Applying and Evaluating Two Influential Coherence-Based Models of Text Analysis

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Abstract

The notion of 'coherence' might be problematic, especially when viewed in relation to cohesion. There are some models which consider cohesion and coherence synonymous, being both derived from the verb 'cohere'. Other models consider the two disparate. However, the approach adopted here is the one that opts for the separation of cohesion and coherence. Moreover, only coherence are discussed here according to two influential models, and the deficiencies in these two models are explored through the approach adopted by Hoey and Jordan (1994). The paper concludes that the two models of coherence presented reflect the way coherence-based interpretation is effectuated. The van Dijk model maps the way comprehension can be approximated in the form of micro- and macro-structures. The two levels of analysis are interrelated, since micro-structures usually operate at the sentence level. de Beaugrande and Dressler's model, on the other hand, is based on the same cognitive background, but it employs intricate networks in order to map how coherence is established. Yet the two strategic points from which de Beaugrande and Dressler's model starts off are too rigid to be realistic. The model is remiss about the global structure of a given text, and this is why the more the text enlarges, the more intricate the network-cum-schema becomes.

Keywords: Coherence; cohesion; van Dijk, de Beaugrande; macro-structure; micro-structure

يمكن أن يكون مفهوم "التماسك" إشكاليًا ، خاصةً عند النظر إليه بالنسبة إلى التلاحم النصي. هناك بعض النماذج التي تعتبر التلاحم والتماسك اللغوي مترادفين ، حيث ينبع كلاهما من الفعل "يتماسك (to cohere) ". وتعتبر نماذج أخرى المفهومين منفصلين. ومع ذلك ، فإن النهج الذي سيتم تبنيه هنا هو النهج الذي يختار فصل التلاحم عن التماسك

اللغوي. علاوة على ذلك ، لن يتم مناقشة سوى التماسك اللغوي هنا وفقًا لنموذجين مؤثرين ، ويتم استكشاف أوجه القصور في هذين النموذجين من خلال النهج الذي اتبعه هوي وجوردان (1994). ويخلص البحث إلى أن النموذجين محل الدراسة يعكسان الطريقة التي يتم بها تفسير النصوص القائمة على التماسك اللغوي. فيرسم نموذج فان دايك الطريقة التي يمكن بها تقريب عملية الفهم في شكل هياكل مصغرة وكبيرة. كما أن المستويين التحليليين مترابطان ، حيث تعمل البنى الصغرى عادة على مستوى الجملة. من ناحية أخرى ، يعتمد نموذج دي بوجراند ودريسلر على نفس الخلفية المعرفية ، ولكنه يستخدم شبكات معقدة لرسم خريطة كيفية تأسيس التماسك اللغوي. ومع ذلك ، فإن النقطتين الإستراتيجيتين اللتين ينطلق منهما نموذج دي بوجراند ودريسلر صارمتان للغاية بحيث لا تكونان واقعيتين. كم أن النموذج يتجاهل البنية الكلية للنص، ولهذا السبب كلما اتسع النص ، أصبح النموذج الشبكي أكثر تعقيدًا.

الكلمات المفتاحية: التماسك؛ التلاحم؛ فان دايك؛ دي بوجراند؛ البنى الكبرى؛ البنى الصغرى

1. Just Before Starting: Demarcating the Borders Between Cohesion and Coherence:

The notion of 'coherence' might be problematic, especially when viewed in relation to cohesion. There are some models which consider cohesion and coherence synonymous, being both derived from the verb 'cohere'. Other models consider the two disparate. Both views will be discussed below.

Knott's (1997) is a case in point. She prefers to discuss cohesion and coherence under one umbrella term, which is 'coherence relations'. She (ibid:1-2) believes that coherence can be discussed in the light of incoherence. Moreover, she underlines the role of context in coherence, giving the following example:

1- Sally decided to take the history course. The ducks on the lake were not eating the bread.

Knott (ibid: 3) maintains that the above text can be perfectly understood if Sally is imagined to have unusual superstitions about the ducks on the lake.

Knott's prelude to coherence relations is the processing of coherence itself. This is done, she (ibid:12-13) contends, in view of 'text spans' which are textual units of the size of a clause or even bigger. She provides the following diagrams which illustrate the point:

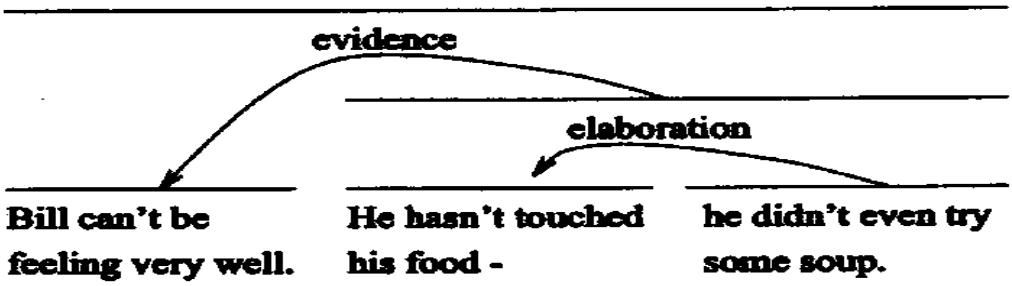


Figure 1: Knott's 'text spans'.

