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## READING THROUGH THE LANGUAGE OF THE ECONOMIST: AN APPROACH TO ANALYSE INTERSEMIOTIC COMPLEMENTARITY IN MULTIMODAL DISCOURSE

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### Abstract

The purpose of this paper is to examine how the visual and the verbal modes co-occur in text-based multimodal discourse. M. A. K. Halliday's Systemic Functional Linguistics Theory (1978, 1985, 1994) and Kress and Van Leeuwen's socio-semiotic approach to develop a grammar of visual communication (1996/2006) provide the theoretical and descriptive framework which I will apply to the analysis of a multimodal text from the *Leaders* section of *The Economist* magazine. It will be my main concern to investigate how the visual mode is used by the British magazine as a tool to introduce and comment on the verbal counterpart, which, by developing and elucidating what the image suggested, nurtures intersemiotic complementarity in discourse.

JEL Classification: M10, Z00, M00

### INTRODUCTION

If, in the last century, the analysis of language in terms of a socially-based semiotic system, as developed by Halliday's Systemic Functional Linguistic Theory (hereafter SFL), initially focussed primarily on linguistic (spoken and written) communication, late in the twentieth century, researchers increased their interest in the analysis of other forms of communication besides language, and visual communication developed as pivotal in multimodal discourse analysis. New media have stimulated scholars' curiosity and concern about images and image-text relations. Socio-semioticians such as Kress and Van Leeuwen (1996/2006), the forerunners of multimodal discourse analysis, applied SFL to visual communication and provided a relevant framework to read images, and examine to which extent the image appears semantically integrated with the text.

In the exploration of multimodal scientific language, Lemke (1998) produced a detailed analysis of how an image and a text interact, but he did not systematize his examination by producing a framework of verbo-visual intersemiotic relations.

O'Halloran (1999), contributed to the analysis of a multimodal approach to image-text interaction in mathematics, by using Halliday's functional grammar system; she produced a framework to underline how, in the process of translation from the verbal to the visual language of mathematics, new elements are introduced and a new semiotic scenario is given shape. This process of semantic shift which occurs when functional elements are reconstructed in another semiotics was called semiotic metaphor.

In their investigation of image-text relations, Martinec and Salway (2005) illustrated a generalized framework which they expected would be "useful for distinguishing between image-text relations in new and old media. Their framework adapts Halliday's clause relation status of dependency and independency to the status of image and text relation as equal or unequal. Unequal status implies interdependency and subordination, whether the image is dependent on the text or whether the text is dependent on the image. Image subordination occurs when the image relates to a part of the text, while text subordination implies that only a part of it relates to the image. According to the principle of equality the whole image relates to the whole text. This status of equality is further divided into independency and complementarity; if independency does not imply any sort of modification, when image and text modify one another they are complementary. Martinec and Salway also investigated the nature of semantic linkage between image and text, thus applying Halliday's system of interclausal relations, by which the way clauses are semantically linked may be defined as elaboration<sup>1</sup>, extension<sup>2</sup>, and enhancement<sup>3</sup>.

Finally, in his approach to analyse visual-verbal synergy, Royce (1998, 2002, 2007) developed a framework which he used to explain the co-occurrence of image and language in texts. He substantiated his inspection by applying his framework to multimodal scientific, economic, and financial discourse. Following Halliday's SFL metafunctional model, Royce demonstrated where and how the ideational, interpersonal and textual aspects of the image and text intersemiotically relate.

## **1. IMAGE-TEXT RELATION: MEANINGFUL THEORIES FOR A FRAMEWORK OF INTERSEMIOTIC ANALYSIS**

As image-text relations are the core of this paper, it will be my prime concern to provide exhaustive details of the theoretical scenario which lies behind the established assumption that semiotic systems interrelate.

It is widely acknowledged that Barthes' essay *The Rhetoric of the Image* (1964/1986) may be considered a fundamental step towards the analysis of cross-modal interaction. Barthes made crucial remarks, relevant to the analysis of how visual representations interact with verbal expressions, which appear to be part of the visual message. He assumed that what images mean is closely related to what the verbal text accompanying them states, claiming that "it is not the image which comes to elucidate or realize the text, but the latter which comes to sublimate, patheticize or rationalize the image" (1977: 25). In his study on advertisements, Barthes depicted the viewer's reception as being either a linguistic, a denoted, or a connoted message, depending on the three different messages advertisements may convey. The linguistic message relates with the verbal occurrences in and outside the

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<sup>1</sup> Elaboration occurs when a clause clarifies another clause.

<sup>2</sup> Extension occurs when one clause adds information to another clause.

<sup>3</sup> Enhancement occurs when a clause completes information to another clause by giving details of how, when, where, and why.

image, while the denoted and the connoted refer to the image itself. The linguistic message, which includes any expression of language (text, caption, headline) relating to the visual form, may function as anchorage and relay. In its relaying function, language and image are "in a complementary relation" (1986:30), with language giving pivotal information which the image does not portray. In its anchoring function, language is aimed at triggering the identification and the interpretation of the pictorial elements in the image:

The text directs the reader among various signifieds of the image, causes him to avoid some and to accept others; through an often subtle dispatching, it teleguides him toward a meaning selected in advance. In all these cases of anchoring, language obviously has a function of elucidation, but such elucidation is selective; it is a matter of a metalanguage applied not to the whole of the iconic message but only to certain of its signs (1986:29).

The connoted and the denoted functions refer to what the image communicates. While the former relates to what both the single components that shape the image and the image as a whole symbolize; the latter, conversely, expresses the literal meaning of the illustration, which has been removed from the suggested signs depicted in the symbolic depiction. Literal and symbolic messages cannot be conceived separately, they both contribute to outlining the functions the image has.

Turning to the evidence of Royce's findings, there are valid reasons to espouse the view of effective interaction between different semiotic systems. Taking his studies as valuable examples, this paper aims at identifying and substantiating crossmodal links between visual and verbal semantic units in terms of the degree of connection and disconnection between image-text based multimodal discourse. In his approach to multimodal discourse analysis Royce presented a framework (see *Appendix 1*) to analyse the level of semantic co-operation between visual and verbal modes in a page-based multimodal text. This framework took inspiration from Halliday's metafunctional approach to verbal communication (1978, 1985, 1994) and from Kress and Van Leeuwen's approach to visual analysis (1996/2006).

Following Halliday's perspective of language as a functional socio-semiotic system, which makes meanings and exchanges them in a socio-cultural context, Royce built his framework on Halliday's three metafunctions (ideational, interpersonal, textual)<sup>4</sup>, which he considered the structural and organizational core of all modes of meaning.

Halliday's SFL approach to language as metafunctional and as a social construct meaning in a context, was taken as an example by Kress and Van Leeuwen, who developed a framework designed to read images and at visualise the variety of meanings which they offer. With their grammar for interpreting visuals they sought to find a connection between the producer, the socio-cultural context of depiction and the visual meanings in the image. Borrowing Halliday's metafunctional view of communication, the two scholars focussed on the ideational function to examine what the represented participants<sup>5</sup> do, in terms of which actions they perform, by

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<sup>4</sup> The ideational function reveals who the represented participants are, what actions they perform under what circumstances. The interpersonal function underlines the mood and the modality of the text. The textual function analyses the degree of coherence in a text, in terms of distribution of information in a text.

