

Transitivity in visual grammar: concepts and applications*

Désirée Motta-Roth

Fábio Santiago Nascimento

Universidade Federal de Santa Maria

Abstract: *This article has a two-fold objective: (1) to discuss how the system of transitivity in Kress and van Leeuwen's Visual Grammar (1996) for the analysis of images is related to the system of transitivity in Halliday's Systemic Functional Grammar (2004) and (2) to suggest questions for pedagogical application of Visual Grammar categories in language teaching. Our interest in multimodality is justified by contemporary need for visual literacy which allows us: (1) to read the increasing number of multimodal genres we are exposed to (which combine sounds, images, colors, gestures etc.); (2) to investigate how multimodal texts combine in meaning production. In terms of a theoretical discussion about visual language, the study of Visual Grammar is relevant, considering the need for investigating the ways this kind of grammar can contribute for language teaching.*

Keywords: *Visual Grammar; multimodality; transitivity; multiliteracy.*

INTRODUCTION

Fast capitalism and the invention of means of mass communication such as radio, television and the Internet have deeply affected public and personal lives (Cope; Kalantzis, 2000). Nowadays, especially in professional settings, people should be prepared to deal with the constant need for adaptation and the ability to negotiate with overlapping identities, discourses and registers (Ibid, p.12-13). Public controversies have stemmed from tensions among communities, each struggling for legitimation and social recognition (Ibid, p.14-16). Advertisements and TV commercials no longer aim to sell concrete goods, but in fact mostly aim to sell values, identities and discourses. In a market that commercializes 'abstract commodities', the post-modern 'self' is

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defined by its possessions and appearances instead of its essence¹ (Giddens, 1999, p.423):

To a greater or lesser degree, the project of the self becomes translated into one of the possession of desired goods and the pursuit of artificially framed styles of life. (...). The consumption of ever-novel goods becomes in some part a substitute for the genuine development of the self; appearance replaces essence as the visible signs of successful consumption come actually to outweigh the use-values of the goods and services in question themselves. (Ibid, p.424)

Selling is essentially based on advertising which, in contemporary society, is accomplished through multimodal texts. Thus, Nike sells an idea of strength, beauty and power by showing the image of a beautiful athlete. Multimodal texts such as movies, ads and multimedia web pages integrate, at one time, different 'meaning-making systems' such as verbal, aural, visual and gestural languages (Cope; Kalantzis, 2000, p.26). These meaning-making systems have a constitutive role in life experiences. In educational terms, the variety of new meaning-making systems makes schooling no longer a matter of teaching grammatical rules in order to standardize national languages/cultures; schooling should be seen as functional, a way to give people 'access to wealth, power and symbols' (Ibid, p.14-15).

In a globalized and multicultural society, with its multiplicity of registers, discourses, communication channels and modes of representation, teachers should rethink the concept of literacy. 'Old literacy' (Cope; Kalantzis, 2000), as the ability of reading exclusively written language, is no longer sufficient for empowering students to achieve their social and professional purposes. Contemporary living requires *multiliteracy*: the reader's capacity of construing meaning from the multiple 'designs' (linguistic, audio,

¹ We thank our anonymous reviewer for their observations, which were followed closely. The discrepancies that remain are entirely our responsibility due to our need to ratify our lexical choices in few occasions. In the case, for instance, of the choice of the word "essence" when quoting Giddens, our reviewer advised us not to use it in association with the concept of identity, in view of contemporary authors' (such as Stuart Hall, Kath Woodward, Judith Butler) criticism of essentialist views of social identity. We indeed conform with the concept of fragmentation of the "self" but have adopted Giddens's original term when quoting the argument elaborated by this author in 1991.

spatial, gestural and visual designs) which compose multimodal texts (Ibid, p.20). For example, a print advertisement presents two designs of meaning (linguistic and visual) which, in combination, convey experience in terms of ‘which world is represented?’, ‘how people in this represented world relate to each other?’ and ‘how verbal and visual languages are shaped for representing this world?’.

Considering this need for multiliteracy, Kress and van Leeuwen’s Visual Grammar constitutes a description of how language experts use/combine visuals to construct meaning (Kress; Van Leeuwen, 1996, p.2). The idea of applying Systemic Functional Linguistics (see Halliday, 2004) to images is derived from Kress and van Leeuwen’s assumption that:

Visual structures realize meanings as linguistic structures do also. (...) For instance, what is expressed in language through the choice between different word classes and semantic structures is, in visual communication, expressed through the choice between, for instance, different uses of colour, or different compositional structures.” (Kress; van Leeuwen, 1996, p.2)

Thus, verbal language relates to verbs, nouns, mood and theme-rheme structures, while visual communication relates to framing, color saturation and semiotic modality.

In order to tackle these principles, this paper presents the analysis of a set of multimodal texts and provides an example of pedagogical application of Kress and van Leeuwen’s Visual Grammar (1996) in three sections. In the first one, some of the main categories in the system of transitivity in Systemic Functional Grammar will be presented. In the second section, we will explore the ways the system of transitivity in Systemic Functional Grammar is expressed in Visual Grammar. Finally we will attempt to explore a multimodal text using the theoretical framework presented in the article and will raise some questions concerning pedagogical applications of Visual Grammar to language teaching.

REPRESENTING HUMAN EXPERIENCE IN SFG: THE SYSTEM OF TRANSITIVITY

The system of transitivity proposed by Systemic Functional Grammar (SFG) classifies the kinds of ‘doings’ and ‘beings’ that

constitute human experience (Halliday, 2004, p.170-171). The transitivity system is used to represent ideational content, i.e. the semantic content of language. The system is composed of six Processes (Image 1) that represent human experience in terms of: physical and physiological actions (Material and Behavioral), thinking and speaking actions (Mental and Verbal) and actions that signal the existence of something/someone and their identifying features (Existential and Relational) (Ibid).

