

Foreword

G. Bertolaso¹ ■

When this issue of “Progettazione Sismica” is published, a little more than ten months will have passed since the earthquake stroke L’Aquila and its Municipality. Three hundred people died under the collapsed buildings where they used to live, thousands were injured, tens of thousands have shared the tragedy that their hearts, their minds and memory will never be able to forget. A few hours after the earthquake, the entire Italian Civil Protection structure moved to Abruzzo in order to assist in the rescue operations. It soon became a race against time, which is still going on; every time an earthquake strikes, the same scenario repeats itself, we cannot get used to it, we just share the common feeling that we are competing against time. How can we defeat time, multiply it, stretch the days and hours just relying on our own mortal strength, unable to stop the motion of the sun? The Civil Protection, after many years of dealing with catastrophe and tragedy, has found ingenious ways in which to multiply time, spreading it in parallel lines (as if parallel worlds existed), so that risk mitigation measures can be implemented in concurrent fashion, rather than in sequence, as tends to be the norm.

The first hours and days are typically hectic, digging people out of collapsed buildings, searching for survivors; this time is both atrocious and precious, one breath between life and death, but this is also the time for setting up a new temporary world, replacing the dear old one but so different from it. The new world boards the survivors in camping tents, any available accommodation, hotel rooms in a safer area, providing medical assistance, rest areas, public toilets, electricity, schools, assistance for children and senior citizens, keeping of social life. This long moment of time is filled with hard work, discomfort, the introduction of new habits and rituals; this is the long moment when victims and rescuers live side by side a doubting life, a life of deprivation, hardly gaining some compensation by trying to hold on to hope and new projects, from the building of new friendship to the general effort so as to keep going on through this hostile and complex time.

Not far away, on the side of the tents and the multicolour gear worn by the relief workers, a different hourglass is being turned by other people. These are the men and women striving to gather information in order to study the tragic event; they make on-site analysis of the ground with the aim of understanding, measuring, evaluating, assessing the damages. They try to define what can be recovered, what is definitely lost, and where it is possible to temporarily rebuild some kind of alternative to normal life defeated by the earthquake. This is the time of science, of technology, the time to put into effect what we’ve been studying for years. It’s the time of truth, not less truthful, not less short than other times, though more silent and seemingly hidden. We usually tell the visible aspects of time, the rescue operations, the wasted land, the silence of deserted and insecure places, the stories of rescuers and rescued, of those who lost their autonomy to make a decision. While the human need for independence grows up inside, the surrounding world tells loudly to be patient, that some more time is needed before everyone can take back their power to choose and to make plans for the future. The photos, the newspaper articles, the images on live TV on the remains of this life, its colours and faces, feelings preserved in secret glances and only half expressed by broken and uncertain words. The time flowing in the heart and mind of those living this tragedy, on the one hand helps journalists writing stories while on the other hand it becomes a burden for the soul, causing nightmares at night and uncertainty during the long days.

This issue of “Progettazione Sismica”, tells the story of the time that goes unnoticed because feelings are hidden deep inside it; this time goes unnoticed by the public audience who is only attracted by impressive scenes, nonetheless, it is a precious part of the seismic emergency scene. I am very glad about the project of “Progettazione Sismica” aiming to gather documentation, studies, testimonies based on the “unnoticed” and untold aspects of time, undervalued time, taken for granted as if it were bureaucratic procedures, administrative acts, something

¹ Capo del Dipartimento della Protezione Civile - Commissario per l’emergenza in Abruzzo. www.protezionecivile.it



useful for the archives rather than a valuable part of our heritage.

Readers of this special issue entirely focussed on the earthquake of Abruzzo, will be surprised to discover these hidden aspects of time. Each article deals with real facts, not with the theoretical discussion, but actual events seen from an objective point of view. It tells about the work of thousands of people who have taken part in the various scientific and technical activities; it tells about the most up-to-date technologies, experi-

mentation and testing of theoretical studies.

The earthquake becomes a sort of experimental laboratory, where every hour various specialisations and experiences meet and confront each other, they grow up together and lay the foundations for new process, for the fine tuning of new parameters, standard, data, scenarios, projects, technical and scientific applications.

This work has to be carried out rapidly, because, if another seismic event occurs, only a fast understanding and interpretation of the facts



may prevent the repetition of the same tragic consequences.

This hectic activity becomes the Civil Protection itself, competing against time while trying to stick both to its internal dynamics and to the logic of science and technology. As a result, the scientific and technological findings of the real-time seismic laboratory operating in the emergency area, go side by side with the tight timing of rescue operations, damage assessment, need of rebuilding and will to give back an accept-

able quality of life to people who are left with nothing but their own life.

This special issue of "Progettazione Sismica" analyses what is happening in the city of L'Aquila and in its surrounding area, what the television and newspapers tell about new houses and very fast earthquake-proof building programmes. The process is so quick that, only a few months after the earthquake, the destroyed area has been turned into some kind of showroom of Italy's effort to give a feeling of security

Headquarter (DICOMAC) of the Civil Protection set up in L'Aquila right after the Earthquake of 6th April 2009.

to those living in a seismic area.

A huge work has been carried out during quiet times by academics, researchers, innovation technology scientists cooperating with the Civil Protection; among the most collaborative are the Eucentre, ReLUIS, INGV. The post-earthquake fast emergency action was possible thanks to them, which are the most active centres of expertise of our Civil Protection, and worldwide acknowledged for their excellence. The same response would not have been possible without the extraordinary helpfulness of people whose life is entirely committed to science, technology and design. They have been able to work side by side with the rescuers, obeying the rules imposed by the lack of time and by the need to obtain concrete results in next to no time. As it always happens in calamities, they have struggled together with victims and rescuers, in the same cold weather, under the same rain or the same hot sun.

Thus, with my deep gratitude to the scientific community, to the workers of the Civil Protection who help providing important scientific and technological knowledge, I would like to invite you to treasure all the information collected in this special issue of this journal.

Many readers will find their own personal experience in these pages and I really hope that, after reading these articles, many of you will be persuaded that an effective earthquake disaster prevention is possible. The key is to work quickly

and hard, trying to prevent the most tragic consequences of earthquakes, to study and develop new techniques for prevention, and to rely on the work of professionals and industries focussing on seismic design. All this can be achieved with contained costs.

The one thanking that would like to be received by all those that have worked in the "crater" after April 6th, the main protagonists of the struggle with time, those who have devoted their professional lives to the study of earthquakes and to find ways to reassure the people living with seismic risk, the most important reward for all these men and women would be the knowledge that the results of their efforts will be useful and soon put into effect in other seismic-prone areas and contexts, in order to ensure construction according to correct standards, so as to give security to people, so that the powerful and voracious energy of an earthquake will hit things only, not human lives, and so that we will be asked to gather data and information on limited observed damage rather than on lost or destroyed lives.

This "thank you" is possible, many of us long for it.

GUIDO BERTOLASO