

# **Act of Hope: A Story of Climate Change and Water Puppetry Performance Along the Red River, Vietnam**

*Research in Drama Education: The Journal of Applied Theatre and Performance*

**Special Issue: “Confronting the Global Climate Crisis: Responsibility, Agency, and Action”**

Alison LLOYD WILLIAMS<sup>a,1</sup>, Quỳnh VŨ<sup>b</sup>, Huệ LÊ<sup>c</sup>, Lisa JONES<sup>a\*</sup>, Thu Thị VÕ<sup>c</sup>, Florence HALSTEAD<sup>a,2</sup>, Katie J. PARSONS<sup>a3</sup>, Anh T.Q. NGUYỄN<sup>c</sup>, Christopher R. HACKNEY<sup>d</sup> and Daniel R. PARSONS<sup>e</sup>

*<sup>a</sup>School of Education, University of Hull, Hull, UK; <sup>b</sup>Institute of Cultural Studies, Vietnam Academy of Social Sciences, Hanoi, Vietnam; <sup>c</sup>Vietnam National University Central Institute for Natural Resources and Environmental Studies (VNU-CRES), Hanoi, Vietnam; <sup>d</sup>School of Geography, Politics and Sociology, Newcastle University, Newcastle, UK; <sup>e</sup>Geography and Environment, Loughborough University, Loughborough, UK.*

\* Corresponding author: L.M.Jones@hull.ac.uk

## **Abstract**

This case study explores a collaboration between young people, researchers and artists which captured stories of how people in the Red River Catchment of Northern Vietnam are responding to climate change, and then used the local art of water puppetry to communicate those stories to a wider audience. The performance evoked the interdependence of the human and physical worlds, showing the impacts of climate change but also people’s adaptiveness. In this way, the piece highlighted how communities along the Red River are practising how to ‘live with hope,’ as Gallagher describes it (2022), and how others could do so, too.

## **Keywords**

Red River Catchment, climate change, community resilience, youth, water puppetry

## **Introduction**

The climate emergency highlights the urgent need for communities to learn to adapt and for all voices to be included in formulating adaptation plans. This case study reports on a two-year project, Youth-led Adaptation for Climate Change Challenges in Vietnam (YACC),<sup>4</sup> which brought scientists, educationalists and theatre artists together with young people living along the Red River in Vietnam to explore how communities are responding to the localised impacts of the climate crisis and to use water puppetry as a stimulus for dialogue around resilience building.

Water puppetry is emblematic of the Red River region. Historically, farmers performed water puppetry to awaken heaven and earth when facing unusual weather conditions or to call on the gods in response to disasters. The practice was traditionally connected with magical movements in the rain-praying ceremony and often appeared in places for worshipping saints (Vũ 2014). Alongside its symbolic function, the materiality of the performance itself - with its dynamic, watery stage and colourful puppets that play above, along and beneath its liquid surface - literally foregrounds for the audience the interconnectedness of the physical and social world, demonstrating what Scott-Bottoms (2019, 415) describes as their ‘ecological’ interdependence. Water puppetry thus invokes what Verlie and CCR 15 (2020, 1270) call the ‘intra-action’ of humans and climate in a dynamic and co-emerging relationship which ‘collaboratively enacts climate knowledges-and-responses.’

As a traditional practice, water puppetry represents a link with the past as well as the future, pointing to change but also continuity, in particular the human capacity to respond to crisis. As such, we suggest that the water puppetry performance that was created during our project represented an ‘act of hope.’ In making this claim we build on the work of Gallagher et al. (2020, 3) who draw on their experience of theatre making with young people to argue that ‘hope is an action, not a possession, a verb not a noun.’ Gallagher notes elsewhere (2022, 207) that ‘hope may seem an unlikely subject in catastrophic times’ but suggests that the most resilient youth she has met ‘are not hoping for something; they are practising what it might be like to live with hope, even when their material or social conditions made that exceedingly difficult to do.’

Gallagher's analysis highlights issues of agency in the sense that practising hope can be seen also as an act of citizenship – that through action we can intervene and change our world (Lloyd Williams 2015). By using the traditional form of water puppetry to communicate contemporary stories of life along the Red River we aimed to spotlight the resilience of those - youth and adults - who are already 'practising hope' in the face of climate change. At the same time, we wanted to use the performance to stimulate a wider conversation with the local community and other stakeholders about how societies can continue to adapt, based on grassroots knowledge and experience.