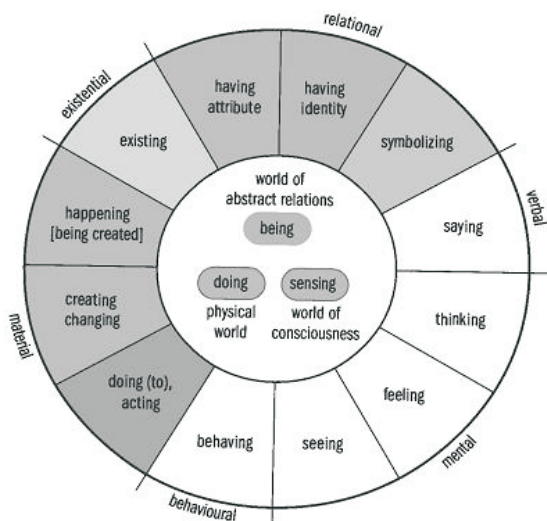


Image 1 - The grammar of experience:
Types of Processes in English (Halliday, 2004, p.172)

The system of transitivity focuses on the clause as its unit of analysis (Ibid, p.50). A clause is composed of two essential elements: the Process and the Participant(s) involved in it (Ibid, p.175). In addition, there may be a third element in a clause, the Circumstance(s) surrounding the Process (Ibid).

Each different Process in the system requires different kinds of participants (Ibid, p.60). For example, Material Processes usually present an Actor (the 'doer' of the action) and a Goal (the Participant whom the action is aimed at). In the case of Mental Processes, the Participant who performs the action is the Senser and the mental construct engendered by him/her is the Phenomenon. In Relational

Processes, the first Participant is the Identified, who is identified by, has an attribute expressed by or symbolizes a second Participant who, by its turn, is the Attribute of, the Identifier of, or the symbolic meaning expressed by, the first participant. Circumstances represent in which manner and under what conditions the Process is realized (Ibid, p.260) as, for example, in Figure 1.

I	was cooking	dinner	when the phone rang.
Actor	Material Process	Goal	Circumstance

Figure 1² - Example of Material Process

In Figure 1, there is a main Process ('cooking' - Material Process), an Actor who performs the action ('I') in relation to a Goal ('dinner') and the temporal Circumstance in which the Process occurs ('when the phone rang'). This is the main structure of this clause. Evidently, there is a minor clause embedded in the Circumstance ('the phone rang'), but we will not extend this analysis since our purpose in this paper is to explore multimodal texts and not verbal texts.

SYSTEMS OF TRANSITIVITY IN SFG AND VISUAL GRAMMAR: POINTS OF CONTACT

While SFG presents a system of transitivity composed of six Processes to represent ideational content in verbal language, Visual Grammar (VG) offers two main dynamics: Narrative and Conceptual Processes. In general terms, Narrative Processes depict Participants 'doing' something or performing an action while Conceptual Processes depict the Participants' general state of affairs.

² We have chosen to identify each exemplified clause with the word 'Figure' in the legend (instead of Chart or another term) in accordance with Systemic-Functional Grammar (Halliday, 2004, p.169-170), which defines a clause experientially "as a **figure** or configuration of a process, participants involved in it and any attendant circumstances. (...) All figures consist of a process unfolding through time and of participants being directly involved in this process in some way; and in addition there may be circumstances of time, space, cause, manner or one of a few other types."

According to Kress and van Leeuwen (1996, p.114-115), SFG and VG present some similarities as regards their semiotic categories, as we attempt to illustrate³ in Diagram 1.

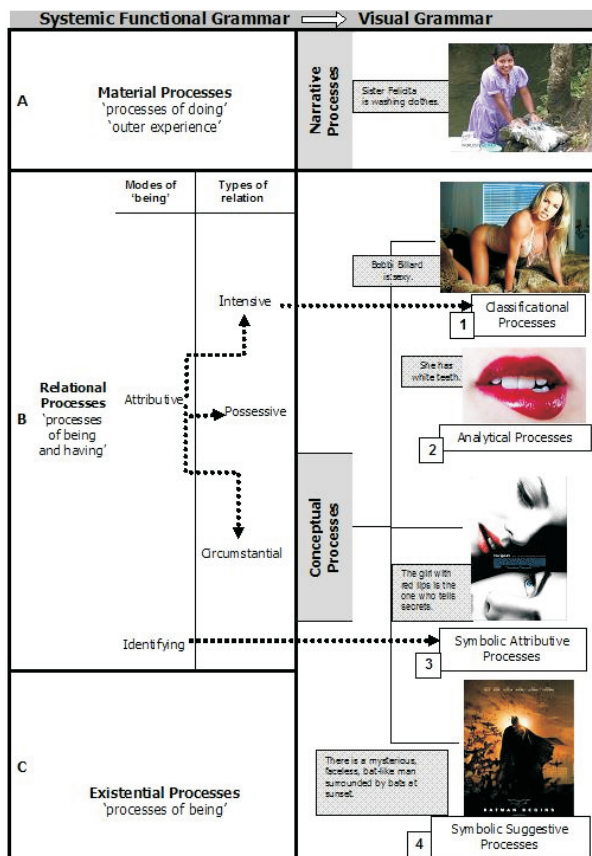


Diagram 1 - Correlation between SFG and Visual Grammar's transitivity systems

³ The examples in Diagram 1 were collected from the following websites:
 (A) <http://worldstogethertravel.com/belize/quich-culture.htm>
 (B1) <http://themoostbeautifulwomen.blogspot.com/2007/04/glamourfitness-model-bobbi-billard.html>
 (B2) <http://hotlipstickchicks.com/redlips/?cat=13>
 (B3) <http://movies.about.com/library/weekly/blthequiet081106.htm>
 (C4) http://www.icicom.up.pt/blog/take2/2005/04/25/posters_da_semana.html

Diagram 1 is an attempt to summarize in non-verbal terms the transitivity systems of SFG and VG to show how one system is related to the other. For example, Material Processes present linguistic functions that find correspondence in Narrative Processes because both serve to represent 'outer experiences' in the material world. At the same time, Existential and Relational Processes realize meanings similarly to Conceptual Processes because all of them are about 'being and having', the way Participants are construed as 'things' or actions/events (Existential) or are represented in terms of their Attributes (Relational).

In the next section, we will explore these three types of Processes in SFG - Material, Relational and Existential - as well as the two major types of 'ideational' Processes in VG - Narrative and Conceptual. The reason for concentrating on a partial account of the set of experiential meanings in SFG is that Kress and van Leeuwen's VG does not explore projecting and physiological Processes (Mental, Verbal and Behavioral) in detail.

