6. THE NARRATIVE PROGRAM

SUMMARY

The narrative program (NP), developed by Greimas, is an abstract formula used to represent an action. Doing (action) is defined as a temporal succession from one state to the opposite state, effected by any agent (S1: the subject of doing). A state may be broken down into a subject of state (S2) and an object of state (O) and the junction between them, which is either a conjunction (n: the subject with the object) or a disjunction (u: the subject without the object). The long formula of the narrative program is:

NP = F {S1 \rightarrow [(S2 u O) \rightarrow (S2 n O)]} (the conjunctive NP) or NP = F {S1 \rightarrow [(S2 n O) \rightarrow (S2 u O)]} (the disjunctive NP).

For example, in the fable "The Crow and the Fox", we have:

NP = F {Fox \rightarrow [(Fox u Cheese) \rightarrow (Fox n Cheese)]}.

The abbreviated formula, which is the most commonly used, gives only the second state:

NP = F {S1 \rightarrow (S2 n O)} (the conjunctive NP) or

NP = F {S1 \rightarrow (S2 u O)} (the disjunctive NP).

This would give us, for example:

NP = F {Fox \rightarrow (Fox n Cheese)}.

An array of NPs is composed of at least two NPs between which at least one temporal relation (succession, simultaneity) or one presential relation (presupposition, mutual exclusion, etc.) is described. For example, the previous NP describing appropriation by the Fox and the (short form) NP of dispossession, NP = F {Fox \rightarrow (Crow u Cheese)}, presuppose each other reciprocally, in that one does not exist without the other; the temporal relation is simultaneity.

1. THEORY

1.1 ELEMENTS OF THE NARRATIVE PROGRAM

A product of Greimas' semiotics, the narrative program (NP) is an abstract formula used to represent an action (see Courtés, 1991, pp. 69-98, summarized here with our additions). Doing (action) is defined as a temporal succession from one state to the opposite state, effected by any agent (the subject of doing) and affecting any patient (the subject of state). A state may be broken down into a subject of state and an object of state and the junction between them, which is either a conjunction (the subject is with the object) or a disjunction (the subject is without the object). The two opposite states of a single action include the same subject and the same object; the opposition consists solely of the difference in the junction between them (conjunction becomes disjunction or the reverse)¹.

TME T1 (before)		\rightarrow	T2 (after)	
STATES	s1	\rightarrow	s2 (= ¬s1)	
STATES BROKEN DOWN	SnO	\rightarrow	SuO	
EXAMPLE: "The Crow and the	Crow with Cheese	\rightarrow	Crow without Cheese	
Fox"				
STATES BROKEN DOWN	SuO	\rightarrow	SnO	
EXAMPLE: "The Crow and the	Fox without Cheese	\rightarrow	Fox with Cheese	
Fox"				

Relations between actions, time and states in the narrative program

Legend: T: time, s: state, S: subject of state, O: object of state, n: conjunction, u: disjunction, ¬: negation.

1.2 THE FORMULAS OF THE NARRATIVE PROGRAM

The narrative program proper is presented as a long formula or a short formula. The formula for the narrative program, long or short, can be verbalized or explained as follows: the function by which a subject 1 (subject of doing) causes a subject 2 (subject of state) to be conjoined with (or disjoined from) an object (object of state). Here is the long formula:

¹ According to the principle that action requires only a change in junction, there is no action, strictly speaking, with respect to the object involved in the following "stories" (which does not mean that other actions do not occur with respect to other objects and subjects in the same story): Paul n Illness -> Paul n Illness (an identical junction); Paul u Money -> Paul n Illness (a different object); Paul n Illness -> Andy u Illness (a different subject). Also, note that in the actantial model, the subject, the object and their junction correspond to the second state of the NP.

$$\begin{split} \mathsf{NP} &= \mathsf{F} \; \{\mathsf{S1} \rightarrow [(\mathsf{S2} \; \mathsf{u} \; \mathsf{O}) \rightarrow (\mathsf{S2} \; \mathsf{n} \; \mathsf{O})] \} \; (\text{the conjunctive NP}) \; \text{or} \\ \mathsf{NP} &= \mathsf{F} \; \{\mathsf{S1} \rightarrow [(\mathsf{S2} \; \mathsf{n} \; \mathsf{O}) \rightarrow (\mathsf{S2} \; \mathsf{u} \; \mathsf{O})] \} \; (\text{the disjunctive NP}). \end{split}$$

To give an example of a (conjunctive) NP in the long form, in the fable "The Crow and the Fox", we have:

NP = F {Fox \rightarrow [(Fox u Cheese) \rightarrow (Fox n Cheese)]}.