## **Background**

Rising sea-levels, along with increased precipitation intensity and duration linked to climate change, place the Red River Catchment (RRC) in Northern Vietnam on the front-line of the climate emergency (Doocy et al. 2013). In the upper basin, these hydrological extremes are leading to landslides and soil erosion. In the delta region, relative sea-level rises are increasing the frequency and magnitude of flooding and leading to increased saline intrusion. As one of the most populous, economically important and ethnically diverse areas in Vietnam, these risks mean citizens, government and policymakers are faced with significant challenges concerning climate change mitigation, adaptation and resilience (Bangalore, Smith, and Veldkamp 2017). Simultaneously, Vietnam is a hierarchal, adult-led society where young people are often excluded or unclear of what role they can play in decision-making and future actions to mitigate the climate emergency (O'Brien, Selboe, and Hayward 2018; Corner et al. 2015). However, youth expectations are gradually changing as young people increasingly break down existing social norms around their role - an important development when ~50% of the population in Vietnam is under 30 (Worldometers 2019).

While there is a history in Vietnam of using water puppetry to explore contemporary social issues or for propaganda (Pack, Eblin, and Walther 2012; Rumsby 2015), most performances today are for tourists and the practice has largely become what Pack, Eblin and Walther describe (2012, 29) as a 'static representation of ancient art, culture, and lifestyles.' This project therefore presented an opportunity to explore how this important cultural art form could be used to tell

stories of the current physical and social landscape of the delta as well as imagine possible futures for that landscape in the context of climate change.

### **Gathering river stories in the Catchment**

The project worked with 18 young adults located in three provinces within the RRC in Northern Vietnam: Lào Cai, Phú Thọ and Nam Định. From the highlands down to the delta where the Red River meets the Gulf of Tonkin, these three locations represent many of the geographical, social, cultural and economic diversities in the wider catchment. Each location experiences climate-related hazards differently - from landslides, flash floods and drought in the northern highlands, to sea level rise and saltwater intrusion in the delta. With economic practices varying greatly across the region (e.g. tourism and rice farming in the north, to aquaculture in the delta) these climate impacts intersect with livelihoods in an array of ways.

The young people were recruited via the Hồ Chí Minh Communist Youth Union, the largest youth group within Vietnam. Participants ranged from 23 to 36 years old and spanned three ethnic groups: Kinh, Mông and Dao. During the project, participants attended workshops across a range of formats, all of which encouraged active participation, open dialogue and mutual learning. Topics included: the science of climate change; conducting social research (interviews, focus groups, observations, ethics); and methods including photography and empathy mapping. Empathy mapping, first developed by Gray et al. (2010) to assess computer user experiences, has been previously adapted by members of our team (Parsons et al. 2021; Parsons and Wolstenholme 2021) to support people in thinking about others' lived experiences concerning climate change and biodiversity loss through exploring what different members of the community might 'say', 'feel', 'think' and 'do', the objective being to promote collective solidarity in taking action. Towards the end of the project, sessions were held on storytelling and the use of ArcGIS 'storymapping,' an online application in which users build interactive stories into digital maps through the application of text, images and video, tagging their own narrative to specific geographical locations.

Following the initial workshops, the youth took on the role of active researchers within their communities, working in small teams to interview local people and collect additional sources of

data (photographs, news reports, government documents etc.). While the aim was to understand the various impacts of climate change in their hometowns from a range of perspectives, the research process also motivated several of them to self-organise and tackle some of the identified local issues in ways that went beyond the initial scope of the project and were carried out without any influence or input from the academic research team. This included organising river clean-ups and larger community gatherings to tackle the source of the issue via wider communications. This is a clear illustration of what Gallagher (2022, 207) would call the ‘practice’ of hope, whereby the youth demonstrated, in ways we would not necessarily have expected, a real sense of ‘care’ for their community and the issues raised which mobilised them to collective forms of action (Gallagher 2022, 3).

