After Maria
Everyday Recovery From Disaster

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Dedicated to all of the families in Ingenio.

You can freely download this comic and watch multimedia footage from Ingenio neighbourhood here: www.gemasou.com
On September 20, 2017, Hurricane Maria struck the Caribbean island, Puerto Rico – a United States territory that is home to 3.3 million people. You might remember reading about the “biggest storm in Caribbean history!” or watching a news report about the “category 5 mega storm!” headed towards the Caribbean. Maria devastated the island, killing 64 people and causing approximately 100 billion US dollars worth of damage. In the aftermath, thousands more people died from treatable illnesses because they could not access routine medical care. Most of the media presence had gone by November and we heard little about how families were recovering.

In this comic, Natalia is our protagonist, and her story is based on a one-year ethnographic research project about how low-income Puerto Rican families, living in the neighbourhood Ingenio, were affected by, and recovered from the impacts of Maria. “After Maria” tells the story of one fictional family; however, their story reflects the experiences that affected all of the families I spoke to.

With “After Maria”, my priority was to construct ethical and respectful representations of the families I spoke to. I wanted to shine a light on the overlooked and everyday challenges that low-income people face when they are left to shoulder much of the responsibility to recover from disasters. I’ve used the comic to bring through the personalities, humour, voices and identities of people. This is something we see little of in mainstream media or academic research in ‘developing’ country contexts, as people are often homogenised into groups such as “disaster victims” or “poor people”. This has been challenging and exciting in equal measure, though I hope that others may read “After Maria” and consider communicating their research in a similar way.

Thank you for reading and I hope you enjoy,

Dr. Gemma Sou,
Humanitarian and Conflict Response Institute,
The University of Manchester
Maria is set to be one of the strongest hurricanes in Caribbean history.

Many low lying areas are likely to flood...

Please take all measures to ensure the safety of your families.

I've lived through other hurricanes, but this one turned out to be something else.

Let's take what we can upstairs.

The 'real deal', you might say...
Uncle Joe!
Is it going to be ok?

Natalia!
Felix!

Our neighbour Molli had rounded up a whole bunch of people from the neighbourhood. It really started to sink in, this was going to be serious...

We're going to the school, it's higher ground there!

We're gonna stay here! The roof is brand new – there's no way the water is coming up here!

OK, keep safe. Pray this passes quickly!

Now I wish we had all gone with her...

But that's the beauty of hindsight.
By midnight Maria was tearing through the neighbourhood.

Midnight.

4am.

It's ok, it's ok... It will all be over soon.

Mama! Mama!

7am.

11am.

2pm.

4.30pm.

Incredible.

Rosa kept filming, but we all just stood there in absolute shock. Nobody knew what to say.
Once the rain stopped we had nothing to do but wait...

Felix said somebody should come for us soon, otherwise the water will go down in a couple of days.

I wanted to call my sister to see if she was ok

But the cell phones weren't working.

You getting any signal on your phone yet?!

No, and the battery is completely dead now anyway!

The next day a man living nearby arrived in a boat and took us to the school which had turned into a refugee centre...

But it was awful there, so we all went back to the house the next day.

And then just waited for the water to go down...

And waited...
Two days later, the water had gone, and we finally got to see what had become of our home...

Where do we even start?
But we were just one family. Everybody in our neighbourhood was affected...

A little girl living nearby had drowned.

Roofs had blown away, or were twisted into unbelievable shapes.

Wooden houses were totally destroyed.

Sofas, beds, family photos, toys, all completely ruined.

We had no running water. The electricity was gone and wouldn’t be back for 6 months.

And it was the same for hundreds of thousands more across Puerto Rico.
The first few weeks were crazy, but there was a sense of community. This was unusual for people round here...

Hola, need some help?

We’d usually keep to ourselves.

¿Sí, muchas gracias!

Gringos from all these different churches in the USA kept arriving...

Hola Señorita, may we help you?

Michael and Rosa found their Spanish accents really funny.

Running water was hardly on during the first weeks, so we’d rush to clean the house whenever it came on...

I couldn’t stand looking at those disgusting dirty black walls.
They're handing out food at the top again!

The kids are getting sick of ready meals, Michael actually asked for mangos yesterday!

ja ja! It took a hurricane to get him to like fruit!

When aid trucks arrived, there was a real bustle about the place.

Do you know how Jenna & Arturo are doing? Surely they can't manage at their age...

We've been getting stuff for them...

