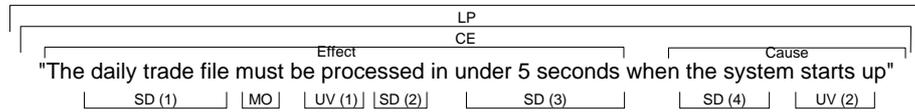


An Annotated Meta Model Example

“The daily trade file must be processed in under 5 seconds when the system starts up”

Meta Model Elements



LP	Lost Performative
MO	Modal Operator
UV	Unspecified Verb
SD	Simple Deletion
CE	Cause Effect

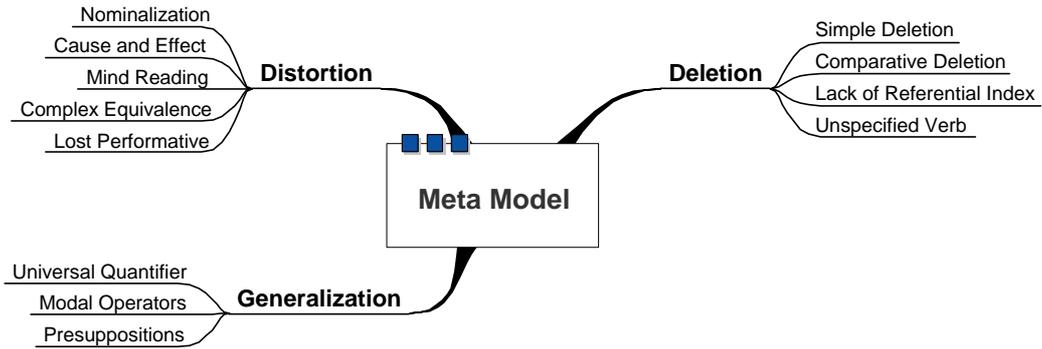
1. Identify the Meta Model Elements
2. What questions can we ask?
3. Identify the presuppositions
4. What do they lead to?
5. Ask the questions early
6. Use the questions as test conditions
7. Use the questions to guide your exploratory testing

LP	Who says “The daily trade file must...?”
SD(1)	Containing what? From where? Called what? Stored where?
MO	What if it isn't?
UV (1)	Processed How specifically?
SD (2)	Processed by what? It might be a mistake to assume it is the same system that starts up.
SD (3)	Where did this number come from? How Much under 5 seconds?
SD (4)	Which system?
UV (2)	Starts how? Starts When?
CE	Processed only when the system starts up? Never processed at any other time? Processed by any other systems? So if the system didn't start it wouldn't be processed?

Presuppositions

Presupposition	Leads to...
There is a daily trade file	what if it doesn't exist?
The trade file is generated in some way	by what system?
The trade file is accessible	is it on our environment, where does it reside? What if the permissions are set wrong?
The trade file can be processed	What if it is corrupt? Locked? Too Big?
The trade file is a file	What kind of file? Binary, Text?)
The system will start-up on a daily basis	What if the system doesn't start up one day, does the trade file get overwritten or something worse? What if the system starts up more than once?
There is only one daily trade file	
The system can process a trade file in under 5 seconds	What if it is too big? What if the transactions are very complicated?
There are knock on effects if the file is not processed in under '5' seconds : 'must'	What happens if it doesn't?
The daily trade file only contains trades for a day?	What does the File contain? What does a trade look like? What is a trade? What kinds of trades?
The system knows how to find the file	Is the location hard coded? Is the location passed as a parameter? Is the location in a config file?
The trade file has a specific name format	Is it always named the same thing?
The daily transaction file has transactions in it	What if the file is empty?
The daily transaction file is produced daily	Produced by what system? Produced when?
The daily transaction file is generated before our system starts up	What if the system starts up as the file is being generated?
The system is closed down at some point (in order to start up again)	What if the system is not closed down?

Meta Model Summary



Meta Model Element	Examples	Questions
Nominalization (N) <i>A process represented as a noun</i>	"The Software Testing is inadequate" "Testers don't get any respect"	<i>Convert object to a process</i> "What is involved in your software testing?" "How do you know you are not respected?"
Cause & Effect (CE) <i>X Causes Y</i> Stimulus and response	"Late delivery of software makes me angry"	<i>Identify missing information associated with the causality</i> "How specifically does it make you angry?" "Does it always make you angry?"
Mind Reading (MR) <i>Claim to knowledge (often about someone else's internal state)</i>	"They hate testers"	Identify source of claim "How do you know?"
Complex Equivalence (EQ) <i>2 statements represented as equivalent</i>	"They really don't know how to develop software, the requirements are never signed off."	<i>Check validity of the equivalence</i> "So if the requirements were signed off, that would mean that they knew how to develop software? Is that all it takes?"
Lost Performative (LP) <i>A value judgment with a missing judge and criteria.</i>	"It is wrong to test without writing Test Scripts first"	<i>Identify Source and criteria</i> "Who says?", "According to whom?"
Simple Deletion (SD) <i>Element missing from surface structure.</i>	"This system is going to fail"	<i>Recover deleted information.</i> "Fail how?", "which system?"
Comparative Deletion (CD) <i>Missing reference point.</i>	"This system is the worst" "This system is rubbish"	<i>Identify the unstated comparison.</i> "Compared to what?"
Lack of Referential Index (RI) Noun not specified	"They have a poor process"	<i>Identify the unstated reference.</i> "Who are they?"
Unspecified Verb (UV) Missing process details	"They want me to test this"	Identify & expand the unstated verb "How specifically do they want you to test this?"
Universal Quantifier (UQ) A Generalization	"Nobody will ever do that"	Find a counter example to counter a limiting generalization "I just did it"
Modal Operator (MO) Rules for limits	"We must add this requirement now" "I can't run these tests"	Explore the rule "What would happen if you didn't add that requirement now?" "What stops you running these tests?"
Presupposition (P) <i>What has to be true for this statement to be true?</i>	"If they know how much work unsigned-off requirements caused us they would make sure they were all signed."	<i>Challenge presuppositions and test our analysis</i> "How do you know they don't know?"

Table: Meta Model Elements, examples, questions and objectives

Meta Model Summary Diagrams