The short formula of the NP, which is more commonly used, gives only the second state. This is based on the idea that only the second state need be mentioned, since the first state is its opposite (only the junction is different):

 $\label{eq:NP} \begin{array}{l} \mathsf{NP} = \mathsf{F} \left\{ S1 \rightarrow (S2 \ n \ O) \right\} \text{ (the conjunctive NP) or} \\ \mathsf{NP} = \mathsf{F} \left\{ S1 \rightarrow (S2 \ u \ O) \right\} \text{ (the disjunctive NP).} \end{array}$

Here is an example of a (conjunctive) NP in the short form:

NP = F {Fox \rightarrow (Fox n Cheese)}.

The subject of doing may or may not correspond to the subject of state; in other words, what accomplishes the action may or may not be what is affected by it. When the subject of doing is identical to the subject of state (SD = SS or S1 = S2), it is called reflexive action or performance; otherwise, the action is transitive (SD \neq SS or S1 \neq S2). For example, if we take the view that the crow is the one who (unintentionally) gives the cheese to the fox, then we have the following transitive action: NP = F {Crow \rightarrow (Fox n Cheese)}.

NOTE: ACTANTIAL SYNCRETISM

In Greimas' theory, actantial syncretism occurs when a single actor, such as a character, corresponds to two or more different actants. If we take the subject and object actants – the only actants directly involved in narrative programs (there are others in the actantial model and the canonical narrative schema) – we obtain the following syncretisms: (1) S1 = S2 (performance), (2) S1 = O (e.g., a professor who "dedicates himself" to his students), (3) S2 = O (e.g., a psychologist who enables a subject to "find himself"), (4) S1 = S2 = O (the injunction "Know thyself", for example). And lastly, there are some cases in which the actors fulfilling the actantial functions remain unknown (Courtés, 1991, p. 80). For example, a lucky find (finding an object by chance) could be transcribed in this way: ? \rightarrow S n O. But it is usually possible to describe these "unknown" elements in one way or another, in terms of luck, chance or even Providence in the case of the lucky find.

NOTE: VARIANTS OF THE NARRATIVE PROGRAM

Some of the following variants of the narrative program may be useful:

1. NP of manipulation (causing-to-do): NP = F1 [S1 \rightarrow F2 {S2 \rightarrow (S3 n O)}]. The equivalents are as follows: F1 and F2: Action 1 and Action 2, S1: the subject of manipulation (or sender-manipulator) and S2: the subject of the action (or receiver-subject). Manipulation (this term has no pejorative connotations in semiotic) is the function by which a subject manipulates another subject's wanting-to-do and/or having-to-do to prompt him into action. Manipulation is one of the components of the canonical narrative schema (see the chapter on this analytical tool), along with action, competence, performance and sanction.

2. NP of exchange: NP = F1 {(S1 \rightarrow S2 n O1)} \leftrightarrow F2 {(S2 \rightarrow S1 n O2)}. F1 and F2 represent the two actions involved in the exchange (for instance, the consumer gives money to the merchant who gives him an item in exchange).

3. NP of participatory communication: NP = F {S1 \rightarrow [(S1 n O u S2) \rightarrow (S1 n O n S2)]}. S1 keeps what he gives to S2 (the professor retains the knowledge that he transmits to others, for instance).

1.3 SIMPLIFIED FORMULAS FOR NARRATIVE PROGRAMS

To make them easier to read, in the narrative programs we use, we will replace the variables in the formula with the corresponding actors. We will also eliminate the parentheses and brackets. For "The Crow and the Fox", this would give us:

Fox \rightarrow Fox n Cheese.

We can even reduce the formula to just the second state and use very minimal notations for the actors. This would give us:

F n C (F = fox and C = cheese).

When doing this, we need to be careful not to include a state as part of an action if it was not preceded by the opposite state in the story, in other words, if it is not the direct result of an action. For example: Crow n Ugly (since the crow did not in fact change from beautiful to ugly; there are not two states pertaining to ugliness).

