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Exploring roles in digital co-creation: the case of Twittertheater

Christian Holst ^a, Yulia Belinskaya ^b and Olga Kolokytha ^c

^aInstitute for Management & Organization, Leuphana University Lüneburg, Lüneburg, Germany;

^bDepartment of Media and Digital Technologies, University of Applied Sciences St. Pölten, Sankt Pölten, Austria; ^cDepartment for Arts and Cultural Studies, University for Continuing Education Krems, Krems an der Donau, Austria

ABSTRACT

The COVID-19 pandemic significantly impacted the performing arts, leading to innovative digital practices. This paper explores seven virtual theatre events using Twitter (X) conducted by Burgtheater Vienna during the pandemic. Utilising co-creation and enactment theories, the study combines network and thematic analyses to examine the roles and interactions within these events. The findings reveal five distinct roles: facilitators, multipliers, narrative instigators, core engagers, and sporadic engagers. These roles, rooted in traditional theatre practices, contributed to the co-creative process, each in specific ways. The study concludes that digital co-creation can mirror physical theatre dynamics, providing structure in an otherwise open digital space. This research offers practical implications for cultural managers and highlights the potential for long-term digital transformations in the performing arts.

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Introduction

The COVID-19 pandemic has affected the cultural sector worldwide, with the performing arts being particularly hit (Dinardi et al., 2023; Vincent, 2023; Vriesema et al., 2024). The pandemic caused problems such as loss of revenue and skilled workers for organisations (Chatzichristodoulou et al., 2022; Florida & Seman, 2020; Khlystova et al., 2022), casualisation of working conditions (Comunian & England, 2020), and mental health issues for cultural professionals (Spiro et al., 2023). However, the lockdowns have also catalysed digitalisation (Amankwah-Amoah et al., 2021; Hantrais et al., 2021), aesthetic experiments (Liodaki & Velegrakis, 2022; Szostak & Sułkowski, 2024) and the online theatre experience (Leguina et al., 2025).

Contributing to this debate, we examine a series of seven virtual theatre events conducted by the Burgtheater Vienna during the COVID-19 lockdowns, utilising Twitter (now X), which allows low-threshold participation for large numbers of people, making it an interesting tool for co-creation. Our investigation draws on theories of co-creation (Payne et al., 2008; Prahalad & Ramaswamy, 2004) and enactment (Jennings &

CONTACT Christian Holst  christian.holst@leuphana.de  Leuphana University Lüneburg, Germany

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Greenwood, 2003; Weick, 2003). We aim to understand which roles emerge in the co-creative process and how these roles contribute to the enactment of the event. We employ a mixed-methods approach, combining network analysis of the tweets posted during these events with thematic analysis of the tweet content. This approach enables us to capture both the co-creative process's structural setup and its contextual nuances.

Our paper contributes to the growing body of scholarship on co-creation in digital environments in two ways. First, it identifies the roles that emerge in virtual co-creative contexts and discusses their characteristics. Second, it highlights how these roles contribute to the enactment of co-creative events. Understanding the roles and dynamics involved in such events can inform the design and management of effective collaborative projects, particularly in artistic and cultural contexts where the experiential quality of co-creation holds significant value.

Theoretical background

Our theoretical framework draws upon two complementary perspectives necessary for the paper: co-creation theory and enactment theory. Co-creation theory provides insights into the roles emerging from a collaborative invention and experience of an unconventional theatre event that is realised solely through digital means. In contrast, enactment theory offers us the lens to examine how individuals and organisations interpret and respond to digital stimuli triggered for and by the event.