<sup>5</sup> Represented participants are people, places, things depicted in the image.

processing<sup>6</sup> acts of doing, sensing, being, behaving, saying, reacting, interacting, under certain circumstances<sup>7</sup>. The interpersonal function focussed on how the visual representation involves and interacts with the viewer, in terms of gaze<sup>8</sup>, distance<sup>9</sup>, and perspective<sup>10</sup>. The textual function enabled the viewer to examine the degree of cohesion and coherence of the represented message/s<sup>11</sup>.

## **2. TOOLS TO ANALYSE INTERSEMIOTIC COMPLEMENTARITY: A FRAMEWORK**

As this paper aims at examining how and to which extent the sections of a page-image based multimodal text interacts in terms of intersemiotic relations, both Halliday's metafunctional approach to language analysis and Kress and Van Leeuwen's framework to read visuals will be used to determine image and text interrelatedness.

Reading/viewing a multimodal text implies the simultaneous interaction of the three metafunctions, the ideational, the interpersonal and the textual in both modes, the verbal and the visual.

Both in the linguistic and the verbal process of text analysis, the ideational metafunction investigates how the *social action* develops, in terms of what is going on, who (the participants) is doing what (types of process) under what circumstances (place, time, etc). The semantic categories of participants, processes, and circumstances explain "how phenomena of the real world are represented in linguistic structures" (Halliday, 1985:102).

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<sup>6</sup> Processes can be narrative, conceptual, symbolic. Images can narrate events or provide the viewers with conceptual or symbolic representations of actions.

<sup>7</sup> Circumstances reveal where, when, and how participants relate to each other.

<sup>8</sup> Visual configurations have two main functions. The first is to create a visual contact with the viewer, who is directly asked to activate a visual relation with the represented participant/s. The second, addresses the viewer indirectly; the absence of eye contact offers the depiction to the viewer's scrutiny.

<sup>9</sup> Distance establishes the degree of proximity to, or farness from, the viewer. The closer the shot is, the more the intimacy between the represented participants and the viewer is prompted, The longer the shot the less interaction is processed.

<sup>10,10</sup> The image can be created from a horizontal or vertical angle. Images produced from a horizontal angle represent the relation between the frontal plane of the image-producer, and the frontal plane of the represented participants. The producer can choose between a frontal-angled or an oblique-angled depiction. Frontal angle images indicate a sort of involvement between what is represented and who represented it; the viewer feels the same sort of intimacy being positioned in front of the depiction. Oblique angle images display detachment, the producer did not feel intimacy with what s/he represented. As a consequence the viewer will feel the same state of detachment. Scanning the image from a vertical angle, the viewer is involved in a relation of superiority (high angle), since the producer depicted the image looking down at what s/he would represent. The viewer feels in a position of equality (medium angle), since the producer depicted the image as feeling the same level of solidarity. The viewer feels in a state of inferiority (low angle), since the producer showed the power of the represented participants over her/himself.

<sup>11</sup> From a horizontal reading path, elements are analysed according to their position, from left to right, where elements on the left represent the Given (known information), while those on the right the New (new information). From a vertical reading path, elements are analysed according to their position, from top (the generalised essence of information,) to bottom (the concrete essence of information). Both horizontal and vertical reading paths include the analysis of foregrounded and backgrounded elements, and centralised or marginalised elements. Both foregrounded and centralised elements usually correspond to core factors, while backgrounded and marginalised elements are of secondary importance.

While examining how the visual and the verbal interact intersemiotically at the ideational level, once the participants, the processes, the circumstances, and the attributes (personal qualities and features) have been identified, cohesive ties, in terms of semantic relations between the lexical items and visual segments, are labelled. Halliday and Hasan's approach (1985) to the examination of cohesion was used by Royce to analyse cohesive relations, which he called "*sense relations*" between visuals and texts. Royce's framework of lexico-semantic cohesion among different modes involved inersemiotic relations of repetition, synonymy, antonymy, hyponymy, meronymy, and collocation<sup>12</sup>.

By exploring how images and texts are interpersonally interrelated, the role structure, in terms of how the author and the reader of a text, and the producer and the viewer/reader of an image interact, is pivotal in influencing the understanding and interpretation of the message. Visuals and texts are interpersonally complementary if and when the viewer/reader is addressed (mode). In the verbal mode, the degree of involvement and interaction between writer/speaker and reader/listener depends on the speech-functional meanings. Halliday (1994) identified four primary speech functions (order, command, statement, question), which, according to the addressor's production and the addressee's replies, determine the linguistic pace and the degree of interaction. In the social act of exchanging information or proposals, as Halliday named the possible forms of interaction, the order in which subject and finite<sup>13</sup> are employed, and the use of modals to express the personal attitudes and views, affect the intensity of the social exchange.

The degree by which involvement is activated with visuals depends on factors different from the speech functions, mood and modality used in verbal speech. Gaze, perspective, distance and salience are indicators of how the producer and the viewer/reader relate. The absence of gaze, horizontal oblique angle, vertical high angle, and the size elements are indicators of exclusion; the viewer is left alone in contemplation of an image whose message is offered to be decoded. Conversely, direct gaze, horizontal frontal angle, vertical eye-level angle, and the size of the frame as close or medium shot involve the viewer in an act of cooperation with the producer. These elements are all markers of inclusion: the viewer is given visual support and is helped in analysing and understanding the visual message.

The distribution of how segments of the text and elements of the image textually relate, in terms of how meanings are verbally and visually exchanged and organised as messages, will be defined in the following sections of the paper.

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<sup>12</sup> Repetition indicates the repetition of experiential meaning; synonymy expresses a similar experiential meaning; antonymy designates an opposite experiential meaning; hyponymy marks the identification of a general class of something and its subclasses; meronymy refers to the whole of something and its constituent part; collocation implies words that tend to co-occur in various subject areas.

<sup>13</sup> In Halliday's (1994) analysis of the grammatical organization of clauses, he identifies two elements, the subject (nominal group) and the finite (part of the verbal group) as being the basic components of the MOOD, which is the essential component of the social exchange.

### 3. THE ARTICLE: THE BILL THAT COULD BREAK UP EUROPE

The article bearing the title *The Bill that could break up Europe*, which was published in *The Economist* on 26<sup>th</sup> February 2009<sup>14</sup>, is presented in full in *Figure 1* here below. A sentence division of the article is given in *Appendix 2*.

Figure 1:  
Eastern Europe's woes  
The bill that could break up Europe  
If eastern Europe goes down, it may take the European Union with it  
Feb 26th 2009 | from the print edition



Illustration by KAL

TUMBLING exchange rates, gaping current-account deficits, fearsome foreign-currency borrowings and nasty recessions: these sound like the ingredients of a distant third-world-debt crisis from the 1980s and 1990s. Yet in Europe the mess has been cooked up closer to home, in east European countries, many of them now members of the European Union. One consequence is that older EU countries will find themselves footing the bill for clearing it up.

Many west Europeans, faced with severe recession at home, will see this as outrageously unfair. The east Europeans have been on a binge fuelled by foreign investment, the desire for western living standards and the hope that most would soon be able to adopt Europe's single currency, the euro. Critics argue, with some justice, that some east European countries were ill-prepared for EU membership; that they have botched or sidestepped reforms; and that they have wasted their borrowed billions on construction and consumption booms. Surely they should pay the price for their own folly?

