## **CAPÍTULO 13**

# INTEGRATIVE RESILIENCE: how the Communitarian Scottish Spirit was key to overcome a severe flooding crisis

## Norma Valencio Juliano Costa Gonçalves

#### Universidade Federal de São Carlos (UFSCar)



#### ABSTRACT

A flooding crisis in Northeast Scotland is examined in terms of how the main preventive and warning measures were successful to avoid or significantly reduce the community losses and damages as well as to building a consistent engagement of government, technicians, and local people in searching for better strategies of integrative resilience. Although this UK flooding crisis has been studied from different disciplinary fields, it still lacks a sociological analysis about the way that the severe disruptions affected the quotidian life of citizens and the socio-technical-political strategies to mitigate the crisis. This study focuses this flooding crisis as a learning process of integrative resilience in which each of the three axes – government, technicians, and local people – are sufficiently flexible to adjust to circumstances with an approach aiming to strengthening their ties, based on citizenship parameters. Through documentary and field research, communitarian aspects of the affected locations in key areas of Aberdeen City are presented. The analysis of the referred case is based on literature from the social sciences. The main social support groups were characterized, including which types of practices/modes of interaction with the affected citizens collaborated with the mitigation of the material and symbolic losses during the acute crisis. This study concludes highlighting the importance of a more comprehensive sociological analysis to connect actors/agents/actions and identifies the challenges in improving integrative resilience.

Keywords: Scotland; flooding crisis; disasters; community; resilience.

#### RESUMO

Uma crise de inundação no nordeste da Escócia é examinada em termos de como as principais medidas preventivas e de alerta foram bem-sucedidas para evitar ou reduzir significativamente as perdas e danos à comunidade, bem como para construir um engajamento consistente do governo, técnicos e população local na busca para melhores estratégias de resiliência integrativa. Embora esta crise de inundações no Reino Unido tenha sido estudada a partir de diferentes campos disciplinares, ainda carece de uma análise sociológica sobre a forma como as graves perturbações afetaram a vida quotidiana dos cidadãos e as estratégias sócio-técnico-políticas para mitigar a crise. Este estudo enfoca esta crise de inundação como um processo de aprendizagem de resiliência integrativa em que cada um dos três eixos – governo, técnicos e população local – é suficientemente flexível para se ajustar às circunstâncias com uma abordagem que visa o fortalecimento de seus laços, com base em parâmetros de cidadania. Por meio de pesquisa documental e de campo, são apresentados aspectos comunitários dos locais afetados em áreas-chave da cidade de Aberdeen. A análise do referido caso está fundamentada na literatura das ciências sociais. Foram caracterizados os principais grupos de apoio social, bem como quais tipos de práticas/modos de interação com os cidadãos afetados colaboraram para a mitigação das perdas materiais e simbólicas durante a crise aguda. Este estudo conclui destacando a importância de uma análise sociológica mais abrangente para conectar atores/agentes/ações e identificar os desafios para melhorar a resiliência integrativa.

Palavras-chave: Escócia; inundações; crise; desastres; comunidade; resiliência.

And so, faced with the bestial hostility of the storm and the hurricane, the house's virtues of protection and resistance are transposed into human virtues.

Gaston Bachelard, The Poetics of Space

## INTRODUCTION

In the last days of 2015 and early days of 2016, Scotland had to deal with flooding crisis of significant proportions. Many regions of the country suffered the impact of successive storms, such as Desmond (05 December 2015) and Frank (30-31 December 2015). As these adversities were multiplied and spread to different locations of the country, which started to receive warning alerts, the row of priorities in Scottish quotidian life was gradually being changed, first from local scale, then to national scale, with increasing levels of social apprehension. In that same period, much of England was also flooded, as had not been seen for decades, so that the local calamity could not even be seen as a national priority, given the national size of the crisis. In a sense, the Scot people knew they were on their own to deal with the situation.

A stereotype of the Scottish citizen is the reputation of being grumpy<sup>1</sup>, and these adverse socio-environmental conditions would be enough reason for such bad temper become explicit in its full capability. However, the facts do not match with such bad reputation. Quite the opposite, the Scottish people showed to be extremely friendly even in a bad weather. Many of the

Although such reputation comes from long times, being particularly disseminated by Disney's character Uncle Scrooge – routinely called of stingy – recent studies, such as Rentfrow et al (2015), indicate that Scottish people present social and personality features in the opposite direction, towards higher agreeableness, conscientiousness and openness and lower neuroticism than other parts of the UK.

communities that suffered heavy materials damages still helped each other to alleviate community suffering. When the Scottish First Minister, Nicola Sturgeon, visited them, she walked the streets on foot, talking to families and emergency services staff. She considered that the process of dealing with this crisis, despite all the material losses and disruptions that characterized it, had a positive social aspect, which was of making evident the collective good mood of facing and dealing with such a dramatic circumstance. Her assessment was that there was an explicit social cohesion and solidarity with and between the families. In declaration to the press, she said: "On the other side of that, the response has been heroic. Emergency services, volunteers, members of the public, the council, working together. There's a sense here of real community spirit." (BBC News, 2015a).