Doing and happening: Material and Narrative Processes

a) Material Processes

In SFG, Material Processes describe actions in the material world in terms of physical actions and happenings (such as 'running' and 'throwing') and changes unfolding through time and space (such as 'cooking' or 'breaking' something) (Halliday, 2004, p.179-180). There are two types of Material Processes depending on the nature of the Process: *Creative* and *Transformative*.

The first type of Material Process, *Creative*, refers to those clauses in which a Participant comes into existence (Kress; van Leeuwen, 1996, p.184): 'I cooked dinner', that is, there was no dinner before I cooked it. The second type, *Transformative*, refers to those clauses that express some change in an existing Participant (Ibid, p.185): 'He made the bed', that is, the bed looks tidy now that he has acted upon it.

In Material clauses, there is at least one Participant who performs the action (*Actor*)⁴. In transitive clauses, there is also the *Goal*, the Participant at whom the action is aimed⁵, as shown in Figure 2.

⁴ Subject in traditional grammar.

⁵ Object in traditional grammar.

Sister Felicita	is washing	clothes.
Actor	Material Process	Goal

Figure 2 – Verbal representation of Diagram 1 (Image A)

‘Sister Felicita’ (Actor) is doing a physical action (‘washing’) aimed at another Participant represented as an inanimate object (‘clothes’). The Process type is Transformative because the Actor is changing or modifying the external aspects of the Goal (dirty pieces of clothing become clean).

b) Narrative Processes

Similarly to Material Processes in SFG, Narrative Processes in VG depict a physical action which expresses an event, a movement or a change in state (Kress; Van Leeuwen, 1996, p.56).



Image 2 – Adidas’s adSource:

<http://gratifyingchange.wordpress.com/2007/06/14/the-djoker-and-the-safinator-wears-color/>

Image 2 realizes a Narrative Process by representing ‘what is happening or being done’ (instead of representing a state of affairs or ‘how things are’). The image depicts two Actors who are

carrying out a certain scope of physical activity related to a game (changing positions in space while hitting a tennis ball in order to score against an opponent). In verbal terms, the image could be represented as Figure 3.

Novak Djokovic and Marat Safin	are playing	tennis.
Actors	Material Process	Scope

Figure 3 – Verbal representation of the *Adidas's* ad (Image 2)

Alternatively, Image 2 can also be represented verbally by a clause involving a 'ball', the second Participant (the Goal). However, the ball is not actually visible in Image 2. Thus, the Goal (tennis ball) is not represented and the emphasis is on the tennis players and the way they are playing.

Novak Djokovic and Marat Safin	are hitting	a tennis ball.
Actors	Material Process	Goal

Figure 4 – Another verbal representation for the *Adidas's* ad (Image 2)

The purpose is not only to describe 'what is happening', but also 'who is performing the action'. The two Participants performing the action (Novak Djokovic and Marat Safin) are not average tennis players, but two of the best in the world. They are among the best professional tennis players and as such are sport celebrities. Most importantly, they wear Adidas. The brand takes advantage of these sportsmen's status as a marketing strategy to sell its products. When consumers buy an Adidas sportswear item, they are not just purchasing a product, they are purchasing the symbolic value attached to the product and reinforced by the multimodal ad.

Being, having and existing: Relational, Existential and Conceptual Processes

a) Relational Processes

In SFG, Relational Processes ‘serve to characterize and to identify’ things (either concrete or abstract ones) by establishing a relationship of identity or class membership between two entities (Halliday, 2004, p.210-214). There are two kinds of Relational Processes or, in Halliday’s words, ‘two modes of being’: *Attributive* and *Identifying*.

Relational Attributive Processes

Relational Attributive Processes establish a relation of class membership between two Participants by signaling to the reader that an entity (a Participant called *Carrier*) has ‘some class ascribed or attributed to it’ (Halliday, 2004, p.214-219) as seen in Figure 5.

Bobbi Billard	is	sexy.
Carrier	Relational Attributive Process	Attribute

Figure 5 - Verbal representation of Diagram 1 (Image B1) - Attributive mode

Relational Identifying Processes

Relational Identifying Processes define the identity of a Participant by establishing a relationship of signification between two entities in which one of them is used to identify (*Identifier*) the other (*Identified*) (Halliday, 2004, p.214), as shown in Figure 6.

Bobbi Billard	is	one of the most famous North-American models.
Identified	Relational Identifying Process	Identifier

Figure 6 - Verbal representation of Diagram 1 (Image B1) - Identifying mode

A useful linguistic probe to check the (Identifying or Attributive) mode of a Relational Process is the reversion of the Participants' order in the clause, as illustrated in Figure 7.

One of the most famous North-American models	is	that woman next to the car.
Identified	Relational Identifying Process	Identifier

Figure 7 - Reversed version of Figure 6

Relational Identifying Processes are usually reversible because both Participants can act as Identified or Identifier (Ibid, p.228-229).

Types of Relational Processes

Attributive and Identifying 'modes of being' can vary according to the type of relation established between participants. There are three main types of relations expressed by the English system: *Intensive*, *Possessive* and *Circumstantial*:

- Intensive is the type of relation in which one Participant is characterized in relation to another ('x is y') (Halliday, 2004, p.216). For example, in Figure 6 the type of relation is Intensive because one specific Participant ('Bobbi Billard' - *Token*) is being characterized (in this case, classified) in terms of another Participant who represents a more general class ('one of the most famous North-American models' - *Value*).
- Possessive is the type of relation in which Participants establish a part-whole relationship in the clause ('x has y') (Ibid, p.216), as illustrated by 'She has red lips' in Figure 8.

She	has	red lips.
Carrier (the whole)	Possessive Attributive Process	Attributes (the parts)

Figure 8 - Verbal representation of Diagram 1 (Image B1) - Possessive type of relation

The Participant ('She') is being characterized in terms of one of her body parts ('red lips').

- **Circumstantial** is the type of relation in which Participants establish a relationship in terms of a Circumstance (time, place, manner etc.) ('x **is at** y') (Ibid, p.216, 240) as seen in Figure 9.

