

# EMERGENCY BEHAVIOUR & COLLECTIVE RESILIENCE

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# OUTLINE

- Contexts to study of crowd behaviour
  - Irrationalist approaches
  - Social Identity Models
- Research into crowd behaviour in emergencies
- Implications for crowd safety management

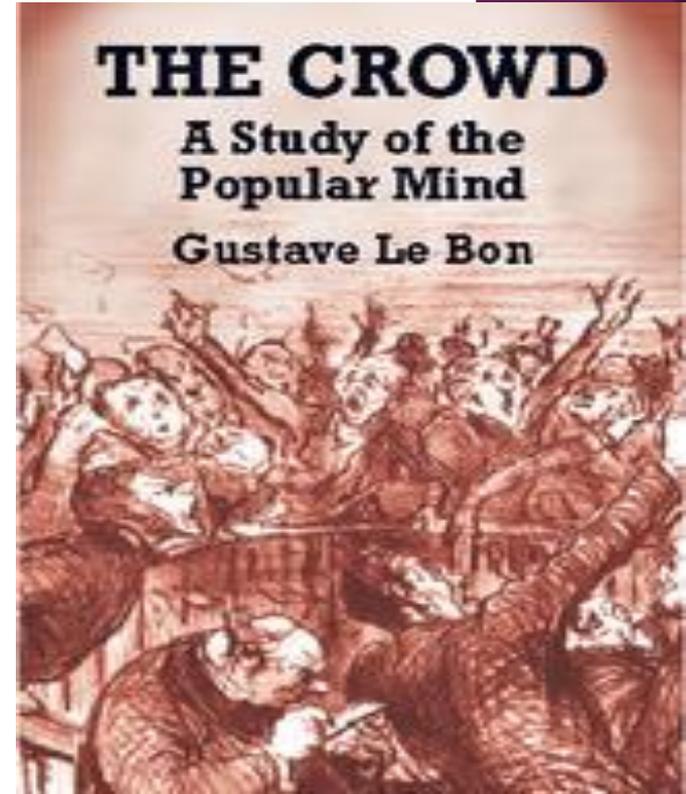
# LE BON & IRRATIONALIST MODELS

Crowds inherently irrational

Crowd members lose individuality to collective 'mob mentality'

Crowds either actual or potential threat to status quo & should be treated as such by authorities

Ignores social context in which crowds occur



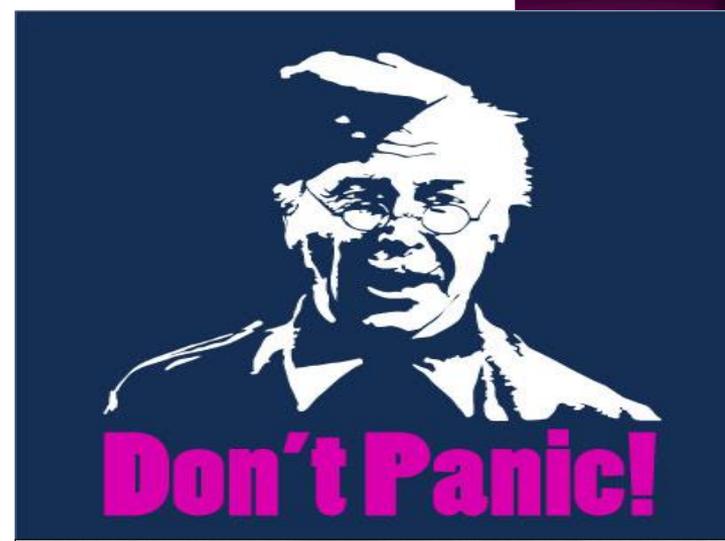
# PANIC MODEL

From irrationalist tradition-  
sees crowds as 'mad'

Threat causes emotion to overwhelm  
reason

Collective identity breaks down  
Selfish behaviours- pushing, trampling

Contagion- behaviours spread  
uncritically to crowd as a whole



INSIDE THE IROQUOIS THEATER WHILE THE FIRE RAGED.

