Fukushima Facts: Science, Journalism and the Way Events are Perceived

Lic. Alejandro Margetic
Autoridad Regulatoria Nuclear
República Argentina

1- Introduction

The most reasonable voices of the nuclear field suggest not take hasty decisions without sufficient objective grounds for the future of the nuclear plans of their countries, after the serious accident\(^1\) at the reactors in Fukushima Dai-ichi, northeastern Japan. After the tsunami that followed one of the largest earthquakes of the last hundred years, there was a flood in the buildings housing the diesel engine. These engines are a source of standby power, which are activated when the cooling system of the reactor fails. The electrical system of the plant responded by batteries during the first eight hours after the shutdown of the reactors. From there, two situations are foreseen: a- an external source power through the network, or b- diesel engines provide electric power. The network was crippled by the aftermath of the earthquake, and diesel engines could not take action as expected. Although the reactors were in the "cold shutdown" it still required the use of the refrigeration system. Thus, we can summarize the start of the Fukushima I plant accident.

The first facts became public the day of the accident, on Friday 11 March. The following days that showed different events as well as different interpretations, until the event was established as the "biggest nuclear accident after Chernobyl."\(^2\)

This situation caused a great shock in the political class in several nations that had previously chosen to produce electricity based on nuclear fission.

2- Journalism as Literature

We consider the idea that journalist's work is a literary practice, namely a work whereby certain facts are presented through writing. This is a very broad definition indeed. But what is meant is that there is a difference in nature between facts and

\(^1\) We made the rating of a major accident based on the events classification of the INES scale.
\(^2\) Making a list of the news thus qualifying Fukushima accident would cause this article double the number of pages
narration of events. Both objects, facts and narration, have a different dynamic. That is, a different mode of production, as much as a mode of consumption and interpretation.

The literary work then is the writing of facts. And journalism is a form, especially indeed, of literature. What we want to clarify here is what link exists between the facts that are taken to be related, and the narration of these events.

It requires clarification here: journalism relates facts reputed real, not imaginary; events that are supposed to have an objective material existence regardless the contest of human consciousness.

But our point here is to think whether this transcription to writing the facts are kept in the same state, or, if in this passage any transformation is printed. In other words, whereas narration has a nature and a different form from an "objective fact", and also gets a particular significant structure, the fact of the incorporation of these facts in a different framework, is a topic that arise about so necessary. We will deal with it, then.

From the above, raises a number of important issues that we cannot address without our issue ends moving up, such as the question of the existence of facts independent of human consciousness, ie the question of ontology.

However, there are others that we can’t ignore and on which we want to make some comments: the actual events do not occur in reality in the form of a story in themselves, they aren’t "objects of literature". They are objects that have an existence and a dynamic of its own. But we can not help wondering whether the transcription of a significant cultural structure, as any story written, gives it some sense of how those facts exist.

This is a classic problem of the philosophy that includes science, since it also includes an account of the real: the production process of an event, whatever it be, is different from production process what is said about the event, either their own field of science or literary field. Will have to see then, what changes impose each practice on its object.

Depending on the latter, we include another variable to further characterize journalism as literature: we think the newspaper article as a particular form, and certainly not unique to order real events in language, in writing. As Roland Barthes points out in his *Leçon inaugurale au Collège de France*³, "la littérature travaille dans les interstices of science."

A particular narration’s feature, distinguish them from real facts, an issue that allows us to advance a more concrete definition of journalism as literature: being a written language production, this object completes its implementation, and makes perfect sense in the consumption of its object. That is, a newspaper supposes necessarily it willingness to be read,

including the potential reader and the interpretation of what is written by the same. We also appreciate that this consideration to the newspaper article become clearer its interpretation as a commodity.