Perceptions of roles in digital collaborative practices

Collaborative practices like co-creation (Galvagno & Dalli, 2014; Payne et al., 2008; Prahalad & Ramaswamy, 2004; Ranjan & Read, 2016), co-production (Ramírez, 1999; Vargo & Lusch, 2004; Voorberg et al., 2015) and prosumption (Ritzer, 2014; Shah et al., 2019; Toffler, 1980) have gained significant attention in scientific debates about managing value creation. This trend is also evident in the artistic and cultural domains, where these practices offer novel opportunities for audience engagement and immersive experiences, leading to a redefinition of conventional boundaries between creators and audiences (Bonazzi et al., 2024; Nakajima, 2012; Stage et al., 2020; Walmsley, 2013, 2019, Chapter 8). This terminology is sometimes used interchangeably, though subtle differences exist. While prosumption refers to value creation driven by collaboration of consumers, largely independent of firms, co-creation and co-production describe value creation arising from cooperation between organisations and consumers (Alhashem et al., 2021; Brandsen & Honingh, 2018). Co-production focuses on practical tasks delegated to consumers during the production or delivery process. In contrast, co-creation highlights consumer input at a strategic level, shaping the development and innovation of offerings (Brandsen & Honingh, 2018), i.e. the specific task of invention and creation. Co-creation can foster individual participation and commitment within social networks, creating experiential value (value-in-use) (Ranjan & Read, 2016) beyond the added value of service delivery or execution. In the sense of actively participating in the creative act, co-creation stands out as a specific form of audience participation – a broad umbrella term encompassing various concepts and levels of audience involvement across different stages of artistic production and dissemination (Simon, 2010).

The surge in interest towards collaborative practices is propelled by digitality, with digital tools fostering and facilitating platform – and network-building (Meijer & Boon, 2021; Ritzer & Degli Esposti, 2020). Media convergence blurs the line between production and consumption by providing broadly available devices that offer tools for both. Many research papers, therefore, discuss the importance of easily accessible digital technologies that allow people to co-create and engage in interactive encounters and decision-making (Füller et al., 2009; Meijer & Boon, 2021). However, digital tools can also constrain co-creation (Lember, 2018; Lember et al., 2019). Focusing specifically on performing arts, Brilli et al. (2023) highlight constraints such as limited digital skills and accessibility, organisational challenges, tensions between professional and amateur roles, and difficulties in maintaining liveness in digital formats.

The duality of producer and consumer still widely frames the conceptualisation of roles in co-creation processes (Humphreys & Grayson, 2008; Waseem et al., 2018), although theories on collaborative practices suggest that this duality is dissolving (Cova et al., 2011; Saarijärvi et al., 2013). Lusch and Vargo (2014, p. 102), therefore, advocate for discarding this duality and argue for viewing relationships in co-creative networks as equal actor-to-actor connections, where resources are exchanged for mutual benefit. Building on this, Ekman et al. (2016) show that actors form a dynamic network, switching roles between providers and beneficiaries, both of which can be active or passive. Lipp et al. (2023) further find that distinct role types emerge within such networks. These perspectives emphasise the fluid nature of roles and their flexible assignment within the network. We will explore this fluidity of roles in greater detail later in our paper, but first, it is essential to understand the dynamics and patterns of actor-network formation and role attribution within these networks.

Enactment perspective as a theoretical lens

To explore the emergence of roles in collaborative processes, we build on the enactment perspective as described by Weick (1979, 2003) and others (Jennings & Greenwood, 2003; Mahling, 1993; Sandberg & Tsoukas, 2015). Enactment, as used by Weick, is embedded in the broader concepts of organising (Weick, 1979) and sensemaking (Weick, 1995; Weick et al., 2005). Weick understands organising as an evolutionary process, which is assumed to be deliberately and prospectively designed. In contrast, the sensemaking perspective highlights how events and decisions are rationalised and justified after they occur. In both views, enactment is essential because it describes the first reaction to change in the organisational environment (Weick, 2003, p. 186). The reaction is based on “extracted cues” (Weick, 1995, p. 49), i.e. stimuli that are perceived as essential or causal to the change. These cues are picked out from the stream of events through “noticing and bracketing” (Weick et al., 2005, p. 414), serving as a starting point for interpreting the change and formulating a response. On this basis, further actions take place, resulting in a complex influence between the organisation and its environment. By responding to the situations and behaviours they observe in their environment, organisations actively enact and shape their environments, which then again provides new cues for action. While Weick understands enactment as part of a larger sensemaking process (Weick, 2003), others see it as a standalone theoretical approach (Hatch, 2018, pp. 40–41; Jennings & Greenwood, 2003), which is the perspective adopted in this paper.

