

MAKING THE INVISIBLE VISIBLE: HOW FORUM THEATRE CAN REVEAL THE IMPACT OF SOCIAL MEDIA ALGORITHMS ON LOCAL AND GLOBAL JUSTICE ISSUES

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Abstract: What is the connection between the genocide of the Rohingya in Myanmar, the rapid spread of mis- and dis-information and the rise of mental health and attention difficulties? Whilst seemingly disparate, each of these issues have been exacerbated by the widespread use of engagement-based algorithms on social media platforms. Engagement-based algorithms are designed to captivate our attention to keep us engaging with the platform for longer, thereby raising advertising revenues for the companies. These algorithms pick up on content which is showing strong engagement and suggest it to users. Engagement means interaction with the content, such as ‘likes’, sharing the content, or commenting on the content. Engagement can also simply be the amount of time the user spends looking at content. As well as the adorable kitten videos, extreme content holds our attention, inducing algorithms to promote this material. There is a lack of awareness amongst the public about how these social media algorithms are amplifying alarming content, causing polarisation and driving inequality.

To highlight these issues, a theatre group working with Creativity and Change in Munster Technological University (MTU) explored the local and global impact of social media engagement-based algorithms. This took place through a mentorship with Brazilian theatre practitioner, Julian Boal. In this article, we explore algorithmic awareness as an important missing aspect of global citizenship education (GCE), before illustrating what we learned from exploring this topic through forum theatre. We conclude by drawing some lessons for GCE on using socially engaged theatre to explore complex, invisible topics. We also draw on the links between forum theatre and Freire’s pedagogy of the oppressed, including forum theatre as a form of praxis, conscientisation and collective action that makes invisible power structures visible.

Key words: Forum Theatre; Algorithmic Injustice; Socially Engaged Theatre; Participatory Arts Practice; Paulo Freire.

Introduction

Algorithms are increasingly important in shaping decisions that impact our lives, from what music or television shows we are recommended, to whether we get a mortgage, insurance, or a job (Birhane, 2021; Gran et al., 2021; O’Neil, 2016). Research suggests that many people are unaware of what an algorithm is, or that social media platforms like Facebook use algorithms to filter their feeds, deciding what we see and read on that platform (Eslami et al., 2015; Gran et al., 2021; Oremis et al., 2021; Smith, 2018). Scholars of critical algorithm studies suggest that this is a digital divide that needs to be addressed to enable people to meaningfully participate in democratic life (Lythreathis et al., 2022). In contexts such as Myanmar, this is likely to be even more important, as Facebook is often essentially the Internet (The United Nations’ Independent International Fact-Finding Mission on Myanmar [IIFMM], 2018). By this, we mean that, as Facebook offers participants free data, it is often the only platform used to access information. A lack of algorithmic awareness indicates a lack of awareness about engagement-based algorithms designed to keep us ‘engaging’ by capturing our attention. Engagement-based algorithms favour sensationalism, misinformation and extremism. Engagement-based approaches have been associated with an increase in youth mental health difficulties, attention deficit, the rapid spread of mis- and dis-information, and in worst instances, genocide (Amnesty International, 2022; Barger et al., 2016; Center for Humane Technology, n.d.; Golbeck, 2020; Jin and You, 2023; Naughton, 2022; IIFMM, 2018). At a widespread level, GCE has not yet critically engaged with software as a global justice issue, particularly how algorithms impact the global South. In this article, we demonstrate how forum theatre, an innovative form of theatre for development, is an effective tool to increase algorithmic awareness as a form of GCE. This approach supports an embodied form of conscientisation, that is, a process of developing a conscious awareness of algorithmic justice and how to bring about change. First, we introduce the problem of algorithmic justice as an important focus for GCE, and then introduce the process by which we developed a play based on this issue. Finally, we discuss lessons learned from using a socially

engaged art approach that might be used by others wishing to explore this issue within GCE.