1.4 COMBINATORIAL ANALYSIS AT WORK IN THE NARRATIVE PROGRAM

The narrative program is essentially based on a combinatorics using the elements of the following oppositions: subject/object, state/doing (or action), and conjunction/disjunction²:

States: s1 (initial state): S2 u O; s2 (final state): S2 n O The subject of state: S2 The object of state: O The junction³: disjunction: u, conjunction: n Doing: the whole narrative program (or in the restrictive sense, the change from the initial state to the final state) The subject of doing: S1 The object of doing: the change from the initial state to the final state

Summary table of the elements of the narrative program

				T1	\rightarrow	T2
		-		s1	\rightarrow	s2 (= ¬s1)
NP with OD, OS, SD, SS	NP = F	{SD	\rightarrow	[(SS J OS)	\rightarrow	(SS ¬J OS)]}
				O[)	
Long formula NP	NP = F	{S1	\rightarrow	[(S2 u O)	\rightarrow	(S2 n O)]}
ex., S1 = S2: reflexive NP (= performance)		Fox	\rightarrow	Fox u Cheese.	\rightarrow	Fox n Cheese
ex., S1 ≠ S2: transitive NP		Crow	\rightarrow	Fox u Cheese	\rightarrow	Fox n Cheese
NP (short formula)	NP = F	{S1	\rightarrow			(S2 n O)}
ex., S1 = S2: reflexive		Fox	\rightarrow			Fox n Cheese
ex., S1 ≠ S2: transitive		Crow	\rightarrow			Fox n Cheese

LEGEND: NP: narrative program, T: time, s: state, F: function, OD: object of doing, OS: object of state, SD: subject of doing, SS: subject of state, J: junction, ¬J: opposite junction, n: conjunction, u: disjunction. In those cases where the kind of junction is specified, only conjunctive NPs are represented (where the subject is conjoined with the object in state 2), and not disjunctive NPs (where the subject is disjoined from the object in state 2).

1.5 ARRAYS OF NARRATIVE PROGRAMS

A NP array is composed of at least two NPs between which at least one temporal relation (succession, simultaneity) or one presential relation (simple or reciprocal presupposition, mutual exclusion, comparing/compared, etc.) is identified⁴. We will give a few examples.

The following NPs are in reciprocal presupposition, in that one does not exist without the other, and the temporal relation is simultaneity.

NP1 = F {Fox \rightarrow (Fox n Cheese)} NP2 = F {Fox \rightarrow (Crow u Cheese)}

Conversely, the following NPs are in mutual exclusion simultaneously, but not successively, in that they cannot be realized at the same time. (According to the logic of the story, only one of the two protagonists can take possession of the cheese at a time):

NP1 = F {Fox \rightarrow (Fox n Cheese)} NP2 = F {Crow \rightarrow (Crow n Cheese)}

In the following example, the second narrative program presupposes the first in succession, but not the reverse. (Carrying out an action presupposes the idea of carrying it out, but the idea of carrying it out is not necessarily followed by its realization.)

NP1 = F {Fox \rightarrow (Fox n idea of stealing)}

² In Greimasian theory, junction relates only to states; therefore, there is no junction of doing. A conjunction of doing might correspond to the actualization or realization of an action, and a disjunction of doing to the virtualization of an action, understood as its non-actualization or non-realization.

³ An incremental junction is conceivable. For example, by combining an intensity with a thymic evaluation of the junction, Zilberberg distinguishes between an insufficient junction, a junction (a correct one, we might say) and an excessive junction (2000, p. 20).

⁴ We use the term "narrative array" rather than *narrative trajectory*, since the notion of the narrative trajectory is linked with certain Greimasian conceptions that we have not adopted. A narrative trajectory is essentially a series of narrative programs that are consecutive in time and related by simple presupposition. In addition, when we establish temporal relations, we will not use Greimasian theory's reversechronological numbering system, in which the presupposing narrative program comes numerically before the presupposed program. Consider the following sequence (where the arrow indicates that a NP presupposes the one preceding it): NP1: John n job \leftarrow NP2: John n wage \leftarrow NP3: John n money. In Greimas' notation, our third NP would be number one, and so on.