June, 12 th	is	Valentine's Day.
Carrier	Circumstantial Attributive Process	Attribute (circumstance)

Figure 9 - Circumstantial Attributive Process

For Kress and van Leeuwen (1996, p.115), Intensive and Possessive Processes show equivalence to two subtypes of VG's *Conceptual Processes*: *Classificational* and *Analytical* (Diagram 1). The main reasons for such equivalence are that both:

- Classificational and Intensive Relational Processes characterize one Participant in terms of another (in the case of Classificational Processes, one Participant ascribes a class to another), as shown in Diagram 1; and
- Analytical and Possessive Relational Processes establish a relation of ownership between participants as shown in B2 in Diagram 1 (more details on sub-section c) *Conceptual Processes*).

b) Existential Processes

Existential Processes serve to signal to the reader the existence of an entity (e.g. 'There is a man at the door') or a happening (e.g. 'There was a storm yesterday') (Halliday, 2004, p.256-258). These Processes present only one Participant (the *Existent*) which is usually accompanied by a Circumstance of time and place (Figure 10).

There is	a mysterious, faceless, bat-like man	surrounded by bats at sunset.
Existential Process	Existent	Circumstance

Figure 10 - A possible verbal representation of Diagram 1 (Image C4)

In an attempt to describe Image C4 (Diagram 1) in simple verbal terms, we could simply say: there is an Existent (a man with certain Attributes -‘faceless’, ‘bat-like’) that exists under specific manner and time Circumstances (‘surrounded by bats’, ‘at sunset’). However, the meaning of the verbal text is expanded when combined with non-verbal language. The image realizes a *Symbolic Suggestive Process*⁶ because the atmosphere (the mood of a place or situation) surrounding Batman (the Carrier) constructs his identity (‘mysterious’). In addition, the participant’s identity is constructed by the *Symbolic Attributes* that exist in/around himself: the black costume, the impossibility of identifying him with certainty, the golden sunlight which surrounds his head as a halo, the mysterious atmosphere suggested by the bats flying around him. All these attributes expressed by the non-verbal text construct the double identity of this character: an avenger against crime (Batman) and a gloomy millionaire with a sad past and a lonely life (Bruce Wayne).

Despite these points of contact identified between the two grammars, Kress and van Leeuwen (1996, p.115) argue that there is a wide range of structural devices in non-verbal language which have no equivalent in verbal language. The semiotic richness of using multimodal texts for representing human experience resides in the interplay of both modes of language, playing semantic roles that are equally important for textual meaning (Ibid).

In the next subsections, we will provide a more detailed explanation of Narrative and Conceptual Processes in VG, illustrating our discussion with examples and trying to relate the visual and verbal modes of meaning production.

c) Conceptual Processes

Conceptual Processes are image representations of the general state of affairs of Participants and general truths about the world (Kress; van Leeuwen, p.114).

Image 3 depicts three Participants (a boy, a man in his early thirties and an older man in his late fifties) in an organization which suggests that they are a family. They share some common Attributes:

⁶ For a more detailed discussion on Symbolic Processes, see section *Symbolic Processes*.

all three of them are Caucasian, wear white clothes, are illuminated by sunlight and seem healthy and peaceful.



Image 3 – *Chrome* by *Azarro* advertisement
Source: www.ciadvertising.org/.../images/chrome.jpg

Despite their different ages, these Attributes signal to the reader that they belong to the same general classification: in social hierarchy, they are probably wealthy and occupy a privileged position. In addition, there is another minor classification that excludes the little boy: the father and the grandfather occupy the same horizontal axis in the representation. The way they are positioned, involving a younger Participant, classifies them as protective masculine representations, as ‘family men’. However, the Participant who is the focus of attention in this representation is the boy’s father due to the fact that he is more salient in the composition: his whole head is visible in the picture and he is foregrounded in comparison to the grandfather; his gaze and body is oriented more towards the reader if compared with the boy. The reason for giving so much emphasis to this Participant is that he represents the main target consumer for the product: a Caucasian young adult male, probably married, with children, enjoying a high social status.

If we look at the image as a whole we notice a *Chrome* flask at the bottom-right corner that can be interpreted as another

feature the three Participants have in common and which identifies them as belonging to the same class: all of them can wear the fragrance irrespectively of their age, from a young boy to a mature man. The verbal text ‘reflections of men’, below the flask’s image, reinforces this principle: *Chrome* is the fragrance for all men, independently of their different ages and life experiences, as long as they share, among other things, the same social status, the same ideology ‘of family man’ expressed by the image. In addition, we can argue that the men in the picture are ‘models’ of men who wear *Chrome* and who share most of the Participants’ Attributes. They epitomize the ideal customers for Chrome, those the readers should look up to and emulate: white, middle/upper class, attractive and successful males.⁷

Translating this visual composition in SFG terms, we could have the clauses in Table 1.

Carrier(s): Three Participants	Relational Attributive Process	Attributes
The boy, the young adult and the mature man	are	Caucasian, peaceful, healthy, wealthy, illuminated by sunlight.
These men (in the picture)	are	true reflections of men.

Table 1 - Verbal representation of Image 3 in SFG terms

In Table 1, we have three occurrences of Relational Attributive Processes. The Participant in the left column to whom the Attribute is ascribed is the *Carrier*. There are three Carriers (the boy, the young adult and the mature man) who ‘carry’ the Attributes listed in the right column. These Attributes are associated with real men who wear the fragrance (‘reflections of men’) as a way of establishing some common identity between real consumers and represented Participants.

⁷ We thank our anonymous reviewer for helping us clarify this point.

Considering Image 3, the main function of Conceptual Processes is to signal to the readers who the Participants are (their identity) and what positions they occupy in the order of things within a classification system. Participants' Attributes such as clothing, age, ethnicity and the setting are non-verbal elements which serve to classify these Participants.

Furthermore, Conceptual Processes can be divided into three subcategories: *Classificational*, *Analytical* and *Symbolic*, which will be discussed in detail in the next section.

Subtypes of Conceptual Processes

Classificational Processes

Classificational Processes concern an existing taxonomy of Participants and the role they play in representational structures (Kress; van Leeuwen, 1996, p.81). There are two kinds of taxonomies in Classificational Processes: *Overt Taxonomies* and *Covert Taxonomies*.

Overt Taxonomies usually present Participants 'in chain' where some of them can act both as Subordinates or Superordinates, depending on how they are related to other Participants. These taxonomies can be single-leveled (one Superordinate connected to two or more Subordinates) or multi-leveled (two or more Superordinates linked to two or more Subordinates) (Ibid, p.81), as shown in Image 4.