Algorithmic justice

Algorithmic justice is a concept increasingly used to highlight growing concern about the impact of AI and ‘Big Data’ enabled algorithmic decision-making (Birhane, 2021). We draw on this concept to highlight the need to address the harm associated with social media platforms’ engagement-based algorithms. An engagement-based algorithm is designed to boost platform engagement (i.e., time and interaction), through prioritising content that will provoke a reaction. Unfortunately, high engagement-based content is often sensational, divisive and/or a form of misinformation, reportedly contributing to a worsening of youth mental health (Haugen, 2022; Naughton, 2022), racist and anti-immigrant actions (Michael, 2023), violence in counties in the global South, including Ethiopia, India and Myanmar (Haugen, 2022; McIntosh, 2021; Paul, 2021) and interference in democratic processes (Wong, 2019). The more engaged a user is, the more social media companies profit from advertising revenue (Naughton, 2022). Engagement is based on how much attention and interaction each piece of content receives, how often it is shared, liked, commented on and so on. In tandem, the algorithms capture what each person likes, and suggests other content that they may like. If a user is depressed, they are likely to be shown content about depression. For example, British teenager Molly Russell, died by suicide months after harmful content was pushed her way by Instagram and Pinterest. The Coroner stated that social media content had contributed ‘in more than a minimal way’ to Molly’s death (Walker, 2022). Social media whistle-blower Frances Haugen revealed that Facebook was aware that Instagram, for example, was harmful for teenage girls and led to an increase in body image issues (Haugen, 2022).

In Myanmar, the same algorithmic approach has incited genocide against the Rohingya minority (Amnesty International, 2022; IIFMM, 2018). The rise of hate speech against the Rohingya on Facebook wasn’t moderated effectively. To reduce hate speech that may have been unknowingly shared, Facebook and Burmese civil society developed a design feature that acted like a sticker to alert users of hate-speech. When users applied the sticker, the Facebook

algorithm recognised it as ‘engagement’, and as a result the machine-learning algorithms of Facebook actually increased the sharing of tagged hate speech rather than reducing it (Amnesty International, 2022).

Facebook whistle-blower Frances Haugen showed that the company spent 87 percent of its budget preventing misinformation on English features, whilst only 9 percent of users are reportedly English speakers (Paul, 2021). This means that there are less (if any) misinformation detection Facebook features and moderators in the global South, and especially in minority languages, leading to disproportionate harm (Amnesty International, 2022; McIntosh, 2021; Paul, 2021; IIFMM, 2018).

In Ireland, activist Mark Malone wrote an open letter which named social media algorithms as an underlying cause of the rise of anti-migrant racism (Michael, 2023). The Far Right Observatory (FRO) group brought these concerns before the Oireachtas (Irish Parliamentary) committee on Children, Equality, Disability, Integration and Youth, in February 2023. In her opening statement to the committee, FRO director, Niamh McDonald stated:

“Algorithms drive the content people see - amplifying toxic and manipulative content that fosters engagement via shares, likes, views. The scale and speed of viral content circulating has been instrumental to amplifying protests, and flashpoints, resulting in multiple violent incidents and escalation of vigilante mobs” (McDonald, 2023: 1).

What we see happening in Ireland is part of a larger pattern where racist groups exploit the infrastructure of online algorithms to disseminate hateful messages about migrants and refugees (Noble, 2018). Ireland is the home of many social media platforms, and whistleblower Frances Haugen pointed out how Ireland has a unique role to play in accountability (Molony, 2022). She also suggested that moderators for contexts like Myanmar have jobs based in Dublin. Whilst we have introduced what we mean by algorithmic injustice, we will now introduce the method of forum theatre which we used to explore this topic.

Method

Forum theatre

Forum theatre was initially developed in 1973 by Brazilian theatre director, Augusto Boal (Boal, 1985) as a form of participatory theatre used to engage with spectators, called spect-actors, in meaningful dialogue and action on social issues that impacted their lives. In what becomes a ‘rehearsal for life’ a team of actors present a social issue to the spect-actors. A protagonist is often depicted as trying to overcome a form of oppression and the everyday barriers they face whilst trying to bring about social change. The spect-actors are then able to enter the play, replacing the protagonist, to offer alternative solutions and strategies. The actors respond in character, which gives the spect-actors instant feedback about the potential effectiveness of each strategy that is performed (Ibid.). Through this process, pathways of change become clearer, and hope is affirmed. Forum theatre has been used all over the world to make systems of oppression visible from gender-based violence, to housing, and to what has been called ‘theatre of the techno-oppressed’ which makes visible the ways in which technology can obscure new types of labour exploitation such as the exploitation of Uber drivers or Amazon Turk workers (van Amstel and Serpa, n.d.). It is a particularly good method at making visible, the invisible, and making the abstract concrete.

