



Improved strategies for post-disaster reconstruction are needed more than ever, as natural catastrophes become more and more frequent. Developed and developing countries are not spared, but in the latter, disasters reap the heaviest toll in terms of human and material losses. Uncontrolled urbanization, communities settled in hazard-prone areas, deepening poverty and global climatic variations combine to increase their vulnerability. Inadequate prevention programs and stereotyped approaches for housing reconstruction prove to be ineffective in re-establishing communities after natural disasters and fail to contribute to their long-term development. Improvements in post-disaster reconstruction programs can be obtained when a reasoned strategy is adopted, avoiding approaches which are driven by mutually exclusive paradigms such as self-help only or imported prefabrication only. In a pluralistic and systemic approach, building design is coupled to organizational design, and local and imported technologies are merged.

1. program of activities

Thursday May 23

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| 10.00 to 14.00 | Registration desk open
(located in the main hall) |
| 12.30 to 14.00 | Light 'cash' lunch available at the HEC building (see map) |
| 14.00 to 14.30 | Welcoming remarks by Dean Irène Cinq Mars and Colin Davidson
(auditorium, room 1120) |
| 14.30 to 15.15 | First keynote presentation:
Mark Napier (South Africa) "Informal settlement integration, the environment and sustainable livelihoods in Sub-Saharan Africa"
(auditorium 1120) |
| 15.15 to 15.45 | Break |
| 15.45 to 16.30 | Second keynote presentation:
George Ofori (Singapore) "Developing the construction industry to prevent and respond to disasters"
(auditorium 1120) |
| 16.30 to 17.00 | Presenting the workshops
(auditorium 1120) |
| 17.00 to 19.00 | Wine and cheese in the exhibition room.
(room 2081) |

Evening free with suggestions for dinner (Old Montreal, Crescent street, St. Laurent Boulevard and Laurier street)

Friday May 24

- 8.00 to 9.00 Late registrations and refreshments
(main hall)
- 9.00 to 10.20** **2 parallel workshops:** A and B, selected presentations of 25 minutes each and discussions of 15 minutes each.
- Workshop A** (room 2065) Animator: Mark Napier, Reporter: Gonzalo Lizarralde
- **Rohit Jigyasu** (India), "From Marathwada to Gujarat – Emerging challenges in post- earthquake rehabilitation for sustainable eco-development in South Asia"
 - **Sarwat Viguar** (Pakistan), "Displaced population and informal settlements in the border Pakistan – Afghanistan"
- Workshop B** (room 2077) Animator: Yaoxian Ye, Reporter: Colin Davidson
- **Andrew Fox** (England), "Montserrat-A case study in the application of multiple methods to meet a post-disaster housing shortage"
 - **Cassidy Johnson** (Canada), "Planning aspects of temporary housing for post-disaster recovery; Example of the 1999 Turkish earthquake"
- 10.20 to 10.45 Break
- 10.45 to 12.05** **2 parallel workshops:** C and D, selected presentations of 25 minutes each and discussions of 15 minutes each.
- Workshop C** (room 2065) Animator: George Ofori, Reporter: Cassidy Johnson
- **Alex Salazar** (United States), "The crisis of modernity of housing disasters in developing countries"
 - **Philip Amstislavski** (Israel), "Design of refugee settlements; developing ecology-driven approach"
- Workshop D** (room 2077) Animator: Mark Napier, Reporter: Colin Davidson
- **Gonzalo Lizarralde** (Colombia), "Organizational design, performance and evaluation of post-disaster reconstruction projects"
 - **Catherine Willis** (Canada), "Reconstruction after the Gujarat earthquake"
- 12.05 to 13.30 Light 'cash' lunch available at the HEC building (see map)
- 13.30 to 15.10** **Special thematic workshop E.** Presentations of 35 minutes each and discussions of 15 minutes each.
(auditorium 1120) Animator: Colin Davidson, Reporters: Gonzalo Lizarralde and Cassidy Johnson
- **CECI.** The Canadian Center for International Studies and Cooperation. Julia Sanchez et al. "Community based disaster preparedness and mitigation; an experience in Vietnam"

- The reconstruction in India

Participants: Alex Salazar, Nehal Karim, Annie Jayaraj, A. Satya, Rohit Jigyasu Jean-Lou Hamelin et al. The questions/topics for discussion will be:

- Two strategies for disaster management and reconstruction:

1. Coordinated by local NGOs
2. Coordinated through International Organisations

What are the advantages and disadvantages of each type of strategy?

- How can the culture of India be addressed from the perspective of International Organisations acting in place for disaster management and reconstruction?

15.10 to 15.30

Break

15.30 to 17.30

2 parallel workshops: F and G, selected presentations of 25 minutes each and discussions of 15 minutes each.

Workshop F (room 2065) Animator: Yaoxian Ye, Reporter: Cassidy Johnson

- **Philippe Rosset et al.** (Canada), "Seismic zoning at small scales in urban areas: a tool for preparedness and mitigation"

- **Bruce Etherington** (United States), "Improving Post-disaster reconstruction in developing countries through municipally based disaster centers"

- **Robert A. Findlay** (United States), "Resilience and sustainable community design"

Workshop G (room 2077) Animator: George Ofori, Reporter: Gonzalo Lizarralde

- **Nehal Karim** (Bangladesh), "Options for cyclone protection: Bangladesh context"

- **K. Sivaji** (India), "Community preparedness – An unique experience in post-disaster scenario" Presented by A. Satya.

- **Annie Jayaraj** (India), "Experiences in disaster management in Andhra Pradesh"

16.50 to 17.35

Jury for student competition; informal discussions. (exhibition room – 2081)

19.00 to 22.00

Conference dinner (not formal) – **Third keynote presentation:** Yaoxian Ye (P. R. China) "Chinese experience with post-natural disaster reconstruction" (room L'Oreal at the HEC building).
CAN \$20 or included in registration fees.