Image 4 presents a multi-leveled taxonomy in which three kinds of Participants are involved: the *Superordinate*, a Participant which occupies a higher hierarchical level in the composition; the *Subordinates*, Participants which belong to the same class, presenting equal properties (size and distance) and which are included as a sub-class of the Superordinate element; and the *Interordinate*, the Participant which can act both as Superordinate or Subordinate (Ibid, p.83) with reference to other participants.

In this composition, Participants are distributed along seven categories (*kingdom, phylum, class, order, family, genus* and *specific epithet*) in which each category is more general than the category immediately below it. *Kingdom* is the Superordinate for all the levels (its Subordinates) and each category below it is a Superordinate in itself. However some of the levels, from *order* to

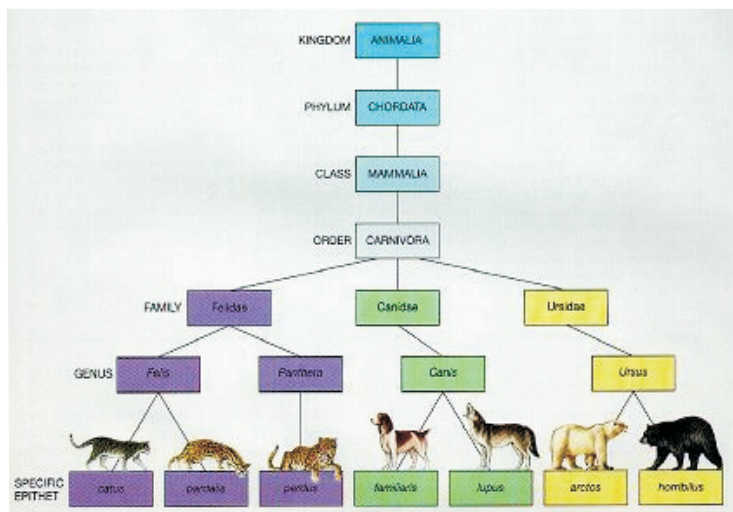


Image 4 – Animals’ taxonomy

Source: <http://ridge.icu.ac.jp/gen-ed/classif-gifs/animal-class-example.gif>

genus, have more than one subcategory. For example, the order *carnivora* has three Subordinates (the *felidae*, *canidae* and *ursidae* families) and the family *felidae* presents more two Subordinates (genera *felis* and *panthera*). The family *felidae* is an Interordinate because it both acts as an Subordinate to the order *carnivora* and as a Superordinate to the genera *felis* and *panthera*.

Getting back to Image 3, there is also the realization of a Classificational Process in that three elements of the same genus/ family develop a specific epithet: mature (old) – adult – child. The adult can be regarded as the Interordinate between the Superordinate (mature) and the Subordinate (child).

Differently from Overt Taxonomies, Covert Taxonomies show an apparent equivalence among the Participants of the visual construction. They are depicted in a ‘more or less objective, decontextualized way’ (Kress; van Leeuwen, 1996, p.81), with the Superordinate usually indicated by a legend. For example, the advertisement in Image 5 presents six women in underwear with different attributes such as age and ethnicity. However, one can ask: ‘What do these women have in common?’.



Image 5 – Dove Firming Ad

Source: <http://brasil.business-opportunities.biz/2006/05/05/as-belas-e-as-feras-da-dove-e-natura/>

The composition of Image 5 is symmetrical because the Participants present some equivalence in terms of orientation (same horizontal axis) and color of their underwear (white). One can say that this representation is decontextualized because the background is plain and neutral and the angle is frontal and objective (Ibid, p.81). All these features provide indication that these women are Subordinates of the same class. The verbal text topping the composition indicates the Superordinate member of this Covert Taxonomy: they are women who have ‘real curves’ (which means that they are not curveless woman, an allusion to professional models, to ‘unreal’, ‘extraordinary’ women) and all of them have tested the new *Dove Firming*.

Carriers	Relational Attributive Process	Attributes
These six different women	have	real curves.
They	are	in white underwear.

Table 2 – Verbal representation of Image 5

Table 2 is a version of Image 5 in verbal terms. The choice of Relational Attributive Processes (Possessive and Intensive) seems more adequate to represent the six women as belonging to the same class/membership despite their differences: two Attributes (Superordinates) in the right column ('real curves' and 'in white underwear') are carried by each one of them (Subordinates).

The use of Covert Taxonomies is a semiotic strategy employed by visual text producers (e.g. photographers) to 'naturalize' the way they classify entities which normally do not belong to the same class intrinsically. The use of this strategy varies according to what is judged to be the adequate classification for the representation of identities and relationships in each specific social context (Ibid, p.81).

Analytical Processes

Besides classifying entities in a hierarchical order, images can also identify them by their attributes, establishing between them a part-whole relationship through Analytical Processes. Non-verbal texts create this part-whole relation by involving two kinds of Participants: the *Carrier* (whole) and its *Possessive Attributes* (parts) (Kress; van Leeuwen, p.89). In SFG and VG, Relational and Analytical Processes, respectively, establish a relationship of ownership between two Participants in which one entity (Carrier) 'possesses' another (Possessive Attributes) (Halliday, 2004, p.244). Image 6 depicts a model (Carrier), wearing a dress (Possessive Attribute).



Image 6 - Hone Watson's dress fashion shot

<http://www.honewatson.com/baby-phat-fashions/cute/juniors/dresses-and-jumpsuits/>

Image 6 emphasizes the role of the Possessive Attribute (dress) in interpelating the gaze of the viewer. The model's head is out of the frame and the background is absent (no contextualization). The lack of similarity to common people (a complete human body with head and feet) or to real life situations (people do not exist in a vacuum, they have to be standing, sitting or lying down because of gravity) indicates a low degree of correspondence to reality or, in VG terms, low Modality.