While enactment theory and co-creation stem from different conceptual backgrounds (i.e. a social cognitive perspective on organisational behaviour vs. a marketing perspective on value creation processes), they share some basic commonalities. Both focus less on the nature of factual processes but rather on people's interpretation and evaluation of these processes that are influenced by subjective expectations, social constellations, and patterns of thinking and behaviour. Both perspectives focus on the interaction between an organisation, as traditionally defined, and its environment. They highlight the dynamic, unpredictable, and ambiguous aspects of management processes, which are continuously shaped by the complexity of social interaction. Beyond the commonalities, the two approaches also cross-fertilise each other, with the enactment lens allowing for a more precise understanding of the micro-processes based on which co-creation takes shape. It is with this intention that the two approaches are combined for this paper.

Research context and questions

Our study is based on the analysis of an experiment called Twittertheater, conducted by the internationally renowned Burgtheater in Vienna, Austria. The Burgtheater is one of the oldest theatres in Europe and the largest in the German-speaking world. The experiment started during the first COVID-19 lockdown in the spring of 2020 and continued until spring 2022. On seven occasions, the Burgtheater invited its community to use Twitter to collaboratively create narratives of an evening at the theatre – an experience that, due to lockdown, could only take place in imagination. Each event, lasting between approximately 90 and 180 min, featured a unique hashtag to guide participation. The theatre provided some prompts but otherwise left the creation of the “storyline” to the community. Thus, the “plot” was driven by playfully reacting to cues and ideas from the community. The events were organised with slight variations but followed the same basic concept. For detailed accounts and context, see Aschenbrenner and Huber (2023) and Holst et al. (2021). Building on data from all seven events, our study explores two research questions:

1. Which roles emerge in the co-creative process?
2. In which ways do these roles contribute to the enactment of the co-creative event?

Methodology

Data collection

We used the tweets of the events as data sources. Each event was conducted with a specific hashtag. Four of the events were organised as a continuous series over four weeks. All tweets related to the hashtag were identified using a mining service. Tweets that used the hashtag but were unrelated to the events under investigation were deleted. This included tweets such as programme changes at other theatres (#vorstellungsänderung) or tweets contributing to debates about unfeasible demands in politics (#Wunschvorstellung – wishful thinking). Table 1 provides an overview of the individual events, the respective numbers of tweets, participants and interactions.

Table 1. Overview of Twittertheater events.

Hashtag	Date	No. of tweets	No. of Participants	No. of Interactions
vorstellungsänderung	12 May 2020	3,023	475	14,632
wunschvorstellung (1)	29 November 2020	1,093	128	4,198
wunschvorstellung (2)	6 December 2020	1,022	96	4,017
wunschvorstellung (3)	13 December 2020	1,020	74	3,213
wunschvorstellung (4)	20 December 2020	1,180	124	4,467
gehörtvorgestellt	30 January 2022	1,986	211	5,635
hopevorstellung	5 April 2022	561	49	2,347
Total		9,885	1,157	38,509

Additionally, one of the authors participated in two events. While the observations were not systematically analysed for this paper, they served as background information.

