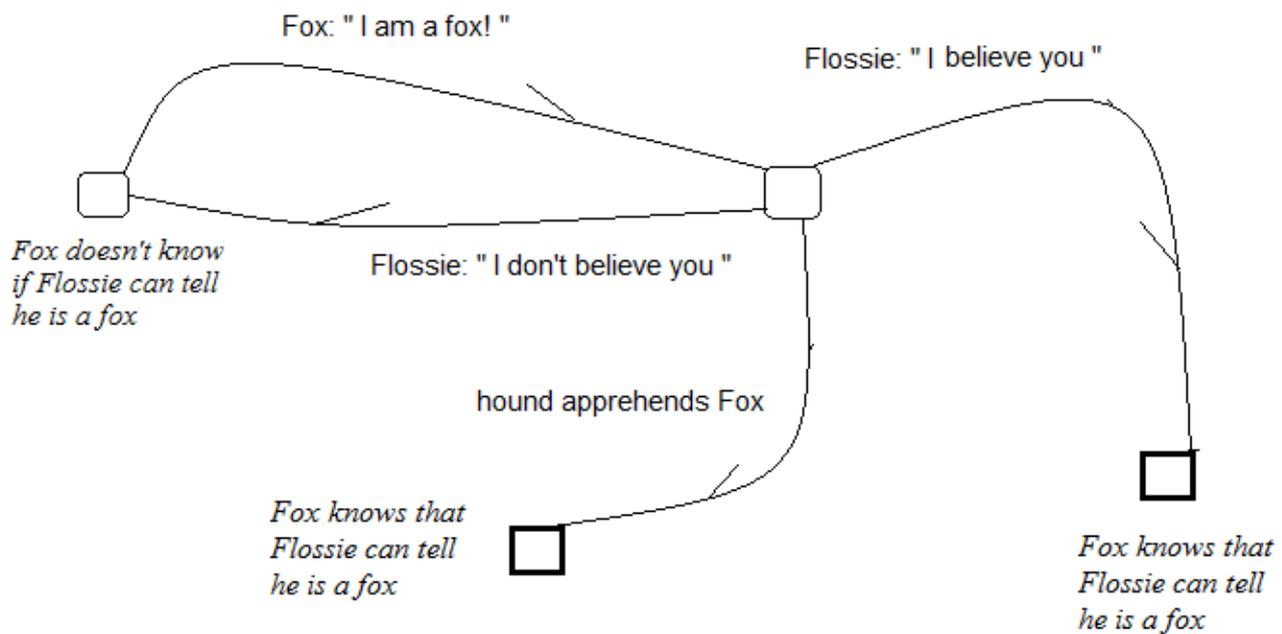
Fox says that of course he is a fox: “A little girl like you should be simply terrified of me. Whatever do they teach children these days?” But Flossie replies, “I aine never seen a fox before. So, why should I be scared of you and I don’t even-now know you a real fox for a fact?”

Flossie goes on her way.

(2)

Formal – structural aspects

Fabula level



Flossie and the Fox

“Oh well, a fox be just a fox. That aine so scary.” (1)

Flossie skips along and encounters a strange creature, who announces that he is a fox. Flossie looks him over carefully and says, “I just purely don’t believe it . . . I don’t believe you a fox.”

Fox says that of course he is a fox: “A little girl like you should be simply terrified of me. Whatever do they teach children these days?” But Flossie replies, “I aine never seen a fox before. So, why should I be scared of you and I don’t even-now know you a real fox for a fact?” Flossie goes on her way. (2)

Reasoning aspects

Story level

If Fox knows that Flossie can tell that he is a fox, then Flossie is at a disadvantage.

By game-theoretic analysis

Flossie gains by making Fox think Flossie is ignorant.

By game-theoretic analysis

Η πρόταση (1) και η παράγραφος (2) βρίσκονται σε *παλίνδρομη* σχέση:

Προϋποθέτοντας την (1), η Flossie μπορεί να αγνοήσει την αλεπού και να μην υπαναχωρήσει στον μεταξύ τους διάλογο (2).

Επειδή η Flossie δεν υπαναχωρεί (2), η αλεπού καταλαβαίνει ότι αν επιτεθεί ενδέχεται να συναντήσει αντίσταση: επομένως γίνεται επιφυλακτική, άρα λιγότερο επίφοβη (1).

