

**An analysis of two newspaper articles in the aftermath of the 2011
Japanese Tsunami**

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Written Discourse

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Choose two news/current affairs texts, one from English-speaking media (e.g. A British or American TV news report, an Australian newspaper, etc.) and the other from a media outlet in another country/language, but both dealing with the same 'global' events (e.g., wars, disasters, etc..). Critically discuss the two texts using a CDA approach (unit 8).

You should reach conclusions as to how the two texts are similar or different in some or all of the following:

- the differences in the representation of events and in relations with the intended audience;
 - the ways 'news values' influence the production of news;
- the underlying system of values/ideologies which shapes each report;
 - implicit and explicit evaluations conveyed by the texts;
 - the ways social actors are represented;
 - the ways different linguistic codes represent the same events;
- the visual illustrations that accompany the texts – are they the same or different and the implications of the choices.

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(excluding long quotes, tables, references and appendix)

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1. Introduction

1.1 Introduction and background.

Newspapers are an important part of society. Reah (2002) suggests that they are “snapshots” which “create or at least influence” parts of our society and culture (p.1).

This paper will aim to examine the differences and similarities between two related news articles both printed on March the 16th, 2011 in the aftermath of the earthquake and tsunami that devastated north-eastern Japan. In the immediate aftermath of the two disasters, it quickly became apparent that there was a problem at the Fukushima nuclear plant on the east coast of Japan. It is the response to the unfolding nuclear situation in the news media that will be examined in this paper.

The texts to be examined are “*Radiation fears grow after blast,*” from *The Japan Times* (appendix 1), and “*Exodus from a nuclear nightmare: Thousands flees as they question whether Japan’s government is telling the truth about reactors,*” from *The Daily Mail*, a UK-based newspaper (appendix 2). The texts will be analyzed using Critical Discourse Analysis (CDA) and particularly the framework and terminology associated with Norman Fairclough (2003).

While these two articles are quite different in their angle for reasons discussed below, they are both representations of how the same disaster was being reported in different countries on the same day.

In using a CDA approach to this analysis, this paper will consider not only the vocabulary selection and grammatical functions of the language used in the article, but the societal factors affecting the writers’ choices.

1.2 Critical Discourse Analysis

Jaworski and Coupland (1999) open with a number of definitions of discourse at the beginning of their reader. They suggest that discourse analysis “offers a means of exposing or deconstructing the social practices that constitute social structures (p.5).”

He goes on to break this down schematically into three levels: social structures, social practices, and social events.

Discourse manifests itself in three ways (Fairclough, 2003: 26). These are Genres, Discourses, and Styles. I will consider each of these briefly here and in more detail below.

Genres are “a discursal aspect of ways of acting (Fairclough, 2003: 65),” and there are many different, but frequently overlapping genres in social situations. Here, the genre immediately seems to be a newspaper story, or article. Newspapers, however, serve a number of purposes beyond presenting the news to their readers. They contain a range of items ranging from advertizing to TV listings. In addition, the news is often celebrity related leading Reah (2002:2) to question whether this is actually news.

Discourse can be considered abstractly and concretely, as either meaning language as a part of social life, or as a way of representing part of the world.

Finally, Style is a way of being. Newspapers are often personified. The Daily Mail in the UK, for example, is pictured as a conservative, right-leaning paper whereas the Guardian is considered more liberal and representing the ideologies of their owners and editors. The style of a particular paper thus needs to be considered in any analysis of a particular article published in such a paper.

This discussion will use this framework outlined in Fairclough (2003) to analyze the articles.

It will begin by considering internal relations, and proceed to external relations.

Internal relations are how linguistic structures interact in a text. Fairclough identifies three types of “meaning” (ibid: 27) which he suggests are important in an analysis of internal relations in a text. He refers to as action, representation and identification.

Action meanings relate to how language is used to ‘do’ something.

Representational meanings relate to the world around us. One implication of this is that what is written in newspaper “stories” does not depict the actual event, but a representation of it.

