# Special Issue The Great East Japan Earthquake Chronicle

Chronicle of a Disaster: Understanding How Multiple Disasters are Constructed in the Time and Space of Events

Takashi MACHIMURA

## DISASTER AS A SEQUENTIAL, BUT CONTINGENT, MASS OF EVENTS: AN INTRODUCTION

At 2:46 pm on March 11, 2011, I was in an office at a university building located in a western suburb of Tokyo. Suddenly, the floor began to violently shake. Earthquakes are not special occurrences in Tokyo. Yet, it did not take long before I understood that this earthquake was different from previous ones: the first quake continued for more than two minutes and was soon followed by several, frequent aftershocks. This was, however, just the beginning of long, eventful, and gloomy days for Japan.

Why did we decide to chronicle the disaster, now called the "Great East Japan Earthquake"? One main reason is, unquestionably, the magnitude of the Earthquake's impact. However, if our intention were to represent the size of the event, the number or the volume of occurrences would be more impressive and, probably, easier to index. In fact, TV and newspaper reports often emphasized the extent of the disaster.

However, we believe that such expression cannot present the "reality" that people have actually experienced since last March. Too many events occurred after the first quake, some of which were obviously related to it. However, most others were experienced by people without any certain belief of whether those events were real aftereffects. In particular, this time the accidents at the Fukushima Daiichi Nuclear Power Plant have caused countless events until today. The nuclear crisis in Fukushima was certainly a direct aftereffect of the Earthquake and subsequent tsunami. However, related things occurred not only in the nearby area but also in Tokyo, entire Japan, and even the entire world. In reality, people's image of the current "disaster" has been produced through a cumulated perception of sequential, but contingent, facts following various

Takashi MACHIMURA, Hitotsubashi University

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accidents and incidents, sometimes regardless of whether they were directly caused by the Earthquake. This causes us to raise several simple, but difficult, questions: what was the disaster? Was it "a" disaster or "multiple" disasters? When will it end? Or, more importantly, how can it end?

Soon after the Earthquake, many people said or believed that everything had changed. If so, all the facts could be seen as, more or less, disasterrelated. Certainly, this may be true from the obvious viewpoint of those who experienced it. However, such a view is inaccurate and may lead to a misunderstanding because it ignores the complicated structure of the facts related to both before and after the disaster. A careful review of what actually happened is important to establish a reality of the disaster. Making a chronicle is a starting point for this review.

In this volume, two chronicles of the March disaster are presented. The Japanese version covers occurrences from March 11 to May 11, 2011, two months after the Earthquake. The English version is abridged, but covers up to the end of June.

# CHRONICLING A DISASTER: SIGNIFICANCE AND LIMITS

About one month after the Earthquake, our research group began collecting data about the event, which was thought to be related to the disaster. The details of our collection procedures are explained by Takefumi Ueda in the next section. Here, I identify three basic characteristics of the chronicle, which can be attributed to the procedure of editing it.

#### Tacit Knowledge behind Chronicle Making

To begin with, chronicling a disaster includes tracing a series of "effects" caused by or rooted in an original incident. In our case, that incident is the Earthquake and the effects are tsunami and the nuclear crisis caused by these two events. The crucial thing here is selecting an event from among an immeasurable number of facts. Of course, there is no tag or sign such as "disaster-related" or "caused by earthquake" on each occurrence. Therefore, necessarily, an attempt to select an event requires or depends upon a tacit knowledge that guides a decision of what is "disaster-related." Such knowledge may include not only formal information or scientific data but also a shared feeling such as fear, threat, anger, or solidarity. These work together as a hidden frame of reference when describing a whole image of a "lived" disaster.

In addition, we use mass media and the Internet as major sources of information. This means that the contents of the following chronicle are restricted by two hidden frames: one is that of chronicle makers, and the other of the original-source makers. To avoid any limitations being caused by this, we tried to expand the range of sources as broad as possible. Yet, the problem was not fully solved. Now we believe that the purpose of making a chronicle is to provide important clues for estimating such hidden contexts of the perception of the disaster that pervaded in public at that moment.