The horizontal lines represent text spans, and the curved line represents the relation between them. Coherence relations have different taxonomies which are given by Knott (pp. 16-20) as follows:

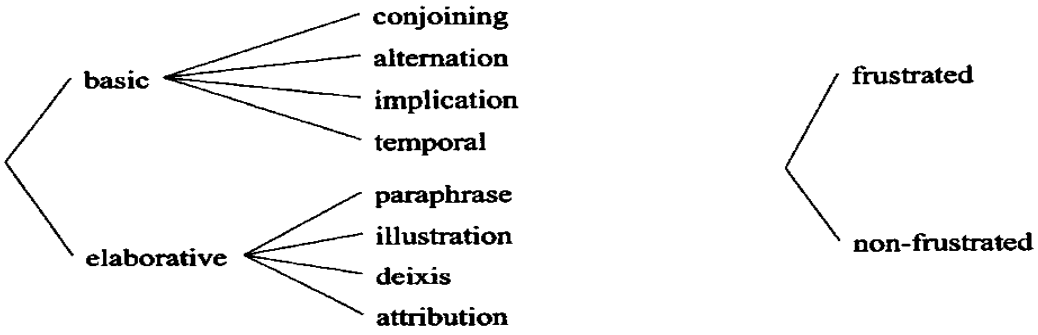


Figure 2: Knott's basic taxonomy of coherence relations.

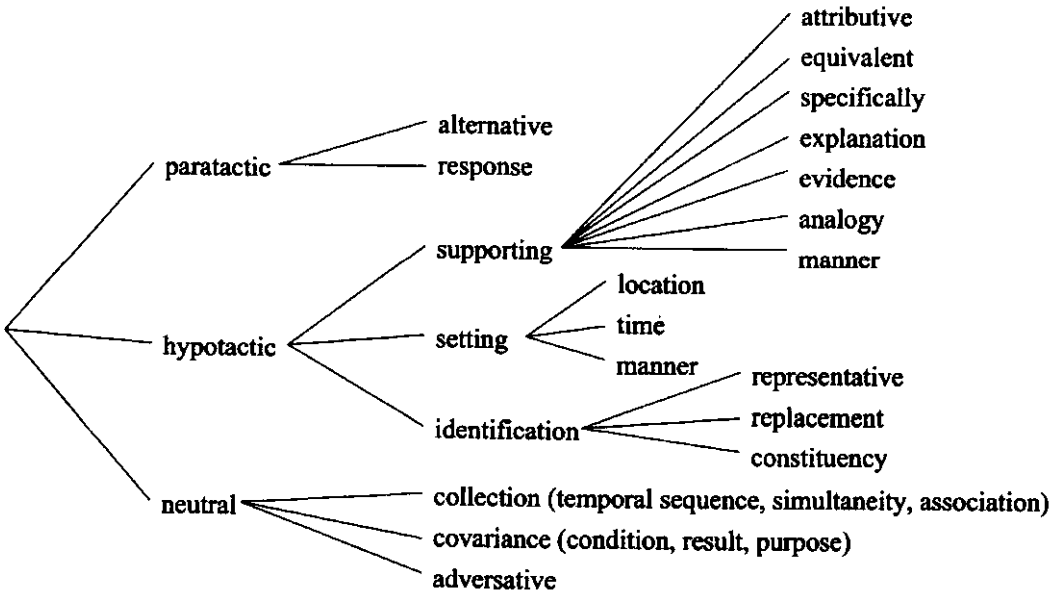


Figure 3: Knott's extensive taxonomy of coherence relations.

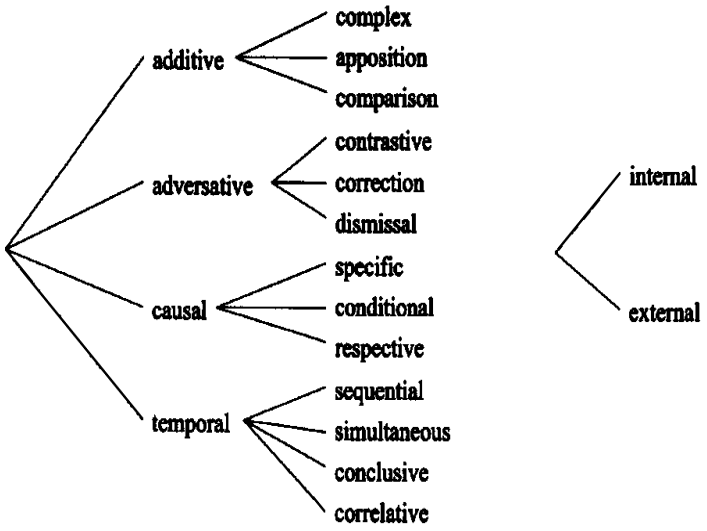


Figure 4: Knott's alternative taxonomy of coherence relations.

What is notable here is that Knott's approach views cohesion and coherence as intimately close to each other. The same view is adopted by Redeker (2000:4), who maintains that: 'A widely accepted current paradigm for the description of textual coherence is a group of approaches that describe text organization in terms of coherence relations, rhetorical relations, or discourse structure relations'.