However, in everyday life we often see the written object as a fact fully constituted, as a given objectivity, something that is there to be read, ignoring its production process. All the mechanisms by which a note becomes a notice are denied, as it were hidden behind the immanent presence of the note in the media: one thing that it's there without knowing how, and on which is projected an uncertain destiny. If the note is then taken as a thing, and not as a process, it seems that is just the sense of this, which is imposed as data. Just like any other commodity would be assumed by its use value. It seems then that "the news" is true only for what it says, regardless of the dynamics of their production and the dynamics of consumption.

In this respect, the Bulgarian author Julia Kristeva rightly points out:

(literature) is a translinguistic work – as also is considered politics, journalism and every discourse in our phonetic civilization - that our culture attains only in the post-production (consumption); hidden productivity (...) subject to be assessed, designed, judged solely on its reified replacement.⁴

As shown, the news tends to appear as something fully formed, just denying the character of being the product of labor, of human activity in specific conditions, contexts and interests. What is lost, then, is the interpretation of the narration as a moment of a process, and as a result of any other productive activity, is mediated by interests in conflict, be they ideological, economic, political or ethical. In addition, we emphasize, this is a step in a process that does not end with its production, even with its consumption, since the reception can generate an infinite redefinition with consequent unexpected repercussions.

Therefore, any analysis of written news, evaluating writing as a meaning in itself, loose, in our opinion, the understanding of the process by which a narration becomes a different object from another. In summary, the analysis simulates take everything, but considering only a part. Having stated this, we must note another determination of the narration: like all speech,

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⁴ KRISTEVA, Julia; Semiótica 2; Madrid, Fundamentos, 1969. “Reificación” can also be found in the philosophical literature translated as “thing” given its Latin root res = thing. In general, can be defined as the effect of making something a “thing”, irrespective in its analysis the process whereby is constituted. For a very basic initial understanding of the term, see the entry “reification” in FERRATER MORA, José; Diccionario de Filosofía, Barcelona, Ariel, 1994, pág. 3046/7.
journalistic expression has a will-saying. There is something it wants to communicate. As one timely reading of the work of Lucien Goldmann points

Plus que le simple produit d’une psychologie individuelle, elle doit être considérée comme la cristallisation cohérente d’une représentation du monde propre à un groupe social. Le propre de l’acte littéraire est de synthétiser, d’une manière concrète et sensible, cette représentation du monde.  

We understand this term as more than a motivation that projects the view from an individual will that leads a certain intention. We understand it as the particular synthesis of a general representation of the world from a particular social group.

Moreover, this want-saying, cannot be reduced to the desire to tell the occurrence of one or more facts. As argued above, we believe the want-saying far exceeds what is written. The message goes beyond the literal words of the sentences. It says more than what is said. A want-saying in this context, is a network of interests, ideological and political positions that are brought into play through a media in which the note is expressed. So, reading the note is read what is written, but it is also read the interpretation of the world of a social group with particular interests, which are not necessarily written.

In summary, we argue that analyzing this particular literary narration, the news, we must consider the interpretation of a whole field of meaning. As we said, this field doesn’t deal with the meaning of the terms used. But these terms, together with the techniques and tools of the profession -titles, styles, pictures, etc ... - are the embodiment, an expression of a complex network of interests of a social group that is expressed through a graphic media. On the other hand, argue that the meaning interpreted is not immutable, nor necessarily maintained over time.

What we're saying then is that as in all writing, there is a complex combination between written form and content, within a given context.

As an example, an analysis of a different corpus –historiography- and in order to show that the meaning of a written text overcome the literal, Hayden White expresses this complex relationship:

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5 DERAMAIX, Patrice; *Structuralisme Genetique et litterature. Lucien Goldmann, critique et sociologue* <http://membres.lycos.fr/patderam/gold1.htm>
The events not only have to be registered within the time frame in which they occurred, but also have to be narrated, ie prove to be events endowed with a structure, an order of meaning that do not possess as mere sequence.\(^6\)

As a final consideration, which apparently departs from what we argue here but that is a central element of a newspaper article, we note that the meaning of a text implies a certain knowledge of what is spoken. The note intends, "wants to know" through their meaning, involves a "will to truth".