Semantic – analytic aspects

Narrative level

Η πρόταση “Oh well, a fox be just a fox. That aine so scary.” ανήκει στον **Άλλο** της κοινότητας.

Narrative as a Form of Knowledge Transfer: Narrative Theory and Semantics

Mischa M. Tuffield, Nigel R. Shadbolt, David E. Millard
IAM Group, Department of Electronic and Computer Science
Southampton University, UK

Memories for Life aims to address the applicability of storing autobiographical knowledge in the form of *multimodal electronic media* and to identify any issues that may arise from such an experiment. This research aims to present how *Semantic Web* technologies could be adopted.

Given a collection of multimodal electronic autobiographical memories, a *vocabulary of terms and their relationships* is needed to annotate the “memory nuggets” to encapsulate their semantics.

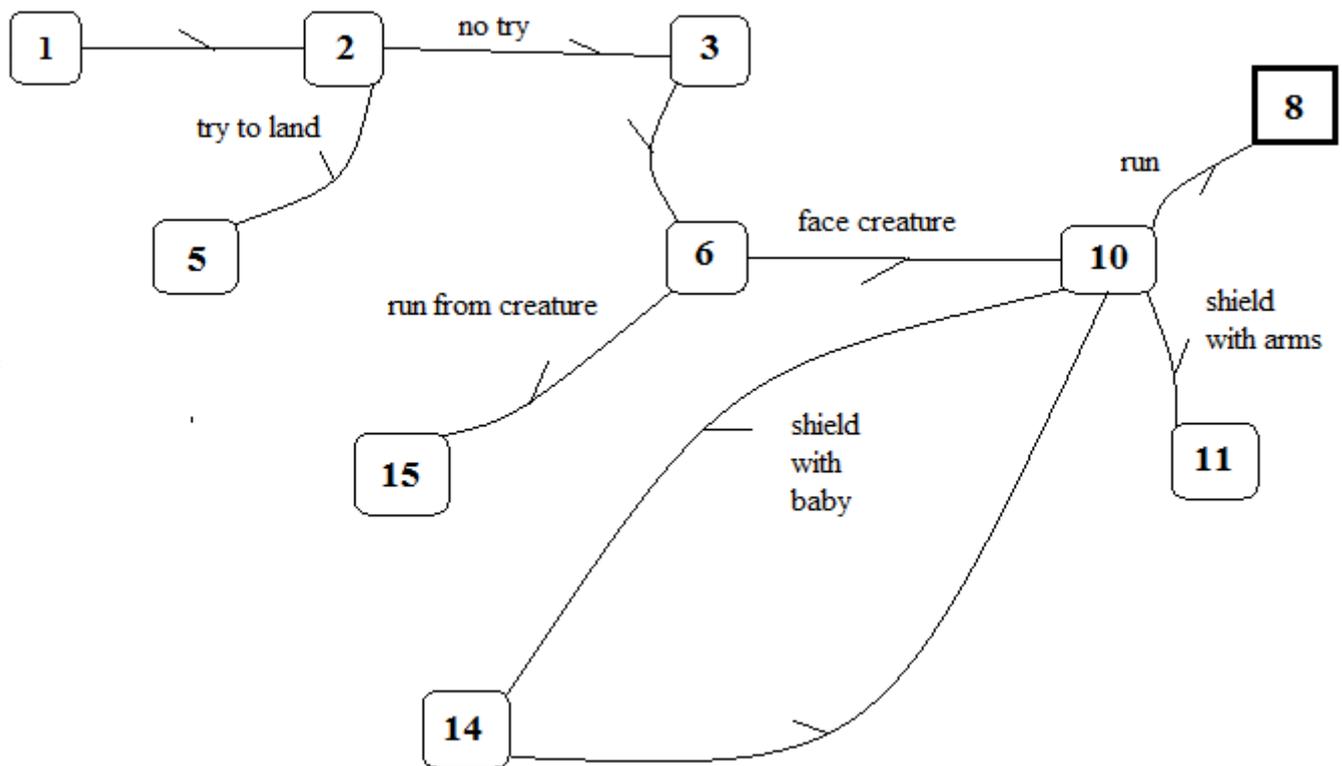
Work is currently being undertaken in the OntoMedia3 project to define an *ontology* that can be used to *mark-up* media in its various forms. This ontology has been designed to allow the mark-up of literature, film, and other forms of narrative.

