

# Pragmatic Mechanisms in Discourse Analysis

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## **Abstract**

*When interacting with public discourse, one needs to be able to break it down into the elements that make it up and that give it structure and meaning. Some of the most basic components of discourse, from a pragmatic point of view are schemata, stereotypes and mindsets. The present paper will attempt to investigate them in turn in order to uncover the way they function and the ways they shape the production and interpretation of public discourses. Their role is crucial when attempting to analyze discourse, as they are the very fabric on which all texts are based, the essence of their coherence and the means by which they produce communicative instances.*

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## **Key words**

*categorization, stereotypes, schemata, mindsets, discourse analysis.*

### **1. Introduction**

The aim of the present paper is to analyze in turn and comparatively the types of cognitive structures that are employed in the production of discourse and to identify the roles they play in discourse analysis. Consequently, we shall focus in turn on the process of categorization itself, on the way schemata operate, on the role of prototypes, on the way stereotypes affect perception, and, last but not least, on mindsets and the ways in which they inform our understanding of and reactions to the world around us.

Concepts or conceptual categories are mental representations of objects, entities and events stored in memory (Roth and Bruce 1995). Without coining thoughts into concepts, humans would fail to interact properly with objects, entities and events, as they would retain all trivial information and would consequently be unable to separate superfluous information from essential information (Lakoff 1987). Without concepts, human beings would also be unable to communicate successfully, i.e. to verbalize mental representations of objects, situations and events or to make sense of their interlocutors' discourse. In order to interpret and understand discourse, we need to be able to decode the messages we receive in terms of the categories

they refer to and the interactions that exists between them. Both filtering information and sharing representations involve categorization, the mental activity of grouping similar things together into conceptual classes or categories. “The process of categorization refers to how we identify stimuli and group them as members of one category, similar to others in that category and different from members of other categories” (Augoustinos & Walker 1996: 34). Categorization is the fundamental process that helps us interpret and order the complex world of stimuli in which we live. Categories serve to represent objects, events, and entities with maximum information and minimum cognitive effort; therefore, they can be regarded as satisfying the human need for cognitive economy.

## **2. Schema theory**

The object of study for schema theory is represented by simplified and systematic mental structures. They are accumulated in memory as higher order cognitive constructions and employed whenever comprehension of an incoming message calls for usage of previous representations. Rumelhart defines schemata as follows:

Schemata are truly the building blocks of cognition. They are the fundamental elements upon which all information processing depends. Schemata are employed in the process of interpreting sensory data (both linguistic and nonlinguistic), in retrieving information from memory, in organizing actions, in determining goals and subgoals, in allocating resources, and, generally, in guiding the flow of processing in the system (Rumelhart 1980: 33).

Consequently, their main aim is simplify reality, to make it accessible for the mind to process efficiently and effectively. They also organize our memory structures by helping us process and store new information. To put it simply, they are made of generic information about their constitutive elements and the relationships between them that can be adapted and applied to a variety of situations and yield interpretations. As Rumelhart further explains:

A schema is a data structure for representing the generic concepts stored in memory (...). A schema contains, as part of its specification, the network of interrelations that is believed to normally hold among the constituents of the concept in question (...). [M]eanings are

encoded in terms of the typical or normal situations or events that instantiated that concept (Rumelhart 1980: 34).

It is important to bear in mind the fact that schemata are not isolated concepts. They are part of a whole network/web of concepts and information that had been previously picked up from experience and processed to suit other cognitive demands.

Schemata are meant to facilitate the comprehension of people, of events, and of situations. During the process of comprehension, schemata are activated by:

- a) Establishing the variables i.e. the slots that need to be filled in by compulsory values or by missing values that can be predicted. Variables are associated with elements of the input in order to successfully instantiate the schema and enable comprehension;
- b) Determining the variable constraints i.e. the restrictions of the types of entities that can fill each slot;
- c) Providing the missing elements, that is the default variables, i.e. elements that can be inferred from the context even if they are not conspicuously present. Communication depends on the extent to which all those involved in the transfer of information share the same default variables.