Identification is an indication of the writer’s stance in and to the world. In the case of a newspaper, this might be their political view.

These definitions and their implications will all be considered in detail in the following sections.

External relations, to be discussed in section four, include social practices and social structures and they shape the way texts are written. Social practices are actions are done within a social structure. Social structures are more abstract but can be thought of “as defining a potential, a set of possibilities (Fairclough, 2003: 23).”

2. Analyzing the texts - Internal relations

2.1 Action and genres

As stated above, action meanings relate to what the text is doing. To paraphrase the title of Bakhtin (1999), there is a problem when discussing the genre of any newspaper article. Needless to say, different newspapers have different agendas, both socially and politically. In addition, newspapers in the UK are divided into two groups, Broadsheets and Tabloids. Tabloids are sometimes referred to as the “popular” press, and can be broken down into up-, mid-, and down-market (for example, Jucker, 1992: 48). The Daily Mail is a mid-market tabloid (Tunstall, 1996, cited in Reah, 1998: 2), and as such presents its news stories in a way that appeals to the majority of its readership. There is more focus on “human interest” (Bednarek, 2006: 13), which may explain some of what will be discussed below. The Japan Times caters to an international audience of ex-patriots living in Japan. While there is some international news in the paper, the majority of stories are national. Additionally, what constitutes the practice of newspaper writing can be very different between countries. This will be discussed further in section 4.1.

The Japan Times (from here referred to as JT), from its headline to its closing paragraph, uses declarative clauses, with facts and quotes from various officials presented with a minimum of evaluation.

The Daily Mail (from here referred to as DM), also uses many declarative clauses though out its article, and, while there are question clauses, these are embedded in quotations provided not by officials, but by residents of the area surrounding the plant. The implications of this will be discussed below in section 2.3.

2.2 Representation and discourses

Representational meanings, which Fairclough suggests are related to the world around us, three elements need to be considered: processes, participants and circumstances (Fairclough, 2003: 135). When analyzing a text from a representational point of view, we should thus consider what elements are given prominence, and which are given less.

2.2.1 Vocabulary

The use of vocabulary in the two articles is starkly different. Li (2009: 90) suggests that variations in the language used may “constitute particular representations of the world, social identities and relations.”

The vocabulary in the JT which is given prominence is factual. It uses scientific jargon on a number of occasions. The word ‘millisievert’ is used six times in the JT articles accompanied by various statistics, compared to zero times in the main text of the DM. The DM also avoids using any numbers relating to radiation.

The DM gives prominence to a number of words that evoke fear, panic and anxiety. This trend begins in the headline with “nightmare” and “panic,” and continues throughout the article. “Danger,” or “dangerous,” is used five times, as is “Flee,” or “fleeing”. The Oxford English Dictionary (2011) defines “to flee,” as “To run away from a place or situation of danger.” In addition, five other words which have connotations relating to fear or danger are used a total of sixteen times. While the writer does not directly tell the reader to “get out of Tokyo now (as in The Sun, 2011),” his choice of vocabulary does implicitly suggest that there is an imminent danger or threat. It has the effect of raising concerns and anxieties in the reader.

In contrast, the JT uses eight words which could cause anxiety in the reader, with ‘fears’ being used twice and ‘worrisome’ once. (Table 1)

This difference relates to the tone of the articles. The fact-based, declarative style of the

JT lends a sense of calm, while the more emotive style of the DM does the opposite. It creates fear and uncertainty. The reasons for this difference will be discussed in the analysis of external relations.

Table 1. Frequency of occurrence of vocabulary related to anxiety and fear in the two articles,

The Japan Times		The Daily Mail	
Lexical item	Times used	Lexical item	Times used
worry	1	nightmare	1
fears	2	flee	3
worrisome	1	fleeing	2
dangerous	1	terrified	2
lethal	1	worried	1
worst	1	dangerous	3
dramatically worsened	1	threatened	1
		fearful	1
		danger	1
		panic	1
Total	8	Total	16

2.2.2 Social actors and quotations

As with other choices that have to be made by the writer of any text, choices need to be made about the representation of social actors (Fairclough, 2003: 145). There are a number of choices suggested by Fairclough as to the ways a writer can represent social actors in their texts. These include the variables inclusion/exclusion, activated/passivated, personal/impersonal and specific/general.