Because aid wasn't delivered door to door, old and sick people were almost completely reliant on their neighbours.

Do you have diapers?

We need cleaning equipment, god damn it!

Where are the asthma inhalers?

I'm sorry, this is all we have!

And for all the food and water they gave us, it still wasn't what many of us really needed...

Four weeks after Maria, and Puerto Ricans are entirely dependent on the compassion and aid of international humanitarian organisations...

But the problems with aid were completely unreported in the news.
MICHAEL APONTE GONZÁLEZ!!
JAIME GARCÍA LORCA!!
You get away from the garbage RIGHT NOW!

Por favor, I’m so bored being inside all day! Can we just play out for a little bit?

No.
Both of you go and have a shower right this minute.

The garbage was attracting cockroaches, and rats that spread diseases. A little boy living nearby caught leptospirosis and died.
FEMA finally turned up at the end of November...

Hola!

Ma'am, we’re here to do a damage assessment of your house.

Money from FEMA was going to be the break we desperately needed...

But it was a joke! They only wanted to hear about structural damage...

We lost three beds, mattresses, tables & chairs, wardrobes... EVERYTHING!

hmm

mmhm

mmmm

Is this your house Ma'am? Can you provide us with proof of ownership?

They didn’t even understand Spanish!

The house is in my mother’s name, but she died two years ago... I’ve lived here all my life!

uh huh

This answer screwed us over 4 months later.
What is going on with the Mayor? A tiny bit of food & water?! Has he fallen off the face of the earth?

What d'ya expect? They're bankrupt because of that bastard Mayor we had last time... They don't really care about us anyway...

Natalia, I've got to go. I'll be back at around 8 tonight.

By December our patience was really running out, thankfully Felix's job in the factory started back up so at least we were getting a regular income again...

But it still wasn't enough to fix the mess we were in.

Joe and Susanna were on welfare, so they really couldn't afford to fix their roof any time soon.

Luckily for the first few months my Uncle Pablo sent some money from the USA; I saved it up and bought two mattresses so the kids could finally sleep in the other room.

This came at just the right time, because Felix snores like a monster and the kids were getting no sleep at all!
I missed how our life was before Maria.

I wouldn’t let Michael and Rosa outside once it was dark because of rumours that were spreading round the neighbourhood...

Philippa said she saw a man in a blue van, talking to some children...

si.

And apparently he opened his door and then asked one of the children to get in!

WHAT?!! My god... They need to get the street lights back on!

And the neighbour’s generators...

Don’t even get me started on them.
The next few months were really hard without electricity. Life was so different.

We couldn’t refrigerate anything, so I had to go to the shops every day if we wanted to eat anything fresh.

I feel like we’re in 1898!

Cooking became a real nightmare, and I couldn’t get my cake business up and running again...

Which only added to our money problems.
I hate to admit it but living with my brother was like living with another kid!

REALLY? Make the bed for once in your life, man!

And shouldn't you be saving your money to fix the roof, rather than sitting around drinking beer all day?

Don't start... It costs $1 and it's the first one I've had all week!

And me & Felix have bought the last three gas canisters!

You need to start helping out around here. Me and Susanna can't do everything!

¡Dios mio! Give it a rest why don't you!

We don't have as much money as you!

It's not only you that's stressed.
Sometimes I’d sit on that ugly sofa donated by the church...

And think of things we used to have.

I didn’t miss the things so much... I missed what used to be.

The way the house used to feel... How I used to feel.
Thankfully, the electricity came back on 6 months after Maria.

And life finally started feeling more like it did before.

...but then, we finally heard from FEMA.

¡DIOtas!
¡POR DIOS!

I've lived here all my life!

Don't they understand how we live around here?!
Thankfully in May, families received US$1500 from an organisation run by Jennifer Lopez.

It wasn’t a fortune, but it made a massive difference.

Come on Joe, put your back in to it! I’m doing all the work!

Let’s go Felix, it can’t be that complicated, jajaja.

It was slowly starting to look and feel like home again.
Days started to pass as normal

Michael, are you getting ready for school?

Si, Mama!

But we still needed to buy doors.

Prices had skyrocketed, because everybody was trying to buy them...

Rosa, have you finished in there yet?

¡MAMA!

GET OUT!!

It was worse for Joe and Susanna...

Not with everyone in the house...

They were still sleeping in our living room.
Mama! Papa!

It's alright, it's alright little buddy.

It's OK, baby girl. It'll stop soon...
Have a good day at school, kids!