Creativity and Change mentorship on forum theatre

Through an Irish Aid innovation funded mentorship with Brazilian theatre practitioner Julian Boal (son of Augusto) and facilitated by Creativity and Change, a group of artists, activists and academics prepared and performed forum theatre plays in Ireland that reflected local and global social issues. The mentorship began with a three-day in person face-to-face workshop with Julian in Cork in December 2022, where we devised plays related to forms of oppression that impacted our lives including gender-based violence, housing, care and in our case, algorithmic injustice. Based on the thematic areas of interest, we separated into small groups and continued to research and develop plays on these topics between December 2022 and an initial public performance in April/May 2023. Each month we sent videos of our work to Julian and then met with him online for feedback. The algorithm group began with six participants, which over time

became a core group of writers/actors including Sarah Robinson, Claudia Barton, Pat McMahon, and Chriszine Backhouse. We were greatly supported by the wider forum theatre mentorship group who improvised new scenes, provided feedback, and performed in the play, particularly actors Ivy Favier and Kevin McCaughey, and later Catherine Murray who performed in the final version of the play.

In March 2023, the algorithm group invited a group of software engineers from diverse backgrounds (Iran, Pakistan and Ireland) from Lero, the Irish Software Research Centre, members of the Comhairle na nÓg (n.d.), and members of Jigsaw's (n.d.) Youth Advisory Panel to give us feedback on our scenes. Jigsaw is Ireland's Centre for Youth Mental Health and Comhairle na nÓg are child and youth councils in the 31 Irish local authorities, which give children and young people the opportunity to be involved in the development of local services and policies. Some of the young people who attended pointed out that the youth voice was not adequately expressed in the play, while some of the software engineers thought the play lacked nuance regarding the infrastructure of algorithms. The feedback helped us to identify areas of improvement, as well as build connections with people directly impacted by the issues we were portraying.

Synopsis of the play

Finding ways to connect the local and global impacts of algorithms was a key task we aimed to achieve through our forum theatre play. We had to choose characters, locations, and dilemmas that would create meaningful opportunities for the spect-actors to engage with the complexity of the issue. After many iterations, we chose to centre the play on a mother who becomes alarmed by the negative impacts of social media on her teenage daughter. The mother makes discoveries that the same algorithms that have negatively impacted her daughter have implications on everything from a rise of misogyny in schools to genocide in Myanmar. The spect-actors are invited to go on this journey with the protagonist, putting together the pieces of the algorithmic puzzle and discovering routes to systemic change.

In a strong forum theatre play, the protagonist will try and fail to find allies in each intervention scene. As Julian Boal taught us, 'Forum theatre is not

about life as it is, it's about life as it is when you're trying to change life itself'. As the protagonist tries to make allies, the allies reflect the societal conflicts and contradictions which maintain the oppression. For example, a school dean who is concerned about the reputation of the school if they go to the media, or a software engineer who is afraid of losing their job if they perform a virtual walk out.

As we created our play, Julian encouraged us to develop a protagonist who is trying to change the structures of oppression. To allow for a realistic scenario which encompasses local and global areas for activism, and to emphasise the personal as political, the protagonist is a parent and an employee of a social media firm, with potential to effect changes in both areas of her life. The following is a synopsis of the scenes we developed for the forum theatre play:

Scene one: Suggested for you/Click on me

Adolescent Anna is scrolling on her phone and after a few 'likes' is suggested posts promoting eating disorders. The charismatic algorithmic suggestions are personified by actors who vie for Anna's attention.

Image One: 'Click on me' scene. Actors: Ivy Favier, Sarah Robinson, and Chriszine Backhouse (Photo: Helen O'Keeffe).



Scene two: School run

Anna's mother (our protagonist) is getting Anna ready for school. Anna is absorbed with the phone and rejecting suggestions for breakfast. Anna accidentally leaves her phone behind when running out of the door, giving her mother an opportunity to see the content Anna has been engaging with.

Scene three: Timeprime TV show

In a current affairs programme, a whistleblower and a representative from a non-governmental organisation (NGO) are interviewed on the global consequences of

social media algorithms, connecting the amplification of extreme content to genocide in Myanmar and declining mental health in adolescents in the UK and Ireland. Questions are invited from the audience with actors planted amongst the spect-actors, who raise questions about how restricting social media companies might affect jobs in Ireland and how moderating content could undermine freedom of speech. This is a 'dirt' scene which conveys information, but also allows for questions from the spect-actors. Real newspaper articles are projected as a backdrop.