As the youth began to analyse their data through storytelling workshops with the research team, they identified issues they had anticipated, as well as those they had not – for example, land loss, changes in weather patterns and challenges for particular groups such as single mothers. They also discussed how humans are instrumental in climate change – both in contributing to it but also in being able to adapt in response. Through such reflections and analysis, it became clear that though there were many stories of hardship, there were also many stories of hope, such as diversifying crops to ensure resilience to changing weather patterns, and community collaboration to help one another through difficult times.

During these later workshops, members of the team, including a researcher specialising in water puppetry, sketched a draft script that pulled together key themes and stories that the youth had identified from their data. The youth and team members then discussed visual details or symbolic activities that were suggested by the stories, such as particular livelihoods or occupations, ethnic costumes, labour tools, landscapes, cultivated plants and style of housing. These became the raw materials for translating the stories into performance and developing the puppets.

### **Water puppetry in Northern Vietnam**

Water puppetry is an indigenous art form that developed in the wet rice ecosystem of Northern Vietnam. Born in the villages of the river basins of the delta nearly a millennium ago, water puppetry, including the agricultural world it represents, has become a symbol of Vietnamese

culture (Vũ 2014; Foley 2015). The art form centres on the interplay of the two central elements: puppets and water. Puppet-making emerged from the craft of carving folk wooden statues, while water is the most important factor in rice farming (Nguyễn 2007).

Water puppetry developed in response to the desire by farmers to deal with natural hazards. In the early days of conquering the delta, the Vietnamese faced excess water in the semi-submerged delta, so the prevention of inundation and flood control were the top concerns of the local people. In his 1936 study, *Tonkin Delta Farmers*, Gourou (2003, 67) observed: ‘The life of the people of the Tonkin Delta is often miserable because of excess water, not lack of water. The construction of dykes and water withdrawal is necessary to proactively return water in the delta, which means more water removal than worrying about the delta's drought.’

Ponds are therefore the result of how farmers have adapted to the natural conditions of the delta – a solution that helps people to store water in the dry season and drain it in the flood season (Nguyễn 2006). Almost every village in the delta has ponds to collect rainwater: large ponds, small ponds, house ponds, village ponds... These ponds are central to many people's daily life and have become an iconic image in the panorama of rural Northern Vietnam. As such, as Roe et al. (2022, 93) describe, ‘the character of the staging and the spatial context of the performance within water landscapes’ have become an integral feature of the water puppetry art form.

The habit of using on-site water from village ponds has shaped residents' thinking about water. Water is considered a living substance (for daily activity, agricultural production and so on), a sacred substance (for praying for rain, water procession ritual and statue bathing), as well as a focus for local culture and community (water puppetry, boat racing, swinging across the river, going to the bridge, catching ducks in the pond). People have sacred notions about water. If there is a drought, they will pray for rain (*gặp tai di thì cầu đảo*). Many localities have the custom of water processions during village festivals and follow beliefs about worshipping water.

Using the surface of the village pond as a performance stage, puppeteers traditionally take advantage of water's natural acting surface. They can explore the water's buoyant properties while avoiding its flow (water puppetry does not take place in rivers, where strong currents

interfere with puppet control), exploiting the dynamism of water to hide their puppetry techniques. The water surface changes flexibly: it can represent the wet rice fields where farmers cultivate, catch fish, go fishing; it can also represent ponds where people enjoy boat racing or swimming; sometimes it becomes a terrestrial space where women weave cloth, sing lullabies to their children or pound rice; it is also the place for processions and festivals and honouring ancestors; sometimes it transforms into a metaphysical space for symbolic folk tales featuring flying dragons, dancing phoenixes and fighting unicorns (Vũ 2014).

Communal temples, pagodas or village spaces are the traditional backdrop to the performance. The ingenuity of hands that are familiar with manual labour can turn simple, ordinary materials such as bamboo, wood, rope, cloth and rubber into vivid puppets that tell stories of the countryside. In this way, the art form is deeply rooted in the real, daily lives of the communities in which it is practised (Vũ 2014).