NP2 = F {Fox \rightarrow (Fox n cheese stolen)}

1.5.1 AN EXAMPLE OF A SIMPLE NARRATIVE ARRAY

In order to represent temporal succession and simultaneity, we propose using the rows and columns of a table. The following table represents one of the NP arrays that may be used to describe this story: *Paul, who is an expert swimmer, rescues Andy from drowning, and then Bernard. (While rescuing Bernard, Paul thinks about the most beautiful moment of his life.) He does not get to Sasha in time to save him.*

An example of a simple narrative array

	T1 (NP1)	T2 (NP2)	T3 (NP3)
А	$P \rightarrow A n$ rescue	$P \rightarrow B n$ rescue	$(P \rightarrow S n rescue)$
В		$P \rightarrow P n$ thought	

We will use alphanumeric codes for the NPs to make them easier to find on the chart. (For example, $P \rightarrow P n$ thought is NP2b.) The parentheses around NP3a indicate that it was possible, but did not become real; it was not realized (we will come back to the possible/real status of NPs). Amongst the NPs we have selected, there is no specific logical relation on the axis of succession, such as presupposition (simple or reciprocal) or mutual exclusion; on the axis of simultaneity, there is a relation of mutual exclusion, in that any one of the three rescue NPs excludes the other two (the expert swimmer can only save one person at a time).

1.5.2 RELATIONS OF PRESUPPOSITION AND MUTUAL EXCLUSION

We will address the relations between simultaneous and successive NPs in more depth, that is, simple presupposition, reciprocal presupposition and mutual exclusion⁵. We can refer to the absence of presential relations between NPs as "parataxis"⁶.

All of these relations, or the absence thereof, are given in terms of the text being described. Thus, they could be different from the relations that would normally be established in reality. Taking just the example of reciprocal presupposition between simultaneous NPs, consider a text in which each time someone walks (whether just once or several times), he chews gum; or it even stipulates that in order to walk, one must necessarily chew and vice versa. Even if there are one or more cases in the text where one happens without the other, of course one could conclude that walking and chewing presuppose each other mutually, by using concepts such as the exception to the rule, bending the rules, general trends and approximation.

	Examples of simultaneity	Examples of succession			
No particular relation	NP1a: Paul n turn on the	NP2: Paul n read	NP3: Paul n whistle		
(parataxis)	lamp				
	NP1b: Paul n sneeze				
Simple presupposition	NP4a: Paul n food	NP5: Paul n money	NP6: Paul n buy		
	NP4b: Paul n roast chicken				
Reciprocal presupposition	NP7a: Fox n cheese	NP8: Seller n money	NP9: Buyer n product		
	NP7b: Crow u cheese				
Mutual exclusion	NP10a: Player x n ball	NP11: Paul n divorce	NP12: Paul n traditional Catholic wedding		
	NP10b: (Player y n ball)				

Examples of relations of presupposition and mutual exclusion between narrative programs

Comments:

We have listed only the final state of the action in the table, with no mention of the subject of doing.

The relation between NP4a-NP4b: The example in the table illustrates the relation between a general NP and a specific NP. This is a relation of simple presupposition, so long as there are at least two specific NPs associated with the general NP. Thus, in the story relating to this example, roast chicken is one possible food, but every food in the story is not necessarily roast chicken.

⁵ In Greimasian semiotics, a distinction is made between paradigmatic relations (*one element or another element*, that is, this NP or that NP) and syntagmatic relations (*one element and another element*, that is, this NP and that NP). These relations do not correspond exactly to the ones we have presented. For example, although syntagmatic parataxis is mentioned in Greimasian semiotics, what we will call "paradigmatic" parataxis apparently is not. It would seem that since the paradigmatic relation, strictly speaking, entails a relation of substitutional equivalence for any one temporal position, it overrides the parataxic relation in simultaneity. In syntagmatic relations, Courtés gives special treatment to comprehensive NPs. A comprehensive NP seems to be nothing more than a more complex narrative trajectory than the usual presuppositional "uni-linear" sequences found in Greimasian theory. For instance, a recipe can be broken down into sub-programs (and some of these into sub-programs as well, and so on) some of which are simultaneous or partially overlapping

programs (and some of these into sub-programs as well, and so on), some of which are simultaneous or partially overlapping. ⁶ When examining successions, we must be wary of the maxim *post hoc ergo propter hoc*, that is, of jumping to the conclusion that whatever occurs after an event is a consequence of it, or in other words, presupposes it.

The relation between NP5-NP6: Presupposition is not reciprocal, in that having money does not necessarily presuppose buying, but buying presupposes having money (at least in the realistic story we have invented).

The relation between NP7a-NP7b: The fox's appropriation of the cheese implies dispossession for the crow and vice versa, since, according to the logic of this fable, the cheese must necessarily be in the possession of one of the protagonists.

The relation between NP8-NP-9: This is a specific type of exchange. In the case of a purchase that must be paid in advance, the second narrative program only occurs if the first program has already been realized. Of course, there are exchanges in which the two NPs are realized simultaneously (especially if the two parties involved distrust each other, as in a case of ransom).