Yet if a country such as Hungary or one of the Baltic three went under, west Europeans would be among the first to suffer (see article). Banks from Austria, Italy and Sweden, which have invested and lent heavily in eastern Europe, would see catastrophic losses if the value of their assets shrivelled. The strain of default, combined with atavistic protectionist instincts

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<sup>14</sup> The article was published in the European edition of the paper. Every week the magazine issues a North American, a European, and an Asian edition, which do not differ in the contents of the articles, but which may feature a different cover and advertisements according to the topical interests of the countries they are aimed at.

coming to the fore all over Europe, could easily unravel the EU's proudest achievement, its single market.

Indeed, collapse in the east would quickly raise questions about the future of the EU itself. It would destabilise the euro—for some euro members, such as Ireland and Greece, are not in much better shape than eastern Europe. And it would spell doom for any chance of further enlarging the EU, raising new doubts about the future prospects of the western Balkans, Turkey and several countries from the former Soviet Union.

The political consequences of letting eastern Europe go could be graver still. One of Europe's greatest feats in the past 20 years was peacefully to reunify the continent after the end of the Soviet empire. Russia is itself in serious economic trouble, but its leaders remain keen to exploit any chance to reassert their influence in the region. Moreover, if the people of eastern Europe felt they had been cut adrift by western Europe, they could fall for populists or nationalists of a kind who have come to power far too often in Europe's history.

### **How to avert disaster**

The question for western Europe's leaders is how best to avert such a disaster. Although markets often treat eastern Europe as one economic unit, every country in the region is different. Three broad groups stand out. The first includes countries that are a long way from joining the EU, such as Ukraine. Here European institutions may help financially or with advice, but the main burden should fall on the International Monetary Fund. These countries will have to take the IMF medicine of debt restructuring and fiscal tightening that was meted out so often in previous emerging-market crises.

Things are different for the countries farther west, all EU members for which the union must take prime responsibility. One much-touted remedy is to accelerate their path to the euro, or even let them adopt it immediately. It might make sense for the four countries with exchange rates pegged to the euro: the Baltic trio of Estonia, Latvia and Lithuania, plus Bulgaria. (Slovenia and Slovakia have joined the euro already.) None of these will meet the Maastricht treaty's criteria for euro entry any time soon. But they are tiny (the Baltics have a population of barely 7m), so letting them adopt the euro ought not to set an unwelcome precedent for others nor should it damage confidence in the single currency. Yet the European Central Bank and the European Commission firmly oppose this form of "euroisation", even though two Balkan countries, Montenegro and Kosovo, use the euro already.

Unilateral or accelerated adoption of the euro would make far less sense for a third group of bigger countries with floating exchange rates: the Czech Republic, Hungary, Poland and Romania. None of these is ready for the tough discipline of a single currency that rules out any future devaluation. Their premature entry could fatally weaken the euro. But as their currencies slide, the big vulnerability for the Poles, Hungarians and Romanians, especially, arises from the debt taken on by firms and households in foreign currency, mainly from foreign-owned banks. What once seemed a canny convergence play now looks like a barmy risk, for both the borrowers and the banks, chiefly Italian and Austrian, that lent to them.

### **Stopping the rot**

The first priority for these four must be to stop further currency collapse. The second is to prop up the banks responsible for the foreign-currency loans that are going bad. The pain of

this should be shared four ways: between the banks and their debtors, and between governments of both lending and borrowing countries. From outside, these two tasks will necessitate help from several sources: the European Central Bank as well as the IMF, the commission's structural funds, the European Bank for Reconstruction and Development and perhaps the European Investment Bank. Given the scale of the problem, the lack of co-ordination between these outfits has been scandalous. A third aim must be to get eastern European countries to restart the structural reforms they have evaded thus far.

Bailing out the same mythical Polish plumbers who just stole everybody's jobs will be hard for Europe's leaders to sell on the doorsteps of Berlin, Bradford and Bordeaux, especially with the xenophobic right in full cry. German taxpayers are already worried that others are after their hard-earned cash (see article). The bill will indeed be huge, but in truth western Europe cannot afford not to pay it. The meltdown of any EU country in the region, let alone the break-up of the euro or the single market, would be catastrophic for all of Europe; and on this issue there is little prospect of much help from America, China or elsewhere. It is certainly not too late to rescue the east; but politicians need to start making the case for it now.

The article (hereafter referred to as *The Bill* text), which discusses the economic crisis Europe is suffering, is a multimodal text composed of a visual and a verbal mode. The visual representation portrays the caricaturization of an after-dinner caricature set in a restaurant where three clients whose facial expressions show evident signs of worry for a bill they have just been given by an emotionlessly composed waiter. The verbal counterpart narrates and comments on the reasons why the crisis exploded in Europe; details of what the responsibilities of both the Eastern and the Western European countries are given, and, on these grounds, urgently imperative interventions of recovery on both sides are suggested.

As a priority in the analysis of this multimodal text, my main concern is to examine it as a metafunctional construct where its ideational, interpersonal, and textual meanings interact simultaneously. As a ten-year subscriber and usual reader and viewer of *The Economist*, I wish to provide the elements to substantiate my investigation and allow any reader/viewer to interact with the complexity of multimodal texts and understand their organizational, social, and interactional aspects in order to manage the comprehension of where and how the visual and verbal are intersemiotically interrelated.

#### **4. IDEATIONAL INTERSEMIOTIC ANALYSIS**

In the examination of the intersemiotic relationship between the visual and the verbal aspects of the text, initial focus is devoted to the analysis of the ideational features which characterize both modes, in terms of WHO or WHAT the visual representation portrays (animate or inanimate represented participants), WHAT action is occurring under WHAT circumstances. I proceed by reading through the verbal aspect of the text semantic relations among lexical items. Finally, the semantic relationship between the visual and the verbal elements are elucidated.

*The Bill* text portrays a waiter holding a bill and giving it to three clients sitting at a table. Each of them reacts at the sight of the bill and looks astonishingly worried; as viewers we cannot but deduce that the bill must be very costly. One of the main purposes of the image is to identify the characters involved in the action portrayed, any salient elements, which may contribute to their identification, is meaningful. The represented participants are a



metaphorical and metonymical caricaturization and their identity may be commented on as follows:

