

ShapeShifting TV Narrative Structures

Tutorial : EuroITV 2007
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Amsterdam 23 May 2007



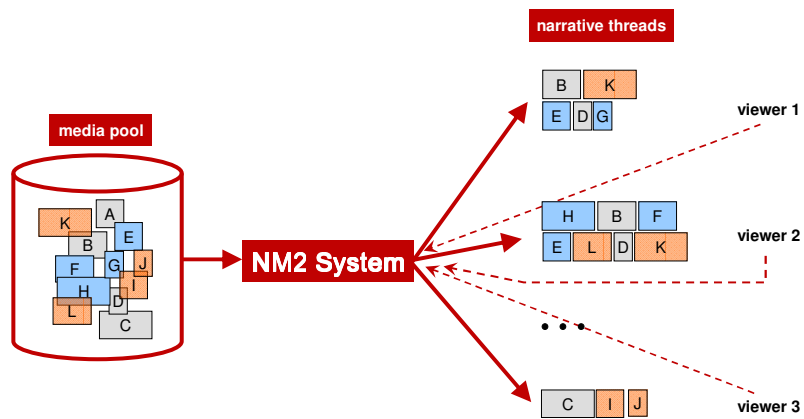
ShapeShifting TV – definition

- programmes that change **at viewing time** according to the preferences and choices of their viewers
- programmes that **reconfigure** and **interact in real time**
- programmes that **Shape-Shift**

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ShapeShifting TV – principle



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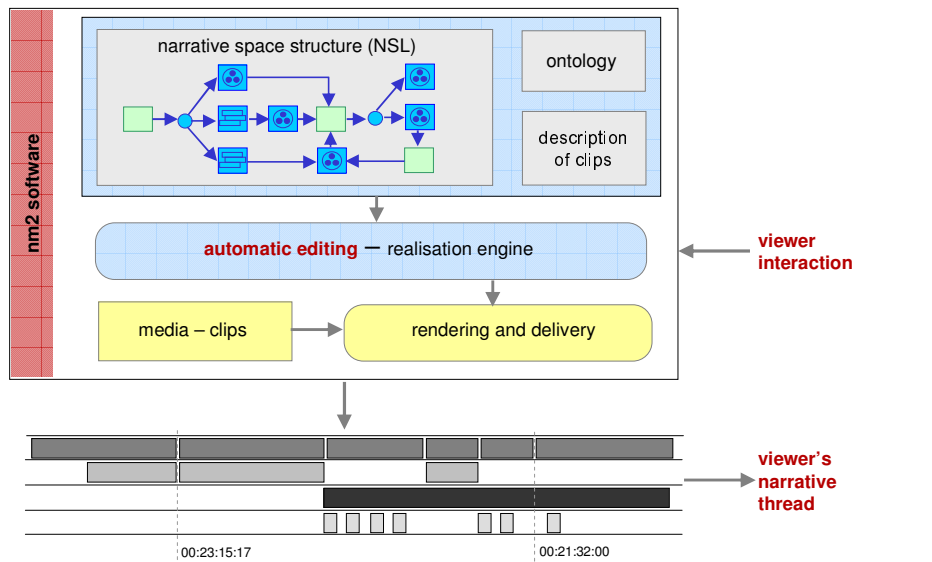
ShapeShifting TV – approach

- productions are authored
 - stories are crafted by storytellers
- authoring focuses on the structure of the narratives
 - **mechanics of assembling clips in stories**
 - (think of design and CAD)
- differences from
 - **current iTV**: works more or less with linear productions
 - **games**: emphasis on interaction not on narration
 - **intelligent storytelling**: story emerges
- NM2 system
 - allows authors to express their knowledge such that it could apply it at the time of delivery to automatically create narrative threads on the basis of users' interaction

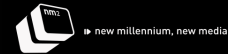
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software architecture



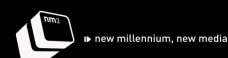
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Narrative Structure Language

- used for describing narrative spaces
 - media item – atomic narrative object
 - composition structures
 - link structure
 - layer structure
 - selection group
 - each structure has associated authoring mechanisms
 - narrative object
 - recursive definition

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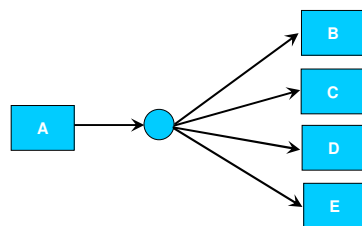
annotations of narrative objects

- general properties
 - different for ANO and NO
- user selected metadata
 - overall object
 - region
 - point
- NSL dedicated annotations
 - interaction
 - actions

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link structure



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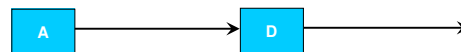
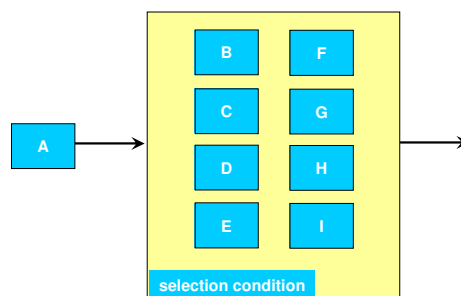
link structure

- sequencing
- node
 - narrative object
- edge/arc
 - enabling condition
- decision point
- conditions
 - interaction
 - metadata annotations
 - context
- disambiguation

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selection group – simple



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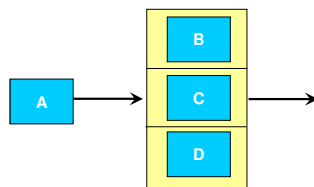
selection group

- set of narrative objects
- condition
 - interaction
 - metadata
 - context
- disambiguation
- looping
- content
 - explicitly selected – **explicit**
 - filtering condition – **implicit**

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layer



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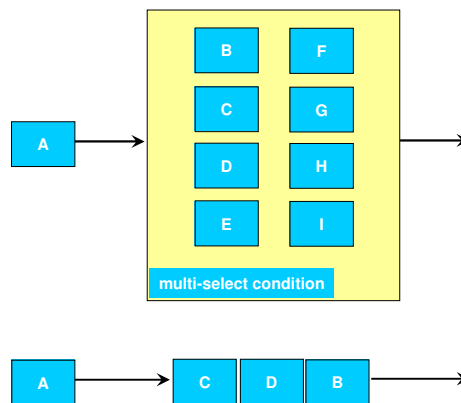
layer

- synchronisation and timing
 - sequence of layers
 - action annotations (e.g. triggered narrative object)
 - overall objects
 - regions
 - points

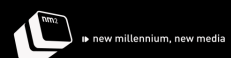
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selection groups – complex



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multi-select group

- constraints determine the choice and sequence

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editing rules

- scope
 - narrative object
- *may* alter the play list compiled from the object

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details and explanations

- demo

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