Image Two: 'Timeprime TV Show' scene. Actors: Sarah Robinson, Ivy Favier, and Claudia Barton. (Photo: Helen O'Keeffe).



Scene four: Team building

Workers at the fictional social media company ‘Facebox’ are brought together for a team building exercise to boost morale after the ‘Timeprime’ broadcast. A content moderator, a software engineer, a product manager and our protagonist, who works in accounts, discuss the viability of changing the engagement-based algorithms at Facebox. Each suggestion proves to be unrealistic due to the importance of the attention economy in sustaining company profit.

Image Three: ‘Facebox team-building day’. Actors: Chriszine Backhouse, Sarah Robinson, Ivy Favier, and Claudia Barton. (Photo: Helen O’Keeffe).



Scene five: Parent Teacher Association (PTA) meeting

The agenda discussed is an upcoming sports event and a teacher's concern about the rise of misogyny at the school. The protagonist links the misogyny to social media's engagement-based algorithms and highlights the school's power to raise awareness. The issues she is confronted with are the dean's reluctance to have the school labelled as 'misogynistic' and other parents aligning the problem to the children having access to technology, which is counter-intuitive when they are an iPad school.

Image Four: Parent Teacher Association meeting – 'how not to be a misogynistic school'. Actors: Sarah Robinson, Claudia Barton, Catherine Murray, Chriszine Backhouse, Ivy Favier. Projections from news articles about the rise of misogyny in schools due to social media algorithms (Photo: Helen O'Keeffe).



Scene six: Mother and daughter talk

At home Anna is frantically looking for her phone. Her mother returns the phone and tries to have a heart to heart about the dangers Anna and her friends are being exposed to. Anna is half listening, then returns to being absorbed with her phone catching up with her online life.

Scene seven: Mother falls down a parenting rabbit hole

The play is bookended with the personified algorithms now taking advantage of the protagonist's insecurities about parenting and she falls into a negative chamber of posts about bad parenting.

Challenges with making the invisible impact of algorithms visible

Creating the play was not straightforward. In our March 2023 feedback session with spect-actors, we found that the spect-actors gravitated towards dealing with the problem the algorithms were amplifying e.g. worsening mental health or ethnic violence, rather than addressing the infrastructure of engagement-based algorithms itself. Similar to how we as theatre practitioners struggled with the topic initially, the spect-actors couldn't see the specific problem engagement-based algorithms posed and we had to restructure our play to make this more visible. We did this in two ways. Firstly, we devised a scene in the format of a primetime show which we called Timeprime, where the host interviewed characters based on real-life activists including Facebook whistleblower Francis Haugen (see for example the Minderoo Centre for Technology and Democracy, 2022) and an Amnesty international representative who claimed that Facebook's algorithms promoted genocide in Myanmar. We projected real newspaper clippings throughout the scene to further develop the audience's understanding of the impact of engagement-based social media algorithms. Secondly, to make the issue visible we also created a scene where the algorithms were embodied by actors (as evident in Image One) representing the way content on social media can quickly become extreme and polarised. Within the scenes where our protagonist was trying to change the algorithms, we clarified what she was asking for, with lines like 'we need to get to the root cause... We have to hold the social media companies accountable'.

As an ongoing mentor, Julian Boal also helped us to shape our play - refining the characters we created, bringing in more theatrical elements - as he said, 'we are making theatre for change, but it is theatre and must be engaging'. We embraced opportunities for humour while parodying a television show in our Timeprime scene, or in the pedantic constraints of a school meeting in our PTA meeting scene. Making the play entertaining was important to hold the spect-actors' attention, as well as creating an environment where an important dialogue could take place. As one spect-actor said, 'the actors were very engaging and talented and really demonstrated the different viewpoints which was important for the discussion after'.

Apart from the protagonist, the actors had to play multiple parts and used simple costume changes (wigs, spectacles, moustaches, hats, etc.) to distinguish their roles, which permitted an informality engendering confidence for the spect-actors to take part. Expressing traits stereotypical of posts suggested by algorithms in, for example, our final scene, 'five reasons where you are failing as a parent' etc... allowed actors to embody the loud and often crude means of garnering attention on social media, which became animated and comedic. We included some verbatim text for the characters in the television show, taken from research material, and used a combination of real people for the development of the back story for all the roles. For example, we were inspired by the experience of Molly Russell and her family who sought justice after her death. The believability of the characters for the audience and the actors was essential for the improvised intervention scenes.