In the same perspective, the Justice Secretary, Michael Matheson, presented his view when visiting another Scottish city affected, Dundee:

Many people across Scotland have seen their homes and livelihoods damaged due to flooding over recent weeks and recent television reports have brought home the scale of the devastation that severe weather can cause. Today I was able to hear from some of those who were on the front line responding directly to the emergency and meet some of those who coordinated the emergency response. As always, I was struck by the sheer professionalism and commitment shown by everyone involved in the face of sustained pressure over a number of weeks (...) I am delighted to have the opportunity to thank our blue light services for, yet again, going above and beyond the call of duty to protect our communities and keep Scotland safe (...) Alongside this, it's also important to recognize the hugely important response from communities themselves and the joint effort between members of the public who have given up their time to volunteer and the emergency

services is simply fantastic. I know the work is still not over, however I am confident that Scotland's emergency responders will continue to provide the highest quality service to those in need (The Scottish Government, 2016a).

Although this kind of public speech has focused on social aspects very sensitive to the affected citizens, it had been disregarded in the mainstream of the scientific and technical debate on flooding crisis in general. In fact, the current debate, overly focused on risk assessments of quantifiable environmental phenomena, does not put sufficient value to how the preparedness, response, and recovery measures encouraged by local authorities and emergency technicians were in tune with the local people expectations. However, such aspects are what define, in its essence, the core of the concept of crisis management and so only by analysing such aspects it is possible to acquire valuable clues about whether a integrative resilience is being built. The concept of integrative resilience refers to a process of cohesion between different types of social actors to receive their input in expanding the scope of a common problem with which they have to deal, especially validating the needs and contributions of frontline communities to guide the design and implementation of more equitable interventions of care and in the lived space; it combines demands for wellbeing and justice, overcomes the conventional vision of infrastructure in the first place - always revealing the dismantling of the temporalities and rationalities in which their planners formulated them, disregarding the collateral effects of their overlapping (Iossifova et al., 2020) - and is a piece of resistance against the public organizational vision based on dehumanizing conceptions of a neoliberal nature (Camponeschi, 2022). This is not exactly a bottom-up process, as Jon and Purcell (2018) alluded to in their conception of radical resilience; nor does it assume the conventional top-down orientation. The meaning of interactions in an integrative conception of resilience is more horizontal, seeking an attentive encounter configuration to mitigate slow violence (Nixon, 2013) and in which the different positions in the game are known in a mutual and dynamic need for legitimacy.

This study starts with social considerations about disasters to then extract the specific elements of analysis of the flooding crisis of 2015/2016. The objective is describing the plurality of actors and social practices involved in this meeting between the *society* – in the institutional and organization aspects of the Scottish context – and the *community* – in terms of its distress and demands of the locality. It is in this meeting that the circumstantial or long-term predispositions for sociability, in different scales, mix to reveal the directions of this crisis.

The description of the mentioned case had the support of official documents and news records, produced by public authorities and the press in the period of December 2015 to January 2016. A special focus was given to the case of Aberdeen city – one of the affected localities in the Northeast of the country –, where additional field research was made by adopting three integrated procedures: non-systematic records from direct observation, photo-documentation, and interview with the coordinator of a shelter installed in a local school.

# FLOODING CRISIS: A SOCIAL PERSPECTIVE OF ANALYSIS

Life in *society* and life in *community* have been mixing in an increasingly challenging way. Community, in social terms, is usually identified with the concept of *place* – i.e., a small meshwork where the people that share it have an active participation in the production of the rules of interaction (Clark, 1973). However, the fluxes (economic, cultural, etc.) in the daily life of the members of the community intertwines with a fraction of the systems of objects that organize the local activities (e.g., transport, energy, communication infrastructures). So, there is an in-

terdependence between local dynamics and a broader scale of actors, values, and rules, which, directly or indirectly ends up participating of local social life (Albrecht, 2019). In this larger scale of society, the governmental, economic, educational, religious, and other institutions also organize rules of functioning more global, which permeates the communities' meshwork and the interpersonal relations.

At a given point, the dynamics of society dissolves the communities, in a process that Bauman (2011) identify as fragmentation of human life. The author considers that the excess of fluidity in social relations – every time more ephemeral and unstable –and the transience of the link between people with the place – once individuals are now at constant departure to a new horizon –, is breaking the remains of solidity in communitarian life. Its fundamental values are solidarity, mutual support, and mutual concern. The loss of these and other references of sociability would give rise to an individualist and competitive social behaviour, more prone to the adoption of dehumanizing classifications towards those seen as losers, which would then be treated as human waste (Bauman, 2005).

Nevertheless, in the context of a flooding crisis, it is possible that society sees itself more likely to act in a flux of opposition to this external control. The communitarian relations would then be seen as something more significate and valuable, and the collective environment framework that they use for their dynamics – the place – would then be the focus of actions from society to support it to be re-established. When a community is under floods, there is a justification already accepted by broader society that the residents could give priority in saving their dwellings and their belongings. The State institutions also become available to make exceptional arrangements to give priority to the re-establishment of damaged or destroyed public services and provide material support and care to affected families. Hence, the crisis is characterized not only as a disorganization of the routines of quotidian life, but also as a process that involves the need of a situational reorganization of the trans-scale fluxes of places. A disaster disturbs profoundly the places, as from the physical, emotional, economical affected people and environmental resources to the damaged or destroyed objects in a flood demands a new composition of interactions between different subjects to attempt the return of the routines in new bases.