- the waiter is a pictorial metaphor<sup>15</sup> for the European Commission and announces to the EU member-states that they are in trouble; there is no reference of him in the text, which does not contribute to correlating his visual and verbal representation;
- the three clients, read through from left to right, are pictorial metaphorical caricaturizations and represent three politicians identified as Merkel, Sarkozy, and Brown who metonymically indicate the heads of three western European governments (Germany, France, and Britain). They indicate the Western European countries which must decide the Eastern European countries' destiny. We know about this by virtue of the frequent use of the intersemiotic repetition of the countries they represent *west European countries*, which are also meronymical expressions; the intersemiotic lexical items such as *western Europe's leaders* and *Europe's leaders* indicate the institutional position they hold;
- the bill, which is both visually represented and verbally discussed as the subject of the multimodal text, is a pictorial metaphor for the European economic crisis; it also illustrates either visually and verbally what must be done to save Europe. As it is the topic of this multimodal text, any form of intersemiotic verbo-visual complementarity is analysed later in this section;
- the typical dishes from Eastern European countries listed in the bill are a metonymical<sup>16</sup> verbalization of which countries are in grave danger and risk to making Europe collapse. In terms of intersemiotic complementarity, they are verbalized through the lexical repetition of the countries where the dishes are cooked (*Hungary, Bulgaria, Romania, The Baltic trio of Estonia, Latvia and Lithuania*);
- the "*very sour krauts*" and "*Silvio if only*" are metonymical indicators of who invested money to make some Eastern European countries join the European community. The verbal counterpart of sour krauts refers to Austria, while Silvio to Italy, which are repeated as lexical items in the article. Intersemiotic complementarity is found by the use of synonyms which connotatively refer to Austria and Italy as *the borrowers, the borrowing countries*, and hyponymically by the repetition of semantically correlated items such as *the banks, foreign-owned banks*;

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<sup>15</sup> As Lakoff and Johnson (1980/2003) defined it, metaphor is the phenomenon whereby we talk and potentially think about one thing in terms of another. According to the Cognitive Metaphor Theory (CMT) developed by the two scholars in the late 1980s, metaphors may be defined as linguistic and conceptual. While the former indicate the systematic verbal process of talking about one thing in terms of another, the latter indicates the systematic process of thinking about one thing in terms of another. The semantic link between the two conceptual domains, as they were called, is conceived as a mapping process. The two domains are the source and the target. Borrowing Kövecses's words, "the conceptual domain from which we draw metaphorical expression to understand another conceptual domain is called source domain, while the conceptual domain that is understood this way is the target domain" (2010:4). If Lakoff and Johnson did not set limits to metaphorical representations, CMT did not take notice of metaphors in non-verbal language. Forceville (1994, 2008) developed CMT principles and applied them to pictorial metaphors before and multimodal metaphors later. A pictorial metaphor is a non conventional visual representation in which both source and target are visually portrayed. A multimodal metaphor occurs If target and source domain are rendered in two different sign systems (visual, written, spoken), or modes of perception (smell, taste, and touch), even if the 'A is B' format is maintained, metaphors become multimodal.

<sup>16</sup> A visual metonymy is a figure by which the representation of a referent is replaced by the depiction of an attribute or of an entity related to in some semantic way. There is a directly or logically contiguous relationship between the substituted element and its referent.

- The national flags, shaped like napkins, represent the client's and saviours' nationality (German, French, British). There is neither specific verbalization of the three countries, nor are the politicians' names mentioned in the article, which speaks about western European countries in general;
- The drinks on the table are social stereotypes and associate the typical national drink to each of the three clients; Merkel drinking coffee, Sarkozy drinking wine, and Brown drinking tea are indicators of cultural drinking habits. There are no lexical items which semantically link these visual elements to the verbal aspect of the text;
- The purse is a pictorial metaphor for British state funds and it is empty, the butterfly which is flying away is a metaphorical sign of the help which Britain seems unable to give to the indebted countries. There is little evidence of intersemiotic complementarity in the text between the purse/butterfly metaphor and Britain's attitude towards the crisis;
- The couples of clients in the background are pictorial metaphors for Europe's citizens waiting for a decision to be taken by the foregrounded clients. There are no significant salient elements in the image which allowed me to find semantic relations between the visual illustration and the verbal lexicalisation;

Moving from the visual representation to the verbal aspect of the text, the remarkably high number of sentences discussing what the image portrays (see the verbalization of the text in *Appendix 3*) and the use of a substantial number of lexical items show that the verbal and the visual aspects of the *Bill* text complement each other; there is a relatively high occurrence of intersemiotic synonymy, repetition, hyponymy, meronymy and collocation, which interactively support the focus of the text. There is thus clear evidence of intersemiotic complementarity in the ways that both modes deal with the same topic and relevant terminology.

As the economic status of crisis in Europe is the topic of the multimodal text, I focus on the intersemiotic complementarity between the visual representation of the bill and the verbal references to it as details expressed via repetitions of such lexical items as *bill*, *problem*, *disaster*, *collapse*, *rot*, *break up*, all of which, bill excluded, are also synonyms and bear the bill's connotative meaning. The lead of the article uses a hyponymical climax, which presents possible economic problems verbalised as "*tumbling exchange rates*", "*current-account deficits*", "*foreign currency borrowings and nasty recessions*", "*ingredients of a third-world crisis*". A relatively high frequency of intersemiotic meronymy, which is concerned with part/whole relations, illustrates and discusses the geographical division of Europe into Eastern and Western countries, where the former indicate the cause of the crisis while the latter symbolize the possible saviour countries. Intersemiotic collocation is also significant, as any reference to the bill highlights a state of *pain*, *disaster* or risk of an economical *collapse*. The subject area is pointed out via the use of *crisis* as the head-word of a semantic chain in which lexical items such as *collapse*, *disaster*, *problem*, *meltdown*, *recession*, *investment*, *assets*, *losses*, *floating exchange rates*, *currencies*, *currency collapse*, *debt*, could be expected to co-occur in a text about economic crisis.

As a multimodal verbo-visual metaphor, the bill illustrates and examines a crucial moment for Europe, which risks an economic crash in the eastern countries (Hungary, Bulgaria, Poland, Baltic countries), in some western countries (Ireland and Greece) which are already in grave danger, and in some western countries (Germany and Britain) which *faced a severe recession*; Austria, Italy, and Sweden which provided financial support to the eastern countries to launch new companies are also involved and risk *catastrophic losses*. In

ideational terms, there is undoubtedly remarkable intersemiotic complementarity between the visualization and verbalization of the countries above-mentioned in terms of lexical repetitions (i.e. *east European countries, east Europeans, eastern Europe; west Europe, west Europeans*), intersemiotic meronymies (i.e. *Hungary/Hungarians, Poland/Polish, Romania/Romanian; western European leaders, Europe leaders* and the three politicians in the image).

If we look at the same bill from a different perspective, that is to say through Merkel's, Sarkozy's and Brown's eyes, it may even be seen as a visual and verbal metaphor for solution. The intersemiotic complementarity of the way to rescue Europe is visually and verbally discussed via the metaphorical representation of the bill. As the image shows and the text points out, the only way to avoid a collapse is to pay the bill. The significant usage of intersemiotic repetitions and synonyms in the types of actions suggested as part of the rescue plan are expressed in the text, as summarized in *Table 1*, but neither the image nor the text give evidence of when the payment happens.

Table 1: Paying the bill

SENTENCES	PAYING THE BILL
6	(...) footing for clearing it up
27	These countries will have to take the IMF medicine of debt restructuring and fiscal tightening that was meted out (...)
29	(...) accelerate the path to the euro (...) adopt the euro (...)
32	(....) adopt the euro (...)
42	(....) the pain should be shared (...)
45	Eastern European counties should restart the structural reform they have evaded so far.
48	The bill will indeed be huge but in truth western European countries cannot afford not to pay it.