On the other hand, there are approaches which insist on the separation between the two

terms theoretically. Hobbs' (1976) is a case in point. He (ibid:6) maintains that the cohesive relations studied by Haliday and Hasan (1976) can be seen as deriving from coherence relations. Hobbs (ibid) provides a classification of coherence relations as follows:

1- Elaboration: 'Go down Washington street. Just follow Washington Street three blocks to Adams Street'. The pattern is recognized by inferring 'going' from 'following' and matching the paths from the two sentences.

2- Parallel: 'Set the stack pointer to zero, and set link variable P to ROOT'.

3- Contrast: 'You are not likely to hit the bull's eye, but you're more likely to hit the bull's eye than any other equal area'.

It is clear that Hobbs' coherence relations make no reference to cohesive markers, and thus underpins the role of inferencing and implication in coherence as opposed to explication in cohesion.

Mani et al (2003) also underline the differences between cohesion and coherence. To them, coherence is a reflection of the hierarchical structure of the text to achieve certain argumentative goals, whereas cohesion is brought about by the use of linguistic devices that are dispersed in different portions of the text to lend it connectedness. Ben-Anath (2006) also concurs, bringing to the fore the role of connectives in discourse comprehension. She (ibid: 3) criticizes Halliday and Hasan's model (1976) as incomplete in terms of text understanding. She quotes Blakemore's (1992) view which emphasizes the shift from linguistic connectivity (i.e. by means of explicit cohesive markers) to connectivity of content (i.e. by means of coherence relations).

However, the approach that will be adopted here is the one that opts for the separation of cohesion and coherence. Moreover, only coherence will be discussed here according to two influential models, and the deficiencies in these two models will be explored through the approach adopted by Hoey and Jordan (1994).

2. Two Coherence Models:

2. 1. Van Dijk's Model (1977):

Van Dijk's model of discourse comprehension has revolutionized text linguistics and discourse analysis. It has established basic notions such as coherence, frames, scripts, microstructures and macrostructures. It has also paved the way for further explorations in pragmatics and cognitive linguistics through van Dijk's collaboration with Kintsch (1978). van Dijk's model (1977) derives its importance from emphasis on the role of coherence as a starting point for pragmatic analysis on more global levels (i.e. microstructures and macrostructures).

Van Dijk (1977: 93) defines coherence as ' a semantic property of discourses, based in the interpretation of each individual sentence relative to the interpretation of other sentences'. He (p.96) believes that coherence relations exist between propositions (like those explained above); values must thus be assigned to these propositions or parts of sentences. He also speaks of 'model structures' which depend on each other; individuals may be introduced or eliminated in the course of discourse, and each sentence is to be interpreted with respect to its 'actual domain of individuals' (van Dijk's term). This implies, he maintains, that sentences in a discourse are connected to each other so that interpretation occurs a priori. Moreover, 'properties' or 'relations' (i.e. predicate values) change for an individual 'at different time points and in different possible worlds' (p.96). Thus, a discourse containing two propositions like *John is ill* and *John is not ill* may not be inconsistent.

Van Dijk (pp. 98-99) gives a concrete example of coherence at work. The following passage is cited:

> Clare Russel came into the Clarion office on the following morning, feeling tired and depressed. She went straight to her room, took off her hat, touched her face with a powder puff and sat down at her desk.
>
> Her mail was spread out neatly, her blotter was snowy and her inkwell was filled. But she didn't feel like work…

Van Dijk discusses one important cognitive condition of semantic coherence through this passage, i.e. the 'assumed normality of worlds involved' (p.99). He identifies the term as the role played by individuals' knowledge about the structures of worlds in general and of

particular states of affairs or courses of events in determining expectations about the semantic structures of discourse. Thus, normal propositions can be added to the above passage as well as abnormal ones. van Dijk lists the following as abnormal propositions (or discourse alternatives):

1- (…) took off her clothes (…)
2- (…) threw her desk out of the window (…)
3- (…) her mail was hanging on the wall (…)
4- (…) she drank her inkwell (…)

He introduces here the notion of 'frame', which is '[t]he set of propositions characterizing our conventional knowledge of some more or less autonomous situation (activity, course of events, state)' (pp.90-91). The above example illustrates the office frame with all its events and contents.

Van Dijk (pp.102-103) summarizes coherence conditions as follows:

1- Each situation of each model of the discourse model is either identical with an actual (represented) situation or accessible from this situation.
2- There is at least one individual function for all the counterparts of this function.
3- For all other individuals, there is a series of other functions defined by relations of partiality (inclusion, part-whole, membership, possession).
4- For each property (or relation) applied to the same individual in the successive models of discourse model, there is a more comprehensive property or a dimension containing sets of characteristics.
5- For each fact in the subsequent models of the discourse model, there is a fact that is a condition of other facts or a consequence of it.
6- A sequence of sentences consisting of two coherent sequences is coherent if there is a relation such that individuals or properties of the two topics or frames satisfy this relation in the discourse, or if the first sequence contains a predicate giving possible access to the possible worlds in which the second sequence is satisfied.