Schemata are flexible structures that 'take into account the human tolerance for vagueness, imprecision and quasi-inconsistencies' and as such they may change and get readjusted in the light of new experiences. Rumelhart (1980: 35) suggests that there are three main models of learning within the schema-based model:

- a) Accretion or 'fact-learning', which involves accumulation of new information within an existing schemata, without changing the schemata as such;
- b) Tuning, meaning schema modification, which may involve adding further specifications for the variable, replacing a fixed element with a variable (generalization) or replacing a variable with a fixed element (specialization)
- c) Restructuring or schema creation when, existing schemata prove to be inadequate for the comprehension of new input. This complete remodeling can take place in two ways. The first one is by modeling a new schema on old ones, a process called "patterned generation". The second mode is by inducing a new schema directly from experience, a process called schema induction.

Schemata are a cluster of knowledge, which contains information organized according to different criteria such as appearance, gender, education, profession, etc.

It is useful to think of a schema as a kind of informal, private, unarticulated theory about the nature of the events, objects and situations we face. The total set of schemata we have available for interpreting our world in a sense constitutes our private theory of the nature of reality. (Rumelhart 1980: 36)

Unlike stereotypes, they are built through individual experience and they can be reanalyzed and redefined contextually. Therefore, schemata are individual-bound and context-defined. At the same time, they contain a set of anticipations and expectations relying on the relationship between an individual and society which allow comprehenders to predict a series of discursive occurrences and/or interpret them accordingly.

However, these predictions are not necessarily imposing a certain view on a certain situation. Although they are prescriptive to some extent, expectations exhibit a high degree of adaptability to any sudden, unexpected changes in the situation. Semino claims that "(...) schema theory provides a remarkable, flexible and powerful framework for the explanation of inference, expectations, default assumptions and the perception of coherence in comprehension" (Semino 1997: 148).

When interpreting an instance of public discourse, regardless of the precise field it may stem from, we use the same cognitive mechanisms as when decoding a real life situation. Textual elements present in that discourse trigger the activation of certain schemata and stereotypes in light of which the recipient will interpret certain behaviors and situations. The recipient is likely to make certain inferences when going through or listening to a text and in light of these inferences develop some predictions as to how the action will unfold and how the characters will conduct themselves. Consequently, particular schemata are activated to guide the comprehender in his/her cognitive endeavor to further decipher the text. However, once credible evidence has been gathered against the utility of a certain schema for comprehension purposes, the recipient 'suspends' that schema and allocates their mental resources toward "a more promising schema" (Rumelhart 1980: 42). Suspension of unsuitable or

incongruent schemata prevents distortion via what Bruner & Potter call “the debilitating effect of premature commitment to a particular schema” (Bruner & Potter (1964) qtd in Rumelhart 1980: 47).

When interpreting discourse, the first thing the receiver comes in contact with is the linguistic component, which consequently plays a key role in the decoding of the text via the activation of background knowledge elements. The joint role played by linguistic input and by background knowledge in achieving coherence of discourse interpretation is highlighted by Semino:

It is one of the basic tenets of psychology that comprehension crucially depends on the availability and activation of relevant prior knowledge. We make sense of new experiences – and texts in particular – by relating the current input to pre-existing mental representations of similar entities, situations and events (Semino 1997: 123).

Interpreters embark upon inferencing whenever “particular events in the text trigger the activation of certain schemata (bottom-up), and [whenever] activated schemata generate expectations that fill in with what is not explicitly mentioned in the text (top-down)” (Semino 1997: 125). Besides drawing inferences, schema activation enables comprehenders to make the best of their relevant background knowledge, i.e. to develop expectations and/or make predictions about incoming input and consequently incoming mental representations. The same claim was supported by Rumelhart who advocates that “the total set of schemata instantiated at a particular moment in time constitutes our internal model of the situation we face at that moment in time, or, in the case of reading a text, a model of the situation depicted by the text” (Rumelhart 1980: 37).