Saturday May 25

9.00 to 9.45

Fourth keynote presentation: Roger Richard (Canada) "Technologies for post-disaster reconstruction" (auditorium 1120)

9.45 to 10.10

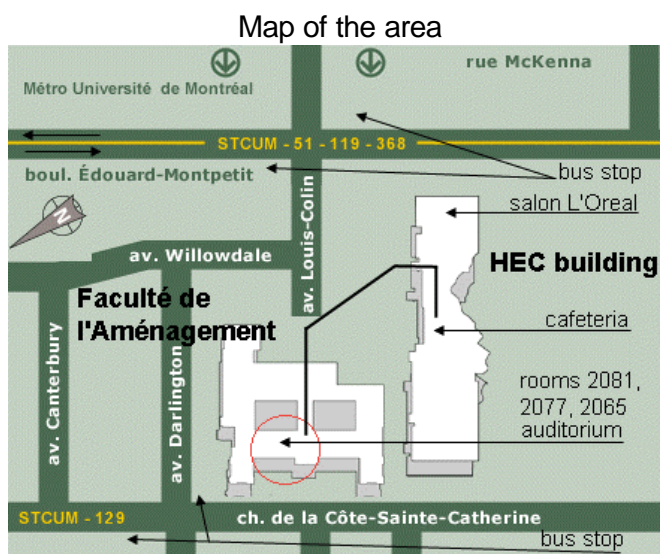
Break

10.10 to 12.30

Final session: Results of students' competition, Feedback on the workshops, Conference conclusions and discussion; Elaborating a plan of action. (auditorium 1120)

Participants are invited to visit the exhibition “Reconstruction and Cultural Expression” at the School of Architecture of McGill University (downtown campus); the exhibition will be open until the 31 of May. Ask details for directions to McGill University and the guided visit.

Additional information



To visit the IF Research Group web-site: <http://www.GRIF.UMontreal.ca/>
To visit the i-Rec web site: <http://www.GRIF.UMontreal.ca/pages/irechomepage.html>

Thank you for your participation in the i-Rec conference. On behalf of the i-Rec members I invite you to continue building cooperation links for the improvement of post disaster reconstruction in developing countries. We look forward to hear from you soon.

Cordially,

Colin Davidson
Montreal, May 23, 2002.



2. students' competition

Please visit room 2081 to see the panels prepared by the students

Undergraduate and graduate students of architecture, industrial design, urban planning and engineering were invited to participate in a competition that attempts to bring out innovative ideas to radically improve post-disaster reconstruction strategies for developing countries.

The context: conflicting views 1 and 2

1. The design of prefabricated “universal” emergency shelters for post disaster reconstruction in developing countries has been strongly criticized. Instead, it has been argued, that the best approach rests on assisted self-help, relying on social development through shared efforts. The practice of importing “prefabs” has been disqualified for not addressing the real needs of survivors, for resulting in expensive solutions, for not promoting the local long-term development of the affected communities, etc. It is, unfortunately, true that the remarkable failure of prefabricated emergency shelters during the seventies favoured a certain scepticism towards imported so-called “industrialized” solutions for the reconstruction of housing in developing countries. This reaction probably found its peak when Fred Cuny wrote in 1978:

“Let me emphasize this fact: new housing types are not needed. Every relief agency has a file cabinet full of bright ideas submitted by graduate students, industrial designers and architects, which offer the ultimate solution to the world’s housing problems. Thousands of designs and concepts have been drawn, some have been developed, and even a few have made it to the field.”

2. However, less dogmatic approaches (Kellet and Franco, 1993; Stallen et al., 1994) suggest that prefabrication of open systems of components can significantly contribute to low-income housing in the developing World. In fact, Stallen and co-workers argue that it is, indeed, possible to couple light systems of prefabrication with self-help initiatives. “The yardstick is”, they wrote, “to search for technologies which are economically advantageous, socially and culturally acceptable and which can be promoted technically and be applied with ease in the process of self-help/mutual-aid housing.” Kellen and Franco summarize this vision by bridging the usual gap between imported solutions and local participation: “The second objective [of the program CYTED in Latin America] is to identify integrated projects which combine innovative technology with high levels of [local] participation.” Obviously it is naïve to consider that the problem of housing in developing countries (including post-disaster reconstruction, which is the concern here) is exclusively a technological (or “hard”) issue. Nor, in fact, is it just a design problem. The provision of infrastructure (sanitary systems, telephone, electricity, etc.), the distribution of land, the provision of community services (health centres, transportation, retail, policing, etc.) and the availability of sources of work (industries, commerce, employment opportunities, etc) are crucial “soft” factors for the success of any housing reconstruction program.

A comment

Rather than be considered as a constraint on the participation of building-sector professionals, a view of post-disaster reconstruction that accepts the hard and soft challenges, provides a context that requires rigorous organizational design coupled to technical/architectural/engineering design. Therefore, architectural design must now be accompanied by an organisational design that articulates the participants and their roles, and the resources that are needed to provide socially acceptable reconstructed habitats.

The brief

The students' competition invited participants to develop a balanced approach, reconciling technology and local participation in a post-disaster housing scenario. The projects were to be explicit on how they promote the long-term development of the affected community while meeting the short or medium term requirements of providing shelter. Participants were required to examine not only the technical aspects of housing reconstruction but also to present a scenario for an organisational design that articulates the participants, their actions, their resources and how they are made available. Solutions must consider the end-product (the dwellings, their adaptability and cultural suitability, etc.) and must also provide a response to process aspects such as: employment, logistics, financing, international aid and national responses, temporary shelter, etc., viewed as an integrated system.