Data analysis

We used a mixed methods approach to obtain both a structural and a content-based understanding of the data. We conducted a network analysis (Donato et al., 2017; Luke, 2015) to gain an overview of the data and to understand broader patterns of interaction within the virtual theatre events. Subsequently, with the thematic analysis of the most interactive tweets, we focused on individual interactions to understand the perspectives (roles) from which different types of content were contributed to the enactment of the event. In the next stage, we built clusters based on several indicators calculated from the networks and compared these automated results with the insights from the thematic analysis. The combination of quantitative and qualitative analysis helped ensure reliability. It was further supported by validating findings with event organisers, comprehensive documentation of the analysis processes in Orange, Gephi and MAXQDA, and continuous cross-verification of results among the authors.

Network analysis

To visualise the network of interactions within each event, we used Orange software to map out the connections and Gephi to calculate the network indicators. Participating Twitter accounts were represented as nodes, and their interactions – such as favourites, mentions, or comments – were depicted as edges. This approach allowed us to capture the dynamics of engagement within the event. Each event's network was analysed separately to understand its unique interaction patterns and key influencers. The placement of nodes within the network is visualised using a Fruchterman and Reingold (1991) force-directed layout algorithm. The algorithm simulates a physical system where nodes repel each other like charged particles while edges exert a pulling force, drawing connected nodes closer together, resulting in a specific spatial arrangement. This accentuates the formation of clusters and central nodes, providing a more precise visualisation of their interactions and relationships.

We used several measures of centrality. First, the degree was calculated for each node as the total number of connections, with nodes having many connections (high overall degree) typically closer to the centre, defined here as the area with the highest density of connections, rather than geometric middle. Second, eccentricity measured the maximum distance from a node to all others (the longest geodesic distance). Nodes with lower eccentricity values are closer to the centre of the network. Third, betweenness

centrality indicates that if a node is positioned on a significant number of shortest paths, it is crucial for maintaining communication and connectivity; if this bottleneck node is removed, the network might become fragmented. Thus, a node with both high betweenness centrality and low eccentricity might be exceptionally influential.

Finally, we used authority and hub scores from the HITS (Hyperlink-Induced Topic Search) algorithm. A hub node has many outgoing connections, serving as a central connector, while an authority node is frequently connected to by other nodes. Thus, in-degree and out-degree are straightforward counts of incoming and outgoing connections, respectively, while authority and hub scores also consider nodes' importance. We used in-degree (interactions received) and out-degree (interactions initiated) metrics to identify the most influential nodes. The node's size on the graph is proportional to the authority of the account.

Furthermore, clusters were indicated. As clustering refers to grouping nodes based on their similarities or the strength of their connections, we assume that multiple connections between the actors indicate stronger ties and high involvement in co-creation. The clustering was done using the K-means algorithm, which assigns each node to the nearest cluster centroid, recalculates the centroids, and repeats this process until the nodes are well-separated into distinct clusters.

Thematic analysis

We conducted a thematic analysis (Braun & Clarke, 2012; Naeem et al., 2023) to understand how individual interactions were organised in terms of content and perspectives of contributors (roles). Tweets for thematic analysis were selected based on the assumption that the number of interactions (favourites, retweets, replies, and quotes) they receive indicate their relevance for the collaborative enactment of the creative event, as it prompts people to respond and interact. Against that background, we analysed the 100 most-interacting tweets for each event. This approach meant that the poorly connected accounts, as shown in the network analysis, were not initially included in the thematic analysis. To understand their low connectivity, we conducted a spot analysis of these accounts for content-related clues. We examined two aspects of the tweets: (1) the perspective from which they were formulated and (2) what content-related function they were intended to fulfil in the conversation. We applied thematic analysis inductively: after familiarisation with the data, initial coding was carried out. The codes assigned were bundled into themes and consolidated in an iterative process (Braun & Clarke, 2012; Naeem et al., 2023). We used the code-relation-browser in MAXQDA to identify relations between roles and the kind of content they typically contributed.

Findings

Network analysis

From the network analysis, we found a similar structure for each event: Each network features a prominent central node depicted in yellow (Burgtheater) that is highly connected, suggesting it plays a key "hosting" role. It also has the highest in-degree and out-degree, meaning it receives and sends a significant number of connections.