The relation between NP10a-NP10b: In a baseball game, one ball is in play at a time, so that when it is in one player's possession, it cannot be in another player's possession (at certain times, it is not in any player's possession).

The relation between NP11-NP12: If Paul gets a divorce, he cannot enter into another Catholic marriage afterwards, and, by correlation, if he gets married in the Catholic Church, he cannot have been divorced previously.

1.6 NPs AND MODAL CATEGORIES

A NP is marked for various modal categories, either implicitly or explicitly.

1.6.1 VIRTUALIZED / ACTUALIZED / REALIZED NARRATIVE PROGRAMS

A NP is marked implicitly or explicitly for ontological status (status with respect to existence). Greimasian semiotics distinguishes between the following modes of existence (however, "ontological status" is not the term used)⁷:

A NP is virtualized⁸ if the idea of the action exists, through desire or obligation (for instance, the idea of stealing something);

A NP is actualized if the action is under way (for instance, the robbery in progress);

A NP is realized if the action has been completed (for instance, the robbery has been carried out)⁹.

The ontological status of a NP tends to change as a function of time in the story. Different ontological statuses may follow one after another with no overlap. For example, a NP may be:

1. Non-existent, that is, completely irrelevant at T1 (for example, an honest citizen who has never thought of stealing until T2);

2. Virtualized at T2;

3. Actualized at T3;

4. Realized at T4.

⁷ Greimas and Courtés (1982, p. 111) give the following operational definition for semiotic existence: "the semiotic existence of any entity is determined by the transitive relation which binds this entity to the cognitive subject, and at the same time posits it as an object of knowledge". In semiotics, states of existence, reflected in what we call ontological status (Rastier's term), are not simply categorized as (1) non-existent / (2) existent. The second term of this opposition is broken down into sub-terms that vary in number and kind from one theory to another. (Even when the names are identical, the terms may mean different things.) Greimas and Courtés (1982, pp. 111-112) identify three sub-terms for describing actions: an action may be (2a) virtualized / (2b) actualized / (2c) realized. The ontological statuses in this triad correspond to potential action, action in process and completed action, respectively. Actualization and realization are equivalent to the manifestation of the action. The dynamic processes corresponding to this triad are: virtualization (getting from 1 to 2a), actualization (getting from 2a to 2b) and realization (getting from 2b to 2c). Fontanille mentions that "just as Guillaume proposed inserting "effectuation" between "force" and "effect", Greimas introduced actualization between virtualization and realization (1995, p. 19). The opposition existent/nonexistent is homologous to the opposition presence/absence, insofar as non-existence is a radical absence. The triad virtual / actual / realized is closely related to the triad inchoative / progressive (or durative) / terminative, which reflects the beginning, middle and end of an action, respectively (and is manifested in the verbal triad, begin / continue / finish, for example). We can conceive of at least two ways - not mutually exclusive - of interpreting these relations. In the first case, the two triads intersect, and virtualization is an actual beginning to action (in the sense that it sets up wanting-to and/or having-to-do a certain action); in the second case, the triad inchoative / progressive / terminative applies to the portion of the action extending from actualization to realization (the manifestation portion of the action); the terminative may be distinguished from realization in that the latter assumes a completely finished action, whereas the terminative can describe the ending as it is under way. Greimas and Fontanille later proposed adding a fourth mode of semiotic existence, the potential, which would come before the virtual and would correspond to the preconditions for signification, part of the hypothesis of the generative trajectory of signification (1991, pp. 10, 56-59, 145-147, 151-153). Notice that changing the triad into a tetrad adds consistency - which is

 ^a The terms "virtualization" and "actualization" do not have the same meaning in NP analysis that they have in isotopic analysis, such as in Rastier's interpretive semantics (see the chapter on structural relations).

⁹ Ontological status can be correlated with thymic values: In general, our societies evaluate crimes negatively, or dysphorically, with increasing intensity from the virtualized to the realized crime.

Or they may be collapsed into a single moment (e.g., a malicious glance).

Obviously, not all virtualized NPs are actualized, and not all actualized NPs are realized. The description is generally formulated from the perspective of the last time segment of the story, thus emphasizing NPs that have been realized. However, in some cases it becomes important to account for unrealized NPs, whether virtualized or actualized.