### **Creating the performance**

Following the work by and with the youth, the team held a series of meetings with artists from Đồng Ngư Water Puppetry Troupe, Thuận Thành District, Bắc Ninh Province, who perform regularly at the Vietnam Museum of Ethnology in Hanoi. While the artists were excited to take part in a project with such relevance for the local community, they also found it challenging: the troupe has performed traditional stories since the 1970s but had never worked on a piece that addressed these issues and necessitated the creation of new puppets and scripts. Despite the work done with the youth to think about visual iconography for the piece, the artists found it difficult at first to imagine how to translate the stories into performance via their usual puppetry ‘toolkit.’ Water puppetry traditionally relies upon the puppets’ symbolic movements to express the content so, together with the artists, the team distilled the text of the draft script into scenes, exploring how to convey the themes and characters with movement and sound.

The puppet making process itself was particularly hard. Normally it takes two to three months to make a puppet, depending on the weather. Artists must dry the wood before chiselling to avoid shrinkage and warping. When painting, each layer must be dried thoroughly before painting the next layer but rainy weather meant the paint layers took longer to dry and the artists had less time

to practise. In the end, the artists created nearly 40 puppets and props to vividly depict the local landscapes and people reflected in our stories, including costumes associated with the Tày, Mông and Dao ethnic groups that we had worked with on the project.

Eventually, the team and artists worked together to create a 25 minute performance, consisting of six scenes which drew on the stories uncovered by the youth to show how local people in each of the three regions of the RRC are adapting to climate change, including the increased risk of natural hazards such as flooding. Despite the difficulties and sometimes conflicting opinions, the troupe remained highly committed to the process and continued to re-engage with the stories, spending hours immersed in cold water, making and rehearsing the scenes. The research team will never forget the image of the troupe after a practice session, shivering as they huddled together to find warmth from a cup of hot tea in their trembling hands. This image of collective resilience evokes Gallagher's (2022, 208) analysis that the 'ensemble' serves as the best 'metaphor' of 'theatre for the world'. Through the creative space of artist collaboration, the artists were also building community and 'hope together with others' (ibid).

**[INSERT PHOTOGRAPH 1 HERE: Đồng Ngư Water Puppetry Troupe rehearses the water puppetry piece at Vietnam Museum of Ethnology, Hanoi. © Quỳnh Vũ]**

### **The performance**

The performance begins with the appearance of a puppet in the shape of a young man, dressed in clothing representing the Dao ethnic minority. He represents the Youth Union participants on the YACC project and explains to the audience how their role involved going to villages along the Red River to find out about people's experiences. Traditional water puppetry uses Uncle Tễu - a puppet that symbolises Vietnamese farmers - to lead the show, but here a Dao youth puppet is used in order to emphasise the leadership role of the youth on this project. Already, the performance is playing with audience expectations, drawing on yet also subverting water puppetry conventions to shift perspectives and literally put youth in the foreground as agents of action within their community.



The opening scene which follows draws on traditional water puppetry elements to depict a peaceful rural life, with people working hard to grow and carry rice and other crops, herd buffaloes, go fishing in the sea and rake clams. Instrumental music and folk songs are performed live by musicians standing next to the stage, on the shore of the pond. However, the following scene interrupts the calm, introducing how rural communities still rely on folk knowledge to recognise and respond to the threat of floods and severe weather. The performance shows natural phenomena such as bees flying back to the nest, crabs leaving caves for the shore, dragonflies flying at low altitudes and termites leaving the nests. It also depicts the human response as people realise a storm is coming soon and alert each other to prepare for it.

[INSERT PHOTOGRAPH 2 HERE: Youth call on people to evacuate as a storm approaches.

© Anh Tuấn Đặng]

This scene involves many puppets moving quickly and continuously to the rushing sound of shouts and drums from the musicians, showing the urgency of the warning. The head of the village uses a loudspeaker to call offshore boats to come ashore. People prepare their houses, move livestock to higher ground, harvest crops with the slogan ‘Green at home is better than ripe in the field,’ prepare and preserve food, and thus mitigate the extent of the disaster. When the storm arrives, amid the sound of the howling wind, rain, thunder, we see trees falling and houses drifting. When a small child is knocked over by wind on the edge of the rice field, the community works together to rescue her. The aftermath shows the trail of destruction left by the storm with damage to houses, trees, bridges and roads but, again, the performance shows how people work together to make repairs, including with the help of volunteer youth forces.