To summarize what was stated in this chapter, the object "news story" implies:

a- A difference from the narrated object;
b- a motivation, a want-saying;
c- this want-saying goes beyond what is written, and thus who speaks is the "significance";
d- the spoken-written is the support for which is expressed that "significance", that "sense", which is both an expression of a contradictory network of interests and, ideological and political positions;
e- this sense supposes a form of knowledge, a knowledge about the narrated, which implies a "will to truth"
f- An interpretation of the journalist’s work includes, therefore, the analysis of the production process that incorporates consumption.

If we accept these statements, we can also strengthen the argument of journalism as literature: any form of writing, and we consider journalism as a form of it, is a certain solution to the problem of understanding the experience of men in a meaning way, ie belonging to structures of human significance. Thus, we postulate a claim on the speaker (in this case the journalist or the newspaper) that is expressed through a note: ITS want-saying supposes a will to truth.

2.1. Journalism and truth

Let us say it quickly, despite of the common pursuit of truth, it would be hard journalistic work be related to the scientific work, field to which it belongs the idea of truth. Without hesitation, like journalism, we can say that science is a productive work, a human activity that aims to produce a new object. However, what he has in common with any other productive practice is

not enough to define its uniqueness. Precisely the difference with any other activity, are the means by which it works, the "raw materials" and the particular object which produces: in short, theories, concepts, "knowledge objects", methods and technologies, and as result, knowledge.

Moreover, we note that any scientific endeavor is always a task that tends to remove from its throne to what appears as obvious. Science begins, we could say, with a break from the evidence. The evidence leads to the scholars of Pisa "see" bodies of different density "falling" at different speeds. Breaking with it, allowed Galileo to revolutionize his discipline, leaving the "error" to previous physics. The evidence belongs to the field of common sense. A common sense that consists on daily practices and theories that involve a whole system of concepts. In short, a particular worldview and an ontology. Knowledge is then the outcome from the task of discrediting evidence.

On the contrary, journalism is an evidence reproductive mechanism that fails to run its claim to truth be completed. At least, not with the truth value that establishes the scientific field. However, we must be clear, the information a note communicates could be verified as true, and the more serious media and journalists do it continuously. But a true statement in a journalistic new does not impose neither to the overall dynamic of journalism, nor to its particular product, the nature of truth.

What gives a degree of certainty to journalistic literature, are not the mechanisms of validation of the truth: experimentation, and logical demonstration, but belonging to a conception the world, belonging to common sense. Therefore, its activity is not the field of knowledge, but of "recognition", his field is not the truth, but of the verisimilitude – *vraisemblance*.

### 2.2. Truth or verisimilitude

Verisimilitude, unlike truth that corresponds to real, is nothing more than a speech out of step with reality, a discourse that moves away from the real. Therefore, is a speech about the evidence. And the real, as we warned, it is not evident.

Moreover, the sense of verisimilitude does not exist outside of discourse, indeed is a discourse about a discourse, and therefore not affected by the object-language relation. The "verisimil" speech simulates concern for objective truth, but what worries it is his relationship

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8 We consider that the categories "real" and "true" are not identical and refer to different entities.

9 There will be remembered that any "sense" is one way to "we" or for a subject, because a sense in itself is a contradiction. What we note is the necessary presence of an "other" in all production and distribution of senses.
with a speech which "appear to be an objectve-true"¹⁰ be recognized, accepted, institutionalized. Verisimilitude does not know the real, and need not be true to be authentic. Therefore we can see that the effect of verisimilitude, even when we recognize their "want-saying", is only “recognition”¹¹. Now, what does this idea of recognition imply? As we understand, the effect of recognition implies:

1 - Something different from knowing
2 - An ideological practice
3 - impose the "evidence" as those certainties that we can not fail to recognize¹², through the interpellation of credibility.