# PANIC MODEL-IMPLICATIONS

- Emergencies seen as potential public order problem & planning strategy can reflect this

- Info withheld to prevent ‘panic’
  - code words used to avoid saying ‘fire’

Crowd seen as problem rather than possible resource

- 1989 Hillsborough disaster tragic example of viewing crowds as public order (not safety) issue



# PROBLEMS WITH PANIC MODEL

- Mass panic rare- noticeable by absence in many different emergencies:
  - Kings Cross underground fire (1987)
  - 7/7/2005 London bombings
  - 9/11- ‘panic’ <1% of behaviours recorded in WTC & pushers on stairwells told to wait in line
  - People can behave selflessly even when death seems inevitable (Grenfell Ray ‘Moses’ Bernard)
    - <https://www.bbc.co.uk/news/av/uk-44301256/grenfell-tower-inquiry-ray-moses-bernard-selfless-last-moments>

# UNDER (NOT OVER) REACTION

*‘When people die in fires, it’s not because of panic, it’s more likely to be the lack of panic’*

Neil Townsend, Divisional Officer, London Fire  
Rescue Service

# SOCIAL ATTACHMENT MODEL

- ◉ Developed by Mawson (2005)
  - Inspired by Bowlby's attachment work
- ◉ In times of stress, people seek out attachment figures
  - affiliative behaviour
- ◉ Social norms rarely break down & people tend to evacuate together or die as a group (Cornwell, 2001)
- ◉ But problems remain;
  - Implies panic in crowd of strangers more likely
  - Neglects possibility that strangers may co-operate with each other

# SOCIAL IDENTITY MODEL OF COLLECTIVE RESILIENCE (SIMCR) DRURY ET AL (2009)

- ◉ Disasters create common identity in response to shared threat
  - ‘we’re all in this together’
- ◉ Results in orderly, altruistic behaviour as people escape common threat
- ◉ Co-operative rather than selfish behaviour predominates
- ◉ Lack of co-operation usually due to physical constraints
- ◉ Supported by evidence from emergencies
  - ◉ Those affected by disasters tend to behave better than expected & anti-social behaviour rare

# LONDON BOMBINGS 7/7/2005

Individual fear & distress, but no mass 'panic'

General calm & co-operation as common ID & social bonds emerged in response to shared threat



# 7/7/2005

- Physical mass becomes psychological crowd
- *‘One of the things which struck me about this experience is that one minute you are standing around strangers and the next minute they become the closest and most important people in your life. That feeling was quite extraordinary’*
  - online account

# VENUE MANAGEMENT

- Tragedies often mis-represented as mass ‘panic’, ‘stampedes’ etc
- Detailed examination of events afterwards rarely supports irrationalist conclusions
- ‘Panic’ often used as explanation to deflect blame away from possible crowd/venue mismanagement & victims often cast as villains (Cocking, 2015)
- Failure of infrastructure often contributory factor
  - Brazil 2013 nightclub tragedy- only 1 working fire exit
  - <http://dontpaniccorrectingmythsaboutthecrowd.blogspot.com/2013/01/dont-blame-brazilian-nightclub-fire-on.html>
  - S Korea hospital fire 2018- no sprinklers
    - <http://www.bbc.co.uk/news/world-asia-42828023>

# COMMON MISCONCEPTIONS

- ◉ Pushing in crowds often unintentional
  - Especially if density reaches dangerous levels & pressure waves surge through crowd
- ◉ Main dangers physical not psychological
- ◉ Difference between crowd crush/collapse & ‘stampede’
  - <http://www.theguardian.com/world/2015/oct/03/hajj-crush-how-crowd-disasters-happen-and-how-they-can-be-avoided>
- ◉ When trying to avoid ‘domino’ effect, people may be forced to unwittingly step on others during crowd surges

# ‘FALSE ALARMS’

Recent false alarms widely reported as ‘panic’ in media (Oxford Circus, Hawaii)

But easy for outside observers with benefit of hindsight to say that people ‘over-reacted’

It’s not ‘panic’ to take action against potentially life-threatening warnings!

Risk that people won’t take real emergencies seriously in future

<http://dontpaniccorrectingmythsaboutthecrowd.blogspot.co.uk/2018/01/hawaii-missile-alert-panic.html>



 EMERGENCY ALERTS now

**Emergency Alert**  
BALLISTIC MISSILE THREAT INBOUND TO HAWAII. SEEK IMMEDIATE SHELTER. THIS IS NOT A DRILL.

Slide for more

# POTENTIAL ISSUES...

- Problematic behaviour possible in fires
  - But calling it ‘panic’ doesn’t help address problem!
- Delaying exit to safety/’freezing’
- People tend to leave by route they entered, even if closer exits are available (especially if dark, smoke, etc)
- Some situations can cast people in competition with each other (Las Vegas plane fire 2015)
  - <http://dontpaniccorrectingmythsaboutthecrowd.blogspot.co.uk/2015/09/las-vegas-plane-fire-and-evacuation.html>



Stuart McAllister  
@Stu\_McAllister



I do find it disgusting that these people all valued their hand luggage above the other passengers lives.