1.6.2 REAL/POSSIBLE NARRATIVE PROGRAMS

Drawing from Rastier's dialogics (1997) (see the chapter on dialogics), we propose the following distinctions in ontological status in lieu of the above:

A NP is real (a status indicating what is) if it has been realized;

A NP is possible (a status indicating what could be or could have been) if it may be realized later in the story (a possible future NP) or if it may have been realized at some later moment, but was not (a possible NP that never came to pass, that never became real).

If we make the connections between the two modal systems presented here, "possible" corresponds roughly to virtualized and actualized actions, and "real" corresponds to realized actions.

1.6.3 TRUE/FALSE NARRATIVE PROGRAMS

A NP is marked either implicitly or explicitly for veridictory status (true/false).

Whether ontological or veridictory, modal status may differ from one viewpoint to another, that is, for each observing subject, e.g. the different characters. Modal status can also change over time, as we have mentioned.

We distinguish the reference categories and observing subjects (which correspond to the truth of the text) from what we call the assumptive categories and observing subjects (which are subject to contradiction by the truth of the text). The narrator is generally the reference observing subject, especially if omniscient, and (s)he defines the reference categories.

For example, during his sleep, a character may mistakenly believe that he has attained the object of his desire; upon awakening, he understands his mistake: the conjunction has not really occurred, and it may never. The NP Dreamer n Object of desire is:

A true and real NP according to the dreamer at time 1 (sleeping); A false and real NP according to the dreamer at time 2 (awakening); A false and real NP according to the narrator from time 1 to time 2.

Unless there is some indication to the contrary, the statuses 'true' and 'real' are assigned by default to a NP, from the perspective of the reference observing subject. For example, this is the case with the NP: Fox n Cheese (if no other details are given). This is, in fact, the case with most of the NPs we present in this chapter.

1.6.4 AN EXAMPLE OF A MORE COMPLEX ARRAY OF NARRATIVE PROGRAMS

Consider the following story:

John is rich and happy. Luke asks Peter to rob John for him. Peter trains in preparation for the robbery. The night of the robbery, Peter opens John's safe. Then, like a dentist pulling a healthy tooth, he robs John; at the same time, Luke is eating a piece of cake. Peter could keep the loot, but he gives it to Luke. Luke checks the loot, keeps it and congratulates Peter. The moral of the story? John is no longer rich, but despite what you might expect, he is still happy.

We propose the following representation for the array of narrative programs contained in this narrative:

An example of a more complex array of narrative programs

	T1 - NP1	T2 - NP2	T3 - NP3	T4 - NP4	T5 - NP5
А	$L \rightarrow P n ask$	$P \rightarrow P n$ training	$P \rightarrow P n$ open safe	$P \rightarrow P n money$	$P \rightarrow P$ u money
В	$[P \rightarrow L n money]$	$[P \rightarrow L n money]$	$[P \rightarrow L n money]$	$[P \rightarrow L n money]$	$P \rightarrow L n$ money
С				$P \rightarrow J u money$	
D				$L \rightarrow L n$ cake	
E				$(P \rightarrow J u happiness)$	
F				Dentist \rightarrow patient u	
				healthy tooth	

_					
	T6 (NP6)	T7 (NP7)	T8 (NP8)	T9 (NP9)	T10 (NP10)
А	$L \rightarrow L n$ check loot	$L \rightarrow P n$ congratulations			
В		$(L \rightarrow P n)$ remuneration			
С					
D					
E					
F					

LEGEND: L: Luke, P: Peter, J: John. No brackets or parentheses: a real NP (realized). Parentheses: a possible NP that did not come to pass (a NP that was not realized, although it could have been). Square brackets: a possible NP (an action under way that is not yet real, not yet realized).

NOTES:

- Other NPs could be added: For instance, $J \rightarrow J n$ discovers he has been robbed; this NP is presupposed by the affirmation that John remains happy in spite of it all.

- It may be relevant to formulate other objects (for example, $P \rightarrow P$ n money = $P \rightarrow P$ n robbery). The names of the elements need not be identical to those used in the text (for instance, the text may not mention money by name).

- Listed here are only a few of the NPs whose ontological status is "possible".

- The ontological status of the NP about the dentist is difficult to define, given that it is a comparing action. But since the compared action is realized, one might say that the same applies to the comparing action.