Summarizing, how to understand then the performance of journalism under this set of concepts that we have put forward:

1 - Press, as a form of literature, wants to say something about certain events,
2 - consumption is performed for us readers, reifying the result abstracted from its production and distribution process, trying to override an interpretation of the interests at stake.
3 - It gives its object the appearance of "true", verisimilitude
4 - Considering evident the "verisimil", the effect of recognition is produced: we became subjects of journalistic discourse: sujet assujetti¹³

To clarify this theoretical preamble, what we want to raise is no longer "what is literature?" - issue that is lost in the nebulous metaphysics of the essential and the inessential-, but a very different problem: arguing literature as a particular ideological formation. As pointed out in an old article two French philosophers, it is

(...) The specificity of the ideological effects produced by the literature and the mode (mechanism) whereby it produces.¹⁴

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¹⁰ KRISTEVA, Julia; Op. Cit.; pág 11.
¹² As Althusser points out, facing this function we have the "inevitable reaction to exclaim: ¡obviously! That's it, is very true! "See Althusser, Louis, op. cit. Page 33.
¹³ "Subject-subjected": game of words indicating the status of subject of and in ideology, attached to the games of practical ideology.
¹⁴ Balibar, Etienne y Macherey, Pierre; “Sobre la literatura como forma ideológica”, p. 32, en Althusser, Poulantzas, et alter; Para una crítica del fetichismo literario, Madrid, Akal, 1975, pages 23 to 46.
3 - Clarín and the nuclear "catastrophe".

As a case study, we want to analyze the treatment given by the newspaper Clarín to the facts relating to the nuclear accident on March 11, and its consequences on the ground of Fukushima Dai-ichi in Japan after the earthquake and tsunami.

3.1 - The daily cap

At first, we believe essential to transcribe what was said by the newspaper Clarín on the cover of Sunday 13 March in relation to events in Japan.

Cover Clarín: Sunday March 13, print edition (no pictures)

- Volanta: Clarín in Japan. The day after the earthquake.
- Title: (Main newspaper) FEAR GROWS BY NUCLEAR LEAK AFTER THE TSUNAMI.
- Tuft: There was an explosion at the nuclear plant in Fukushima. And the government recognized that there were radioactive leaks. There are four contaminated and thousands evacuated. 125 aftershocks were recorded. No major attacks in the South Pacific, Chile called off the alert.
- Box 1: Foreign Correspondent - David Brunat - Hoarding food in the midst of stress.
- Box 2: The Tragedy: There are 1800 dead people and, by radiation, 200,000 thousand evacuees.

Begin by presenting a comment about the "volanta"

- "Clarín in Japan. The day after the earthquake."

The newspaper announces it is in Japan.

The idea of its presence close to the events deserves special attention. With the aim of giving the hierarchy of "true" to the arguments disseminated in any debate, often is considered a weight basis having seen, heard, taken part as a privileged witness to the events referred to. Thus it is common note –or uttering- sentences with the following structure:

- "I hold it because I have seen with my own eyes"
- "What you said about the" fact X" is not true because I lived it, and you do not"
It is not important to develop here an explanation of the advantage it brings, in a complaint, a real argument against another that can not sustain itself unless it is a value shared by all of us. Similarly, in the modern philosophical tradition, the idea of "being there" as the foundation of a true statement, is based on the support received from hundreds of miles of shelves full of books: it would imply a key element to understand a phenomenon, although, of course, that tradition is not without criticism.

Assuming that the newspapers are intended to communicate the truth of the facts, then the observer facing to events would have the advantage of the witness. This privileged panoramic would give the narration the virtue of containing -though certainly not the only or most important- a central element of truth in experimental science: the ability to capture through the senses the different features of the observed phenomenon.