Bye! Bye Mama!

Hurricane season has come back around too quickly.

Most of us are still recovering from last year as it is.

And the thing that makes me angry is that we've basically had to do everything on our own.

For now we're all just carrying on as normal...

Hoping we'll never have to face another Maria.
DISASTERS IN ‘DEVELOPING’ COUNTRIES

Disasters across the world
The number of disasters across the world is increasing. This is partly because the number of natural hazards, such as hurricanes and heat waves are increasing, particularly because of the effects of climate change. However, the rise in disasters is also associated with the increasing number of people who are vulnerable to the impacts of such hazards.

The impacts of natural hazards are unevenly distributed across the world, with lower and middle-income countries being burdened with the most impacts. This is not because they experience more natural hazards, but instead because they are more vulnerable to the impacts of hazards, and have limited capacity to recover. Even within countries, impacts are unequal, as people with low-incomes are often the most vulnerable and adversely affected by environmental hazards. They cannot afford housing in areas less exposed to hazards, and are less able to invest in activities to reduce their disaster risk. Governments tend not to invest in protecting ‘at risk’ areas that are populated by the lowest-income and politically marginalised populations in society. Yet, disasters exacerbate pre-existing inequalities, and make the most insecure groups in society even more vulnerable.

Women, racial and ethnic minorities, people with disabilities and health problems, LGBTQ+ populations and the elderly typically experience disasters most adversely. Taking gender as an example, women will often experience disasters more severely than men. For example, Natalia runs a home-based business making cakes so that she can earn an income whilst taking care of the gendered domestic duties. However, in the aftermath of Maria she lost this livelihood, and everyday domestic duties (e.g. cooking, shopping, and cleaning) became more time and labour intensive.

What ‘counts’ as a disaster impact?
When measuring the effects of disasters, most approaches focus on direct and quantifiable impacts such as deaths, injuries, people affected, damage to buildings and infrastructure, economic losses. There are some approaches which focus on less quantifiable damage, such as health impacts, employment losses, and environmental degradation.
A damaged house in Ingenio, Puerto Rico
Source: Dr. Gemma Sou, December 2017
Yet, damage to intangible resources remains significantly overlooked. Intangible resources are ‘soft’ resources which cannot be easily measured, but nevertheless play an important part in how families experience and recover from disasters. Examples include: people’s attachment to place; their sense of home and belonging; their identities; people’s sense of community; as well as the social relations between family members. All of these may drastically change in the aftermath of a disaster. For example, Natalia’s sense of home and belonging, as well as her social relations with family members were impacted “After Maria”.

If damage to intangible losses is overlooked, then we do not fully comprehend the extent of the loss experienced by people. Furthermore, if damage to intangible resources is excluded from impact assessments, then recovery policies and programmes are less likely to focus on these issues. Therefore, labelling what is and what is not a ‘disaster impact’ is very political because it decides what is important to disaster-affected people, and how a society will be assisted towards recovery.

**Recovering from disaster**

Disaster recovery is typically defined as the process of restoring, rebuilding, and reshaping the physical, social, economic, and natural environment of a society. Problematically - as we saw in “After Maria” - recovery programmes by governments typically focus on rebuilding houses, without providing support for people to restore their material items such as sofas and everyday items. Even less attention is paid to providing psychological support.

Families with greater and more diverse resources are more likely to carry out recovery activities more quickly and effectively than those with fewer and less diverse resources. These resources include: economic income, social networks (i.e. family, and friends) and the strength of these relationships; nutrition and health; and external support from government actors, and non-governmental organisations (NGOs). Natalia and her family have many of these resources that they draw on during the first year “After Maria”.

Government actors are key for facilitating recovery of low-income families. However, across the ‘global south’, governments as well as NGOs often focus on short-term relief, which may not meet people’s short-term or longer-term recovery needs. We see this illustrated in “After Maria”, when people were asking humanitarian organisations for diapers, medical supplies and cleaning
Interior of a damaged house in Ingenio, Puerto Rico
Source: Dr. Gemma Sou, October 2017.
equipment. When government and NGOs do provide financial support, this is often insufficient for families to adequately recover their houses and livelihoods. Also, because the lowest-income and most socially and politically marginalised are often the most affected by disasters across the world, there is limited political will from governments to substantially invest in the disaster recovery of such communities. Again, the lack of intervention from government actors is apparent throughout the “After Maria” story.