2. APPLICATIONS

2.1 APPLICATION I: ANTOINE TONNY'S TOFFEE BY MAGRITTE

Antoine Tonny's Toffee Magritte (1931)

* * *



© Estate of René Magritte / ADAGP (Paris) / SODRAC (Montréal) 2006

The poster Antoine Tonny's Toffee by Magritte portrays a polemical situation: the number of coveted objects (a toffee candy) is less than the number of subjects coveting it (a cat and a dog). In all probability, the protagonists are operating under categorial logic (the all-or-nothing kind) as opposed to incremental logic (a logic of compromise, in which it would be possible to share the object in order to resolve the conflict irenically (from the Greek eirênê, "peace"; thus, in a manner that reestablishes or promotes peace). The overall effect of selecting this kind of logic is a sort of hyperbole glorifying the advertised product: everyone will fight tooth and nail over toffee this delicious. Rather than using the bone-of-contention topos (where an object's value is such that it disrupts alliances, such as friendship), Magritte uses the topos of consensus between enemies: dogs and cats, no matter how dissimilar they are, go crazy over the same toffee. The general opposition between the dog and the cat is reinforced by a series of visual oppositions: white fur / black fur, kinky fur / smooth fur (even with its hackles up), rounded / pointed ears and tail, and round / almond-shaped eves. Using two strongly polarized subjects, Magritte somehow manages to cover the spectrum of subjects who like toffee: everyone loves it, even creatures as radically dissimilar as dogs and cats. Since the product is intended for humans, the advertisement establishes a comparison between them and animals. This comparison may underlie the topos in which a subject regresses under the influence of his desire: adults become children; reasoning human beings become instinctive animals. Moreover, the candy is oversized, which is a symbolic indication of its force of attraction.

The primary states involved in the story of this poster are: Cat n Toffee, Cat u Toffee, Dog n Toffee and Dog u Toffee. The scene depicted is located at that moment in time when the pendulum could swing from one state to another. However, there is no indication to tell us whether the cat or the dog will win, in order to determine the final state. Likewise, there is nothing to indicate if one of the protagonists had the toffee in his possession initially, or if both of them snatched the object of desire simultaneously.

The NPs representing the four states of this story are as follows:

A. COMPARING NPS

- 1. NP of appropriation: Cat \rightarrow Cat n Toffee
- 2. NP of dispossession: Cat \rightarrow Dog u Toffee
- 3. NP of appropriation: $Dog \rightarrow Dog n$ Toffee
- 4. NP of dispossession: Dog \rightarrow Cat u Toffee

B. COMPARED NPS

- 5. NP of appropriation: Human 1 \rightarrow Human 1 n Toffee
- 6. NP of dispossession: Human 1 \rightarrow Human 2 u Toffee
- 7. NP of appropriation: Human 2 \rightarrow Human 2 n Toffee
- 8. NP of dispossession: Human 2 \rightarrow Human 1 u Toffee

A relation of reciprocal presupposition exists between NPs 1 and 2, NPs 3 and 4, NPs 5 and 6, and NPs 7 and 8: in this story, any instance of appropriation by either of the protagonists has as its corollary dispossession for the other protagonist.

A relation of mutual exclusion is established between NPs 1 and 3, NPs 2 and 4, NPs 5 and 7, and NPs 6 and 8: only one of each pair can actually come to pass.

There is also a relation of mutual exclusion between NPs 1 and 4, NPs 2 and 3, NPs 5 and 8, and NPs 6 and 7.

There is a relation of comparison between the NPs of group A and the corresponding NPs of group B.

The following table summarizes these relations.

Table of relations between NPs

	NP 1	NP 2	NP 3	NP 4	NP 5	NP 6	NP 7	NP 8
NP 1	-	r. presupp.	m. exclusion	m. exclusion	comparison			
NP 2	r. presupp.	-	m. exclusion	m. exclusion		comparison		
NP 3	m. exclusion	m. exclusion	-	r. presupp.			comparison	
NP 4	m. exclusion	m. exclusion	r. presupp.	-				comparison
NP 5	comparison				-	r. presupp.	m. exclusion	m. exclusion
NP 6		comparison			r. presupp.	-	m. exclusion	m. exclusion
NP 7			comparison		m. exclusion	m. exclusion	-	r. presupp.
NP 8				comparison	m. exclusion	m. exclusion	r. presupp.	-

2.2 APPLICATION II: "THE DOG AND THE PERFUME" BY CHARLES BAUDELAIRE

* * *

"The Dog and the Perfume" Baudelaire, *Paris Spleen*

"- My good dog, my handsome dog, my dear poochie-woochie, come sit by me. Come here and breathe this excellent perfume purchased of the best parfumeur in town."

And the dog, wagging its tail, a sign, I believe, among those poor creatures corresponding with the laugh or the smile, he steps up and lays his damp nose curiously beside the open bottle of perfume; then, shrinking suddenly with fright, he bays at me. This is a reproach.