The detailed texture of these scenes roots the piece very specifically in the physical and social landscape of the RRC and the actions that take place are based on the real, lived experiences of that community, as captured through the stories the youth had researched. The piece highlights the adaptations that people are already undertaking, while also modelling the need for communities to work together to increase resilience. In this way, the performance demonstrates the potential of what Balme (2021, 136) describes as ‘drama as citizenship’, creating what he

calls (ibid., 135) a ‘microcosm of the world at large: a model world’ in which people take action to respond collectively to crisis.

[INSERT PHOTOGRAPH 3 HERE: Youth and local people join hands to rebuild the community after the disaster. © Anh Tuấn Đặng]

The next scene shows the related problems of deforestation and forest fires, key issues highlighted by the youth’s research. Two characters appear, one carrying a saw, the other an axe, and proceed to cut down a tree. The fallen tree then catches fire because of another character drying cardamom, a traditional forest practice in one area of the RRC, and soon the whole wood is alight. As the community is alerted to the disaster, people exhort each other to prevent deforestation while working together to put out the fire and save the forest. The puppeteers create the sound of chainsaws and use firecrackers under the water to create fire and smoke. The stage bustles with the sound of drums, trumpets and loud calls. There is fire on the surface of the water and the puppets move in and out of the smoke until they gradually disappear into the void.

After the fire, the upland people tell each other to change their livelihoods and switch to different crops. Meanwhile, the coastal people plant mangroves to break waves and wind, protect dykes, prevent flooding, and keep alluvial soil for shrimp and clam farming. The singers recite a *Vè*, a local *Poem of the Mangroves*, to emphasise this adaptation. *Vè* are original folk verses, passed down orally to praise or criticise a social phenomenon. The *Vè of the Mangroves* was created by a 78-year-old man in Nam Định province, interviewed by the youth, in which he praises the actions of the coastal people, as this extract illustrates:

<i>Bão gió biển động</i>	<i>Storms and winds, the roars of the sea</i>
<i>Ta cũng không nề</i>	<i>We are not afraid of them</i>
<i>Nước lớn xô về</i>	<i>Even when floods come</i>
<i>Nghiep nghề vẫn vững</i>	<i>We can still do our jobs</i>
<i>Các bạn đều cùng</i>	<i>Everyone together</i>
<i>Chung tay suốt đời</i>	<i>Working forever</i>
<i>Thông điệp khắp nơi</i>	<i>Spreading the message</i>

<i>Tuyên truyền ích lợi</i>	<i>About the benefits of environmental preservation</i>
<i>Mùa chim đón đợi</i>	<i>The season of birds is waiting</i>
<i>Đất lành quê ta</i>	<i>Our prosperous homeland</i>
<i>Vang tiếng hát ca</i>	<i>Singing delightfully</i>
<i>Gió rừng đất ngập</i>	<i>The wind blows through the wetland</i>
<i>Bao nhiêu sản vật</i>	<i>The more local specialties</i>
<i>Bấy nhiêu bạc vàng</i>	<i>The more wealth</i>
<i>Ve vè vè ve</i>	<i>Listening to the singing cicada</i>

The final scene shows peace returning after so many disasters as the water becomes still once again. While the musicians sing of the beauty of the region, such as its mountains and forests, puppets representing different ethnic groups appear together wearing their traditional costumes. Tourism is an important new form of income generation for many in the RRC, so the scene celebrates the traditional local culture, including folk music, dance and bustling markets, while also emphasising the need for different groups to work together to respond to the climate crisis.

The positive narrative arc of this performance was deliberately chosen. The workshops with the youth had revealed a wider story that was important to tell - one in which ordinary people living along the Red River face extraordinary challenges but who, on the whole, demonstrate the capacity not only to ‘stay afloat’ but to thrive. The water puppetry stage gave this story and the people and places it featured both visibility and validity, inviting the audience into the world of rural communities living on the frontline of climate change whose perspectives and knowledge are so often excluded. This approach shed light on what Gallagher (2022, 207) would call their ‘practice[s]’ of hope in ways which we hoped would mobilise others. This connects with Busby’s (2021, 32) analysis that theatre can create ‘utopic spaces’ which invite ‘aspirational thinking’ where ‘different futures can be imagined.’