Formal – structural aspects

2.2 Narrative Intelligence

UNDERGROUND KINGDOM

BY EDWARD PACKARD



Christoph Bode, Rainer Dietrich
(with material by Jeffrey Kranhold)

Future Narratives - Theory, Poetics, and Media-Historical Moment

2 Formal Models for Future Narratives

A nodal graph consists of *situations* (graph vertices) and *continuations* (directed edges).

Situations and continuations may be annotated by *aspects*.

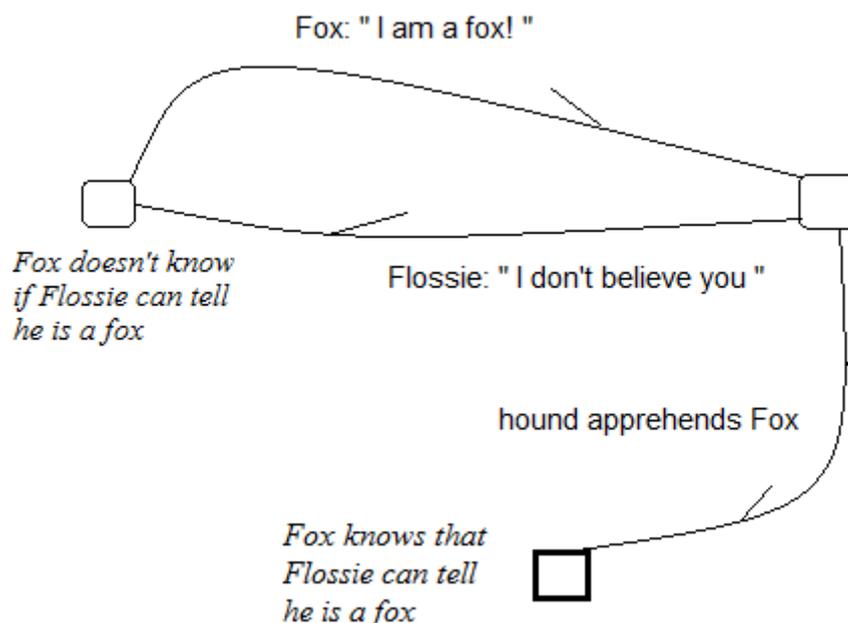
Example 1 *Flossie and the Fox*

... Flossie skips along and encounters a strange creature, who announces that he is a fox. Flossie looks him over carefully and says, "I just purely don't believe it . . . I don't believe you a fox." Fox says that of course he is a fox: "A little girl like you should be simply terrified of me. Whatever do they teach children these days?" But Flossie replies, "I aine never seen a fox before. So, why should I be scared of you and I don't even-now know you a real fox for a fact?" Flossie goes on her way.

... Fox begs Flossie to believe him, but it is too late because one of Mr. McCutchin's hounds arrives to apprehend Fox. As he dashes away, Fox shouts that the hound knows who he is: "Like I told you, I am a fox!" Flossie replies, "I know," and walks unharassed to Miz Viola's.