Once textual elements trigger the activation of certain schemata ‘model of the situation’ in the interpreters’ minds, expectations are generated and (dis)confirmation of those expectations is anticipated.

A special category of schemata are social schemata, which according to Augoustinos and Walker represent “social categorization [and are] assumed to be a more complex process than object categorization in that social objects are variable, dynamic, interactive and, therefore, less predictable” (Augoustinos & Walker 1996: 35). The same as with objects, members of a social category share

common features, though some members are more prototypical than others and the degree of membership within one category is hard to predict due to the internal dynamics of that category.

Categorization occurs with social situations and events, which, similarly to objects, are represented according to typical features as well “so that a certain behavior is anticipated and expected in certain contexts.” By categorizing people and events, we “simplify and structure the social world and thus anticipate future behavior and experiences. Some predictability and coherence is thereby given to our everyday social interactions” (Augoustinos & Walker 1996: 35). Categorization is an unconscious process, the result of personal experience, which is likely to undergo alterations in the presence of evidence to the contrary.

Social psychologists define several types of schemata: person schemata, self schemata, role schemata and event schemata. Person schemata are close to prototypes in that they constitute a cluster of personality traits which can be associated with a person and which are assigned to that person on the basis of the comprehender’s previous personal experience. “Personality traits may serve as conceptual prototypes which people use to process information about others” (Augoustinos & Walker 1996: 37). People can assign different personality traits to people they have just met precisely on the basis of person schemata. Such characteristics may be confirmed or refuted on the basis of further interaction and consideration.

Self schemata deal with the conceptual image people have of themselves. They are “cognitive generalizations about the self, derived from past experience, that organize and guide the processing of self-related information contained in the individual’s social experiences” (Augoustinos & Walker 1996: 38). These schemata are very important for one’s sense of identity. The features that are seen as schematic are the ones the individual considers central to his/her personality and according to which he/she orders his/her life. If they are contested through experience, the individual will at least momentarily experience a feeling of confusion in relation to who he/she is. Novel information can be assimilated within the self-schema if indeed it proves to be defining for the individual’s personality, or it may be considered aschematic and discarded as an isolated occurrence.

Role schemata refer to the knowledge people have of social norms and regulations in relation to the functions people are likely to occupy within society. Roles can be achieved or ascribed. “The former

include roles which are acquired through effort and training, such as doctor role or psychologist role, while the latter refers to roles which we have little control over such as age, sex, and race” (Augoustinos & Walker 1996: 39).

Event schemata are also called event scripts and they describe “the sequential organization of events in everyday activities” (Augoustinos & Walker 1996: 41). They provide the basis for the comprehender to anticipate the future, make plans and set goals.

### **3. Stereotypes**

The stereotype is a subclass of schemata used to interpret incoming information. Social cognitivists argue that stereotyping stems from the human need to simplify reality and, in this respect, stereotypes are very similar to schemata.

Stereotypes act as schemas, directing mental resources and guiding the encoding and retrieval of information from memory. They emerge from a fundamental cognitive need to simplify the social environment by categorizing individuals into groups. Social categorization is primarily based on salient and identifiable features of a person such as age, gender, race and social status. Stereotypes are generalized descriptions of a group and its members emerge inevitably from the categorization process (Augoustinos & Walker 1998: 631).

Stereotypes can be defined as “cognitive structural concepts, referring to a set of expectations held by the perceiver regarding members of a social group” (Augoustinos & Walker: 1996: 39). They are meant to simplify the complexity of the world and they are usually based on the ascribed roles. The differences between man/woman, rich/poor, black/white, young/old seem to be more salient for the formation of a stereotype than any other categorization criterion.