The use of social actors and the quotations attributed to them is very different in the two articles.

The JT takes its quotes from figures of authority: the Government's chief spokesman, a professor from the University of Tokyo, and the Japanese Prime Minister. This has the effect of giving the article creditability.

DM, also consistent, omits quotes from authority figures, taking instead reactions and opinions from residents. The only quotation from the Prime Minister unsubstantiated: "[The Prime Minister] is reported to have asked the plant's operators, Tokyo Electric, 'What the hell is going on?'

The DM particularly uses quotes from residents. This makes it easier for the reader to relate to the speaker, and give the article a 'human' angle. It also allows the article to continue creating fear and uncertainty, as most residents at the time were unsure themselves of what was happening, as apparently was the PM, given the above quote.

Both articles mention the government's spokesperson, Yukio Edano, however again they differ in their approaches. When the DM mentions the government's spokesperson, they do not give a direct quote, telling us instead that he "admitted that dangerous levels of radioactive substances had been spilled into the atmosphere." The JT gives the same information as a quotation, "There is no doubt it is an amount that would have (a harmful) effect on the human body," and goes on to qualify it with, "But that is the

amount right near the leak. The farther away, it drops."

While the JT is inclusive of official figures, the DM is particularly exclusive. The DM achieves this by "Backgrounding," (Fairclough, 2003: 145) officials, and even the Japanese Prime Minister, in other words mentioning, but not making them main characters.

While JT acknowledges there is a problem, they also seek to address any fears or anxieties that may cause. This attitude is seen again in a quote by Professor Maekawa when he states that "Local residents should remain calm and not panic." The DM usage does the opposite again. It tells the reader there is a problem, and only elaborates by stating that the government had said that the real danger zone was within 19 miles of the plant. Although this might have eased any fears, the writer follows up the comment with another use of the word "panic," thus casting doubt on the government's reassurance.

The JT does not use any quotes from residents, maintaining the 'official' tone of the article.

2.3 Identification and style

“Styles are the discursal aspect of ways of being. (Fairclough, 2003; 159).” That is, they show how we identify ourselves in speech, writing and other texts.

In both articles, the writers are named. The writers in the JT both have Japanese names. This suggests that they are not native speakers of English, although it is possible that they are native speakers with Japanese names. This has implications to be discussed in section 4.1 with regard to social practice.

The article from the JT, with its emphasis on officialdom and rationality, seeks to calm fears and avoids criticism of the Japanese government. The focus is giving information clearly and accurately from official sources at a time of great uncertainty. By avoiding criticism and evaluation, the writers showing themselves to be in agreement with the officials they quote, encouraging their readers to do likewise.

It should be noted that this identification was to change in the coming weeks, as negativity towards the government increased. However, the avoidance of such criticism in the article stems from the proximity to the event. The JT is a newspaper in Japan, reacting to a devastating natural disaster, and its repercussions. To undermine the government at this time could have been construed by readers as insensitive and unconstructive as they looked to the government for leadership. As readers’ moods changed, so did the tone of the articles.

As the table below shows, the DM article, using declarative clauses, implicitly suggests throughout the article that the information being given by the government should not be trusted through the use of quotations by residents. For example, in the headline, the writer is not questioning the government; rather “they,” the people, are questioning the government. This trend continues through the article.

Table 2. Phrases in *The Daily Mail* article either directly or indirectly suggesting government dishonesty.