#### Chronicle Conditioned by Time Factor

An attempt to create a universe of events is conditioned by timing, and making a chronicle is no exception. As mentioned, the selection of events depends inevitably upon some tacit knowledge that may be displaced by others in response to changing situations. People forget events easily, though selectively, within a relatively short time. Simultaneously, an attempt to organize those events into several master narratives begins, which in effect invents several coherent and often dominant stories of a "disaster."

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In addition, we encountered difficulty in making a chronicle of this disaster because the "facts" concerning the nuclear crisis were repeatedly revised by the electric company and state authorities. Company executives, state officials, and interested professionals hesitated to release and even hid unfavorable data. This caused a serious delay in the evacuation of residents in nearby areas. Because of an urgent request from concerned residents and both domestic and international criticism, the authorities changed their attitude and slowly released exact data after the accidents. From a technological viewpoint, only a "real" fact after revision should be important. However, from sociological and psychological viewpoints, a "false" fact before revision is also important because people acted on the basis of such a "fact." The following chronicle tries to include both types of "fact" on the same timeline. Thus, a careful review is necessary to follow a chain of events.

#### Geographical Location of the Event

A chronicle is place-bound. Each event has a place of occurrence and a place of origin, and a geographical scale of influence. A disaster is not an exception. However, when studying the case of the Great East Japan Earthquake, several factors should be additionally considered.

First, the geographical origin of the disaster itself is extremely wide. The epicenter of the first quake is reported to be an extended zone of land over 500 km in the Pacific Ocean. This caused a huge tsunami, which hit over 500 km of East Japan's coastal areas. Second, the disaster has a multifaceted and cascading character. As a result, the place of origin and the place of occurrence, as well as the geographical scale of influence were varied and complicated for this event. Third, since the nuclear crisis occupies a significant part of the disaster, the range of related events expanded drastically. While human loss and physical damage in the Tohoku area presented the main picture of the catastrophe, political and economic decisions in Tokyo, social and cultural reactions in remote places, and international responses were also considered disaster-related events.

The following chronicle shows a certain geographical bias in its coverage. We must admit that our chronicle reflects, more or less, a viewpoint from Tokyo. This bias comes partly from the fact that most members in the research group experienced the disaster in the Tokyo area. Yet, it is also based on our original intention. The disaster that we met has a multifaceted character. It created an unexpected chain of effects, which were often produced, controlled, mediated, or interpreted in Tokyo because it is the political, economic, and cultural center of the nation. We have included into the chronicle as many events as possible that occurred in the area directly damaged by the earthquakes, tsunami, and nuclear accidents. However, at the same time, with an intention of making a chronicle from the viewpoint of social sciences, we have tried to cover the facts that occurred in and related directly to Tokyo.

## BEFORE INVENTING A SIMPLIFIED STORY OF A DISASTER

In the following chronicle more than 11,000 various events are presented in a timeline from March 11 to May 11. Since it has many limitations, its contents are still tentative. However, as you will realize, the chronicle is already very voluminous. In fact, we considered the possibility or necessity of editing or summarizing its contents for convenience. However, we decided to publish it in its current form. As mentioned, people have already begun to forget events. Along with this, an attempt has been made to invent several master narratives from numerous

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experiences. Members of our group cannot stay outside such a trend. Therefore, at this moment, we prioritized keeping a record of events and publishing them in a relatively "raw" form.

The disaster still continues, and it is not clear when and how it will end. According to a current official report by the national government, at least 328 thousand residents who lost or left home because of tsunami and/or nuclear accident still live as temporary evacuees (November 17, 2011). In addition, thousands of people who "voluntarily" evacuated their home continue to live elsewhere. Nobody knows what actually happened inside the nuclear reactors at the Fukushima Daiichi plants. Thus, any chronicle has to be temporary, and therefore, open to future addition or revision.