Busby’s emphasis on the anticipatory spaces of theatre as the way for people to imagine the ‘possibility of change’ chimes with Ojala’s work on the role of hope in ‘education for a sustainable future.’ Ojala (2017, 79) draws on Freire’s (2004, 2) assessment that ‘hope is an ontological need’ to argue for ‘critical hope,’ suggesting that ‘It is by accepting the problems at

hand, for instance the threat from climate change, and by facing and bearing the negative emotions related to them that a hope can be evoked that will drive engagement.’ Ojala (ibid., 80) explicitly connects this analysis of hope with agency and action because ‘people high on hope have the ability to motivate themselves to use identified pathways to a desirable goal.’

However, hope is not without its dangers, especially if it merely distracts people from reality (Chandler 2019) and functions only as an unfettered ‘faith’ in a future possibility without then acting which ‘...lures us to orient ourselves to the future instead of the present’ (Lindroth and Sinevaara-Niskanen 2019, 647). The message of hope here, then, is seen as the start of the struggle (Freire 2004) - that is, to realise that change is possible, but for the change to be realised, people have to act (Jones et al. 2021).

The final piece was performed in December 2022 at the Vietnam Museum of Ethnology in Hanoi as part of *Learning to Live with Climate Change: Intergenerational Stories of Adaptation in the Red River Catchment*, the showcase event for the YACC project. At the event, youth shared their experience of participating in the project and what they had learned and showcased their digital ‘Storymap’ of the RRC, highlighting the stories they had discovered through their research. The event culminated in the water puppetry performance and a panel discussion involving a policymaker from the Ministry of Agriculture and Rural Development (MARD), an artist, a scientist, an academic and an international non-governmental organisation (INGO) practitioner. The MARD panellist said he was ‘amazed’ by the water puppet show, commenting that ‘The combination of folk art has helped to visually and vividly convey an inherently arid and scientific field such as natural disaster prevention and control and climate change adaptation.’ The other panellists echoed this response, noting that the method made the topic accessible and more likely to mobilise people to action, through helping them to better understand the issues and build on the voices and experiences of those whose knowledge is often excluded.

It was clear that this was a new approach in the Vietnamese context but the panel was excited by the potential of using creative methods to engage with communities on disaster prevention. The artist on the panel observed that puppetry artists could move beyond merely preserving traditional stories to work with local stakeholders to employ their techniques in exploring

contemporary scenarios and creating new dialogues and interactions. He said, ‘When I first heard about using water puppetry to tell the story of climate change, I couldn’t imagine how, but when I heard about how the project was implemented, I better understood how artists, artisans, researchers or educators and local communities can work together to co-create and co-produce knowledge as well as solutions to climate change.’

Following the success of the performance in engaging people with ideas of adaptation, MARD officials have gone on to adopt water puppetry into forthcoming disaster preparedness training. Additionally, MARD has developed a water puppetry piece to promote ‘early action’ in disaster risk management among the Association of Southeast Asian nations (ASEAN) countries. Vietnam currently chairs the ASEAN Committee on Disaster Management and has proposed ‘From response to early action and strengthening resilience’ as the focus for regional collaboration in 2023.

Further to this, an important outcome for the water puppetry artists was both an increased knowledge and understanding of climate change and a renewed sense of purpose as to the role they could play in community resilience building. As a result, in early 2023, the troupe reprised the performance in local communities in Nam Định and Lào Cai provinces where the original research had taken place. Additionally, the Museum of Ethnology, where the performance first took place and where the troupe has historically performed their traditional shows for tourists, plans to continue to work with the artists to use this innovative use of water puppetry to educate about both the changing climate and the important role of traditional, cultural art forms in that future.

## **Conclusion**

Through this project, water puppetry became more than just a re-telling of historic tales of a watery landscape; the team worked together to use the unique features of the artform to present new stories of ‘climate intra-action,’ showing how that landscape is evolving in response to climate change and how people shape and are shaped by that change. As with all water puppetry shows, the performance shimmered between the real and the imaginary, the human and the physical, but perhaps most importantly, the liquid stage of the performance also symbolised the

connection between the past and the present – as well as the future, showing people’s enduring resilience and adaptability.