In this process of social re-valorisation of the community when affected by a disaster, the public eye is directed to the most essential place, which is the house. More properly, Ingold (2011) consider that a house contains many others places and, in same time, it is contained in larger places. He said: "Thus my house, as a place, contains the smaller places comprised of the rooms and garden, and is contained within the larger places of my neighbourhood and hometown" (p. 146). When the house is facing a threat, such as outsized floods, it is not strange that the persons living therein would experience significant fear. Indeed, this is one of the landscapes of fear to which Tuan (1980) refers to, and where the signals of warning and anxiety mix within the individual, the members of family, the community, and even in the institutions of society. The warning tells the individual that it is needed to escape, as the author says. Hence, it is seen that, in the institutional sphere, during emergencies, the spreading of the technical culture of warning alerts, ending up in conferring an institutional dimension to what, in an individual level, was already instinctive. Now, it is an external voice, technically anchored in objective standards of monitoring, who rings a command to a group, telling it that it is needed to abandon everything and save their own skin. However, anxiety - feeling that Tuan interprets as a diffuse sensation of fear in the hope of more signals to justify an action in a still uncertain direction – is also related to the hope of signals to remain in place and fight for himself for the protection of the threatened place. This dimension of fight is linked to the subjective and intersubjective world, as well as the familiar and communitarian worlds. In a disaster, the subjects realise, more than in other circumstances, that they

and the place explain themselves mutually, and in such a way that the internal and external order, of the symbolic and object universe, becomes equivalent. As the author complements:

> What are the landscapes of fear? They are the almost infinite manifestations of the forces for chaos, natural and human. Forces for chaos being omnipresent, human attempts to control them are also omnipresent. In a sense, every human construction – whether mental or material – is a component in a landscape of fear because it exists to contain chaos (...) Likewise, the material landscape of houses, fields and cities contain chaos. Every dwelling is fortress built to defend its human occupants against the elements; it is a constant reminder of human vulnerability (...) Generally speaking, every human-made boundary on the Earth's surface – garden hedge, city wall or radar "fence" – is an attempt to keep inimical forces at bay (Tuan, 1980, p.6).

The dominant view of the emergency services, that the dwelling is a geographic object like any other – and subject to be abandoned in virtue of a warning alert – makes difficult the understanding of this dual dimension (external and internal worlds, thing and symbol, order versus chaos) which Tuan refers to. It is equally mistaken to consider that one-sided technical decisions of reallocation of affected families to new houses – temporarily or permanently – can be a successful measure; quite the opposite, it tends to failure, once the triangulation of family life, house and community cannot always self-sustain in such kind of solution.

The individual who was put out of his home loses emotional stability, as highlights Bachelard (1969), who then continues:

With the house image we are in possession of a veritable principle of psychological integration (...) On whatever theoretical horizon we examine it, the house image would

appear to have become the topography of our intimate being (...) And by remembering "houses" and "rooms", we learn to "abide" within ourselves. Now everything becomes clear, the house images move in both directions: they are in us as much as we are in them (Bachelard, 1969, p. xxxii-xxxiii).

In this perspective, the private space of the house also presents its own system of objects, which correspond to a number of feelings, memories, habits, and other references of value and of identity. These components act as a filter of the extension and intensity of the crisis – in family and individual levels – and will dictate the priorities in the personal measures about which objects should be restored and which should be discarded. In such private world, the external support and emergency response need to be extremely careful and only act if requested by the head of the household (Siena e Valencio, 2006).

## ABOUT AFFECTED AND SUPPORT SOCIAL GROUPS: THE HUMAN FACE OF THE CRISIS AMID SPATIAL DISRUPTIONS

Far from revealing an ordered universe of social actors articulated in linear and converging practices – as, in general, is described in the training manuals –, the flooding crisis show an amplitude of different kinds of actors interacting in a number of complex ways, some of which, although occurring often, are made socially invisible. The affected groups have many faces, and so does the support groups.

During the process of the 2015-2016 Scottish flooding crisis, the different kinds of damages revealed an equal variety of social subjects that were converging and interacting with each other in this new routine. Roads had entire sections taken by the waters (such as the A96, the main route from Aberdeen to

the Scottish Highlands), mobilising the Police, infrastructure, and communication services to, respectively, block their access, due the repair works, and inform the citizens about the restriction and provide an alternative route. Other episodes reveal this network of actors. Local residents - elderly, children, pets and other vulnerable groups - received assistance from the emergency services to move to safer areas. Farmers, who lost part of their lamb stock and carrot and wheat crops, beyond being affected by the collapse of dykes and fences, received support from the Coast Guard (The Scottish Farmer, 2016); and so on. In episodes like these, not only drivers and passengers were involved in an issue that at first glance seemed as mostly related to road traffic, but also farmers, local residents, local business, hotels, even the aristocracy. One of their properties next to river Dee - the Abergeldie Castle, in Ballater - was, at a given point, in a serious risk of collapse due to the fluvial erosion next to it. Only days before, the then Prince Charles (now King Charles III) had given his support to the citizens of Carlisle, which underwent through deep circumstances of losses due to the floods (BBC News, 2015b), and now it was a property neighbour to the Royal Family<sup>2</sup> itself that was under threat of collapsing in the grumpy waters of river Dee (The Guardian, 2016).

A news report from *The National* (2016, p.6) shows a panorama of the flood impacts across many areas of Scotland:

> Severe flooding saw sections of the A90 between Aberdeen and Dundee closed, trains cancelled and the airport in Dyce shut down after rain caused a hole open up in the runaway (...) With persistent rain expected to fall across Perthshire, Angus and Dundee, and freezing temperatures meaning snow and ice in Strathclyde, Dumfries and the Borders, Police Scotland have told drivers to make only

<sup>2.</sup> Albegeldie Castle is neighbour to the estate of the Balmoral Castle, a property of the Monarch, and where the Royal Family usually spend few days of summer.

essential journeys (...) Around 30 schools in Aberdeenshire and seven I Angus were closed because the weather.