It is clear that the philosophy of science has developed many theories about the mechanism for validating the truth. And they certainly come from very different schools of thought-positivism, falsationism, pragmatism, among others. Without going into details of the discussions that affirm or question the importance of observation of the facts, we must recognize that the statement of "being there" has the motivation to show that the presence in front of events contain a plus sense, and an advantage over who does not.

A scientific discipline that has discussed this issue is particularly anthropology. The American anthropologist Clifford Geertz, addresses this issue in a particular way:

(...) The ability of anthropologists to make us take seriously what they say has less to do with their appearance factual or conceptual air of elegance, with its ability to convince us that what they say is a result of being able to penetrate (or if you like, have been penetrated by) another form of life, of having, one way or another, really "been there". It is in the persuasion that this miracle has occurred, is where the writing takes part.15

Without getting into debates about the differences between scientific and fiction discourse, or a discourse of "communication", which is seen in Geertz's position are three important issues:

a- assuming that the statements issued by the scientist -in this case the anthropologist- to be true, it still remains the fact that such a scientific truth can be communicated and convincing. This, as will be understood, exceeds the proper scope of any scientific methodology and introduces the problem into the field of communication.

15 Cfr. GEERTZ, Clifford; *El antropólogo como autor*; Barcelona, Paidós, 1989.
b- to have "been there" is a key issue to complete the cycle of the dynamics of scientific truth, or for a statement contains the appearance of truth –verisimilitude–.

c- all this is given in writing

What is argued here is that the idea of "being there" actually causes an effect of reality that is transmitted to the whole discourse produced. That the newspaper has been there imposes that what it says about what "looks" holds an effect of verisimilitude.

The author, or rather, its presence in the scene, works as a donor of "truth" of the facts related by him. That is, the author qua individual with sensory capabilities to account for the observed, is transformed in the process of enunciation in author-function. It is through this functionality that operates the above mentioned effect. It does not matter the author himself, who is, where appropriate, but is its "function" that lends credibility, credibility to the text. The novelty here is that everything happens in the writing, this functionality is only in the text, is an effect of written language.

What we've been arguing is that truth is not itself in its own statement, in short, is not self-evident. Operational and discursive mechanisms are needed forward their validity. Or is it that we, modern men and women, accept as true the statement "Only love will save the world" being that it is impossible to contrast with any empirical reality?, ¿Would argue as true the hypothesis "if work is done on a system, or it exchanges heat with another, or the energy of the system changes", just because a scientist with a reputation as Carnot enunciates it.

On the contrary, that, we need some fact checking by experiments, in addition to finding logical consistency for these claims have a solid sense. It is not therefore pedantry remember that truth, true statements, are based on validation mechanisms, and modern science as establishes as applicable procedures the empirical and logical demonstration as "guarantors" of the truth of a statement. In addition, for that truth can convince, we have to suppose the imposition of linguistic mechanisms that also operate in the field of "believing in true".

Thus, the main headline of the cover of Clarín newspaper on Sunday March 13 says "There are renewed fears for nuclear leak after the tsunami." Clearly, no one supposes that the journalist has conducted surveys to conclude that there is a growing fear. However, the headline gains credibility with the wording of the volanta, "Clarín in Japan."

Moreover, both the flywheel as the principal headline pose ambiguities that can be resolved only after a series of deductions. For example, "fear grows ..." does not indicate where or to

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whom would be rising sense of fear. In other words, is the Japanese population as a whole expressing a growing fear? Is it the people of the region near Fukushima?, To the authorities and workers at the plant?, over citizens in another countries? It is not clear in the title.

It is also unclear whether the fear that grows is the result of the potential consequences of nuclear leaks have already occurred, or that they are anxious about the possibility of occurrence of new or more leaks.

In addition, it presents here a paradox: how could a speech presented as true, from the above mechanism, when this expression leaves many ambiguities? Here we must point out two issues:

1 - the distinction between truth and verisimilitude, which we discussed above.

2 - Motivation, "want-saying" of the note, is the claim to impose as evident the growth of fear.