Phrases in <i>The Daily Mail</i> article either directly or indirectly suggesting government dishonesty.	
Quote	
Thousands flee as they question whether Japan's government is telling them truth about reactors.	Headline
Those inside the cars and trucks ... reluctant to believe anything their government was telling them.	Article writer
we aren't being told how dangerous this stuff is and what really happened	Quoted source
I can't believe them now. Not at all.	Quoted source
Some declared that they could no longer believe what their government was telling them.	Article writer
We want the truth	Quoted source
The government needs to tell us how long this is going to last	Quoted source

3. Visual illustrations and accompanying language.

3.1 Overview of the images used in the two articles.

Kress and Van Leeuwen (1999) state that “images involve two kinds of participants, *represented participants* and *interactive participants* (p362). Represented participants are those who are in an image, whereas interactive participants are those who communicate through images.

This paper will now turn its attention to the imagery used in the two articles, considering the three kinds of relations suggested in Kress and Van Leeuwen (ibid).

These relations are those between only represented participants, relations between represented and interactive participants, and relations between only interactive participants.

In both cases, the interactive participants are the newspapers and the writers. However with regard to the represented participants, like much else in the two articles, there are clear differences.

In the JT article, there are two images, one of the Fukushima nuclear plant, the other a map of the affected area, including the evacuation zone. This is again consistent with the newspaper attempting to remain factual and clear.

The DM article does include a similar map, and the same picture of the power plant, although at the end of the article. The language used on the pictures also differs. In the other nine images, the represented participants are people in various states of distress, again consistent with the overall tone of the DM article. The captions accompanying the pictures again use words like “flee,” and “life and death.” The tone again promotes fear and anxiety.

3.2 Analysis of the maps



Figure legend. Left: map in the Daily Mail; right: in the Japan Times.

Visually, the reader is drawn to how Fukushima is represented on the DM map, as a radiation symbol, both on the larger map of Japan, and the zoomed area. The JT uses a plain blue dot.

The same information is provided on both maps. Here it is the DM which is providing figures, whereas the JT avoids using them. The JT shows us the “Evacuation area,” and the “Stay indoors area,” the DM adds the numbers of displaced people to this. This helps illustrate the scale of the disaster.

While both maps mention 400 millisieverts of radiation being detected, the JT qualifies this by stating it was “near reactor 3.” The DM makes no qualification except for “twice the normal annual level,” and adds that “hundreds of staff (are) evacuated.” The JT shows that 5 microsieverts of radiation were detected in Tokaimura. The DM shows that “dangerous radiation levels” have been found in Tokyo, and there is “panic buying.”

The DM uses emotive language again to promote anxiety in its readers. The JT has

chosen to focus on facts. All of this is consistent with the tone of the articles.

4. Analyzing the texts - External relations

The external relation of a text can be considered on two levels –social practices and social structures.

Fairclough (2003) defines social practices as expressions of the “social elements which are associated with particular areas of social life” (p.25), in other words, the way we do things, whether they are delivering a business presentation, writing a newspaper article, or writing an academic paper. Social structures are more abstract. Jaworski and Coupland (1999: 3) suggest that language use is relative to various social, political and cultural formations – these formations or structures, such as government, tie to what Fairclough calls “external relations.”

4.1 Social practice

It would oversimplify the matter if the social practice in the articles is simply defined as newspaper article writing. The practice of writing newspaper articles is different in the two countries.

While both countries have, on the whole, a seemingly free press, in Japan, newspapers, regardless on their political leanings, are heavily reliant on ‘press clubs.’ De Lange (1998) states that all Japanese newspapers rely on press clubs, which results in stories with a similar tone and style regardless of the newspaper it appears in. He goes on to suggest that this is how “the authorities exert a measure of control over the flow of the news (p.ix).” Journalism in the UK is investigative in nature. This goes some way to explaining the differences in the quoted sources in the two articles. The JT would only get its information from ‘official sources’ given to the press club. As noted above, both writers are Japanese, members of a particular press club, and therefore likely to be presenting the report as it had been given to them. This could also explain why there is no comment or evaluation after given quotes.

The DM, being more investigative, would look to take sources from outside official channels.