Some locations, such as Inverurie – where the Scottish Environmental Protection Agency (SEPA, 2015a) already evaluated the residents' vulnerability level to be high - remained under the highest level of flood warnings (meaning danger to life) for several days. Other places had their terrestrial connections totally or partially blocked, due to the flooding or destruction of roads, such as the A83, key route from many towns and villages of Argyll to Glasgow. In the Northeast, Dyce airport, Aberdeen, had to be closed for a day due to the damage in the runaway, and some of the flights were cancelled, affecting both passengers that were going or leaving from that area. The connection by train from Scotland to the North of England were already compromised since late December due the great floods in Cumbria (Northwest England). It gives a panorama of how the multiplicity of fluxes of people and goods were compromised during that period, generating many uncertainties and apprehension about the possibility of achievement of deadlines and deals that depended on the full operational conditions of infrastructures enabling these flows.

Hence, from the Royal Family to the common citizen, from the rural areas to the cities, from the local councils to the Scottish Government, the floods created a crisis in a broad socio-spatial spectrum. We consider that it was not small the amount of pressure and dilemmas that the public authorities had to deal about which localities should be rescued or assisted first, which priorities should be given in the action to these places, which concerns should be cared about towards showing an effective ability for acting and supporting their people.

#### MONITORING, RESPONDING, RECOVERING: THE DIVERSITY OF PRACTICES DURING THE CRISIS

In the perspective of technical groups of the emergency services, the flooding crisis is a kind of crisis which demands some simultaneous and other sequenced interventions, which might be different between themselves, implying that the success (or failure) in one action impacts the other.

From the technical framework, the periods of these actions are usually sequenced as prevention-preparedness-response-recovery; however, in the real world, these steps are intertwined. For example, a good response allows a reduction of the recovery actions; a resilient recovery creates conditions for good solutions for prevention, reducing the uncertainties in front of similar risks and valuing a spiral of social learning.

Response practices are characterized by complex interactions that go from the acting of road traffic officers – which act in the temporary change in the flux of damaged roads - to the rescue of people and pets in danger, beyond the deployment and management of shelters. However, other subjects are acting in long-term recuperation practices; for example, such as in the repair works of roads and other damaged infrastructures, such as airport, road or footbridges, communication networks, power grids. Both polyphony and reflexivity make up essential aspects in building an integrative resilience. When working jointly, technicians from different sectors reduce community stress in relation to the measures that need to be taken to restore their local routines. What really matters in the convergence of these actions of monitoring, response and recovery, is that the involved groups have clarity that the reflection about these actions is their greatest capital to face similar situations with less apprehension in future. Thus, instead of the immediate closure of the crisis cabinets after the acute phase of a flooding crisis is over, would be better to maintain it for a while. The purpose is to engage actors building together a multi-sectorial analysis of the rights and wrongs in their assessments and actions about the problem, as well as assuring that each party has mutual knowledge about the necessary modifications in the coordinated process of dealing with a future crisis. This process is even more appropriate when the two poles of the society-community relationship, which are the rulers and the communities, are more closely linked. The former creates incentive and training mechanisms to break anachronistic corporate-competitive cultures that hinder collaborative actions in essential services. The latter are essential to share their expectations, grievances and assessments with technicians and politicians in order to be at the centre of new public service strategies.

About the technical practices of environmental monitoring, if they have a predisposition for recognizing the cultural resources of the local community, then the absorption of them enhances the repertoire of knowledge and classification parameters of the risk protocols. Once this identification is done, there is basis for issuing warnings, which, for its turn, enable other technical services to operate directly in the control of certain social interactions in the place considered vulnerable.

In an opposite way, when the social interactions that are highlighted in this context are coordinated by the emergency services, they frequently establish a relation of authority – sometimes implicit, other explicit - towards the social groups considered vulnerable that withdraw their dignity and protagonism in the decisions that affect your way of life. The media, who assist in the dissemination of the warning alerts, collaborate in making the public opinion seeing this relationship of authority to remain considered indisputable. It means that the context of emergency makes natural that certain situations environmentally atypical impose social relationships of coercion towards the social groups considered vulnerable or affected, once this is understood as something necessary and for the wellbeing of the latter. However, the social interaction does not need to be necessarily this way. A technical culture that values the hierarchical relation of the "hero" stereotype, in one side, and the "victim" stereotype,

on the other, does nothing but to overload the response, because the community feels itself unable to do something for their own protection. The discourse that sustains this victimization can be the easiest way for the loss of the individual and community self-image and to reinforce the link of dependence with the technical body, which, in its place, can create unrealistic expectations about how they will be saved. In an opposite approach to this, the valorisation of the government authorities to the diversity of actors that develop different roles of prevention, response and recovery, encouraging the emergency services to exercise their role in a more complementary and horizontal way towards the community. It can be a more effective way to express that the community itself, despite all the difficulties it might be facing, would also have their valuable self-means to work well and in partnership with the public sector. The emergency context is, doubtless, environmentally, and socially challenging, where many losses occur, and where sadness and anger exist, but this does not mean that a willing for collaboration cannot prevail.

### THE CASE OF ABERDEEN CITY

One of the affected locations by the Scottish floods was Aberdeen City, where two important rivers that cross Northeast Scotland end to the sea: river Dee and river Don. This is a very challenging place, because, as explains the Scottish Environment Protection Agency (SEPA) (2015b, p.205), "flood risk in Aberdeen City is complex due to the interaction between the main rivers, small often culverted watercourses, sewerage systems, patterns of surface water runoff and tide levels".