Traditionally *Modality* is a resource offered by the linguistic system to signal the degree of truth or credibility we ascribe to our statements about the world (Kress; van Leeuwen, 1996, p.160). It realizes the interpersonal function of language which is to create alignment or distance between readers and writers (visual designers) (Id., Ibidem). In non-verbal language, Modality is expressed in scales of intensity (*Modality Markers*) of color, brightness, sharpness, size, depth, contextualization, representation and/or illumination, which varies according to the reader's coding orientation. As stated by Kress and van Leeuwen (1996, p.163), 'reality is in the eye of the beholder; or rather what is regarded as real depends on how reality is defined by a particular social group'. Each social group has its own realism: in scientific coding orientation, absence of color is a signal of high modality (high degree of fit with reality); however, in a naturalistic (photorealistic) coding orientation it is a signal of low modality. Thus, a scale of color saturation in naturalistic Modality might be represented as Image 7.

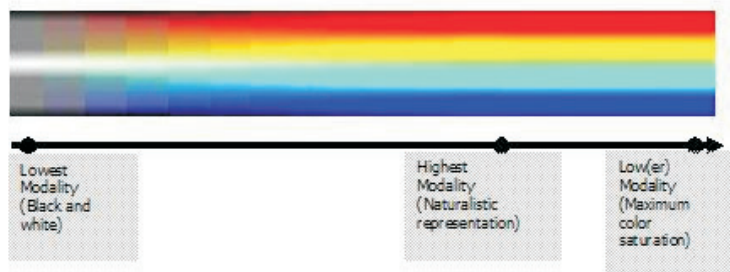


Image 7 - Modality scale for color saturation
adapted from Kress and van Leeuwen (1996, p.165)

Image 7 shows a scale of color saturation in a naturalistic Modality which runs from full absence of color (black and white) to maximum presence of color. For each point in this continuum, a Modality value is conventionalized, according to a specific coding orientation, in terms of what is more or less natural. As explained before, in a naturalistic coding orientation black and white has a low Modality value. However, too much color decreases the level of credibility we ascribe to an image (Kress; van Leeuwen, p.165). The highest Modality is only reached at an intermediary point in the scale, where the presence of color is balanced and naturalistic.

Returning to the analysis of Image 6, there is no action (narrative) and no hierarchy (classification) in the composition. As Kress and van Leeuwen (1996, p.90) state, in fashion shots ‘persuasion is foregrounded, instruction and exposition are backgrounded’. This semiotic choice is adequate for the purpose of this kind of visual structure, which is more interactional than representational. The advertiser’s intention is to have the reader’s attention focused on the dress, which is represented in its minimal defining features (color, shape, texture). A more detailed background would distract the reader’s attention from the commodity on sale (Ibid, p.90-93).

A possible verbal representation of Image 6 is presented in Figure 11.

The model	has	a printed tube dress with a light yellow lining.
Carrier	Possessive Attributive Process	Attributes

Figure 11 - Verbal representation of the *Hone Watson’s* fashion shot (Image 7)

In Figure 11, there is a Relational Attributive Process, with the verb ‘establishing’ a relation of ownership between the Participants. The Carrier is an unspecific nominalization (‘the model’), despite the use of the definite pronoun ‘the’. The entity which is being referred to is a model that is specific as far as the picture goes, but the reader cannot identify this individual in the

broad class of models. Readers will seldom ask: Who is the model? Is she Brazilian? Is she famous? Depicting the model's identity is not the purpose of Image 6. The purpose of this visual is to depict in details the Attribute(s) which combine with the Carrier ('a printed tube dress with a light yellow lining') as a way of calling the readers' attention. Thus, the nominal group which composes the Attribute in constructions such as that in Figure 10 is usually longer, with various adjectives and nominalizations.

Symbolic Processes

Symbolic Processes visually represent what a Participant 'means or is' and explore the meanings and the ideological aspects which compose Participants' identities in visuals (Kress; van Leeuwen, 1996, p.108). They can be of two kinds: *Symbolic Attributive* or *Symbolic Suggestive*.

Symbolic Attributive Processes

Symbolic Attributive Processes involve two kinds of Participants: the *Carrier* (the Participant referred to by a symbolic meaning) and the *Symbolic Attribute* (the Participant which carries a symbolic meaning on itself) (Kress; van Leeuwen, 1996, p.108). Symbolic Attributes are Participants in visual structures which are highlighted by one or more of the following characteristics:

- Modality;
- An action or gesture which makes the Symbolic Attribute evident to the viewer;
- Some kind of displacement in relation to the whole;
- Conventional association with symbolic values (Id., Ibidem).

In Image 8, there are three Participants depicted in black and white, characteristic of low Modality, which signals to the reader that what is being represented is not true, but 'how things may become'. The Carrier is the girl who is offering an apple to the reader (actor Katie Holmes, in the middle). In this context, the apple is a Symbolic Attribute that defines her identity. The red apple is highlighted by the following features: its character as the

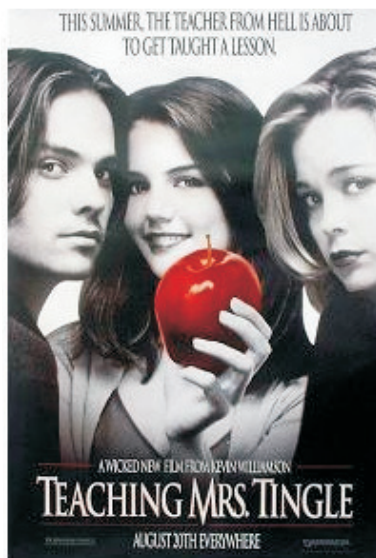


Image 8 - *Teaching Mrs. Tingle* movie poster

Source: http://www.impawards.com/1999/teaching_mrs_tingle_ver1.html

only colorful and brilliant element in the visual composition (element with the highest level of modality in comparison to the overall structure of the picture); its central placement in the framing; the girl's gesture towards the reader, and the symbolic value with which the apple is commonly associated.

An apple is the traditional offer made by 'good' students to their favorite teachers. In the picture, a beautiful and 'kind' student brings an apple to the teacher as a token of admiration (the verbal choices 'Ms. Tingle' and 'teaching' guide the reader to this interpretation). Intertextually, we can read the image as resorting to the Snow White tale: an apparently harmless student offers a decoy (a red apple) to entice her victim to the trap.

The intense red of the apple and the girl's ironic smile show that the students' intentions are malicious. The verbal text topping the picture signals that the person to be taught a lesson is the teacher (Mrs. Tingle). Also, there is an eye-to-eye interaction between the Participants and the reader, an interpersonal resource of VG called *Demand* (Kress; van Leeuwen, 1996, p.122). The Participants' gaze in the picture demand something from the viewer: in image 8,

that they share an evil plot to teach Mrs. Tingle the lesson she should learn. One possible verbal representation of Image 8 is Figure 12.