People from low-income families are often unable to provide proof of home ownership - papers get lost and many people inherit property without officially transferring the deeds – as was the case with Natalia’s family. Being unable to provide the required documents means families cannot qualify for government support, even though they have lived in their house for decades or more. In the ‘global south’ it is also common for multiple families to live in the same house e.g. one family living in the top floor, and another on the bottom floor. Despite families living separate lives, applications for government support may be rejected if more than one application is submitted from the same address. Therefore, financial support schemes do not reflect local living arrangements in low-income neighbourhoods, which is another reasons why Natalia’s FEMA application was rejected.

**Representing disaster ‘victims’**

Visual representations of people affected by disasters in TV, film, social media, the news and NGOs’ fundraising and advocacy campaigns often invisibilise any individualising features, because people are combined into groups e.g. disaster victims. This denies people their personal experiences, voice, personalities, and identity. Images are often highly emotive and depict people affected by disasters at their most personal and vulnerable moments. We often see images of children, women, the elderly and those who are injured or sick, which convey ideas of helplessness and passivity.

These images can bring about emotions such as guilt and indignation, or empathy and gratitude. This emotion-focused approach is associated with short-term participation in disaster-related issues, typically through donations to charities. However, donation to charities does not address the social, political and economic factors that shape people’s vulnerabilities and their capacities to recover.
Disasters are often represented as naturally occurring events because the media tend to overlook the socio-economic and political reasons for unequal vulnerabilities across society, and which explain why families recover at very different speeds. Therefore, the causes and solutions to disasters become simplified and depoliticized. This naturalisation of disasters also constructs a myth that governments can do little to prevent disasters.

In “After Maria” I aimed to bring through the voice, humour, personalities, and hidden personal experiences of disaster ‘victims’. I wanted to create three-dimensional characters who express their emotions and unique personalities. I highlighted the capacities that families have to recover from disasters, thereby challenging the idea that people are helpless victims. Yet, I have been extremely careful not to romanticise families’ resilience, because NGOs and government actors must do a lot more to support recovering families. If not, the burden of responsibility will continue to unjustly fall on shoulders of low-income families.

DISCUSSION POINTS
Read the comic, and consider the questions below. Remember, the “After Maria” story is not unique. From Natalia’s story, we can start to understand many of the subtle, overlooked and hidden ways that people are effected by, and recover from disasters across the world.

Impacts:
1. What does Natalia’s family story tell us about the short-term impacts of disasters? Extension: Categorise the impacts into social, economic, physical, cultural, environmental and psychological.

2. What does Natalia’s family story tell us about some of the long-term impacts of disasters? Extension: Categorise the impacts into social, economic, physical, cultural, environmental and psychological.

3. How and why do different characters experience disaster impacts and recovery differently? You might think about: gender, age, disability, race, ethnicity.
Recovery:
1. What do you think recovery means for Natalia and her family? To what extent does this mirror mainstream ways of understanding recovery?

2. Why do you think there is limited support from government actors, such as local and national governments?

3. What resources does Natalia’s family use to recover from Hurricane Maria?

4. What are some of the challenges that Natalia and her family face when trying to recover from Hurricane Maria?

Improving recovery:
1. What policies and programmes could be introduced to reduce the impacts of future Hurricanes on low-income families in the neighbourhood?

2. What policies and programmes could be introduced to support the disaster recovery of low-income families?

3. Who is responsible for the disaster recovery of families?

Representing disasters:
1. How does the comic represent people affected by disasters?

2. How do these representations differ from mainstream media representations of disaster ‘victims’?

3. If you created a comic about disaster recovery, who would be your main characters? Why?

4. If you created a comic about disaster recovery what would you like the reader to take away from it? Why?
REASONS TO GRAPHICALLY ILLUSTRATE YOUR RESEARCH

I was first inspired to publish my research in comic form after reading Lissa: A Story about Medical Promise, Friendship, and Revolution by Dr. Sherine Hamdy and Dr. Coleman Nye. Many people have asked me why I decided to publish my research in this form. Here I want to share some of the reasons for doing this, and hopefully encourage others to think about communicating their research in a similar way.