An additional difference is that, while both aim to attract readers to their papers through their stories, due to the circumstances at the time these articles were written the JT was not just providing the news. It was also supplying information to the community of ex-patriots in Japan. As the readers of the DM were largely unaffected by the events in Japan, the article was just a news story reported in the paper's usual style. The JT was using declarative statements to be clear about the facts. Misreporting or sensational reporting would have lost them readers. The opposite is true of the DM. By representing human interest, it is remaining true to its identity as a "popular" tabloid newspaper (Bednarek, 2006: 13). This is not to say that human interest reporting is not compatible with responsible reporting, but it is relevant when considering themes of tabloidization, to be discussed below in section 4.2.

4.2 Social Structures

The internal relations and social practices of the two articles show that the texts are written differently for different reasons.

The social structures affecting the articles should also be considered in providing a full evaluation of the two. News stories are not the event itself, but "the ideologically framed report of the event" (Blackwell, 2005: 66). Blackwell goes on to suggest that what is presented is as truthful as might be imagined by the reader.

If the tabloid press can be considered a social structure, then this is certainly what the DM is working within. 'Tabloidization' in news media is, as Connell (1998: 12) puts it, changing "supposedly rationalist discourses into sensationalist discourses." As noted above, the DM chose vocabulary intended to induce anxiety and in effect sensationalize the story.

On the “conversationalising” of the news (Connell, 1998: 13), certainly the DM has done that through its choice of social actors. Rather than focusing on individuals who may have been well placed to discuss the events, the DM chooses to personalize the events through the use of residents’ voices. By personalizing stories in this way, the paper seeks to make sense of events for their readers, rather than explaining them (Connell, 1998: 13).

In section 4.1, how the DM article presented the story as human interest was briefly discussed. Curran and Sparks (1991: 229) suggest that stories taking a human interest angle explain events mainly “in terms of the elemental human emotions of the people involved.” This is certainly true of the DM, both in the text and the accompanying images.

The JT article makes no attempt to personalize, sensationalize or in any other way affect what it presents as the facts of the story. Why this choice was made can be speculated on. On one hand, as we have seen, the press operates differently in Britain and Japan. On the other, the proximity to the event may have led the editor to take a different approach.

A further effect of the articles relates to the power and control of the Japanese government as perceived by the writers of the two articles and how they try to convey that idea. Considering the JT article, the reader is led to believe that the government has control over the situation. The language selection is clear, calm, and reassuring. The social actors chosen are official, and again lend a sense of authority and control.

The effect of the DM article is quite the opposite. The suggestion is that the government has lost control of the situation, and has lost the trust of the people. Despite using many quotations from residents, the effect is not to empower them, more to show how little power the government has, building up to the alleged quote from Prime Minister Kan,

“What the hell is going on?” This could be the “destroying of hierarchy,” discussed in Curran and Sparks (1991: 230).

5. Conclusion

“The question of why news texts are produced in the way they are is always a complex one (Li, 2009: 115).”

The Daily Mail and The Japan Times took different approaches in reporting the events that followed the natural disaster of March 11th, 2011. These differences were due to a number of factors, particularly the social practice of newspaper writing in the two countries, the proximity of the articles to events, and the culture in which the articles were created.

The Daily Mail chose vocabulary and images intended to alarm, and cause anxiety. It also chose to criticize the Japanese government by portraying them as untrustworthy, even at a time of national disaster. While the author did not state this directly, the underlying attitude is shown in the use of quotations from residents near to the disaster.

The Mail was not alone in running stories of this nature in the immediate aftermath of the Earthquake and ensuing nuclear problems.

The Sun (*Get out of Tokyo NOW* (2011)), and The Daily Express (*Desperate bid to avoid meltdown* (2011)), were among a number of media that ran similar stories, both of which were considered for analysis in this paper.