As for the analysis of the processes performed in the image, the visual is a narrative representation of material and mental processes, as well as a conceptual representation encoding what the processes refer to as symbolic attributive processes. All this may be summarized as follows:

- the waiter holding and giving the bill to the clients illustrates a material process (narrative transactional unidirectional) and symbolizes the necessity of taking a decision to avoid an economic collapse;

- the participants who look worried at the sight of the bill represent mental processes and symbolize the difficulty of the decision which must be taken;
- the butterfly flying away depicts a material process (narrative non transactional) and the purse are connoted as belonging to the same field which symbolizes the lack of money to pay for the bill.

The symbolic value of the processes and participants involved is made prominent by the context in which they are depicted. The circumstantial representation shows a restaurant which is intersemiotically a salient element as regards the verbalization of the bill in the caricature where three clients are given the bill to pay, but it is not as salient as regards the article, which locates the economic crisis in Europe. The setting and the bill are important for their metaphorical narrative meanings. This symbolic contextualisation, which emphasizes what is portrayed, gives a highly connotative meaning to the message.

The bill projects metaphorical meanings in terms of past temporal references of decisions taken and actions performed; it provides a scenario of what the present situation is, and makes meaningful suggestions for future arrangements, as *Table 2* summarizes here below.

Table 2: Use of tenses

PAST	PRESENT	FUTURE/CONDITIONAL
Has been cooked (s.5)	Goes down (s. 3)	Could break (s. 2)
Faced (s. 7)	Sound (s. 4)	May take (s. 3)
Have been on a binge (s.8)	Are not (s. 15)	Will find (s.6)
Were (s.9)	Is ... remain (s. 19)	Will see (s.7)
Have botched or sidestepped, have waisted (s. 9)	Is (s. 22)	would soon be able (s.8)
Have invested and lent (s. 12)	Treat... is (s. 23)	Should pay (s.10)
Shrivelled (s. 12)	Stand out (s.24)	Would be (s.11)
Was (s. 18)	Includes ...are (s. 26)	would see (s.12)
Felt (s. 20)	Are (s.28)	could easily unravel (s. 13)
Have been cut adrift (s. 20)	Is ... let ...adopt (s.29)	Would quickly raise (s. 14)
Have come (s. 20)	Are (s.32)	Would destabilise (s. 15)
Was meted out (s. 27)	Oppose ...use (s.33)	Would spell (s. 16)
Have joined (s.30)	Is (s.35)	Could be (s. 17)
Seemed (s.38)	Arises (s.37)	Could fall (s. 20)
Lent to (s. 38)	Looks like (s. 38)	May help.. should fall (s. 26)
Has been (s. 44)	Is to prop up (s. 41)	Will have to take (s. 27)
Have evaded (s. 45)	Are (s. 47)	Must take (s. 28)

Stole (s. 46)		Might make (s. 30)
		Will meet (s. 31)
		Ought not to (...) should it damage (s. 32)
		Would make (s. 34)
		Could fatally weaken (s. 36)
		Must be (s.40)
		Are going bad (s. 41)
		Should be shared (s. 42)
		Will necessitate (s. 43)
		Must be (s. 45)
		Will be (s. 46)
		Will indeed be (... ) cannot afford (s. 48)
		Need to start (s. 50)

The bill is announced at the very beginning of the article as the result of something which has occurred recently, *has been cooked up*, a location is given as well, *at home, in east European countries*; details of what the eastern countries have done is referred as *have been on a binge*, which underlines how a past action is showing its present results. Other participants are identified in the past actions, as the banks from Austria, Italy, and Sweden which *have invested and lent*. The bill as a narrative metaphor for the present situation of western and eastern European countries is intersemiotically lexicalised as follows: some east European countries are ready to join the euro, others are not, in order to recover from their economic crisis. Finally, the countries which invested in the east European one are now at risk.

The future prospects of the bill connoted as a solution, are supported intersemiotically by lexical items as *priority* and *aims* which must be taken into consideration to prevent an economical collapse.

As the bill's history can be considered in terms of a period of time (present-past and future) the intersemiotic relationship between the visual story and the aspects of the verbal story referred to in the text, would seem to be one of intersemiotic meronymy (the whole being the period of time). Indeed lexical items such as temporal adverbs are not used much. The use of *now* for the present prevails over the past and future references are not used extensively. Conversely, the use of modes and tenses is substantial in the past, present, and future. Relevantly important is the building of the bill's present and future/conditional by the use of *goes down*, *could break up*, and *may take* in the headline and the sub-headline which summarize the whole article.

Looking at these results, I would like to comment positively as regards the verbo-visual intersemiotic complementarity in *The Bill* text, whose usage is prominently realised through repetitions, synonyms, and meronymies to introduce and develop the topic .

## 5. INTERPERSONAL INTERSEMIOTIC ANALYSIS

In the analysis of the intersemiotic relationship between the visual and the verbal aspects of the text in interpersonal terms, I start by examining how the text addresses the reader/viewer, and follow by focussing on the level of involvement which allows both the reader and the viewer to feel engaged while reading through the semantic relations between the article and the image. I will then investigate the degree of social distance which determines how close to or far from the multimodal text the readers and viewers are, in order to reflect if they have a stronger or weaker responsibility in understanding the subject matter of the text.

In terms of visual *address (gaze)*, the caricature may be interpreted as a visual offer. Since there is no eye contact with the viewer, s/he is offered information, and what s/he is required to do is to read the information and agree or disagree with what is portrayed. This interpretation of the image is complementary to the verbal counterpart which verbalises the metaphorical representation of the bill as *the bill that could break up Europe*, and the three clients as *western Europe's leaders, Europe's leaders*. The represented participants do not trigger any form of direct interaction with the viewer. In the analysis of language, there are no attempts to directly involve the reader as an active collaborator, all the clauses, except for the headline follow the order subject before finite and mark the declarative mood(statement) in the exchange of information. There are no clausal examples of interrogative, except the rhetorical question "surely they should pay the price for their own folly?" (s.10) or imperative mood, the reader is neither asked questions nor requested or ordered to do or behave in a certain way.

Turning to the *level of involvement (perspective)* which is frontal as regards the constructor and oblique as regards the represented participants, I would say that the multi-layered degree of obliqueness (each client is looking in a different direction) increases the level of exclusion from the visual representation on the side of the viewer who is put in the condition of being no more than a mere observer. In the verbal aspect of the text there are no attempts at involving directly the reader as an interactive participant in the exchange of information by using forms of direct address; neither are there attempts to use the second person pronoun *you* nor the first person plural pronoun *we* as referring to the reader. The reader is not included in a multimodal exchange and discussion of information. All singular and plural personal pronouns are in the third person. *They/them/themselves* refer mainly to the western, the eastern countries, Europe's leaders; while *it*, which is rarely used, refers to the bill. In terms of intersemiotic complementarity, neither the viewers nor the readers are explicitly addressed, they are considered as mere receivers of the offered multimodal information.

Focussing on the *power relation* between the viewers and the represented participants in the image, neither is placed in a position of superiority. The eye-level angle puts the viewer and the represented participants in a position of equality, which means that there is no difference in the degree of power exercised by either. In terms of intersemiotic relations, as for the verbal part, the reader is assumed to be the receiver of information given by the writer. The

degree of equality visualized via the eye level angle power relation is closely interconnected to the exchange of verbal offering/receiving information.