Constructing nuanced and ethical representations

Popular culture, as depicted in TV, film, social media or the news often misrepresent people, places and cultures. This is particularly true of the visual representations of ‘developing’ country contexts. Comics, with their focus on character driven narratives, are able to communicate the rich lived experiences of all kinds of people to an outside audience. You can develop three dimensional characters that foreground the unique personalities, emotions and personal experiences of the people your research is about. In this way, comics allow you to bring through the voice, identity and histories of people and places, which are often not possible via mainstream media or traditional approaches to research dissemination i.e. journal articles. Therefore, you are able to construct sophisticated and ethical portrayals of your research and research participants. This is important because the mainstream media often portrays ‘developing’ country contexts in essentialist and unethical ways.

Making research more democratic

Comics offer what I think of as a more democratic opportunity for research participants to influence and understand the work of academics. A comic may be far more useful to research participants than a research report, book, or journal article. When people can literally “see” themselves in a comic, they are instantly invested. It is important that academics learn ways of communicating research findings through media that is appropriate and enjoyable for their participants. In my experience creating this comic, participants feel more comfortable giving their input on how events, perspectives, and people are represented in a visual storytelling form. Finally, there is something about the physicality and durability of a print comic that lends both legitimacy and longevity to the research it presents. It won’t be lost somewhere in the wilds of the endless Internet or trapped behind the pay wall of an academic journal, but
can be found on a shelf for future generations to discover.

Teaching in engaging and innovative ways
Comics offer new pedagogical avenues that can contribute to and support traditional teaching from academic texts. Comics combine the power of ethnographic research with the unique aesthetic elements of comics as a sequential art, using pages, panels, visuals, dialogue, captions, and lettering to tell the story. They build strong characters that drive the narrative without being too intrusive. Comics also use the visual medium to express non-human environmental elements in a form that is not overly didactic. This approach makes comics excellent for critical analysis because readers can use their wider understanding of theories, concepts and ideas they have learnt in class or elsewhere, to unpack the stories images, dialogue, and narratives. Adding to this, there is an increasing desire among students for more visual material.

Releasing your inner creativity
Comics are also about providing opportunities for researchers to work more creatively themselves. No longer holed up in a room alone writing for hours on end, researchers and graphic artists can share, push, pull, and compromise as necessary in the pursuit of a visual representation of research. This process has been challenging and exciting in equal measure. It has raised questions about what to leave out, what works narratively and aesthetically, but also about how to ensure the integrity of the research and of those being represented. To this end, it is important to work with a graphic artist who is sensitive to the research findings, but also has the skill and intuition to know what works visually.
FURTHER READING

COMICS AND GRAPHIC NOVELS
ethnoGRAPHIC. Toronto University Press. https://utorontopress.com/ca/books/by-series/ethnographic


DISASTER IMPACTS
Blunt, A., & Dowling, R. (2006). Home (Key ideas in geography). Abingdon: Routledge. (This book is not contextualised in disaster; yet it is a great resource to learn about families’ sense of home - an important intangible resource of families).


DISASTER RECOVERY


REPRESENTING DISASTERS


ABOUT THE AUTHORS

Dr. Gemma Sou is a development geographer based at the Humanitarian and Conflict Response Institute in The University of Manchester, UK. Her research focuses on the everyday lived experiences of people affected by disasters – particularly in the Caribbean and cities in the global south. She regularly collaborates with artists to communicate her research in engaging, thoughtful and socially responsible ways.

John Cei Douglas is a freelance illustrator based in London with a particular interest in stories, comics and self-publishing, epitomised by his narrative approach to illustration. He has worked with a variety of clients and projects over the years and developed a strong identifiable lyrical style for his work, often closely linked with themes of mental health and relationships, through picture books and comics to editorial pieces.

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Further information
To learn more about the project, or to download the comic and watch multimedia footage, please visit: www.gemmasou.com
In 2017 Hurricane Maria devastated the Caribbean island, Puerto Rico. “After Maria” is based on Dr. Gemma Sou’s one-year ethnographic research project, which explored how low-income Puerto Rican families were affected by, and recovered from the impacts of Maria. Although the comic tells the story of a fictional family, “After Maria” is based on the experiences that tie together all of the Puerto Rican families that Gemma spoke to.

If you are interested in media representations of ‘developing’ country contexts, or issues related to Gender; Inequality; Resilience; Poverty; Disasters; Cities; and Vulnerabilities then this comic is for you. You’ll discover the subtle social, cultural, economic and psychological impacts of disasters that go under the radar of the international news media. You’ll find out how disaster-affected families recover from disasters, and what recovery means for disaster-affected families – is it simply repairing a damaged roof or does it also include recovering a person’s sense of home and identity? The comic also reveals how people experience disasters differently based on gender, age, income, and ethnicity.