According to Stangor et al (1996:8), “group prototypes are mental representations consisting of a collection of associations between group labels (e.g. Italians) and the attributes that presumably characterize the group (e.g. Italians being romantic).” Viewing stereotypes as prototypes is efficient because on the basis of group prototypes, one can predict which information is stereotype consistent and which is stereotype inconsistent. However, a more encompassing frame of analysis for stereotypes is provided by schema theory.

For a long time, stereotypes have been considered negative cognitive structures, the origin of discrimination, preconception and biases.

Stereotypes, as constructions of groups constitute social and ideological representations, which are used to justify and legitimize existing social and power relations within a society. Stereotypes are not the product of individual cognitive activity alone, but are also collective and ideological products (Augoustinos, Walker 1998: 630).

This definition highlights that stereotypes are not fixed and oversimplified mental representations but complex combinations of psychological, cognitive and ideological features. Social psychology defines stereotypes as “mental representations of a group and its members, and stereotyping as the cognitive activity of treating individual elements in terms of higher level categorical properties” (Augoustinos & Walker 1998: 631). Stereotypes act as schemata, meaning that they are the result of a fundamental need to simplify cognitive processing of the environment, just like schemata. Moreover, categorization is the main tool for dividing individuals into social groups, each with its assigned stereotypes.

Social categorization is primarily based on salient and identifiable features of a person such as age, gender, race and social status. Stereotypes as generalized descriptions of a group and its members emerge inevitably from the categorization process. They function as energy saving devices, freeing up valuable attentional resources which can be utilized elsewhere (Augoustinos & Walker 1998: 631).

A person's age, gender and race are more salient and more easily perceived than other aspects and are more prone to become the basis for categorization. As mentioned earlier, categorization represents the basis for stereotype formation as well, as stereotypes like schemata are energy-saving cognitive constructs. In other words, stereotypes can be considered social schemata; they “are theory driven, stable knowledge structures in memory, they have internal organizational properties and are learnt by individuals during their early years” (Augoustinos & Walker 1998: 631).

However, unlike schemata, stereotypes bear stronger impact on society, since they generate expectancies, which often confirm preconceived information pertaining to the stereotype and account for

the actions of both ingroup and outgroup parties. “Some stereotypes – for example racial and gender stereotypes – are so ingrained that their activation is automatic and their inhibition requires time, effort and conscious attention” (Augoustinos & Walker 1998:632). As Augoustinos and Walker point out, research has demonstrated that even the most liberal and open-minded people are subject to unconscious and automatic activation of certain stereotypes.

Stereotypes have a social dimension in addition to their cognitive one. They cannot be thought of as harmless or not ideologically-laden schemata. Stereotypes and stereotyping are inherently social in nature because they deal with social groups and they are interwoven in the social fabric of the communities that employ and spread them.

While cognitively functional because they simplify the complexity of social life, stereotypes also contain affective information and potential emotional associations (Culpeper 2001: 78), which facilitate representation of stereotyped groups. Analyzing the affective mechanisms of stereotype formation contests the traditional views of stereotypes as purely cognitive structures. Since affect is inherently present in the acquisition of stereotypes, attitudes are inseparable from the set of beliefs attached to a specific stereotyped group (Mackie et al 1996: 52).

Beyond emotions, belonging to a specific community entails, among other things, learning and, at least, partly sharing beliefs held by that community with respect to its constitutive groups and with groups situated outside it. Stereotypic perceptions of groups are socially inherited or “acquired ready-made and packaged” (Mackie et al 1996: 60). Stereotypes are learned by way of observation and imitation, as well as by parental imposition and assimilation of stereotypical representations from the media.