In terms of *social distance* the participants (only the human ones) are represented from a close to a medium close shot; they are not portrayed in their full figure because emphasis has been given on their faces whose size is exaggerated, and which express anxiety. Both elements contribute to confirm and focus on the exaggerated size of the bill and on the gravity of what the bill wants the viewer/reader to be informed of. The verbal counterpart does not give any sign of closer relation in terms of involvement, as mentioned above.

On these grounds the caricature excludes the viewer from any form of direct involvement. This caricature was not meant to be considered as part of the viewer's world, nevertheless s/he is put in a position of equality from which the image seems to ask him/her for the reception of information s/he is being offered, and which might be accepted or refused.

In terms of address and involvement, there is clear evidence that the intersemiotic complementarity between the caricature and the verbal text is achieved by intersemiotic interdependence of indirect address and lack of involvement.

As the distribution of visual information varies from a neutral to a coded representation of facts, a visual world may display a stronger or weaker degree of reality, reliability, credibility, possibility and probability. This process, which is called visual coding orientation, reveals and highlights the producer's point of view in terms of visual modality.

In the examination of *The Bill* text, the caricature portrays a naturalistic scenario (participants, actions, circumstances) which is quite easily recognizable to the viewers even though it is an abstract caricaturization. The representation, from a stylistic point of view, is accurate and detailed, the represented participants, both human and non human, have been portrayed with particular emphasis, which underlines the producer's point of view, and accentuates the features that the viewer is supposed to focus on. A closer examination of the three clients reveals some interesting attitudes: Merkel's, Sarkozy's and Brown's heads are bigger than the usual size of a head, the flags and the drinks, as additional features, are used as social stereotypes and allow the three leaders to be recognized more easily. The viewer is offered the metaphorical (clients/politicians, bill/crisis) and stereotypical (coffee/Germany, wine/France, tea/Britain) elements to decode the visual message.

*The Bill's* visual text, whose caricatured representation of reality is maintained by a medium high degree of modality<sup>17</sup>, portrays a metaphorical setting where the three clients' physical details give evidence of a worrying state of crisis, the gravity of which is emphasized by their facial expressions, and is worsened by the bill's exaggerated size and by the avoidance of any form of hesitation in the waiter's holding and giving the bill. All the elements contribute to emphasise a high degree of modality. The semantic density of the visual messages, which the viewer is provided with, increases the degree of credibility of the participants' behavioural status, actions and reactions. Merkel, Sarkozy, and Brown have unquestionably met and discussed the economic crisis, what is clearly less realistic, and gives a touch of

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<sup>17</sup> Halliday (1994), in his systemic functional approach to the analysis of language, distinguished three degrees of modality, lower, medium, and high, which are encoded by modal verbs and/or modal adjuncts elements (adverbs, prepositional phrases, nominalisations, etc.). Lower modality indicates a degree of possibility (may, might, could), medium modality expresses the probability that something occurs (should, will), and high modality, which excludes any sort of prediction and evokes certainty. (must, ought to).

bitter irony to the image is the visual representation of the crisis through an oversized bill. Yet its size and the metaphorically connoted list of dishes contribute to sidestep any form of uncertainty as regards the gravity of the situation, and confirm the high degree of visual modality. Visual modality slightly decreases looking at Merkel's and Sarkozy's apparent behavioural hesitation. This status of indecision is not confirmed in the article simply because the leaders are not the producers of the verbal message, it is the journalist's point of view which orients the readers and supports the high degree of modality in the multimodal text. In giving details of how western countries must finally react to the crucial moment for the EU economy, the verbal modality features used by the journalist express a general attitude of certainty, as the following clauses state: "*European countries **will** find themselves footing the bill*" (s.6), "*the first priority (...) **must** be to stop further currency collapse*" (s.40), "*a third aim **must** be to get eastern European countries to restart the structural reform they have evaded so far*" (s.45), "*western Europe **cannot** afford not to pay it*" (s.48), and "*It is **certainly** not too late to rescue the east; but politicians **need** to start making the case for it*" (s.50).

Conversely, by giving details of and arguing about catastrophic consequences which highlight the wrongfulness of decisions (wrong investments, lack of reforms), the degree of modality varies from medium to low, as pointed out by the following expressions: "*if eastern Europe goes down, it **may** take the European Union with it*" (s.3), "*the political consequences of letting eastern Europe go **could** be graver still*" (s.17), "*the pain of this **should** be shared four ways*" (s.42).

In terms of attitudinal congruence which realises intersemiotic complementarity, I found three general content areas:

- there is a medium degree of congruence between how responsibilities must be shared and what decisions must be taken by the west European and the east European countries in the visual and the verbal mode;
- there is a high degree of congruence between the way the reasons of the crisis have been shown and written about;
- there is a high degree of congruence between what the future scenario will be, as visually shown and written about.

As regards attitudinal dissonance, I did not find any form of intersemiotic discrepancy between the two modes which, in terms of interpersonal features, contribute to confirming the high level of complementarity in the verbo-visual scenario.

## 6. TEXTUAL INTERSEMIOTIC ANALYSIS

*The Bill* text gives evidence of intersemiotic textual relationship between the visual and the verbal modes which contribute to produce coherent uniformity to the multimodal message.

In the analysis of where information is distributed on the page, and how this is valued, the caricature is placed in the central-lower status of the text which, according to a top-bottom organizational setting, emphasises both its concrete status of truthfulness, credibility and its salient prominence as regards the size of the represented participants.

As for the overall vertical distribution of the text, we may divided it into three sections, with the headline and sub-headline at the top, the image which follows it, and the article from the



upper centre to the bottom of the page. In terms of balance in the verbal and the visual expression, the multimodal text is predominantly verbal, but, as for the semantic aspect, the visual and the verbal modes are intersemiotically closely related. The viewer and the reader are provided with a metaphorical visual sketch which focuses on the topic and subject matter of the article via a caricaturization of the participants involved in the economic crisis. The crisis in Europe, as the verbalised target domain of a multimodal metaphor, visualises the source domain (waiter, bill, and clients) in a contextualised business-lunch scenario. The metaphor, as an element of intersemiotic interrelatedness, in its visual form is meant to be an introductory and preliminary reflection about the possibility of an economic collapse in Europe, while the verbal mode addresses the reader by focussing on the key words of the message, such as *the bill, Europe, western European countries, eastern European countries, Europe's leaders, break up, collapse, disaster, rescue, pay* and gives complementarity to the metaphorical meaning.

Looking at the multimodal text and its visual *salient* centrality, the reader is at first attracted and his/her attention is directed to the visual as the stabilising introductory step towards the reading and understanding of the whole text. The headline, the caricature and article all draw attention to the bill, whose visual size and vertical and horizontal space visual invasion (from centre-left to down-right) highlight the imperatively vital need to pay for it as a binding process to rescue Europe.

Another salient factor in the image is the choice of colours. The background is in a soft modulated yellow which focuses the viewer's attention on the foregrounded participants. The colours of the flags are saturated, while the flesh pink of the waiter's and the clients' faces and the business-like blue/black of their suits are both modulated. The former gives emphasis to the troubled questioning mood of the politicians, the latter focuses on their institutional status. The table and the bill are in a soft-creamed greyish modulated colour. As for the bill, the softness and the low modulation highlight the black saturated colour of the bold-typed text.