The Japan Times opted to present information rather than opinion, with its information coming from official sources. Its intention was to prevent a potential panic by retaining a calm attitude in its reporting. There was little enough information in English in Japan in the aftermath of the earthquake, and what there was could not afford to be alarmist.

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6. Appendices

Appendix 1 – The Japan Time article.

Wednesday, March 16, 2011



Source of worry: This satellite image provided by the U.S. Institute for Science and International Security on Monday shows the stricken Fukushima No. 1 nuclear power plant and damage to the No. 1 and No. 3 reactors. ISIS/KYODO PHOTO

Radiation fears grow after blasts

By KANAKO TAKAHARA and KAZUAKI NAGATA

Staff writers

The earthquake-crippled Fukushima No. 1 nuclear plant suffered a dangerous radiation leak Tuesday in the wake of two new explosions and a fire as officials on site scrambled to avert a meltdown.

At 10:22 a.m., a radioactivity monitoring post near the No. 3 reactor showed 400 millisieverts per hour, 400 times the amount an ordinary person is exposed to in a year.

The figure was 100 millisieverts per hour near the No. 4 reactor and 30 millisieverts per hour between the No. 2 and No. 3 reactors.

Radiation exposure of 7,000 to 10,000 millisieverts per hour is considered a lethal dose, said an official at the Institute of Applied Energy. A millisievert is 1,000 microsieverts.

"There is no doubt it is an amount that would have (a harmful) effect on the human body," Chief Cabinet Secretary Yukio Edano said during a morning news conference. "But that is the amount right near the leak. The farther away, it drops."

Later in the day, Edano said the government was still trying to determine whether the sharp rise in the radiation was caused by an one-time event, pointing out that the radiation detected at the compound's main gate — a sample point often used to measure the radiation level there — rapidly fell to 596.4 microsieverts at 3:30 p.m. after peaking at 11,930 at 9 a.m.

"We are still observing carefully, but this may not be a continuing phenomenon," he said.

The situation, however, definitely remained severe for workers trying to stop a possible meltdown of fuel rods by cooling the reactors.

The nation's worst nuclear crisis dramatically worsened as four of the six reactors at the Fukushima No. 1 nuclear plant have experienced hydrogen explosions since Friday's historic temblor hit the Tohoku region.

A small explosion Tuesday took place at the No. 2 reactor, causing partial damage to the chamber. Attached below the vessel, the suppression chamber's function is to cool the steam flowing from the vessel and thus relieve its internal pressure.

Fears were heightened over whether a containment vessel might be compromised, after the suppression chamber of the No. 2 reactor's containment vessel failed.

Tokyo Electric Power Co. ordered about 750 of its employees to evacuate the plant site but kept 50 there to pump seawater into the reactor cores in a desperate race to cool down three of the four reactors to prevent meltdowns.

But during a news conference at 4:25 p.m., Edano said workers were successfully injecting cooling seawater into the No. 1 and No. 3 reactors.

Seawater — the last-resort coolant to bring the heating reactors under control — was also being successfully pumped into the No. 2 unit, but the government still needs to keep watching the situation carefully, Edano said.

Kazuhiko Maekawa, professor emeritus at the University of Tokyo, said Tuesday that although a meltdown is possible — at least at present — such a case would be different from the 1986 Chernobyl core meltdown in Ukraine that involved a large-scale nuclear explosion.

Even if the fuel rods melt down, they would remain in a liquid state, Maekawa said. If the primary reactor containment vessels "are not totally destroyed," lethal radioactive materials would remain within the reactor compound, he said.

"In the Chernobyl accident, the explosion spread nuclear materials containing 'death ash' and contaminated many people," Maekawa, a counselor at the Nuclear Safety Research Association, said, ruling out such an explosion in Fukushima.

"If you succeed in preventing melted fuel from leaking, the possibility of large-scale radioactive contamination is low. Local residents should remain calm and not panic," he said.