Van Dijk (p.108) touches upon inferencing as a consequence of coherence in discourse:

> It has been remarked several times that natural language discourse is not EXPLICIT. That is, there are propositions which are not directly expressed, but which may be INFERRED from other propositions which have been expressed. If such implicit propositions must be postulated for the establishment of coherent interpretations, they are what we called MISSING LINKS.

To Van Dijk (p.109), inferencing is closely related to 'completeness', i.e. the degree to which information is explicit in a discourse. The following examples (p.109) well illustrate the point:

1- John came home at 6 o'clock. He took off his coat and hung it on the hatstand. He said "Hi, love" to his wife and kissed her. He asked "How was work at the office today?" and he took a beer from the refrigerator before he started washing up the dishes…

2- John came home at 6 o'clock and had his dinner at 7 o'clock.

3- John came home at 6 o'clock. Walking to the main entrance of the flat he put his hand in his left coat pocket, searched for the key to the door, found it, took it out, put it into the lock, turned the lock, and pushed the door open; he walked in and closed the door behind him (…)

Example 1 is, Van Dijk argues, a relatively complete action discourse: all actions of roughly the same level have been referred to. Example 2 is incomplete, however: it does not mention John's activities between 6 and 7 o'clock. Example 3 is overcomplete: it details actions that can be easily inferred. An undercomplete discourse, Van Dijk (p.110) maintains, may run as follows:

4- (…) He put his hand in his left pocket and searched for the key. He turned the lock. He closed the door (…)

In this example, details are given of one action but not of the other actions.

Van Dijk's model, moreover, makes reference to higher levels of discourse processing, namely macrostructures. They are global structures that organize discourse structures in a memorable way. Macrostructures (Van Dijk, 1977: 143) have the functions of organization, in processing and memory, of complex semantic information; this information will be

reduced to macrostructures. Thus, the following text can be boiled down to 'Fairview was dying':

> Fairview was dying. In the past, it had been a go-ahead, prosperous, little town and its large factories, specializing in hand-tools, had been a lucrative source of wealth (p.143).

Van Dijk (p.157) finally discusses the cognitive bases of macrostructures:

> In ACTUAL PROCESSING, these operations [i.e. information reduction ones] are however HYPOTHETICAL or PROBABLISTIC: during input and comprehension of a certain sentence and underlying propositions the language user tentatively constructs the macro-propositions which most likely dominates the proposition in question. This hypothesis may be confirmed or refuted by the rest of the discourse. In case of refutation another macro-proposition is constructed. (original emphasis)

Van Dijk (p.159) also maintains that his model is based on hierarchicality: discourse processing does not proceed linearly through micro-information; hierarchical rules and categories and the formation of macro-structures are necessary.

Another example may shed more light on other complex mental processes involved establishing coherence relations in a text. Consider the following excerpt
(Robertson, 1967: 4):

> *...If you are looking down on a glen with stags in the bottom and the wind is wrong, it is often possible tom have your scent carried by the wind so that it ricochets off the opposite wall of the glen, and, coming up behind the stags, makes deer move towards you. Camouflage, too, is important. I always believed in breaking up my costume, for, whatever the forest, its colour will not be uniform, and I would wear, say, a checked jacket, grey flannel knickerbockers and grey-blue stockings. The ground often consists of a ribbon of turf bounded by heather and shingle, and by crawling along the border-line between the green and the rough, keeping half the body in each, if the wind is right it is possible to get within shot, though you are in full view of the deer.*

The text is full of details: it requires first a central idea then delving into the circumstantial account of how to watch deer. The first step is to discover what is termed by Van Dijk (1977) 'macrosturcture': i.e. capturing the global topic of discourse in a form similar to a summary. The second step is no more than a series of linguistic analyses and mental images. Thus,

understanding the text, which is as cognitive as coherence itself (cf. McCarthy, 1991), is based on other factors at work that cannot be ignored because they will *mutatis mutandis* affect the establishment of coherence relations, especially background knowledge. A reader familiar with Scotland with its huge mountains and vales and pasturing deer will easily grasp the gist of the text; his or her schemata correspond precisely to the details given. He/She is supposed to have a frame consisting of Scotland highlands which in turn contain mountains, hills, deer, reindeer, cottages, green stretches of land, etc. Such details are called scripts. Together with frames, they provide the 'missing links' Van Dijk discusses above.

However, with multi-register texts within one genre, Van Dijk's model seems to be inappropriately functioning. Consider the following article written by MacGiugan in the *Newsweek*. The sentences are numbered for convenience of reference:

(1) It is not easy to bring architecture to life on screen.
(2) But when filmmaker Nathaniel Kahn took his camera to the awesome Salk institute in La Jolla, California, in his award-winning documentary, "My Architect: A Son's Journey," he knew just what to do.
(3) The Salk's beauty lies not just in the design of its dual building but in the plaza in between that overlooks the Pacific.
(4) To animate that empty but magical space, Kahn put on Rollerblades—and we can see him glide and weave across the plaza toward the endless horizon.
(5) It's part of his search for his father, Louis Kahn—the Salk's great architect and a man Nathaniel barely got to know—and keeps finding not just the grandeur of his father's buildings but also their humanity.
(6) So why should anyone who's not a design buff rush to this movie?
(7) Because the backstory of Louis Kahn is as powerful as any screenwriter could devise.
(8) The film opens with Kahn's obituary—he died alone in the men's room of Penn Station, New York.
(9) Though he had a wife and daughter back home in Philadelphia, he led a clandestine life and, unbeknownst to most of his circle, he had two children out of wedlock, by two colleagues.
(10) Kahn's magisterial buildings have the power of ancient monuments, and the undercurrents of his private life are as old as time.
(11) In this movie, surprisingly sympathetic portrait, his son weaves the public and the personal together as gracefully as a skater gliding toward infinity.