We	are	the students who are about to offer Mrs. Tingle an apple.
Identified	Relational Identifying Process	Identifier

Figure 12 - A possible verbal representation for Image 8

The choice of the first person plural pronoun ‘we’ (Identified) is due to the fact that the Participants are interacting as a group. They are about to act mischievously and the ironic smile in the central participant’s face is connected to the metaphorical use of a clause (‘to offer Mrs. Tingle an apple’) representing a traditional behavior in the context of culture of classrooms.

Kress and van Leeuwen (1996, p.115) believe that “Symbolic Attributive Processes are akin to Identifying clauses” (see Diagram 1, Image B3) and the example explored in Image 8 confirms that this association indeed applies. Image 8 does not emphasize the girl’s action of ‘doing’ something (offering an apple), but represents a state of things, the character’s identities, defining the ideological aspects the participants share. In Image B3 (Diagram 1), Participants are also being identified in terms of their Symbolic Attributes (red lips and blue eyes) as the verbal text in the center suggests: ‘Isn’t it time everyone hears your secrets?’. The Symbolic Attributes construct the girls’ identities and their relationship: one of them is ‘able to speak’, to tell her secrets, while the other can only trust what her eyes see to uncover the truth.

Symbolic Suggestive Processes

In contrast to Symbolic Attributive Processes, which involve two Participants, Symbolic Suggestive Processes have only one Participant (the Carrier) who bears on themselves the Attribute, according to the ‘atmosphere’ in which they are inserted (Kress; van Leeuwen, 1996, p.111).



Image 9 – Madonna's *Confessions on a Dance Floor*

Album: promotional image

Source: <http://www.madonna.cz/stranka.php?navez=galerie&zobrazit=2005>

Image 9 presents just one Participant, the Carrier (Madonna), which carries in herself the Symbolic Attributes: clothes and hair presenting vibrant colors, her body position, illuminated by the stroboscopic light of a disco environment. These Symbolic Attributes suggest the ideas the singer wants to convey to her audience such as fun, dance, energy and youth (with all the features that they entail such as beauty, physical fitness and glamour).

APPLICATIONS

This section of the paper offers an example of a multisemiotic reading which explores categories presented both by SFG and VG. Correlations between theoretical principles and pedagogical application will be elaborated along the discussion.

In some genres, especially advertisements, images are extremely appealing elements because they constitute the most immediate stimulus for the reader. In the teaching of Foreign Languages, where language is the issue, learning to analyze the visual configuration of texts can be extremely helpful in the meaning production.

In multimodal reading, visuals in combination with the co-text (a set of other peripheral textual portions embedded in the text) create a scaffolding resource for the reader. Non-verbal elements, such as color, shape, size, volume, illumination and spatial

orientation, offer clues of ‘what is going on’ in a text because they can activate the readers’ background knowledge before the actual reading of the verbal text.

We can begin to explore a multimodal text with an initial question:

- 1) Multimodal texts combine verbal language with non-verbal elements. Based on these clues, look at Image 10 and try to identify what situation is being portrayed and the semantic field(s) the text refers to.

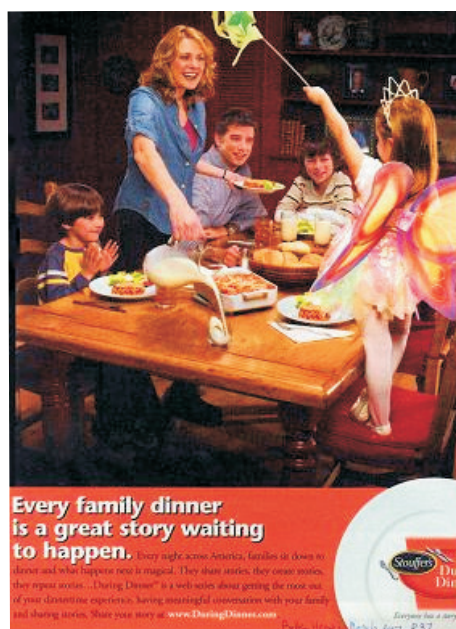


Image 10 – Stouffers During Dinner’s advertisement
<http://www.texascollaborative.org/BoerckerModule/Stouffers-Advertisement.jpg>

The analysis of Image 10 suggests a combination of semiotic elements that helps the reader identify the situation depicted by the text and the semantic fields to which it refers to. In terms of illumination, Participants are much more illuminated in comparison to the dark background, indicating that the event is taking place in

the evening ('dinner', 'Every night'). They seem to be a family sitting around the dinner table, set with a variety of dishes. The colorfulness of the scene, the girl dressed up in a pink fairy costume and their smiles indicate that it is not just a regular dinner scene, but a magical, happy moment in which family members share stories. All these elements define two overlapping semantic fields for the expressions *family dinner* and *fairy-tales* (Image 11).

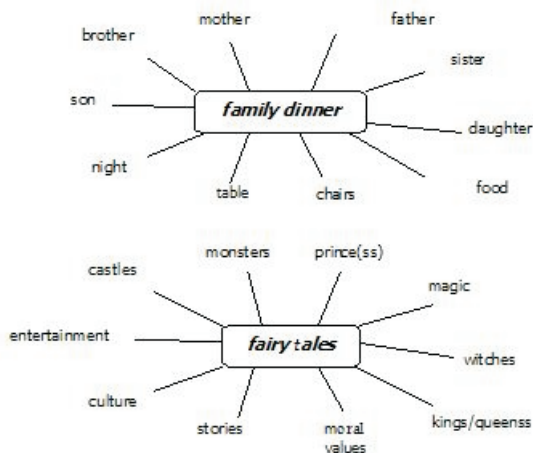


Image 11 – Semantic fields of the words *family dinner* and *fairy tales*

The image, in combination with the verbal text 'Every family dinner is a great story waiting to happen' (Intensive Attributive Process), construes one participant (the family dinner) that bears on itself the attribute of being a great story. The image thus realizes a Symbolic Suggestive Process. Image 11 has intense colors, characterized by low modality in terms of color saturation, which reinforces the 'fairy tale' nature of this family event. The joyful mood is the symbolic value which a dinnertime with *Stouffer's* products (frozen prepared foods) offers to its consumers.