The arrival of a great volume of waters, from upstream areas – where the damages made, particularly by river Don, had already being of great proportions –, leaving the authorities and citizens of Aberdeen worried. It has begun, then, the preparatory actions in the previous days to the arrival of the waters, so to reduce the vulnerability. On the 07 January 2016, BBC News announced in national broadcast the great floods were expected to hit Aberdeen City.

In front of this, the local council took several actions, including releasing in its website a flood warning with a series of recommendations for preparedness, which should be adopted by the families (Figure 1), and systematic updates about the flood risk and related news at constant intervals. Among the recommendations, includes that the families should look for shelter with friends and family, or, alternatively, go to a respite centre, carrying with them some important items for personal and pet care, medicines, important documents, and their cash/credit cards. To protect their dwellings, sandbags were made available in three different locations.

Meanwhile, a emergency respite centre (temporary public shelter) was set up in a school, Bridge of Don Academy, to receive the families who potentially had their homes flooded. The emergency respite centre already had a considerable list of volunteers that made themselves available in advance for assisting in any kind of support and care activities to the sheltered families. They were ready, in terms of capability, to provide support in a level much superior to what was needed in the occasion. Within a single day, this centre was opened and closed, because the water levels lowered down rapidly and the single family that required the support was able to return home quickly. The volunteers, however, were satisfied to be able to contribute somehow.



Council news > Press Releases > FLOOD warnings have been issued as water levels continue to rise steadily across the city.

## FLOOD warnings have been issued as water levels continue to rise steadily across the city.

#### 07/01/16

A WARNING has been issued to residents in the Donside area of the city as the River Don is expected to burst its banks later tonight

The river has reached the highest water level on record, according to SEPA.

Council officials have advised those living in lower residential areas close to the River Don, and in particular the Grandholm area, to seriously consider evacuating their homes as water levels continue to rise across the city.

Residents are advised to seek shelter with friends and family where they can, or alternatively, a respite centre has been set up at the Bridge of Don Academy.

A list of essentials items and advice has been drawn up for residents taking shelter at Bridge of Don Academy:

Change of warm clothing and blankets

Toiletries and everyday medicines

If appropriate, baby clothing, nappies and associated toiletries

Special foods

Important documents, immediate valuables and important telephone numbers of friends and relatives

Baskets or cages and leads for pets

Personal items such as glasses, mobile telephone, keys, cash or credit cards

Make sure fires are out and turn off gas, water and electricity. Allow adequate ventilation prior to turning them back on

Secure your property

As a precaution, alternative accommodation has been found for vulnerable adults living in the three affected care homes in the Grandholm area (Woodside, Persley and Grandholm).

**Figure 1** Partial view of warning given by Aberdeen City Council. *Source:* Aberdeen City Council website, accessed by the authors, 2016.

A strong sense of community prevailed in the deployment and management of this public shelter, as it was highlighted in the interview given by Andy Campbell, who was the Rest Centre Coordinator in the occasion, also having the position of Facilities Manager of the Aberdeen City Council. According to him, the shelter was prepared to receive many families, because the information from the emergency services predicted a much higher impact of the floods. He explains that the shelter was:

only accessed by one family (...) Interestingly, the family concerned was the school's Depute Head Teacher, his wife and their baby son (...) [who] lived in an area called Kettocks Mill, which is further down river from Grandholm (...) They stayed at the school until the end of the school day on the 8<sup>th</sup> January, but were unable to return home immediately due to concerns for the safety of their property. I believe that they went to stay with friends.

Regarding the team that effectively acted in the occasion and those that made themselves available, Mr. Campbell reveals a diversity of social actors, coming from different institutions of society:

> During the evening of the 7<sup>th</sup> January, four members of the Facilities Management team manned the rest centre, working a rota system. There were four members of the school's Catering Team on duty and five members of staff from Bon Accord Care. As it became apparent during the evening that the flooding wasn't going to be as bad as feared and that we had not had any evacuees looking to use the rest centre, most staff were stood down. We also had numerous volunteers from the local church, from the local and wider community offering assistance. Police Scotland also had a presence at the school and two volunteers from the British Red Cross travelled down to Aberdeen from Inverness to offer assistance (...) Early on in

the evening of the 7<sup>th</sup>, two local Councillors attended the school to see what had been set up and to offer their support and assistance. The minister from the local church offered use of their buildings as an overspill, if we had become inundated with evacuees, church and community council volunteers offered hot soup and fresh baking if it were required, the local pharmacy delivered crates of water, fruit juices and coca cola. Local residents offered assistance for families with pets, offering their houses to be used for any evacuees dogs and offering assistance to find places for evacuees cats. Volunteers delivered blankets, bread, tea bags, coffee, etc. The British Red Cross volunteers delivered 300+ blankets and were able to offer first aid for anyone affected.

About the support given to this sheltered family, Mr. Campbell said:

they were supported by school staff and used facilities within (...) All staff and volunteers were happy to be offering whatever help and support that they could, as the only concern was for the wellbeing of anyone affected by the flooding.

On how the routine activities in the school where affected while the family stayed there, these were at first organized predicting the worst case scenario, which, fortunately, did not happen, hence only a small space of the school had to be adapted to a new function, as Mr. Campbell clarifies:

During the evening of the 7<sup>th</sup>, the school's dining hall and games hall had been set up for use for evacuees. As it became apparent that these facilities would not be needed for rest centre purposes on the 8<sup>th</sup>, the school returned to normal operation. A smaller room was able to be found for the affected family, to care for and nurse their baby son.