It is difficult to find a clear macrostructure for the text, since the first paragraph does not center on one global idea: there are the details of the architect Kahn and how the film his son is making is based on the Salk institute in La Jolla, California. Furthermore, the technique used in filmmaking is alluded to. Thus, the first paragraph cannot be easily boiled down to one idea as the Scotland text above. What is more baffling is the second paragraph. The question it poses in the beginning is also just a leading one, which does not reflect the true

content of that paragraph. It is difficult to find one global idea for each of the two paragraphs of text. However, mental imagery plays an important role. The text draws on the intersection of design and cinematography by using specific reference to buildings and persons. Thus, the example text at issue attests to the fact that Van Dijk's model can function well in the case of simple texts, where certain global structures are expected and confirmed, but with texts which jump from one idea to another in the same paragraph, the model falls short; yet mental imagery, in the form of scripts and frames, may assist in the comprehension and building of a coherent whole.

An alternative analysis, however, can be provided along the lines of Hoey's model (1994). In his discussion of the problem-solution pattern, Hoey concludes that many texts can be analyzed according to the continuum of situation-problem-response-evaluation, with response and evaluation often conflated into evaluation as a hold-all term. The above text can thus be broken down into the following pattern:
Situation: sentence 1
Problem: sentences 2-3
Response: sentences 3-5
Problem: sentence 6
Response: sentence 7
Evaluation: Evaluation Basis, sentences 8-9; Evaluation, sentences 10-11.

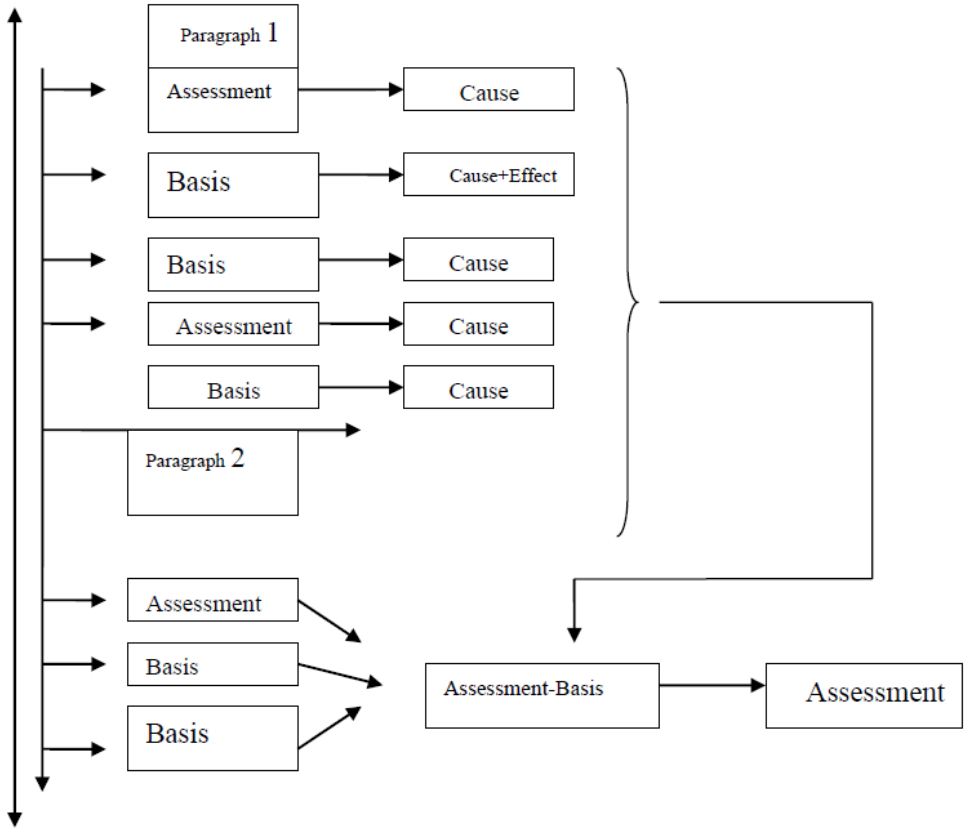
The pattern is therefore a bit jumbled; what Hoey (ibid: 44) terms the 'faulty' discourse pattern is clearly exemplified by this text. The second paragraph of text depends on the general situation outlined very briefly in paragraph 1 (in the form of one sentence), and the problem is relayed once more, with more complications as a basis for evaluation in the end, in the opening question of paragraph 2. This pattern can be diagrammed as follows:

$$A---B_1---C_1---B_2---C_2---D$$

The capital letters A, B, C, and D stand for situation, problem, response and evaluation, respectively. The subscript number stands for the same type of signaling but with extra slight variations. According to this diagram, the text appears to be incoherent: the situation, which should be deployed in each paragraph, is replaced by the problem and response to emphasize how the nature of the film is problematic. With all these problems, the evaluation should have been allotted more space by being expressed in a separate paragraph. This strange

pattern may be considered a validation of a justification pattern, or problem (without solution pattern), though response may at times be considered part of the evaluation process.