Aspect space 1: States of knowledge for agents

Aspect space 2: Assertions of agents , encounters of agents



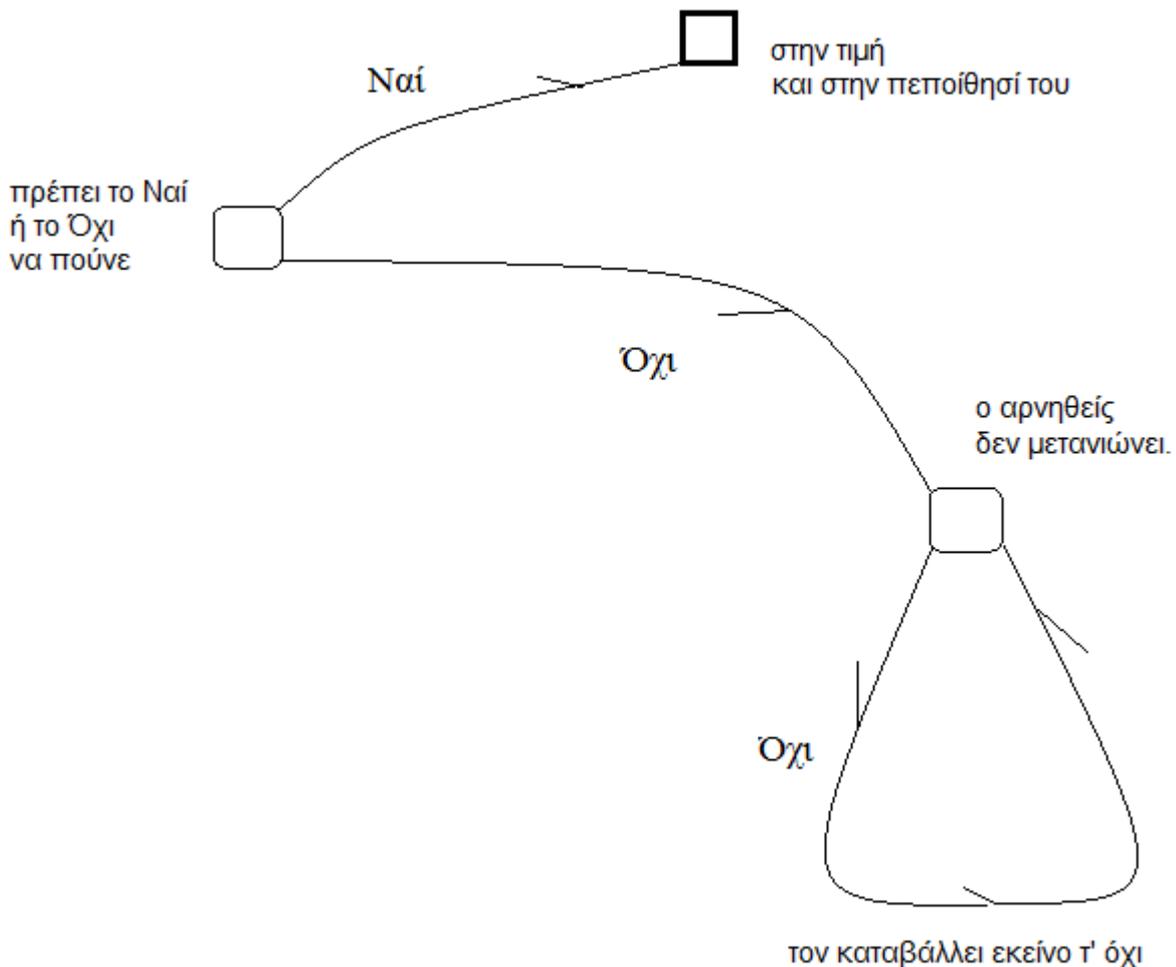
Example 2

Che fece il gran rifiuto

Σε μερικούς ανθρώπους έρχεται μια μέρα που πρέπει το μεγάλο Ναι ή το μεγάλο Όχι να πούνε. Φανερώνεται αμέσως όποιος το 'χει έτοιμο μέσα του το Ναι, και λέγοντάς το πέρα πηγαίνει στην τιμή και στην πεποίθησί του. Ο αρνηθείς δεν μετανιώνει. Αν ρωτιούνταν πάλι, όχι θα ξαναέλεγε. Κι όμως τον καταβάλλει εκείνο τ' όχι — το σωστό — εις όλην την ζωή του.

Aspect space 1: Υποκειμενικές ηθικές στάσεις

Aspect space 2: Υποκειμενικές επιλογές και βιώματα



. Graph and Matrix Metrics to Analyze Ergodic Literature for Children

Eugenia-Maria Kontopoulou
CEID, University of PatrasCEID,

Maria Predari
University of Patras

Thymios Kostakis
SEOKO

Efstratios Gallopoulos
CEID, University of Patras

Formal – structural aspects

Several questions related to the characteristics of hypertexts are expressed in terms of *graph and matrix theory*.

Reasoning aspects

A graph based metric is used to rank storylets.

Results on some acyclic digraphs indicate that the *rankings* convey useful information regarding *plot development*.

Semantic – analytic aspects

There is an analogy between the actions of *random surfers* on the Web and readers of interactive fiction.