In ideational terms, the colours represent a real-like world and denote its meaning; as for an analysis of the interpersonal values of colours, the modulated use of colours in both the participants faces and their clothes communicate feelings of worry (faces) and institutional responsibility (clothes). With regards to the textual organization of colours from a soft yellow at the top, the centre is characterized by a stronger degree of colour intensity (black, blue, red, yellow, white) which emphasises the national, social and behavioural status of the represented participants. The bottom of the image brings focus to the list of content elements of the bill (in black) and leaves the cream- greyish tablecloth and the bill in the position of ancillary elements.

The direction/s the viewer and reader follow to explore a multimodal text is significantly prominent in the interpretation of intersemiotic verbo-visual relation in terms of Kress and Van Leeuwen's *Given-New* text organization. Following the assumption that both visuals and verbals are supposed to be read from a left to right *potential reading path*, I found that the narrativization, as the past, present, and future projection of events, of both the visual and the verbal organization of *The Bill* text, gives evidence of a high degree of intersemiotic complementarity. The *Given*, which illustrates the waiter giving the bill, and which eastern countries should be involved in the rescue project, refers back to what happened with eastern European countries. The verbal counterpart communicates what actions contributed to increase the heaviness of the bill (wrong investments) the visual *New* shows both the

clients' reactions as a consequence of reading the bill, and which western investing countries should be involved in the rescue plan mentioned in the *Given*; the verbal text develops the analysis of Europe's present crisis by referring to the troubles it has been dealing with.

In terms of the horizontal arrangement of the image and the text on the page, intersemiotic complementarity is achieved by the way the giving/receiving information frame is developed in both modes, and gives a balanced focalisation of *information valuation on the page*.

Moving to the examination of the *degrees of framing elements* on the page, the visual and the verbal relate intersemiotically and do not fight for space dominance. The two modes are clearly arranged as separate frames, which, nevertheless, interact with a high degree of harmonious collaboration, and convey to the viewer/reader a semantic verbal and visual sense of unity and inclusion. The multimodal framing flows according to the integration of the verbal and visual blended organization and development of information; the headline introduces what the caricature contextualizes and visualizes, which the article develops and argues in details. The overall effect for the viewer and the reader is of a textually integrated semantic system.

The *Given-New* status of information, in terms of what past/present/future reactions and actions are enhanced by past events and decisions, is intersemiotically complemented by the verbal structural organization of the article.

*Table 3* lists the past, present, and future development of actions in the article.

Table 3: Past events

SENTENCES	
5	The mess has been cooked at home
7	West European countries faced recession
8	Eastern European countries have been on a binge fuelled by foreign investment
9	East European countries were ill-prepared (...) they have botched or sidestepped reforms
12	Banks from Austria and, Italy and Sweden (...) have invested and lent heavily in eastern Europe
45	(...) to restart the structural reforms they have evaded

Present events

SENTENCES	
14	Collapse in the east raise questions about the future of EU itself
15	Ireland and Greece are not in much better shape than eastern Europe
22	The question for western Europe's leaders is how best to avert such disaster
29	One remedy is to accelerate their path to the euro
35	None of these is ready for the tough discipline of a single currency
47	German taxpayers are already worried that others are after their hard-earned cash

Future event

SENTENCES	
7	Older EU countries will find themselves footing the bill for clearing it up
22	Western European countries are to stop such disaster
40	The first priority must be to stop further currency collapse
41	The second is to prop up the banks responsible for the foreign currency that are going bad
42	The pain should be shared four ways: between the banks and their debtors, and between governments of both lending and borrowing countries
46	Everybody's jobs will be hard for Europe's leaders to sell on the doorsteps of Berlin, Bradford and Bordeaux
48	The bill will indeed be huge
49	The break up of the euro or the single market would be catastrophic for all of Europe

## FINAL REFLECTIONS

The aim of this paper was to illustrate to what extent the visual and the verbal modes are semiotically complementary, which allows the viewer and the reader to read through the multimodal text, and understand it as a cohesive semantic unit. I based my examination on Royce's research on multimodal discourse analysis and on the framework he developed (1998, 2002, 2007) which, following either Halliday's concept of cohesion and cohesive ties within written texts, and Kress and Van Leeuwen's approach to identify socio-semantic relations in the visuals, enables the addressee to explore the degree of synergy between the portions of an image and the verbal chunks of a multimodal text.

In my analysis, *The Bill* text substantiates Royce's approach and intersemiotic complementarity is achieved in ideational, interpersonal, and textual metafunctional terms. As for the ideational features and meanings in either modes, lexico-semantic relations are realised through *repetitions*, *synonyms*, *meronymies*, *hyponymies* and *collocations*. Moreover, interpersonal verbal and visual messages co-occur and are related through the low degree of involvement realised via the absence of visual/verbal *address*, the *obliqueness* in the *perspective angle*, the consistent *social distance* which the viewers and readers are kept from, and the medium-high degree of intersemiotic *attitudinal congruence* (modality). Finally, it has been demonstrated that the multimodal text is displayed as proportionally uniform, and gives evidence of verbo-visual semantic interrelation via *information value*, *salience*, *framing*, and *the reading path* on the page. The analysis of *The Bill* text clearly evidenced intersemiotic complementarity, thus highlighting the degree of interactivity among the visual and verbal segments which multimodal texts are composed of.

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## APPENDICES

### APPENDIX 1

#### ROYCE'S FRAMEWORK

Visual-verbal intersemiotic complementarity

METAFUNCTIONS	VISUAL	INTERSEMITOIC COMPLEMENTARITY	VERBAL
IDEATIONAL	<i>participants</i> <i>processes</i> <i>circumstances</i> <i>attributes</i>	<ul style="list-style-type: none"> <li>• <i>Repetition</i></li> <li>• <i>Synonymy</i></li> <li>• <i>Antonymy</i></li> <li>• <i>Meronymy</i></li> <li>• <i>Hyponymy</i></li> <li>• <i>collocation</i></li> </ul>	<i>participants</i> <i>processes</i> <i>circumstances</i> <i>attributes</i>
INTERPERSONAL	<i>address</i> (direct, indirect address)  <i>involvement</i> (perspective)  <i>Social Distance</i> (size of frame)  <i>Modality markers</i> (contextualisation, salience)	<i>Mood</i> (address via offers, commands, statements, questions)  <i>Modality</i> (real or unreal, true or false, possible, impossible,)  <i>Attitudinal</i> <i>congruence/dissonance</i>	<i>Mood</i> (speech functions and clause relations)  <i>Modality</i> (high, medium, low)
TEXTUAL	<i>Information value</i> (vertical: top/bottom; horizontal: left/right; balance: centre/margins)  <i>Salience</i> (foreground/background d, size, colour tones and contrasts)  <i>Framing</i> (visual space and structure)	<i>Page structure:</i>  <i>Information valuation</i> (horizontal, vertical, balance)  <i>Salience</i> (foregrounded, backgrounded elements, size, tones and contrasts)  <i>Framing</i> (visual and verbal space display) <i>Reading path</i> (visual and verbal organization of language)	<i>Verbal mode</i> <i>organization</i> : <i>Information</i> <i>value</i> (given/new)   <i>salience</i> (typesetting, copyfitting)   <i>framing</i> (display type)