All networks display a cluster of nodes around the central hub (facilitator), indicating a group of nodes closely related to the central hub. Each network has a sparse distribution of nodes at the periphery, indicating fewer connections and less integration into the network's core structure. The edges are much more densely situated around the central node and its immediate neighbours, while connections between peripheral nodes are mostly absent, with some exceptions. *Vorstellungsänderung* network visualisation (Figure 1) shows a clear separation between two distinct groups of nodes. The dense cluster in the upper right indicates a highly interconnected community, where nodes have numerous connections (edges), suggesting strong interactions or discussions among these accounts. In the visualisation of *wunschvorstellung* (Figure 2), we observe a more complex and larger network, likely because the event was a multi-part series. Surrounding the central hub are densely connected subclusters, indicating multiple active communities or interest groups. The upper region features smaller, isolated clusters and individual nodes, representing peripheral participants with specific, limited interactions. The overall structure suggests a diverse and interactive community with varying levels of engagement. The network graph of *gehörtvorgestellt* (Figure 3) is less densely populated compared to *wunschvorstellung*, indicating fewer active participants or interactions. The nodes are primarily concentrated around the central hub, with several smaller clusters and individual nodes dispersed around the periphery. The *hopevorstellung* visualisation (Figure 4) depicts a smaller and tighter network. This close-knit structure suggests a focused and cohesive community, also indicating other hubs in the network. The event was organised by Hope Festival; however, Burgtheater, as the most interconnected node, still appears as the centre of the network.

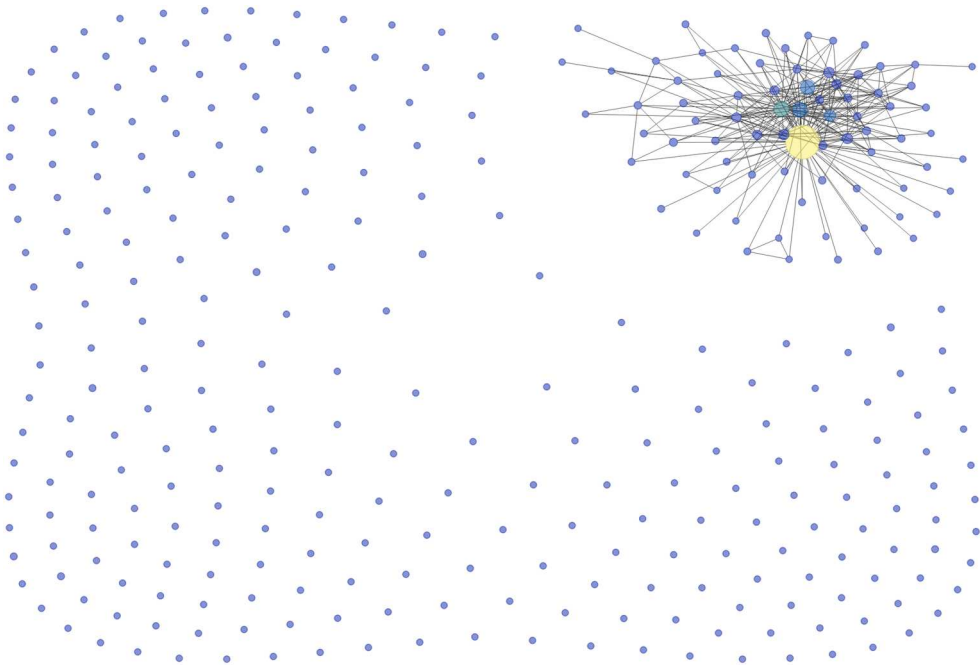


Figure 1. #vorstellungsänderung network.