Besides creating a context of situation for the verbal text, images also 'narrate' how events happen and present a hierarchal classification of things. A critical analysis of images is also a way of exploring social and cultural aspects associated with stereotypes

about gender, social class, race, nationality, profession etc. (Fairclough, 1992; Gee, 2000). In order to explore such ideological/discursive elements in a multimodal text, further questions can be proposed, first to be discussed in groups and then brought to the classroom forum:

- 2) Does the image present a state of affairs or does it narrate events, movements, processes?
- 3) Who are the participants in the image? What are they doing?
- 4) How are participants represented in the image in terms of salience (backgrounding/foregrounding), position (side by side or top/bottom) and size?
- 5) What social and cultural aspects (stereotypes about gender, race, sexual orientation, social class etc.) can be inferred from the image(s)?

Image 11 presents both Conceptual and Narrative structures. Narrative processes are realized by the mother who is pouring milk into a glass and handing a plate of food to her husband, by the little boy who is clapping his hands and by the little girl who is raising a magic wand. All these actions reinforce the notion of a cheerful family dinner as a set of desirable actions in a daily activity.

In conceptual terms, Image 11 depicts stereotypes related to race, economic class, gender and family composition. The family members are Caucasian, healthy (all of them have beautiful smiles and bright hair) and educated (there are pictures on the wall and books on the shelves in the background). In addition, the table at which they are sitting is made of solid wood, they are well dressed and the little girl is wearing an expensive costume. All these characteristics represent the family as belonging to the upper middle class.

Furthermore, family members are classified in terms of position (sitting/standing), salience (foregrounding/backgrounding) and body attributes (such as hair color and facial expressions). The little girl and her mother have blond hair and are standing. All the family members direct their gaze at the girl while she performs an action with the wand and the mother serves dinner. These features classify the female family members as those who provide their 'services' to the other male participants. The

mother is in charge of domestic chores, such as taking care of children and preparing/ serving food, and the little girl is responsible for entertaining the family.

In contrast, the father and the oldest son are backgrounded and have the same facial expression and body position (their elbows are on the table). Also, the oldest boy is sitting at the head of the table, a position usually occupied by the father who is considered 'the head of the family'. These features suggest that the boy will follow his father's steps: he will become a family man like his father and will be responsible for other 'serious' family issues such as those involving money or careers.

A third set of questions may be used to explore the relationship between verbal and non-verbal texts.

- 6) How are the participants in the picture and their actions referred to in the verbal text (by means of which lexical-grammatical choices)?
- 7) What attributes and circumstances are associated with the participants, their actions, and the mood of the scene?
- 8) What kind of story(ies) is (are) validated by the ad?

As generalizations, the verbal passages 'Every family dinner is a great story waiting to happen' (Intensive Attributive Process) and 'Everybody has a story to tell' (Possessive Attributive Process) reinforce the stereotypes presented by the image. How many family dinners can you think of that relate to this advertisement? Who from your social circle would you classify as 'everybody' who tells stories at dinner table? Image 10 is a hegemonic representation of reality because it dismisses those social groups (such as minority communities, the working class or those living in social exclusion) who do not have the attributes required for enjoying the pleasure of 'sharing stories' during a dinner prepared with *Stouffer's* products: families are "'magical'", they have time and a place to "'sit down'" to eat dinner, "'every night'" they have cheerful conversations, they "'share emotions and ideas'".

Post-modernity has deeply affected the way people experience their identities (Hall, 2003) and contemporary families follow new arrangements, with members performing new roles. There are single-parent families, same-sex families etc. Also, there are some families in which the father is in charge of 'typical female'

tasks such as preparing food and changing the baby' diapers while the mother is an executive who works outside the home. However, the family model depicted in Image 11 disavows new family arrangements observed in late modernity, by reinforcing traditional views on what counts as the nuclear family.

CONCLUSION

The analyses presented in this paper illustrate a novel approach to explore multimodal texts in the classroom from a critical perspective. In order to make students more critical about images, teachers should foster students' perception that images are a common meaning-making resource in contemporary societies and that their combination with verbal text is a powerful tool for enacting relationships and identities.

This paper constitutes an attempt to describe the system of transitivity in Visual Grammar and to explore some of its pedagogical applications to the reading of multimodal texts. The discussion of the semiotic categories present in imagetic composition and of the ways visual and verbal modes of language are integrated to create meaning is important for two reasons: (1) discourses, as 'ways of being, feeling, acting, valuing and believing in the world', are materialized through texts composed not only of verbal language, but also of verbal language in combination with other 'non-language stuff' such as clothes, objects, sounds, colors (Gee, 2000, p.7) and; (2) it is a primary educational task to help students to expand their set of discourses and registers in order to help them to achieve their social purposes (Gee, 2000; Cope; Kalantzis, 2000).

The multimodal texts analyzed in this paper are still modes of communication, such as movie posters, advertisements and images which accompany science texts. Further research is needed to identify the pedagogical applications of Visual Grammar's system of transitivity to the analysis of the dynamic semiosis of movies and computer graphic images.

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Título: *Transitividade na gramática visual: conceitos e aplicações*

Resumo: Este artigo tem dois objetivos interconectados: (1) discutir o modo como o sistema de transitividade na Gramática Visual de Kress e van Leeuwen (1996) para a análise de imagens se relaciona ao sistema de transitividade na Gramática Sistêmico-Funcional de Halliday (2004) e (2) sugerir questões para aplicação pedagógica das categorias da Gramática Visual ao ensino de línguas. O interesse pela análise de imagens se justifica pela necessidade contemporânea de um letramento visual que nos possibilite: (1) ler o crescente número de gêneros multimodais aos quais somos expostos na atualidade (que combinam sons, imagens, cores, gestos etc.); (2) investigar o modo como textos multimodais se combinam na produção de sentido. Em termos de uma teorização acerca do texto não-verbal, o estudo de gramática visual é relevante em virtude da necessidade de investigarmos de que forma uma gramática dessa natureza pode contribuir para o ensino de linguagens.

Palavras-chave: Gramática Visual; multimodalidade; transitividade; multiletramento.