The memorable point of this experience, of the school becoming a shelter, was the possibility of testifying how the size of the communitarian spirit in Aberdeen City was bigger than the size of the crisis. As concludes Mr. Campbell,

> It was very encouraging for me to see the willingness of people from many different agencies, voluntary organisations and the local and wider community who were willing to do whatever they could to help anyone who might have been affected by the flooding. We were all glad that things didn't turn out as badly as had been predicted. Thankfully, we do not see such emergencies occurring regularly in Aberdeen, but this situation has been a very useful learning experience for me personally and for Aberdeen City Council. The lessons learned will ensure that we are better prepared to deal with any future such eventuality.

Regardless of how well an affected family is sheltered, the desire to return to their own home is preponderant. Temporary shelters are what Freire (2006, p.51) calls "living on loan", where the respite is also marked by the anxiety and concern with possible damages to the house, where the meaning of the family life keeps linked to. This integration occurs through the practice of dwelling (Ingold, 2011). Hence, the news of being able to return home as soon as possible is always a relief.

In Aberdeen city, it was not only dwellings in distant areas from the city centre that were threatened by the waters, causing apprehension to citizens and local business. There was also flooding in a portion of urban area between the city centre and the beach – where a large supermarket is located – and several parks across the city served as buffer zones for the flooding in urban zones, such as it was the case of Seaton Park, where a rugby playing field became totally submerged (Figures 2 and 3). There, an action was taken to drain the excess of waters before it crossed the borders of the park and affect neighbouring houses.



Figure 2 View of flooded area of Seaton Park, Aberdeen. Source: N. Valencio.



Figure 3 Flooded rugby playing field, Seaton Park, Aberdeen. Source: N. Valencio.

The concern of technical actors and local dwellers remained in the end of the second week of January, and the constant monitoring of the river waters was done as much by the technical actor as by the citizens (Figures 4 and 5). Those who live near river Don went to the historical bridge Brig o' Balgownie to observe the sudden rise of the waters, but also to assess, by themselves, whether the water volume was reducing, so they could be less anxious.

Far from a situation where only the emergency services acted without rest, following guidance from the local council, volunteers also contributed to restore the functions and activities of affected public spaces. They were not called by external organizations, but rather by their common network of relations, which considered these practices to have an important dimension for a better living in the place. Such volunteering activities involved not only the traditional dwellers, but also the minorities. Beaches became full of debris when the tides brought back the remains of trees and other materials taken by the floods in rivers Dee and Don (Figure 6), but the Muslim community of Aberdeen City was one of those who assisted in the cleaning of the beach and other public area (Seaton Park). These areas are much used by citizens in leisure activities, and highly regarded as city landmarks and symbols<sup>3</sup>. In interview to the local newspaper Evening Express (2016), the organizer of the Aberdeen Muslims Flood Relief said that their community was very involved in volunteer project of helping in flood-stricken areas in Northeast Scotland.

Aberdeen City is called by its citizens "the *Silver City with the Golden Sands*", a reference to the contrast of its buildings with the beach. The flowerbed in Seaton Park is also a common city postcard.



**Figure 4** Over the historical bridge Brig o' Balgownie, technicians, and residents observe river Don and flooding risks in Aberdeen. *Source:* N. Valencio.



**Figure 5** View of flooding risks to a dwelling and vehicle near river Don, Aberdeen. *Source:* N. Valencio.



**Figure 6** View of the debris brought to Aberdeen city beach by the tides. *Source:* N. Valencio.

#### LISTENING TO THE COMMUNITY IN THE DECISION PROCESS

Although the public actions to quickly request the resources from the superior levels of government to assist the recuperative process of the affected were essential, this was not the only way government authorities used to respond to this crisis, in terms of policymaking. Some actions dealt with the direct and immediate interaction with the affected groups, considering it as something relevant to be done by the varied positive social meanings underlined. The physical presence of the authorities in the flooded areas during the unfolding of the events, to speak and provided emotional support and resources to the affected, while the citizens were still trying to save something in the midst of the damages, was considered a signal of consideration to them. It indicates, in principle, that the authorities consider legitimate the practices that sustain the linking, objective and subjective, of the individual with the place. In saving some objects, fixing others, cleaning the internal and external areas of the house, taking care of the most vulnerable neighbours and other similar

situations, the social life of the community refreshes its dynamics into a new routine, while it aims to recover the routine of previous times.

It can be mentioned four other favourable aspects resulting from this social interaction, which, for its turn, indicate a potential two-direction flux of socio-political legitimacy:

- a) *Empathy*: when the human face of the authorities is put directly in front of the human face of its people in suffering, these last ones feel that they were taken in consideration in middle of the material circumstances that express their situational disadvantaged citizenship, because in this moment they can get the direct opportunity of express their complaints; at the same time, the staff working in the emergency services feel rewarded by their intensive and exhausted efforts of response and recovery;
- b) *Public compromise with solutions*: the initiative in actively listening indicates a disposition of the authority in having detailed knowledge of the situation and making decisions converging with the kind of solutions the affected wanted to be taken. In counterpart, it usually predisposes these citizens to gain more affinity with this ruler from that moment on;
- c) Willing to change the priorities in the public agenda: the announcement of the visits of rulers and authorities to the affected locations or the public shelter, as well as the time spent in the active listening of the people directly involved in the problem (local council, emergency services staff, local business, affected residents, etc.), are aspects that reveal a change in the priorities in the agenda and in the routines of the authorities, including the adoption of greater flexibility in the budget planning of the theme (depending on the steps taken, this disposition might be confirmed or disproven); and
- d) *Empowering of the lower levels of authorities towards the superior levels*: to be based in the direct observation and in the di-

rect listening of the affected expands the political capital of the authority in the dialogue with the superior level and empowers his demands for additional financial and material support. That the technical reports endorses the political demands, it is true. However, in the direct interaction of one authority with the other it is also favourable to be able to tell: "I know precisely what is the difficult situation that the people in this place are going through and the difference that this extra resource can make in their recovery and wellbeing".