According to some social cognitivists, the social dimension entails the existence of an ideological component. An explanation based on the assumption that stereotypes are ideological representations has been proffered by Hoffman and Hurst (in Augoustinos and Walker 1998). They have started from the assumption that stereotypes have a rationalizing function, meaning that they exist in order to justify the system. Consequently, they can be considered “ideological constructions which do important political and ideological work in rationalizing existing social relations between groups” (Augoustinos & Walker 1998: 638). Because of this

ideological component, stereotypes play an important role not only in gender relations as social interactions but also at a higher and more abstract level such as that of politics and the role it has in structuring political organizations.

Stereotypes are in fact “explanatory fictions” since they claim that there exist inherent differences between different groups in society. Stereotypes are more than a list of personality and behavioral traits connected to a group. They represent a network of features, which emerge from “the background of naïve beliefs and explanatory frameworks that people hold for different social groups in their society” (Augoustinos & Walker 1998: 639). People entertain certain essentialist beliefs about particular social groups and they rationalize them by claiming that there are inherent differences between them and the members of the stereotypes social group. “Essentialist beliefs about social groups emerge because of a fundamental functional need to rationalize and explain ‘why things are the way they are’” (Augoustinos & Walker 1998: 639), that is the existing state of affairs in the world. These beliefs seem to come naturally and to be unavoidable and that lends them a resistance to change that few other mental constructs exhibit.

MacRae *et al* have also noticed that social norms and conventions play a very important part in the perpetuation of stereotypes. Once group stereotypes exist in a culture, expected patterns of behavior for those group members are instantiated and these expectations determine both responses to group members and the behavior of the group members themselves.

One important way of identifying stereotypes is through discourse taking into account that social categories

are not rigid internal entities, which are used inflexibly. Categories are not regarded as cognitive phenomena located in people’s heads – preformed static structures, which are organized around prototypical representations of the category. Rather, discourse analysis is concerned with how people discursively constitute categories to do certain things (Augoustinos & Walker 1998: 640).

Thus categorization is accomplished by placing discourse within a social context and analyzing the meaning the cognitive structures assume when interacting with the discursive element. This explains how people may use different aspects of stereotypes, which might seem contradictory and yet are still part of one and the same

stereotype. The social context may prompt a particular categorization on a particular occasion.

#### **4. Mindsets**

Mindsets represent a special kind of cognitive structures. They most closely resemble event schemata and have been defined as “a series of expectations through which a human being sees the world” (George 2004: 386). Their impact on society and discourse is tremendous as they play a role not only in decoding the information we are presented with but also in supplying any missing links, smoothing other any contentious data, eliminating discrepancies and other elements that may wrinkle our interpretation of a situation of discursive instance. As MacNulty explains “a mindset is a frame of mind we bring to bear on situations and events, based on our story or the relevant aspect of the story; and it provides a means for helping us understand those events” (MacNulty 2007: 12). In other words, they are the looking glass that colours our perception of events and discourses around us.

The reason that mindsets may be considered as dangerous, in some situations, as stereotypes are is that they guide all our perceptions, which means that we are predisposed to seeing things that we expect or desire to see. But in turn this might mean that mindsets can also lead us to ignore or not take into account material that does not fit our mindsets, that is they can lead to “non-perception”(MacNulty 2007: 13). At first glance this may not seem to lead to any serious oversight, but upon closer inspection the scale to which it can affect and even shake our world is tremendous. For example, despite numerous intelligence from many different sources and abundant discourses that all indicated that a terrorist attack would take place on American soil, the intelligence community chose to ignore this strong probability. The reason behind this choice is that the likelihood of such an attack completely contradicted the intelligence communities’ existing mindsets, namely that no-one would be bold enough to do such a thing, nor could anyone have the means to undertake such a large scale operation. We are all familiar with the results.

#### **5. Conclusions**

Consequently, we would argue that examining the role that schemata, stereotypes and mindsets play in shaping our world and our

discourses cannot and should not be underestimated. They guide the way we interact with each other, with people of other cultures, with our friends and with our foes. They may help us better understand ourselves, our perceptions, our interactions and, in the end, being aware of how they operate we might even be able to protect ourselves more efficiently.

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