"- Ah! miserable dog, if I had offered you a sack of dung you would have sniffed it with delight, and probably eaten it. Thus, you, unworthy companion of my sorry life, in this you resemble the public, to whom one must never offer delicate perfumes – these will just exasperate them. For them, only the most meticulously selected rubbish." (Adapted from K. Dixon's translation, 6/98)

* * *

2.3 TIME AS REPRESENTED IN THE STORY

- T1: / purchases the perfume.
- T2: I calls the dog, flatters him, and offers him an action to do.
- T3: The dog approaches, wagging its tail (an iterative action). (The present participle indicates simultaneity, or at least prompts us to think of simultaneity.)
- T4: The dog lays his nose on the bottle and inhales.
- T5: The dog shrinks back and barks (due to the symmetry between these actions and the actions at T3, one can include both actions in the same time interval). The existence of this time interval is indicated by *then*.
- T6: The master rails at the dog. This ranting suggests various actions, the first of which is a possible action whose temporal location is fuzzy: the dog would enjoy excrement. It can be located at T4 (as a substitute task for enjoying the perfume), T7 (as a subsequent activity of verification), or All Time (as a truth that remains valid all of the time). Next there are at least four series of evaluations (thymic evaluations) that are complementary to the dog's evaluation of the perfume: The public's reaction to "rubbish" and its reaction to great works of poetry, and the narrator's reaction to the same objects. These evaluations, unlike the dog's evaluation of dung, do not seem to call for subsequent verification; at least they are not presented in this way. They seem more like truths that were established even before T1. Whatever the case, because of their symmetry with the NP in which the dog evaluates the perfume, we have placed these temporally problematic actions in the same column as this NP.

	T1 (NP1)	T2 (NP2)	T3 (NP3)	T3 (NP3')	T4 (NP4)	T4 (NP4')	T5 (NP5)	T6 (NP6)
а	I → I n perfume	$I \rightarrow D n call$	$C \rightarrow I n sign of enjoyment {wagging}$	D → D n approaches bottle	$D \rightarrow D n sniff$	D → D n evaluate perfume	D→ D u approach	I → D n reproach
b		$I \rightarrow D$ n sign of enjoyment	Person x → Person y n smile			OTHER TIMES D → n evaluates dung	D → I n reproach {bark}	$(I \rightarrow D n sign of enjoyment)$
С		(I → D n reproach)				Public → Public n evaluate poetry	$(D \rightarrow I n sign of enjoyment)$	
d						Public → Public n evaluate Poetry		
е						I → I n evaluate poetry		
f						I → I n evaluate Poetry		

A narrative array in "The Dog and the Perfume Bottle"

LEGEND: (): possible NP that did not come to pass (did not become real, unrealized), italics: NP of comparison, {}: alternative, more specific NP. The upper and lowercase letters in *poetry* indicate great poetry and mediocre poetry, respectively.

NOTES:

- In order to highlight the symmetries between NPs, we have chosen not to superpose some NPs that are simultaneous (which means that we have columns NP3 and NP3', and also NP4 and NP4').
- We could have a NP: I → D n commands, if we distinguish the salutations "my good dog, ..." from what is being asked of the dog ("come ... "). This narrative program would be broken down into three consecutive sub-programs that the dog must carry out: D n near the bottle, D n sniff, D n evaluate (or more accurately, evaluate positively).
- The narrative program I → I n perfume summarizes the action of obtaining the perfume. If this action were broken down, we would find the narrative program: Parfumeur → I n Perfume. This program has comparative companion programs: Author → Public n poetry and Author → Public n Poetry (insofar as there is no distinction between the perfume's producer and distributor, or if they are mixed up).
- The last two NPs are symmetrical: the dog and I insult each other, each in his own language (there is a homology between the oppositions bark / wag and criticize / flatter).
- Sniffing and evaluating can be seen as simultaneous.

For additional analysis, read the study on the same text in the chapter on thymic analysis.

3. SUMMARY DIAGRAM

Diagram summarizing the narrative program



LEGEND

- 1. Vertical arrows: components (for ex., a state (1 or 2) is composed of a subject of state, a junction and an object)
- 2. Horizontal arrows: classifications (for ex., a junction is classified as either a conjunction or a disjunction)
- 3. Bold-face link with no arrow: other relation

The results of the analysis depend on the time of observation and the observer (subject) whose point of view is being reported.