The political disputes on the concept of *appropriate action* for emergency support resources happen in every level of government – from the Scottish Government to the UK Government, from the local councils to the Scottish Government, from the communities to the local councils. The bigger the dimensions of the crisis, the smaller the probability of all sides becoming satisfied with the adopted solutions, leading to many controversies about which authority is to blame about the bad response in the situation (Schneider, 2008).

However, it is needed to consider that the Scottish Government has being attempting to take decisions based in popular consultations, as it was made by the authorities of the Cabinet Secretary for Infrastructure, Investment and Cities (The Scottish Government, 2016b) on the discussion about the A96 road recovery:

> (...) we are now giving the public the opportunity to see he changes we propose to the route following public feedback and ongoing design development. I would encourage everyone with an interest in this important scheme to come along to one of the drop-in sessions next month or view the changes online. As the Inverness to Nairn (including Nairn Bypass) scheme is further progressed, individuals, communities and businesses affected by the work

will be kept fully informed and their vital feedback taken into account.

For the farms, the Rural Affairs Secretary announced specific support measures and SEPA Chief Executive, such as £1m funding destined to cover standard costs up to a cap of £20k per business and cover farmers affected by recent flooding (The Scottish Government, 2016c). Time will tell if these converging actions between the affected communities and the institutions of the greater society really worked.

## CONCLUSIONS

The 2015/2016 flooding crisis were one of the biggest that Scotland recorded in recent years. They not only caused varied damages and losses, affecting a diverse array of social groups, but also brought to the topic extensive discussions about the long-term uncertainties and risks. For example, the flood events brought a higher collective will to reflect about the extreme events related to climate change, as well as about the economic capability of the families and of the authorities in taking recovery measures that can also be preventive to new and unpredictable similar risks.

The Scottish flooding crisis revealed, once again, the complex relation between the damages in the private sphere and in the public sphere of social life, in such a way to demand collaborative and integrated actions of support. If the waters were not being drained in the streets, by action of the firefighters and other technical actors, the families and local businesses would have no effective way of cleaning their houses and affected stores. If the waste disposal services were not intensified, there would be no way of the affected citizens remove their destroyed objects. If the energy supply was not being re-established, in the middle of winter, the citizens would feel more powerless in front of everything that had to be done in the long hours of darkness. Without the support of the charities, the resources for the material recovery would be limited.

As important as the material support, coming from a diversity of organized sectors of the society, it was given a moral support from the community social relations. This involved from the family networks that rescued their affected members - and which, without being too intrusive in the privacy, helped to recover items of great sentimental and memory values for their affected relatives -, to the religious groups that, beyond their specific beliefs, or even making use of them, reinforced the values linked to be at the service of the other in need. Naturally, these relations do not replace the role of professional social service, guided towards the interaction with vulnerable groups through values of citizenship (Sennet, 2004). However, flooding crisis create simultaneous possibilities for the professional and the voluntary acting, private and public, because the affective, spiritual and psychological dimensions of coping with the difficulties are revealed as much meaningful as the dimensions of material and financial character. As Bachelard reflected (1969, p.25), without home, the individual would be a wandering human being, in an even more uncertain life; "it [the house] maintains him through the storms of the heavens and through those of life. It is body and soul. It is the human being's first world".

Although it was good that the Scottish authorities, in many levels, have publicly shown their commitment in solving a crisis like this, it will be the long-term public actions that can truly show us how genuine and solid were these concerns in assuring the living place. One thing is the public acting while the waters are still high, and the media works as a kind of thermometer of the public opinion. Quite different is when the water levels went down but there is still much be done to recover the damages. The continued and qualified support to the affected will show the political commitment with a recovery that can be simultaneously preventive, increasing social resilience in front of new floods. When the river levels rise again, with news of grumpy waters coming, the Scottish people will discover if they become truly prepared.

Acknowledgements – The authors thanks Mr Andy Campbell for the interview given. N.V. thanks National Council for Scientific and Technological Development (CNPq), Research Productivity # 316828/2023-8.

## REFERENCES

Aberdeen City Council. Flood warnings have been issued as water levels continue to rise steadily across the city. 2016. Available at: <u>http://www.aberdeencity.gov.uk/CouncilNews/ci\_cns/pr\_Floodwarning\_070116</u>. asp. Access: 24 January 2016.

Albrecht, C. Community and society. In: Kühnhardt, L., Mayer, T. (Eds). The Bonn Handbook of Globality. 1217-1229. 2019. Springer. Doi: 10.1007/978-3-319-90382-8\_42

Bachelard, G. The poetics of space. Boston: Beacon Press, 1969.

Bauman, Z. Vidas desperdiçadas. Rio de Janeiro: Zahar, 2005.

Bauman, Z. Vida em fragmentos: sobre ética pós-moderna. Rio de Janeiro: Zahar, 2011.