As the aim of forum theatre is to co-create possible solutions to social problems with spect-actors, and not to didactically present solutions, we also wanted to provide different pathways that spect-actors could take to create change. Our target audience included software engineers, young people, and members of the general public. To reflect the diversity of ways that change could occur, we created scenes in different settings. We set a scene in a fictional social media company to explore how change can happen within tech companies, and we created a scene in a parent teacher association meeting to explore how change can happen in local communities.

Impact of the play

Ultimately knowing whether a forum theatre play is effective or not is down to what happens during and after the performance. To ensure that the play is participatory, we continuously blur the line between actor and spect-actor. To help us do this, we have what is called a 'Joker'. The Joker acts as the spect-actor's guide through the performance, discussion, and interaction. At the beginning of our play, the Joker, played by Kevin McCaughey as seen in Image Five, got the spect-actors down onto the stage to play a simple game. He developed rapport with the spect-actors and encouraged them to see themselves as part of the action. The actors then performed the play. When it was over, the Joker began a discussion with the audience about the play - what they thought, what challenges they saw, and what changes could be made.

Image Five: Joker (Kevin McCaughey) talking to the the spect-actors about the interventions they'd like to make in the play. Photo:Helen O'Keeffe.



Then, the play began again and the Joker invited the spect-actors to come on stage to replace the protagonist at key moments to try to arrive at a different outcome. One impactful moment was when a spect-actor replaced our protagonist in a scene set in a fictional social media company. The spect-actor initiated a call to unionise so that the workers would have more power to ask for change within the company. After the intervention, this led to a powerful discussion about individual versus collective action with many more interventions taking place to fine-tune how this might happen.

In the scene set in a parent teacher association meeting, we saw spect-actors finding ways to unite a diverse group of parents and teachers to work together to solve the challenge of algorithms. Over and over, the most effective interventions from spect-actors involved bringing people from different perspectives together; finding common ground through empathy, listening, ensuring all voices are heard, and bridge-building. One spect-actor said, ‘we can’t improve large societal issues without cooperation and input from more than the individual’. Through the forum theatre, these foundational age-old skills of change-making were applied to the new problem of algorithmic justice, reminding us all that we already have the tools to make a change.

In response to the question, ‘What stood out to you about the performance?’, some of the responses were: ‘How it linked local and global harm caused’; ‘The scope of the challenge and the variety of ways in which it needs to be addressed’; and ‘social media is giving the notion of freedom of speech but is showing extreme opinions’. In terms of making the invisible visible, one spect-actor said they were struck by the ‘emotional resonance of scenarios that were previously unfamiliar to me’.

Eisner (2002) said that the arts teach that a problem can have more than one solution. This value of using a creative process to address an issue as complex as algorithms is huge. Through forum theatre we were able to creatively make an invisible issue visible to an audience, while supporting them to explore a variety of responses. One spect-actor said that what stood out to them about the performance were the ‘different opinions from spect-actors and usefulness of gathering different options’.

Lessons for global citizenship education

There are several lessons from the theatre process that are specifically applicable to the GCE/development education (DE) field. Firstly, many elements of Paulo Freire's critical pedagogy are reflected in forum theatre, e.g., the model of 'praxis' which is a process that incorporates both practice and action in a continuous cycle of reflection and application (Freire, 1970). In forum theatre, the spect-actors see the issue, discuss the problem, and then immediately have the opportunity for action by intervening in the scene to arrive at a different outcome. This rehearsal for change allows the spect-actors to experience how different actions could effect change, building momentum and possibility that can then more easily flow into real-world applications. This kind of immediate action could be used by global citizenship educators to move from reflection and theory to action.

Through this process of praxis, generative themes were created by the audience. Generative themes are the social issues, constructs and topics that are important to the participants (Ibid.). The themes were arrived at through dialogue that took place through the succession of interventions posed by the spect-actors on the stage and the debate that took place about the effectiveness of each intervention. For our performance the themes that emerged from the spect-actors included empathy, hearing all voices, collective action versus individual action, and the power of making invisible power structures visible. Another lesson is the way that forum theatre embeds an expectation of action. Spect-actors aren't merely observing, but they are constantly reminded that they are part of the action - both on stage and in real life. In GCE we also must remind people that they are actors in this world and that they can use their agency for change. One spect-actor said that this methodology was 'a good way to talk about the issue instead of a lecture about it'. Humour also helped facilitate this. A lecture is a passive experience, whereas in GCE/DE we want to create opportunities for people to actively become involved.