Jordan (1994), however, provides a more rational framework for analysis. He contends that advertisements and all reviews are mainly constructed around the assessment-basis structure. The above example is a film review, and Jordan's approach can fit it well. Yet, as Jordan claims, microstructures at the sentence level (i.e. within the paragraph), need first to be identified for the macrostructures t be easily explored. In the case in point, the microstructures of paragraph 1 can be deployed, followed by the main structure of paragraph 2, in the flowchart below. The chart is based on such signaling words as 'but', 'why', 'not only' and 'though':



Flowchart 1: The Assessment-Basis Structure of the Newsweek Text

As the flowchart illustrates, the first paragraph contains as an assessment the very first sentence, then justifications are given. Towards the end of the same paragraph, another assessment is provided, and the final sentence provides the basis for the further assessment in the following paragraph, where it is signaled by a leading question. Paragraph 2 starts with an assessment of the film, and proceeds with the bases for this assessment. The final sentence in paragraph 2 provides an assessment-basis for the paragraph and an assessment of the whole text.

2. 2. de Beaugrande and Dressler's Model (1981):

De Beaugrande and Dressler's model of coherence-based comprehension is one of the most influential; it derives its significance from the fact that it provides an integrated theory of human text-processing together with graphic illustrations of the salient processes of coherence. The model has undergone two stages of development, which will be explicated below.

De Beaugrande and Dressler (1981: 90) define coherence in the light of a continuity of senses; '[a] "senseless" or "nonsensical" text is one in which text receivers can discover no such continuity', usually because there is a serious mismatch between the configuration of concepts and relations expressed and the receivers' background knowledge' (p.96).

De Beaugrande and Dressler further pose the following questions as a stepping stone (p. 96):

1-How do people extract and organize content from texts for use in storing and recalling?

2- What factors of the interaction between the presented text and people's prior knowledge and disposition affect these activities?

3- What regularities can be uncovered by varying factors such as the style of the surface text or the user groups to whom the text is presented?

4- What is the role of expectations?

An initial step towards exploring the above questions, they explain, is to redefine coherence. Thus, coherence is 'the outcome of combining concepts and relations into a NETWORK composed of KNOWLEDGE SPACES centred on main TOPICS' (p.96; original emphasis). de Beaugrande and Dressler's model focuses as such on reception of text rather than production. Their main point is to discover 'control centres', i.e. points from which both

accessing and processing of texts can be strategically done. These centres are termed 'primary concepts:

(a) OBJECTS: conceptual entities with a stable identity and constitution;

(b) SITUATIONS: configurations of mutually present objects in their current states;

(c) EVENTS: occurrences which change a situation or a state within a situation;

(d) ACTIONS: events intentionally brought about by an agent.

'Secondary concepts', on the other hand, incorporate the following (pp.96-97):

(a) STATE: the temporary, rather than characteristic, condition of an entity;

(b) AGENT: the force-possessing entity that performs an action and thus changes a situation;

(c) AFFECTED ENTITY: the entity whose situation is changed by an event or action in which it figures as neither agent nor instrument;

(d) RELATION: a residual category for incidental, detailed relationships like ‘father-child’, ‘boss-employee’, etc.,

(e) ATTRIBUTE: the characteristic condition of an entity (cf. “state”);

(f) LOCATION: spatial position of an entity;

(g) TIME: temporal position of a situation (state) or event;

(h) MOTION: change of location;

(i) INSTRUMENT: a non-intentional object providing the means for an event;

(j) FORM: shape, contour, and the like;

(k) PART: a component or segment of an entity;

(l) SUBSTANCE: materials from which an entity is composed;

(m) CONTAINMENT: the location of one entity inside another but not as a part or substance;

(n) CAUSE;

(o) ENABLEMENT;

(p) REASON;

(q) PURPOSE;

(r) APPERCEPTION: operations of sensorially endowed entities during which knowledge is integrated via sensory organs;

(s) COGNITION: storing, organizing, and using knowledge by sensorially endowed entity;

(t) EMOTION: an experientially or evaluatively non-neutral state of a sensorially endowed entity;

(u) VOLITION: activity of will or desire by a sensorially endowed entity;

(v) RECOGNITION: successful match between apperception and prior cognition;

(w) COMMUNICATION: activity of expressing and transmitting cognitions by a sensorially endowed entity;

(x) POSSESSION: relationship in which a sensorially endowed entity is believed (or believes itself) to own and control an entity;

(y) INSTANCE: a member of a class inheriting all non-cancelled traits of the class;

(z) SPECIFICATION: relationship between a superclass and a subclass, with a statement of the narrower traits of the latter;

(aa) QUANTITY: a concept of number, extent, scale, or measurement;

(bb) MODALITY: concept of necessity, probability, possibility, permissibility, obligation, or of their opposites;

(cc) SIGNIFICANCIE: a symbolic meaning assigned to an entity;

(dd) VALUE: assignment of the worth of an entity in terms of other entities;

(ee) EQUIVALENCE: equality, sameness, correspondence, and the like;

(ff) OPPOSITION: the converse of equivalence;

(gg) CO-REFERENCE: relationship where different expressions activate the same text-world entity (or configuration of entities);

(hh) RECURRENCE: the relation where the same expression reactivates a concept, but not necessarily with the same reference to an entity, or with the same sense.