At the end of the introduction, we must apologize for the fact that the chronicle itself is in Japanese. Since most events happened in a Japanese-speaking world, the original chronicle must be in Japanese. It is too large in its original form to be translated into other languages. For the convenience of international readers, an explanation of the procedure of its making, references for information, and an abridged version are provided in English.

Events are divided into several groups of items, such as government; politics and economy; nuclear accidents; military responses of Japan and the U.S.; damages and recovery of basic infrastructures; lifeline and production cycle; responses of professional institutions; activities in civil society; impact of nuclear accidents; culture and media; local events in Iwate, Miyagi, Fukushima, and Tokyo; and international responses. This is not a finished product but just a starting point. We hope that these manifold facts provide an opportunity to better understand what actually happened in Japan since March 11.

### 【日本語要約】

2011年3月11日、巨大地震とそれに続く大津 波が東日本を襲い、東京電力福島第一原子力発 電所で発生した大規模な放射能汚染事故がさらに 追い打ちをかけた。何重にも重なる災害の下で、 数え切れない出来事が被災地で、東京を含めた日 本で、そして世界各地で発生してきた。今回の災 害がはたしていつ終わるのか誰にも想像がつかな い一方で、地震直後の雰囲気や出来事は(ゆっく りと選択的に)記憶の彼方へと遠ざかりはじめてい る。はたして、「東日本大震災」と呼ばれるように なった災害の下でいったい何が起きたのか。しだい に浮上しつつあるお仕着せの「災害の物語」理解 に身をゆだねる前に、まずは関連する(と思われる) 膨大な出来事の束として震災を記録し、さまざまな 理解の可能性に対して門戸を開いておくため、私 たち研究グループは、災害クロニクルを作成するこ とにした。

本号には、3月11日から5月11日に至る2ヶ 月間の出来事、11000件以上を収めたクロニクルが 掲載されている。作成手続きや使用資料等は植田 剛史による次章および後出のリストをご覧いただきた い。クロニクル作成のなかで浮かび上がったその特 徴と限界について、以下3点指摘しておく。

第一に、災害のクロニクルを作成する試みとは、 元となる災害事象によって直接引き起こされたり、 何らかの起源をそこにもつと考えられたりする一連の 出来事をたどる作業に基づく。しかし出来事じたい に標識がついているわけではない。それゆえ、ク ロニクルの作成は、何が災害と関連しているのかの 判断を導く何らかの暗黙の知識に依存せざるを得な い。今回のクロニクルもまたそうした暗黙の知識によ る制約を受けている。

第二に、災害クロニクルの作成は、時間によって その内容が左右される特徴をもつ。災害との関連 判断を導く暗黙の知識は、時間の経過とともに変化 していく。また並行して、「災害」をめぐるいくつか の主要な「物語」へと個々の出来事を整序してい こうとする力が強く働くようになることも、クロニクルの

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内容に影響を及ぼす。加えて今回、原発事故に関 する「事実」で当初隠されたり不明だったりしたも のが、時間とともに次々書き換えられていく事態が 起きている。したがって、今回のクロニクルの中にも、 その後の視点からみると不正確なものも含まれてい る可能性がある。クロニクルを読む際には、こうした 「事実」の上書き過程にも留意をする必要がある。

第三に、災害クロニクルは地理的要因によっても 規定される。出来事は地理的な位置をもつ。した がって作成者の位置関係が否応なく内容に影響す る。以下のクロニクルも、東京という地点からみた災 害観という特徴をもつ。ただし、きわめて広域に及 び、かつ原発事故を含む今回の災害の特徴のひと つは、さまざまな出来事が東京という場を媒介とし て発生し、また解釈されたという点にある。この点を 踏まえ、本クロニクルは被災地だけでなく東京に関 わる出来事も重点的に収録している。

クロニクルの活用にあたっては、以上の特徴と限 界にご留意ください。

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