Tuesday's radiation release was believed triggered by a hydrogen explosion at 6:14 a.m. at the No. 4 reactor, which later caught fire. The reactor had been shut down for a regular check when the earthquake hit. But spent fuel stored inside heated up and generated hydrogen that was the apparent cause of the explosion. The fire was later brought under control.



Tepco continued to pump seawater into the Nos. 1, 2 and 3 reactors, trying to cool off the heating fuel rods inside.

On Monday, the No. 2 reactor's fuel rods were fully exposed for more than two hours, threatening a meltdown. After Tepco pumped in seawater, the water levels rose at one point to the level where the bottom half of the fuel rods were in the coolant.

However, the water level dropped in the night, exposing the rods for a second time.

The hydrogen explosions at the Nos. 1, 2 and 3 reactors, which blew off their housings, came after their cooling systems failed.

Early Tuesday, the government, irritated by Tepco's slow reporting to the prime minister's office, set up a joint crisis headquarters at the utility's head office in Chiyoda Ward, Tokyo. "We are still experiencing a worrisome situation, but we will overcome this crisis, whatever it takes," Kan told reporters. "I will take the lead. I will resort to every possible means to prevent the damage from spreading."

Japan has asked the United States to provide more cooling equipment to help deal with the crisis, Gregory Jaczko, chairman of the U.S. Nuclear Regulatory Commission, said in Washington.

Appendix 2 – The Daily Mail article

Exodus from a nuclear nightmare: Thousands flee as they question whether Japan's government is telling them truth about reactors

By [RICHARD SHEARS](#)

- **Workers battling nuclear meltdown evacuated today after radiation levels increased**
- **More than 140,000 residents within 19 miles of the plant were ordered to stay indoors**
- **6.0 magnitude aftershock off Chiba, east of Tokyo, causes further tremors today**



Mass exodus: Thousands flee the shadow of the nuclear reactor

Hundreds of vehicles sped out of the shadow of the crippled Fukushima nuclear power plant yesterday. Those inside the cars and trucks were fleeing for their lives, terrified about what might happen next and reluctant to believe anything their government was telling them.

'We knew it was close by, but they told us over and over again that it was safe, safe, safe,' said 70-year-old evacuee Fumiko Watanabe.

'People are worried that we aren't being told how dangerous this stuff is and what really happened.'

Meanwhile scores of terrified residents began to flee Tokyo as the power plant threatened to send a cloud of radioactive dust across Japan.

Even in Yamagata city itself, some 60 miles from the plant, residents were fearful of contamination.

As smoke billowed from the nuclear facility, 56-year-old shopkeeper Takeo Obata said: 'When the winds blow from the south-east you can smell the sea air.

'So if we can smell the sea, don't you think we will be able to smell that poisonous air? What are these people doing to us?'

Japan's prime minister Naoto Kan was also furious. He was not told immediately about the latest explosion yesterday in one of the reactors, and is reported to have asked the plant's operators, Tokyo Electric, 'What the hell is going on?'

But just before 4am this morning the Japanese government said that the fire which had raged for around seven hours had been brought under control.

Since then all workers at the site who had been battling to bring the crisis at the plant under control were evacuated after the radiation levels surged to become dangerous to human health.

Aftershocks continue to rock the country, and a 6.0 magnitude tremor struck in the Pacific just off Chiba prefecture, east of Tokyo, today, raising concerns that further damage would be caused to the already-weakened container walls of four reactors.

Two 20ft holes have been blasted in the wall of reactor number four's outer building after the last explosion. 'I can't believe them now. Not at all. We can see the damage to our houses, but radiation? We have no idea what is happening. I am so scared.'

Others had only one objective – to escape the area around the plant. 'I don't care where I end up,' said one driver as he joined a massive queue for petrol on the road to Tokyo. 'I just want to get as far away from this place as I can.'



Bustle: Passengers wait to leave at the Tokyo International Airport, some on any plane they can



Screening: Evacuees are screened for radiation exposure at a testing centre as fallout fears spread



Life and death: A baby is checked for signs of radiation, left, as others get checked in Koriyama City, near Fukushima, right, right
As residents were evacuated from the area around the Fukushima plant, they were screened for radiation exposure.

