



By: *Catriona M. Munro, TA Editor in Chief*

# Earthquakes: Morocco - another notch on the Richter Scale



"It's not earthquakes - it's buildings that kill people" is the mantra of seismologists. The 6.8 earthquake that hit Morocco south west of Marrakesh last Friday apparently unleashed the energy equivalent of 30 Hiroshima atomic bombs.

It is too early to know how many deaths occurred, but if you incline towards Stalinist tendencies, "a single death is a tragedy; a million deaths are a statistic" as he described American attitudes towards "random deaths".

California is a hotspot for earthquakes. Any event this powerful there would cause little damage; and minimal - if any - loss of life, homes or livelihoods - unlike in developing countries like Morocco, which have inadequate building provisions to prevent earthquake disasters.

The first time I travelled outside Europe was in 1990, when my employers sent me to Manila for a tour of duty.

In my opinion, it is neither xenophobic nor unfair to describe the Philippines - then as now - as a "basket case".

The notorious Marcos dictator couple - Ferdinand and his shoe-obsessed wife Imelda - had recently been ousted and replaced, not by their former friend, Ninoy Aquino, who was conveniently shot dead walking down the steps from leaving the aeroplane which transported him to his ill-fated return to his homeland.

Instead, his wife, Cory Aquino, left her self-imposed isolation in an American convent and stepped into the presidential vacuum.

There had recently been a failed coup d'état, before I arrived on the propitious day of Friday 13th, which rather set the scene of my work tour.

**It wasn't a bomb; it was an earthquake. It lasted around 90 seconds but seemed like 90 hours**

On my first day at work, on the 16th floor of a high rise, there was a sudden jolt at around leaving time.

"It's a bomb!" screamed a more seasoned member of staff. But immediately, the whole office began to shake ferociously.

Plaster fell off the walls, allegedly reinforced cupboards shook, papers spilled out. We had to grip a desk to remain upright. It wasn't a bomb; it was an earthquake. Cory confessed to hiding under her presidential desk until the shaking stopped.

It lasted around 90 seconds but seemed like 90 hours. Too risky to take the lifts, so my boss said, "take off these ludicrous shoes (fake snakeskin stilettos? - I was 25!) we have to run down the stairs".

Outside, we met a colleague who had been driving and described the roads as "undulating". Like waves on concrete.

## 7.7 on the Richter and the Moment Magnitude scales

The epicentre of the earthquake was around 80 miles away from metropolitan Manila, in Baguio, the country's cultural capital, but the ramifications hit Manila fairly hard.

There were many aftershocks. However, despite the strength of the quake, there were only 77 deaths (Wikipedia contradicts this, but that was the narrative at the time).

The locals even produced T-shirts a week

later, emblazoned with the legend that "I survived killer quake!" - dated and with death rates. There's always scope for irony.

Ever since, I've monitored earthquakes to wonder why Makati (Manila's business centre) and actually, most of greater Manila, got off so lightly.

It was unquestionably due to the quality of the buildings. A few edifices fell, but fewer than one would imagine.

So who built earthquake-protected "basket case" Manila? Great swathes of this beautiful archipelago were and remain terrorism-controlled and unvisitable.

It has variously been invaded and made shambolic by the Spanish, the Japanese, the British, but, more famously, was assisted by the Americans during and after World War 2, when General Douglas MacArthur stepped into the breach because of a friendship with the president, and observing his military duty. He subsequently fulfilled his promise to return to the Philippines.

But in 2013, Typhoon Haiyan devastated the Philippines, culminating in 6,100 deaths. You can provide buildings with structural anti-earthquake integrity. But there's not much anyone can do about typhoons.

**I found it shocking that the second biggest country on the planet, racing towards the richest, could have such lamentable quality of construction**

In 2008, there was a severe earthquake China - force 8 on the Richter. It resulted in a horrendous death toll - 69,000 people and the collapsed buildings included hospitals and schools.

I found it shocking that the second biggest country on the planet, racing towards the

richest, could have such lamentable quality of construction.

it is arguable that the UK has got off by the skin of our teeth topographically by not having many dramatic seismic faults (we have plenty of other faults to deal with!)

We have a continuing current scare with crumbling RAAC (Reinforced Autoclaved Aerated Concrete).

A lightweight construction material which was overused in the late 2000s, which has now forced several schools and hospitals to close. As if young people has not had their education sufficiently disrupted. But we are tackling this.

I hope the search and rescue efforts in Morocco are as successful as possible. The point about earthquakes is that technically, the damage can be limited if governments and builders shy from corruption and laziness.

Possibly, that is a pipe dream.