As has always been the case with water puppetry, the performance showed ordinary folk not merely as victims, but as resourceful and creative, using whatever is available to make the best of their lives and the world they live in – as practising hope, even in the face of enormous challenges. In this sense, this is but one example of place-based storytelling that undoubtedly would work elsewhere, utilising local knowledge to remind people that communities have always adapted to change and that this will continue. In this sense, the work points towards Gallagher’s (2020, 40) analysis that using theatre in social research can reveal ‘what might be, not simply what is.’

### **Acknowledgements**

We would like to both recognise and offer a special thank you to all the Youth Union members involved in this project and their community members from Lào Cai, Phú Thọ and Nam Định who generously gave their time in supporting this project and whose stories shaped the research, including the water puppetry performance. We would also like to recognise and give thanks to all members of the Đồng Ngư Water Puppetry Troupe. Finally, we offer another special thank you to our project’s Youth Advisory Board members for their ongoing support.

### **Notes**

1. Currently affiliated to Sociology Department, Lancaster University, Lancaster, UK, and Fukushima Medical University, Fukushima, Japan.
2. Currently affiliated to School of Education, University of Glasgow, Glasgow, UK.
3. Currently affiliated to Geography and Environment, Loughborough University, UK.
4. The project titled ‘Youth-led Adaptation for Climate Change Challenges in Vietnam: Social Action, Inter-generational and Inter-cultural Learning’ was funded by The British Academy, Grant Number YF\190165, as part of their Youth Futures Programme, supported under the UK Government’s Global Challenges Research Fund. The project received relevant University of Hull Ethical Committee clearance. All project participation was voluntary, informed consent was utilised throughout and withdrawal

without consequence was possible up to project completion. Socially, culturally and ethically appropriate processes were also followed throughout (e.g. liaison with community leaders/verbal permissions).

## References

Balme, C.B. 2021. "Theatre and Citizenship Education: Global Perspectives and Points of Contact." In *International Perspectives on Drama and Citizenship Education*, edited by N. McGuinn, N. Ikeno, I. Davies, and E. Sant, 9-18. London: Routledge.

Bangalore, M., A. Smith, and T. Veldkamp. 2019. "Exposure to Floods, Climate Change, and Poverty in Vietnam." *Economics of Disasters and Climate Change* 3 (1): 79-99.

Busby, S. 2021. *Applied Theatre: A Pedagogy of Utopia*. London: Bloomsbury.

Doocy, S., A. Daniels, S. Murray, and T.D. Kirsch. 2013. "The Human Impact of Floods: A Historical Review of Events 1980-2009 and Systematic Literature Review." *PLoS Currents* 5 doi: 10.1371/currents.dis.f4deb457904936b07c09daa98ee8171a.

Chandler, D. 2019. "The Death of Hope? Affirmation in the Anthropocene" *Globalizations*, 16 (5): 695-706.

Corner, A., O. Roberts, S. Chiari, S. Völler, E.S. Mayrhuber, S. Mandl, and K. Monson. 2015. "How Do Young People Engage with Climate Change? The Role of Knowledge, Values, Message Framing, and Trusted Communicators." *WIREs Climate Change* 6 (5): 523-534.

Foley, K. 2001. "The Metonymy of Art: Vietnamese Water Puppetry as a Representation of Modern Vietnam." *TDR: The Drama Review* 45 (4): 129-141.

Freire, P. 2004. *Pedagogy of Hope*. London: Continuum.

Gallagher, K. 2020. “Art, Collaboration, and Youth Research in a Collapsing World: Conceiving and Enacting a Multi-vocal Research Project in the Borderland of the Real and the Imagined.” In *Global Youth Citizenry and Radical Hope: Enacting Community-Engaged Research Through Performative Methodologies*, edited by K. Gallagher, D.J. Rodricks, and K. Jacobson. 23-45. New York: Springer.

Gallagher, K., D.J. Rodricks, and K. Jacobson. 2020. “Introduction: A Situated, Ethical, Imaginative Doing and Being in the Encounter of Research.” In *Global Youth Citizenry and Radical Hope: Enacting Community-Engaged Research Through Performative Methodologies*, edited by K. Gallagher, D.J. Rodricks, and K. Jacobson. 1-20. New York: Springer.