De Beaugrande and Dressler (p.98) add other operators, such as a determinateness operator, a typicalness operator, a termination operator, an exit operator, etc. They (p.98) analyse the following text fragment using the concepts outline above:

A great black and yellow v-2 rocket 46 feet long stood in a New Mexico desert. Empty it weighed five tons. For fuel it carried eight tons of alcohol and liquid oxygen.

They provide the following figure:

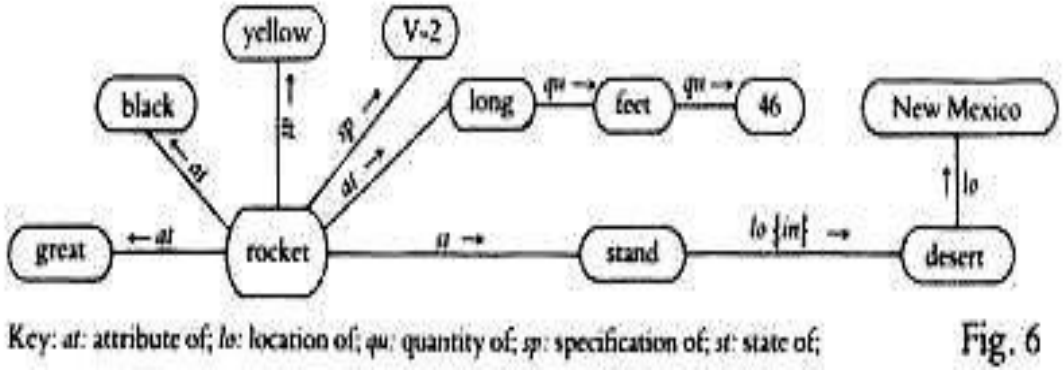


Figure 5: de Beaugrande and Dressler's network of a simple sentence understanding.

They argue (pp. 99-100) that human processors apply strategies of problem-solving assisted by three basic operations: spreading activation (of nodes), inferencing, and global patterns. They also add the following fragments to the above piece of text:

> Everything was ready. [2.2] Scientists and generals withdrew to some distance and crouched behind earth mounds. [2.3] Two red flares rose as a signal to fire the rocket. With a great roar and burst of flame the giant rocket rose slowly at first and then faster and faster. [3.2] Behind it trailed sixty feet of yellow flame. [3.3] Soon the flame looked like a yellow star. [3.4] In a few seconds, it was too high to be seen, [3. 5] but radar tracked it as it sped upward to 3, 000 mph.

For the entire text, they provide an intricate network.

Later, however, de Beaugrande (1981, 2005) revises the model, coming up with novel concepts. He introduces four basic concepts: parsing (identifying the grammatical dependencies of the surface text), concept recovery (associating language expression with cognitive content), idea recovery (building the central conceptual configuration that organizes content) and plan recovery (identifying the plans and goals that the text is intended to pursue). Back-tracking, he argues, is freely allowed among these phases, and the model permits approximations depending on individual readers' capacities.

The initial processing unit is the stretch of text that can be 'comfortably held in the working memory under current limitations of attention, familiarity, and interest' (Beaugrande, 2005). Thus, clauses, a group of sentences, etc. can be considered suitable processing units. (See the

controversy over UT below.) The goal of processing, he argues (p.28), is not syntactic analysis, but rather building a model of textual world, which is 'reconstituted' by the reader.

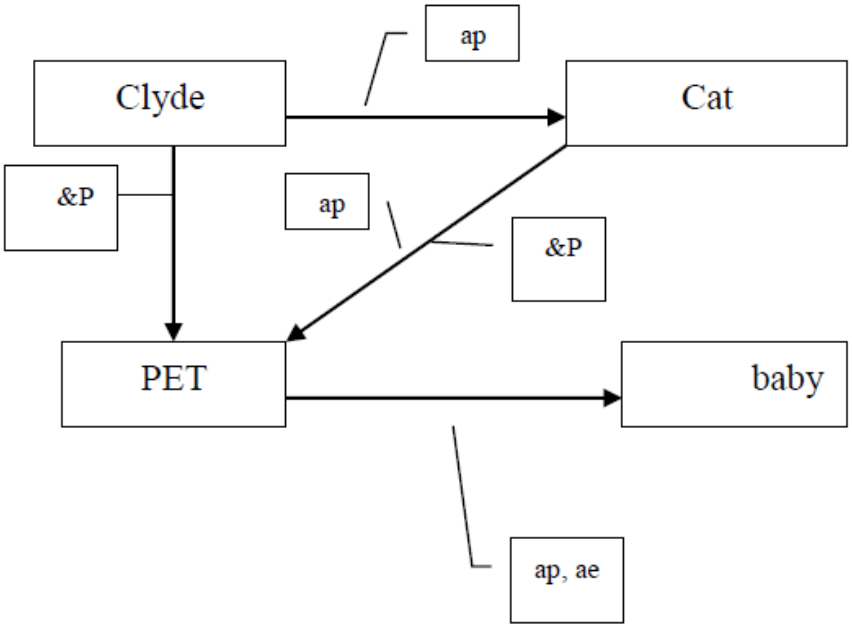
De Beaugrande (pp. 29-33) uses the self-same 'rocket' example, giving the same mental networks developed before. He only adds the world-knowledge correlate technique, which contains facts readers would be likely to know before encountering the text, e.g. rockets use fuel to operate, burning fuel produces flares, etc.