A third lesson from forum theatre is the importance of participatory processes. Several of Freire's key concepts are evident in the participatory model of forum theatre. For example, dialogue takes place between spect-actors both verbally and then through the interventions the spect-actors enact. After each intervention the Joker asks the spect-actors - 'was that intervention successful?'

The spect-actors decide themselves what has worked in the play or not. This approach demonstrates the opposite of a ‘banking’ learning approach as the spect-actors bring their own experience, knowledge and perspective to the discussion and interventions (Ibid.). The outcome is not pre-determined.

Lastly, forum theatre exploration also supports ‘conscientisation’, which Freire describes as the process by which people develop critical awareness of the social inequalities and power dynamics that affect them (Ibid.). Through the forum theatre play, we aimed to support the spect-actors in making conscious what is often implicit. In our initial feedback performance, our spect-actors did not get a tangible sense of how algorithms were affecting the characters in our play. To bring awareness into the spect-actors’ consciousness, we developed new scenes, including one that showed the embodiment of algorithms. In the subsequent performance with these changes made, a spect-actor said that ‘the acting of (algorithmic) notifications’ physical manifestations was very powerful’. The algorithms had become visible, tangible, and thus something that the spect-actors could engage with meaningfully as we worked together to imagine and enact change. Before the algorithms felt tangible to the spect-actors, we couldn’t successfully find ways to address the issue. As an application to GCE, it is sometimes necessary for educators to find creative ways to develop critical awareness of social inequalities and power dynamics, which can seem remote or abstract, by making them palpable. We did this in our play through embodiment, but this could also happen through other creative means including visual art, poetry, and discussion.

Finally, we learned the importance of connecting with people directly affected by the issue we were addressing and building community. When forum theatre was first developed in Brazil, plays were performed and devised within a community to reflect the power structures they were facing. In this mentorship, with participants hailing from broad practices, the formula was extended to connecting with other activists already at work on the issue. Throughout his mentorship, Julian Boal encouraged mentees to reach out to activists and organisations working in the same field to learn from their experiences and provide a support network with strength in numbers. The algorithm justice performers researched by analysing international news stories, joining a course

with the Center for Humane Technology (n.d.) and interviewing software engineers and software design strategists. The research gathered and connections made became a reserve pool of information useful during the improvisational intervention scenes and for creating a play embedded in real life. Their personal research gave actors agency within the forum theatre play and leverage for continued activism in the area. This approach could also be applied more broadly to GCE as it's important in the field to collaborate, build community, and learn from each other.

Conclusion

In summary, the forum theatre play about algorithmic justice was an effective way to raise awareness and community engagement about a complex topic that has both local and global impacts but is rarely considered in GCE. Making the invisible visible through forum theatre allowed the spect-actors to engage with the complexity of this topic in a new, more critically conscious way. The methodology has lessons for the GCE sector, particularly regarding the application of Freire's pedagogy of the oppressed, leading to participants who are ready to take an active role in change-making.

We suggest that there are several methodological and curricula implications for GCE. Firstly, algorithmic justice is an important topic for further exploration within GCE that could be mainstreamed into existing curricula. Whilst we did not explore the climate change links, Greenpeace (2014) indicates that if the Cloud was a country, it would be the sixth highest global emitter. Our everyday technology practices contribute yet are underexplored in GCE. Secondly, whilst we have only performed this play once as a forum theatre play, it is important to connect with a variety of audiences to engage civil society more fully on this issue. Lastly, our process also illustrated the importance of engaging with sectors and disciplines that may not traditionally be considered GCE. Our focus on an element of software has led us to consider software more broadly and its ethical implications for GCE. We hope to explore software as a global justice issue with software engineers and developers from Lero (the Science Foundation Ireland Research Centre for Software) where the second author, Sarah Robinson, works. This is a new community of engagement for both Creativity and Change

and Lero, and we hope to create dialogue between the public and the software sector on issues of global importance.

As we've seen, there is tremendous potential in using forum theatre to not only make the issue of algorithmic justice visible, but to draw on the creativity, insights, and passion of the spect-actors to develop solutions that are based on the collective learning of the group to form an innovative response to a complex issue. As we found, many of the solutions explored by our spect-actors involve skills we already have within the GCE field, such as drawing on empathy, and building meaningful engagement to develop collective action. Forum theatre was an innovative way to rehearse these existing strategies to combat this new issue of algorithmic injustice with both local and global implications.

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