Experts in white and yellow protective suits passed geiger counters over thousands – even young babies – who had fled from their homes to camp in huge evacuation centres.

Some declared that they could no longer believe what their government was telling them. 'We want the truth,' said Yoshiaki Kawata, a 64-year-old farmer who lives in a hillside village in neighbouring Yamagata prefecture.



Heartbreak: Women wail together after hearing the death of family members at an evacuation center in Kesenuma



Tragic: A woman reacts to news that a loved one has died, left, and a picture of family members sits atop the rubble of a destroyed home, right

Officials of Tokyo Electric sat side by side in the capital and struggled to answer penetrating questions about the level of danger before government spokesman Yukio Edano admitted that dangerous levels of radioactive substances had been spilled into the atmosphere.

Although the government said the real danger zone was within 19 miles of the plant, the radiation announcement caused panic among those within a radius of 100 miles. This was followed by the warning that anyone inside the radius had to stay indoors. Should they venture outside, they were ordered to shower and throw away their clothes when they returned.

That order meant some 140,000 were trapped indoors in and around Fukushima. But many were already asking how long they will have to stay there.



Desperate: Nurse Hiromi Kinno looks at scribbled messages left in a gymnasium in Otsuchi in the hope she may find a sign that her missing parents and young nephews are alive

'I left my parents behind,' said a man who was fleeing in his car with his wife. 'They didn't want to leave their home and now they can't go whether they want to or not.'

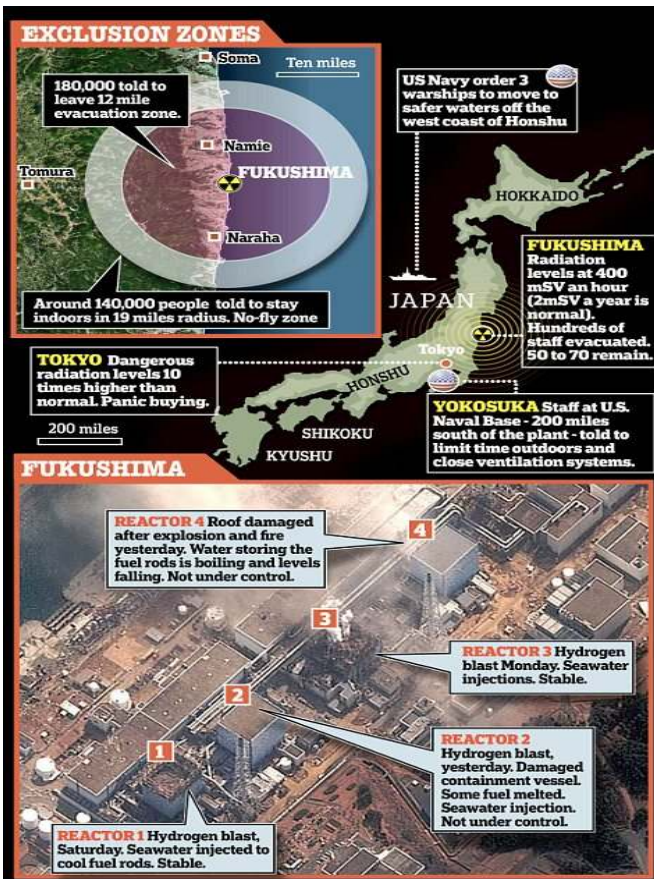
'The government needs to tell us how long this is going to last.'

Authorities told residents not to use their own vehicles, said Koji Watanabe, a 60-year-old taxi driver.

But with military vehicles focused on children, the elderly and the disabled, he got fed up waiting and decided to leave in his car.

He and his wife, who has lung cancer, did not have enough fuel to travel far.

Many petrol stations are closed, and those that are open have long queues.



Sea change: Fukushima Dai-ichi plant before the tsunami hit, left, and how it is now, right