This is the message over which operates all linguistic scaffolding.

Let's see how the logic of the headline works to show how it ranks a part of the message as important. The structure of the holder is to show as follows:

A is a consequence of B, B is a consequence of C.

Where A = "Grow fear"

   B = "Nuclear Leaks"

   C = "Tsunami"

"Growing fear" would be a consequence of the "nuclear leakage" and, "nuclear leakage" would be the effect of "tsunami".

It is true that gave B, and C as well. But, it remains to verify two things: that A is true, and that relations between A, B and C too.

So if we formalize this set of statements we don’t met the transitive property, therefore, not be verified causal relationships: at no time, it is postulated that the tsunami be cause of the growing fear, meaning that C causes A. But, it’s clear that B is due to A: fear is inferred from nuclear accident. By this way we achieve, separate the tsunami and its effects, from leakage and fear.

Moreover, as it’s known, the most important is postulated initially. The order of importance is falling into a title as "pass" the terms.

The linguistic operation has separate natural causes from human causes. The problem is "nuclear".

3.2. The “bajada”
The "bajada" is a part of the news that is typically placed after the title. It is composed of relevant phrases that summarize different ideas from each other and generally do not have the same information as the title.

We repeat here the headline’s bajada of the newspaper Clarin on Sunday 13 March, in order to facilitate reading.

There was an explosion at the nuclear plant in Fukushima. And the government recognized that there were radioactive leaks. There are four contaminated and thousands evacuated. 125 aftershocks were recorded. No major attacks in the South Pacific, Chile called off the alert.

This text is relatively autonomous from other parts of the story, and therefore could be read as a unit. But what does this text tell?

1 - there was an explosion
2 - the government recognizes radiation leaks
3 - was contaminated and evacuated
4 - There were aftershocks
5 - there were no problems in Chile

If, as was seen above, each phrase of the bajada should be independent of each other, we can see that in this case does not meet such a standard of style, as the government acknowledges that there were radiation leaks from the explosion, and as a result of it is contaminated and evacuated. It is true that the text of the bajada does not say what we wrote above, however if we take the text as a whole, the tendency to gather information in a logical sequence of events sends us to a reading such as we propose.

Anyway, it is important to show here as a newspaper contradicts its own rules of style. But rather we are interested in the whole dynamic of communicative expression.

Thus, we see that the text of the bajada could be divided into two, depending on the object concerned. On the one hand, the part that concerns only the situation of nuclear power plants and its consequences: "There was an explosion at the nuclear plant in Fukushima. And the government recognized that there were radioactive leaks. There are four contaminated and thousands evacuated". On the other hand: "125 aftershocks were recorded. No major attacks in the South Pacific, Chile raised the alert". These are two phrases that refer to the earthquake and / or tsunami.
Everything seems to go in line with the central message of the title: "growing fear" because there was an explosion and the government had to recognize the leak -had no way- and this resulted in pollution and an unknown quantity of evacuees. Evacuation is a result of fear of contamination from the leak. But it is not a general fear, without adjectives: this is clearly a "nuclear" fear, a fear to "the nuclear".

As discussed earlier, we have broken down the bajada into two parts according to the object of treatment. When the bajada approaches the subject of the earthquake, clearly separated from "Fukushima", we note that the "125 aftershocks" they don’t produce "big onslaughts".

We can see then, in this day when all start, how it is shaping the future of the implicit separation of the "natural disaster" -to which no allusion is made- of the consequences of the "nuclear tragedy", that make fears grow, causing explosions, radiation leaks, contaminated evacuees counted by thousands.

3.3. Boxes

The boxes are other two elements working together to strengthen the message from the newspaper’s headline. Take one at a time:

Box 1: Foreign Correspondent - David Brunat - Hoarding food in the midst of stress.