8:36 AM - 9 Sep 2015

# SHARED IDENTITY POST DISASTER

- ◉ Does shared experience of adversity endure post emergency?
- ◉ Grenfell Tower & community support
  - <http://dontpaniccorrectingmythsaboutthecrowd.blogspot.co.uk/2017/08/notting-hill-carnival-collective-support.html>
- ◉ Ongoing social justice campaign in response to disaster
  - <https://blogs.sussex.ac.uk/crowdsidentities/2017/11/4/what-happens-after-a-disaster/>



# THE POLITICS OF RESILIENCE

Rhetorical nature of resilience in national emergencies

But vulnerability still assumed

Resilience shouldn't be excuse for not taking public protection seriously/cutting post disaster support

Resilience doesn't mean absence of distress/disruption, but ability to bounce back (or forward!) if given resources to do so



# OK, BUT SO WHAT?

Possible applications of the research

# PLAN EMERGENCY RESPONSE

- Take the possibility of emergency seriously- don't think 'it won't happen to us!'
- Train staff in knowledge of location, and how to relay information effectively in emergencies
- Don't say 'don't panic'
  - can create expectation of panic & foster mistrust
- Practice makes a difference;
  - WTC evacuation rates- 1993 vs 2001
  - 99% of those below planes' impact escaped

# MORE INFO RATHER THAN LESS

- ◉ Very little evidence that people panic if made aware of a threat & some shows opposite
  - Proulx & Sime 1991
- ◉ Use of radio code words helps keep professional composure but no evidence people stampede if they hear 'FIRE!'
- ◉ If info given in clear ways that people can safely act upon to escape threat, they usually do
- ◉ Deliberately withholding info could delay evacuations & cause problems in future emergencies as people may not trust messages
- ◉ 'Stay put' advice untenable post Grenfell & now being investigated by Metropolitan Police
  - <https://www.bbc.co.uk/news/uk-44351567>
  - <https://www.bbc.co.uk/news/uk-44396757>

# DELIVERY OF INFORMATION IS IMPORTANT

- ◉ Info needs to be clear, unambiguous, delivered confidently, & come from credible source that people identify with
- ◉ This can vary with audience
  - Residents, commuters, football fans, etc
- ◉ Those involved in crowd management need to be aware of local context, any relevant behavioural norms, allow crowd to self-manage/ help evacuate those less able etc
- ◉ Try to encourage shared identity in messages
  - Don't refer to people as 'customers', as financial considerations can encourage individualistic view

## EXAMPLE OF GOOD INFO DELIVERY



'You need to be scared, you need to be concerned, you need to get your butts moving out of New Orleans now! ... We are ordering a mandatory evacuation of the city of New Orleans starting in the morning at 8am on the West Bank... we give you 4 hours to evacuate'

(Ray Nagin, Mayor of New Orleans, 31st August 2008)

# 'ZERO-RESPONDERS'



- Rather than too 'shocked/panicked' to act, bystanders can & do intervene in emergencies to help injured & lead others to safety
  - Nairobi Mall 2013 & Manchester Arena 2017
- Need for greater recognition of & planning for 'zero-responders' during emergencies Cocking (2013)
  - Recommendations of Kerlake report into Manchester Arena bombing include call for more public 1<sup>st</sup> aid training & plans to involve public in emergency response
  - [https://www.kerlakearenareview.co.uk/media/1022/kerlake\\_arena\\_review\\_printed\\_final.pdf](https://www.kerlakearenareview.co.uk/media/1022/kerlake_arena_review_printed_final.pdf) (p.154-6)

# GENERAL CONCLUSIONS

- Crowds often behave much better than they are usually given credit for
  - concept of mass ‘panic’ a myth
- ‘panic’ models should not be used in emergency planning
- Selfish behaviour usually individual & rarely spreads
- Risks associated with crowds usually due to physical constraints & lack of info rather than any inherent irrationality/selfishness

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