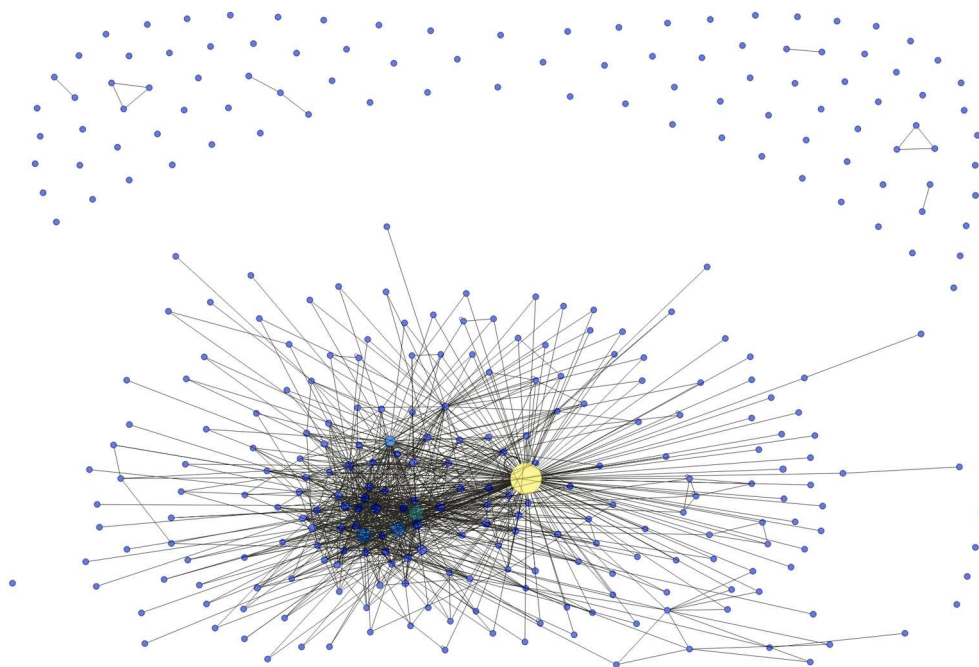


Figure 2. #wunschvorstellung network.

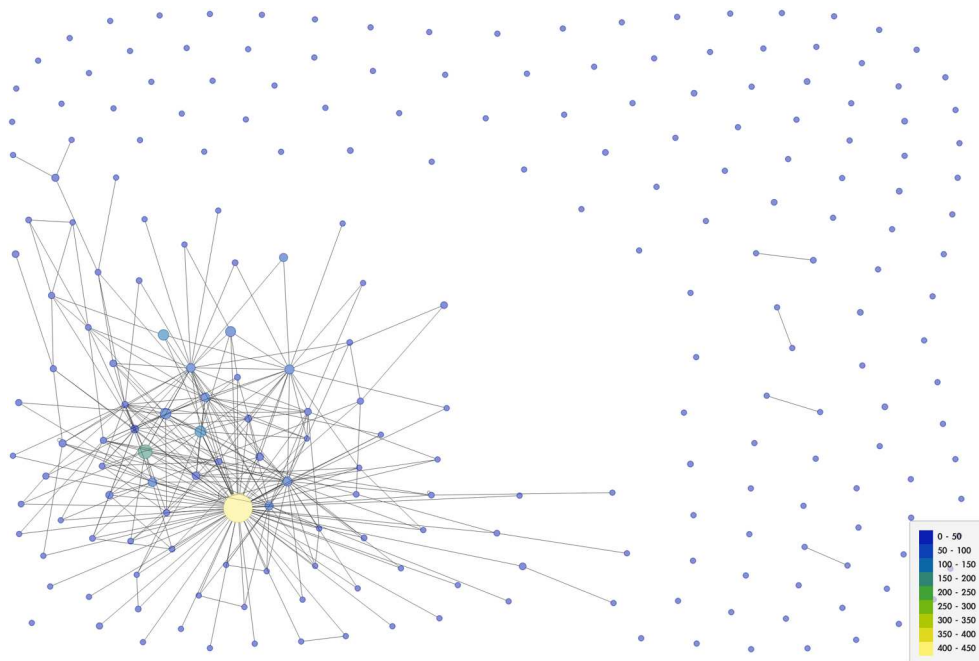


Figure 3. #gehörtvorgestellt network.