Clearly, this imposes a question: if not by shortages, what other reasons food would be hoarded, if doesn’t exist serious problems of food distribution, or runaway inflation? What would produce such evils? Does the nuclear accident produce food shortages, distribution problems or inflation?

Clearly, if this nuclear accident has consequences, as surely will be, it will not be the shortage of food or the generation of uncontrolled inflation. And this for several reasons: the first is that if it has any effect on the economy, will not be similar to destruction of roads, factories, fields, etc ... that caused the earthquake + tsunami. Second, because the area where the nuclear incident occurred, northeast, produces only 7% percent of national Japanese GDP.

On the other hand, some days after the natural accident, it has been known that there were only consumption restriction, not prohibition, of most food produced in the area near Fukushima Dai-ichi site. And this was mainly to children and pregnant women. Moreover, what exactly does "amid tension" mean? An earthquake produces "tension"? And does this tension create acts as "hoarding food"?
The confusion and ambiguity in the news is such that it draws attention to the type of rationality raised.

Finally, the very expression used, similar to using the Spanish language imperative, rather than the assertive use the statement indicating the certainty of an event X. Therefore, expressing "Hoarding food in the midst of tension," would indicate a call to perform the action, rather than observing a situation that was happening.

**Box 2: Tragedy.** There are 1800 dead, and by radiation, 200,000 thousand evacuees.

The terms used here, and have their own weight, want to be: tragedy, death, radiation, evacuated.

While the box does not indicate the cause of the dead, but the evacuees, it is not difficult to imagine that by the very functionality of the headlines, read necessarily fast and associative information to be condensed, only involves a chain of keywords: tragedy, death, radiation, evacuated.

Moreover, the title of the box - the "tragedy" - tends to unify what is ambiguously under his command. Thus, there is a tragedy that takes 1800 deaths and 200,000 thousand evacuees.

As we know, the titles have the ability to "format" the reading of the notes under the framework and focus proposed. Thus there is a tragedy confusing an earthquake, so far claimed nearly two thousand killed not counting the missing or evacuees for that very reason, with a nuclear incident causing by prevention an evacuation of 200,000 thousand people. Then the dead shall be established by the earthquake + tsunami in the tens of thousands and missing for that very reason, almost double. For their part, evacuated by the nuclear accident are still 200,000.

In short, on the cover of the newspaper, and with respect to headlines about the events in Japan, it is clear THE message, what the newspaper "want-say":

1 - There is a growing fear
2 - There is a separation between natural causes (earthquake + tsunami) and human causes (unsafe nuclear industry), tending to show the influence of the second cause.
3 - There is an ambiguity and confusion in the presentation of data showing factual consequences of the events.
In this case, this could only be by means of certain operations in language:

1 - The idea of "being-there"
2 - Isolation of natural causes, nuclear chain of cause
3 - Ambiguity and confusion of data

4. Conclusions

It is in our interest to show a characterization of journalism as literature. Noting that "its" object has different attributes of the real object related. At the same time, we see what are the characteristics of narrative journalism, and their differential relationship with respect to the scientific discourse. Significantly, we try to display the "credible" journalism of enunciation as a specifically ideological production based on the theoretical signs proposed by the Bulgarian author Julia Kristeva.

At the same time we believe that the distribution and consumption of journalistic object has an undeniable mark regardless of its relevance to a scientific truth. Our concern is precisely this last point: in relation to events that happened in the accident at the nuclear plant in Fukushima, the news tends to produce a "real effect" with some effectiveness.

We should note also that the newspaper articles regarding Fukushima stoke the fires of fear in their readers.

The usual trend of academic criticism of these stories is immediately opposed by a scientific discourse, true in a narrow sense.

Given the theoretical differences between real object and literary object, we assume an intrinsic weakness in the effectiveness of the latter counter-discursive strategy. We note that the perception of risk is based on cognitive and emotional factors at once. To raise the critique of these texts, and the ideological effects of them, using only true and scientific statements, means ignore the complexity of the phenomenon.