K. Gallagher. 2022. *Hope in a Collapsing World: Youth, Theatre, and Listening as a Political Alternative*. Toronto: University of Toronto Press.

Gourou, P. 2003. *Người nông dân châu thổ Bắc Kỳ* [Les Paysans du Delta Tonkinois: Études de Géographie Humaine]. Hồ Chí Minh City: Youth Publishing House.

Jones, L., F. Halstead, K.J. Parsons, H. Le, L.T.H. Bui, C.R. Hackney, and D.R. Parsons. 2021. “2020-Vision: Understanding Climate (In) Action Through the Emotional Lens of Loss.” *Journal of the British Academy* 9 (s5): 29-68.

Lindroth, M., and H. Sinevaara-Niskanen, H. 2019. “Politics of Hope.” *Globalizations*. 16 (5): 644-8.

Lloyd Williams, A. 2015. “Exploring Theatre as a Pedagogy for ‘Developing Citizens’ in an English primary school.” In *Applied Theatre: Development*, edited by T. Prentki, 202-221. London: Methuen.

Nguyễn, H. 2006. “Lễ hội cầu nước- trấn thủy ở Hà Nội và phụ cận” [Water Control Festival in Hanoi and Surrounding Areas]. PhD diss., Institute of Cultural Studies, Hanoi, Vietnam.



Nguyễn, H. 2007. *Nghệ thuật múa rối* [The Art of Puppetry]. Hanoi: Theatrical Publisher.

Pack, S., M. Eblin, and C. Walther. 2012. “Water Puppetry in the Red River Delta and Beyond: Tourism and the Commodification of an Ancient Tradition.” *ASIANetwork Exchange* 19 (2): 23–31.

O'Brien, K., E. Selboe, and B.M. Hayward. 2018. “Exploring Youth Activism on Climate Change: Dutiful, Disruptive, and Dangerous Dissent.” *Ecology and Society* 23 (3): 42.

Ojala, M. 2017. “Hope and Anticipation in Education for a Sustainable Future.” *Futures* 94: 76–84.

Parsons, K., F. Halstead, and L. Jones. 2021. INtergenerational Stories of Erosion and Coastal community Understanding of REsilience 'INSECURE'. Paper presented at EGU General Assembly, online, April 2021, EGU21-9478. <https://doi.org/10.5194/egusphere-egu21-9478>.

Parsons, K., and J. Wolstenholme. 2021. Mapping hedgerow gaps and fostering positive environmental behaviours through a combination of citizen scientists and artificial intelligence. Paper presented at EGU General Assembly, online, April 2021, EGU21-9453. <https://doi.org/10.5194/egusphere-egu21-9453>.

Gray, D., S. Brown and J. Macanuso. 2010. *Gamestorming: A Playbook for Innovators, Rulebreakers, and Changemakers*. Sebastopol, California: O'Reilly Media, Inc.

Roe, M.H., N. Black, H. Le, and C. Button. 2022. “Sustainability, Landscape Context and Water Puppet Culture in the Red River Delta, Vietnam.” In *Water: Interconnectivity between Intangible Cultural Heritage and Science*, edited by B. Gyru. and R. Ryoo, 93-112. Korea: ICHCAP/i-WSSM. <https://www.unesco-ichcap.org/publications-archive/30168/>.

Rumsby, S. 2015. “Methods of Manipulation: Propaganda, Ethnicity and Representation in Vietnamese water puppetry.” *Asian Affairs* 46 (2): 304-308.

Scott-Bottoms, S. 2019. “The Rise and Fall of Modern Water: From Staging Abstraction to Performing Place.” *Theatre Journal* 71 (4): 415-435.

Verlie, B., and CCR 15. 2020. “From Action to Intra-Action? Agency, Identity and ‘Goals’ in a Relational Approach to Climate Change Education.” *Environmental Education Research* 26 (9-10): 1266-1280.

Vũ, Q. 2014. *Rối nước châu thổ Bắc Bộ, sự phục hồi từ Đổi mới đến nay* [Northern Delta Water Puppetry: The Recovery from *Doi Moi* to the Present]. Hanoi: Social Science Publisher.

Worldometers. 2019. “Viet Nam Population (Live).” Worldometers.  
<http://www.worldometers.info/world-population/vietnam-population/>.