## APPENDIX 2

### SENTENCE DIVISION OF THE TEXT

1. **Eastern Europe's woes.**
2. **The bill that could break up Europe.**
3. **If eastern Europe goes down, it may take the European Union with it.**
4. TUMBLING exchange rates, gaping current-account deficits, fearsome foreign-currency borrowings and nasty recessions: these sound like the ingredients of a distant third-world-debt crisis from the 1980s and 1990s.
5. Yet in Europe the mess has been cooked up closer to home, in east European countries, many of them now members of the European Union.
6. One consequence is that older EU countries will find themselves footing the bill for clearing it up.
7. Many west Europeans, faced with severe recession at home, will see this as outrageously unfair.
8. The east Europeans have been on a binge fuelled by foreign investment, the desire for western living standards and the hope that most would soon be able to adopt Europe's single currency, the euro.
9. Critics argue, with some justice, that some east European countries were ill-prepared for EU membership; that they have botched or sidestepped reforms; and that they have wasted their borrowed billions on construction and consumption booms.
10. Surely they should pay the price for their own folly?
11. Yet if a country such as Hungary or one of the Baltic three went under, west Europeans would be among the first to suffer.
12. Banks from Austria, Italy and Sweden, which have invested and lent heavily in eastern Europe, would see catastrophic losses if the value of their assets shrivelled.
13. The strain of default, combined with atavistic protectionist instincts coming to the fore all over Europe, could easily unravel the EU's proudest achievement, its single market.
14. Indeed, collapse in the east would quickly raise questions about the future of the EU itself.
15. It would destabilise the euro—for some euro members, such as Ireland and Greece, are not in much better shape than eastern Europe.
16. And it would spell doom for any chance of further enlarging the EU, raising new doubts about the future prospects of the western Balkans, Turkey and several countries from the former Soviet Union.
17. The political consequences of letting eastern Europe go could be graver still.
18. One of Europe's greatest feats in the past 20 years was peacefully to reunify the continent after the end of the Soviet empire.
19. Russia is itself in serious economic trouble, but its leaders remain keen to exploit any chance to reassert their influence in the region.
20. Moreover, if the people of eastern Europe felt they had been cut adrift by western Europe, they could fall for populists or nationalists of a kind who have come to power far too often in Europe's history.
21. **How to avert disaster**
22. The question for western Europe's leaders is how best to avert such a disaster.

23. Although markets often treat eastern Europe as one economic unit, every country in the region is different.
24. Three broad groups stand out.
25. The first includes countries that are a long way from joining the EU, such as Ukraine.
26. Here European institutions may help financially or with advice, but the main burden should fall on the International Monetary Fund.
27. These countries will have to take the IMF medicine of debt restructuring and fiscal tightening that was meted out so often in previous emerging-market crises.
28. Things are different for the countries farther west, all EU members for which the union must take prime responsibility.
29. One much-touted remedy is to accelerate their path to the euro, or even let them adopt it immediately.
30. It might make sense for the four countries with exchange rates pegged to the euro: the Baltic trio of Estonia, Latvia and Lithuania, plus Bulgaria. (Slovenia and Slovakia have joined the euro already.)
31. None of these will meet the Maastricht treaty's criteria for euro entry any time soon.
32. But they are tiny (the Baltics have a population of barely 7m), so letting them adopt the euro ought not to set an unwelcome precedent for others nor should it damage confidence in the single currency.
33. Yet the European Central Bank and the European Commission firmly oppose this form of "euroisation", even though two Balkan countries, Montenegro and Kosovo, use the euro already.
34. Unilateral or accelerated adoption of the euro would make far less sense for a third group of bigger countries with floating exchange rates: the Czech Republic, Hungary, Poland and Romania.
35. None of these is ready for the tough discipline of a single currency that rules out any future devaluation.
36. Their premature entry could fatally weaken the euro.
37. But as their currencies slide, the big vulnerability for the Poles, Hungarians and Romanians, especially, arises from the debt taken on by firms and households in foreign currency, mainly from foreign-owned banks.
38. What once seemed a canny convergence play now looks like a barmy risk, for both the borrowers and the banks, chiefly Italian and Austrian, that lent to them.

### **39. Stopping the rot**

40. The first priority for these four must be to stop further currency collapse.
41. The second is to prop up the banks responsible for the foreign-currency loans that are going bad.
42. The pain of this should be shared four ways: between the banks and their debtors, and between governments of both lending and borrowing countries.
43. From outside, these two tasks will necessitate help from several sources: the European Central Bank as well as the IMF, the commission's structural funds, the European Bank for Reconstruction and Development and perhaps the European Investment Bank.
44. Given the scale of the problem, the lack of co-ordination between these outfits has been scandalous.
45. A third aim must be to get eastern European countries to restart the structural reforms they have evaded thus far.



46. Bailing out the same mythical Polish plumbers who just stole everybody's jobs will be hard for Europe's leaders to sell on the doorsteps of Berlin, Bradford and Bordeaux, especially with the xenophobic right in full cry.
47. German taxpayers are already worried that others are after their hard-earned cash.
48. The bill will indeed be huge, but in truth western Europe cannot afford not to pay it.
49. The meltdown of any EU country in the region, let alone the break-up of the euro or the single market, would be catastrophic for all of Europe; and on this issue there is little prospect of much help from America, China or elsewhere.
50. It is certainly not too late to rescue the east; but politicians need to start making the case for it now.

### **APPENDIX 3**

#### **VERBAL ASPECT OF THE TEXT**

- 1. Eastern Europe's woes**
- 2. The bill that could break up Europe**
- 3. If eastern Europe goes down, it may take the European Union with it**
4. Yet in Europe the mess has been cooked up closer to home, in east European countries, many of them now members of the European Union.
5. One consequence is that older EU countries will find themselves footing the bill for clearing it up.
6. The east Europeans have been on a binge fuelled by foreign investment, the desire for western living standards and the hope that most would soon be able to adopt Europe's single currency, the euro.
7. Yet if a country such as Hungary or one of the Baltic three went under, west Europeans would be among the first to suffer.
8. Banks from Austria, Italy and Sweden, which have invested and lent heavily in eastern Europe, would see catastrophic losses if the value of their assets shrivelled.
9. Indeed, collapse in the east would quickly raise questions about the future of the EU itself.
10. It would destabilise the euro—for some euro members, such as Ireland and Greece, are not in much better shape than eastern Europe.
11. The political consequences of letting eastern Europe go could be graver still.
12. Moreover, if the people of eastern Europe felt they had been cut adrift by western Europe, they could fall for populists or nationalists of a kind who have come to power far too often in Europe's history.
13. How to avert disaster
14. The question for western Europe's leaders is how best to avert such a disaster.
15. One much-touted remedy is to accelerate their path to the euro, or even let them adopt it immediately.
16. It might make sense for the four countries with exchange rates pegged to the euro: the Baltic trio of Estonia, Latvia and Lithuania, plus Bulgaria. (Slovenia and Slovakia have joined the euro already.)
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18. Unilateral or accelerated adoption of the euro would make far less sense for a third group of bigger countries with floating exchange rates: the Czech Republic, Hungary, Poland and Romania.

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30. It is certainly not too late to rescue the east; but politicians need to start making the case for it now.