BBC News. Scotland First Minister Nicola Sturgeon, 31/12/2015. 2015a. Available at: <u>http://www.bbc.co.uk/news/uk-scotland-35203139</u>. Access: 01 January 2016.

BBC News. Prince Charles visits flooded Cumbria communities. 21/12/2015. 2015b. Available at: bbc.co.uk/news/uk-england-cumbria-35152639. Access: 05 January 2016.

BBC News. Homes evacuated as severe floods hit Scotland. 08/01/2016. 2016a. Available at: <u>www.bbc.co.uk/news/uk-scotland-35260227</u>. Access: 12 January 2016.

Camponeschi, C. Integrative resilience in action: Stories from the frontlines of climate change and the Covid-19 pandemic. **Frontiers in Sustainable Cities**, v.4, p.1-18. 2022. DOI: 10.3389/frsc.2022.933501

Clark, D.B. (1973). The concept of community: a re-examination. **The Sociological Review**, v. 21, n3, 397-416. DOI: <u>https://doi.org/10.1111/j.1467-954X.1973.tb0023</u>

Evening Express. Group clears up Aberdeen Park. 25/01/2016. 2016. Available at: <u>https://www.eveningexpress.co.uk/fp/news/local/group-clears-up-city-park</u>. Access: 30 January 2016. Freire, P. À sombra desta mangueira. 2006. São Paulo, Editora Olho d'Água, 2006.

Ingold. T. Being alive – essays on movement, knowledge and description. London and New York: Routledge, 2011.

Iossifova, D. *et al.* Desigualdades infraestructurales en ciudades fragmentadas. Transformando infra-sistemas para la salud pública. In: Gian Carlos Delgado Ramos; David Lopez Ramos. (Orgs.). Las ciudades ante el Covid-19: nuevas direcciones para la investigación urbana y las políticas públicas. Ciudad de México/DF: Plataforma de Conocimiento para la Transformación Urbana, 78-89. 2020. Available at: <u>https:// observatorylatinamerica.org/es/las-ciudades-ante-el-covid-19-nuevas-direcciones-para-la-investigacion-urbana-y-las-politicas-publicas/</u> Access: 14 September 2022.

Jon, I.; Purcell, M. (2018). Radical resilience: autonomous self-management in post-disaster recovery planning and practice. Plan. Theory Practice, v. 19, 235-251. DOI: 10.1080/14649357.2018.1458965

Nixon, R. Slow violence and the environmentalism of the poor. Cambridge, MA: Harvard University Press, 2013.

Rentfrow, P.J.; Jokela, M.; Lamb, M.E. **Regional personality differences in Great Britain**. PLoS ONE, v.10, n.3, 1-20. 2015. DOI:10.1371/journal.pone.0122245

Sennett, R. **Respeito: a formação do caráter em um mundo desigual**. Rio de Janeiro, Record, 2004.

Schneider, S. Who's to blame: (mis)perceptions of the intergovernmental response to disasters. **The Journal of Federalism**, 38 (4), 715-738. 2008. DOI: 10.1093/publius/pjn019

Scottish Environment Protection Agency-SEPA. North East Local Plan District. Section 2. PVA\_06\_15 Full, 172-183. 2015a. Available at: <u>http://apps.sepa.org.uk/FRMStrategies/norh-east.html</u>. Access: 25 January 2016.

Scottish Environment Protection Agency-SEPA. **North East Local Plan District**. Section 2. PVA\_06\_18 Full, 204-216. 2015b. Available at: <u>http://apps.sepa.org.uk/FRMStrategies/norh-east.html</u>. Access: 25 January 2016.

Siena, M.; Valencio, N. Moradias afetadas pelas chuvas: dimensões objetivas e subjetivas dos danos pelo recorte de gênero. In: III Encontro da ANPPAS. Brasília. 2006. Anais... Available at: <u>http://www.anppas.org.br/encontro\_anual/encontro3/arquivos/TA19-02032006-222357.</u> DOC. Access: 15 December 2015.

The Guardian. Queen's neighbours at historic Scottish castle forced to flee floods. 04/01/2016. 2016. Available in: <u>www.theguardian.com/envi-ronment/2016/jan/04/abergeldie-castle-queen-neighbour-balmoral-flee-floods</u>. Access: 30 January 2016.

The National. Aberdeenshire in storm lashing. 08/01/2016. Issue 322, 6-7. 2016

The Scottish Farmer. Frank leaves flood trail of destruction. 08/01/2016. 2016. Available at: <u>www.thescottishfarmer.co.uk/news/frank-leaves-flood-trail-of-destruction.28378871</u>. Access: 30 January 2016.

The Scottish Government. **Praise for emergency service flood service.** Edinburgh, The Scottish Government. 2016a. Available at: <u>http://news.scotland.gov.uk/News/Praise-for-emergency-service-flood-response-2156.</u> <u>aspx</u>. Access: 25 January 2016.

. A96 Nairn Bypass proposals on public display. Edinburgh, The Scottish Government. 2016b. Available at: <u>http://news.scotland.gov.</u> <u>uk/News/A96-Nairn-Bypass-proposals-on-public-display-2171.aspx</u>. Access: 25 January 2016.

(2016c). **Support for flood-hit farms**. Edinburgh, The Scottish Government. **2016c**. Available at: <u>http://news.scotland.gov.uk/News/Support-for-flood-hit-farms-2149.aspx</u>. Access: 25 January 2016.

Tuan, Y.F. (1980). Landscapes of fear. Oxford, Blackwell Publishing, 1980.