Now consider the following text (available online)[1]. The sentences are numbered for convenience of reference:

> *(1) The owner of a missing cat is asking for help. (2) "My baby has been missing for over a month now, and I want him back so badly," said Mrs. (3) Brown, a 56-year-old woman. Mrs. Brown lives by herself in a trailer park near Clovis. (4) She said that Clyde, her 7-year-old cat, didn't come home for dinner more than a month ago. (5) The next morning, he didn't appear for breakfast either. (6) After Clyde missed an extra-special lunch, she called the police.*
>
> *(7) When the policeman asked her to describe Clyde, she told him that Clyde had beautiful green eyes, had all his teeth but was missing half of his left ear, and was seven years old and completely white. (8) She then told the officer that Clyde was about a foot high.*
> *(9)A bell went off. "Is Clyde your child or your pet?" the officer suspiciously asked. (10) "Well, he's my cat, of course," Mrs. Brown replied. (11) "Lady, you're supposed to report missing PERSONS, not missing CATS," said the irritated policeman. (12) "Well, who can I report this to?" she asked. (13) "You can't. You have to ask around your neighborhood or put up flyers," replied the officer.*

The text is an excerpt from a long story about a missing cat. The cat is called Clyde and its owner is called Mrs. Brown. The coherence relations to be established here depend on the ability on the part of the reader to discover that Clyde is the cat and the pet, and that in either case it has been stolen. In this case, a semantic network, based on Beaugrande and Dressler (1981), can be drawn to illustrate the point:

[1] 100 Free English Short Stories for ESL & EFL Learners. Available online: http://www.rong-cahng.com. Retrieved on 15/4/2022.



ap : apperception of; ae:affected entity; &P: part of.

Clyde is perceived of as a cat, while Clyde is part of the category of pets. At the same time, a cat has its superordinate terms as 'pet', which Mrs. Brown perceives of as 'baby'. The pet and baby are affected entities, since both refer to Clyde which has been affected by the action of stealing. This network is, however, meant to explain the coherence relations holding among the different realizations of the pet at different textual intervals: for other coherence relations, other intricate networks are needed.

An alternative analysis, based again on Hoey (1994), can be furnished. The intricacy of De Beaugrande and Dressler's model can be reduced to a pattern that appears to be governing the extract. The extract can be shown to have the following pattern:

Situation: sentences 1-4

Problem: sentences 5-6

Response: sentences 7-8

Response: sentences 8-13; sentence 13 contains another problem.

This pattern can be further analyzed along the lines of the narrative structure. The situation can be termed the exposition, and the response(s) can be considered the climax. Since the text is just an extract, the evaluation part, which can aptly be considered the resolution, is absent. The pattern can be diagrammed as follows:

A---B---C---C (B)

The embedded problem in the final response sets the scene for further complications (i.e. problem) which require solutions. This pattern clearly saves the reader the effort of envisaging intricate networks, and expresses the coherence relations of the text in a comprehensible way.

3. Conclusions:

It can be concluded that the two models of coherence presented in this paper reflect the way coherence-based interpretation is effectuated. The van Dijk model maps the way comprehension can be approximated in the form of micro- and macro-structures. The two levels of analysis are interrelated, since micro-structures usually operate at the sentence level while macro-structures are made up of micro-structures and hence give the shape of the text in a global manner. Van Dijk succeeds in discovering the background knowledge factors that aid coherence-building: he introduces frames as a means of exploring the text receiver's cognitive store. Thus, he speaks of missing links, which must be established if coherence is to be achieved, and of inferencing, which is the process of establishing such links. However, his macrostructures may collapse in the case of inconsistent texts.

De Beaugrande and Dressler's model, on the other hand, is based on the same cognitive background, but it employs intricate networks in order to map how coherence is established. The model is akin to the schema theory in that it emphasizes the need for states of attention and the moves from one comprehension point to the other. Yet the two strategic points from which De Beaugrande and Dressler's model start off are two rigid to be realistic. The model is remiss about the global structure of a given text, and this is why the more the text enlarges, the more intricate the network-cum-schema becomes.

Hoey's and Jordan's pattern-seeking approach is somehow more precise and easier to apply. It attempts to discover the patterns that underlie the text at issue and evaluate whether the text is uniformly composed or not.

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