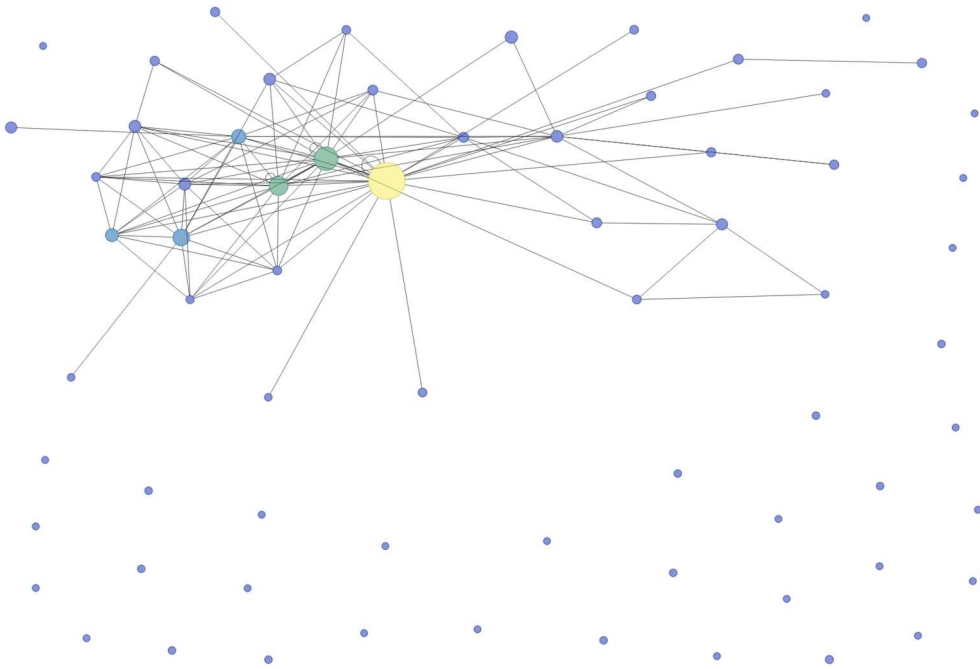


Figure 4. #hopevorstellung network.

However, as all graphs show, the network visualisations resemble a stage where traditional structures are maintained. Central nodes, including the facilitator and key actors, occupy pivotal roles and draw attention to a focal point, while peripheral nodes represent the audience that does not go on stage. This passive audience was quite large in the first event, but by the last event, it had almost disappeared. This structure highlights the hierarchical and organised nature of interactions within the network, with clear distinctions between key influencers and general participants.

To gain a more nuanced understanding of the roles, we built five clusters based on the K-means algorithm. The slope of each regression line indicates the strength and direction of the relationship between in-degree and out-degree within the corresponding cluster. A positive slope means a positive correlation (based on the r-value, which represents the correlation coefficient): as the in-degree increases, the out-degree also tends to increase within that cluster. A negative slope means that the out-degree tends to decrease as the in-degree increases.

The overall network structure shows distinct clusters with varying degrees of connectivity and centrality, providing an initial impression of the behavioural characteristics of different accounts. It is important to note that the roles of accounts can change throughout the event and between different events. The nodes with the bigger authority (indicated by node size) play a critical role in the network's communication efficiency, while peripheral nodes have limited impact on the overall structure (Figures 5–8).

Within Cluster 3 (C3, green), there are highly interactive nodes that both receive and initiate many connections. In almost all cases, Burgtheater acts as the facilitator, as its combined degree is drastically larger than any other node. The only exception is "Hopevorstellung", which was staged as a co-production between Burgtheater, Berliner

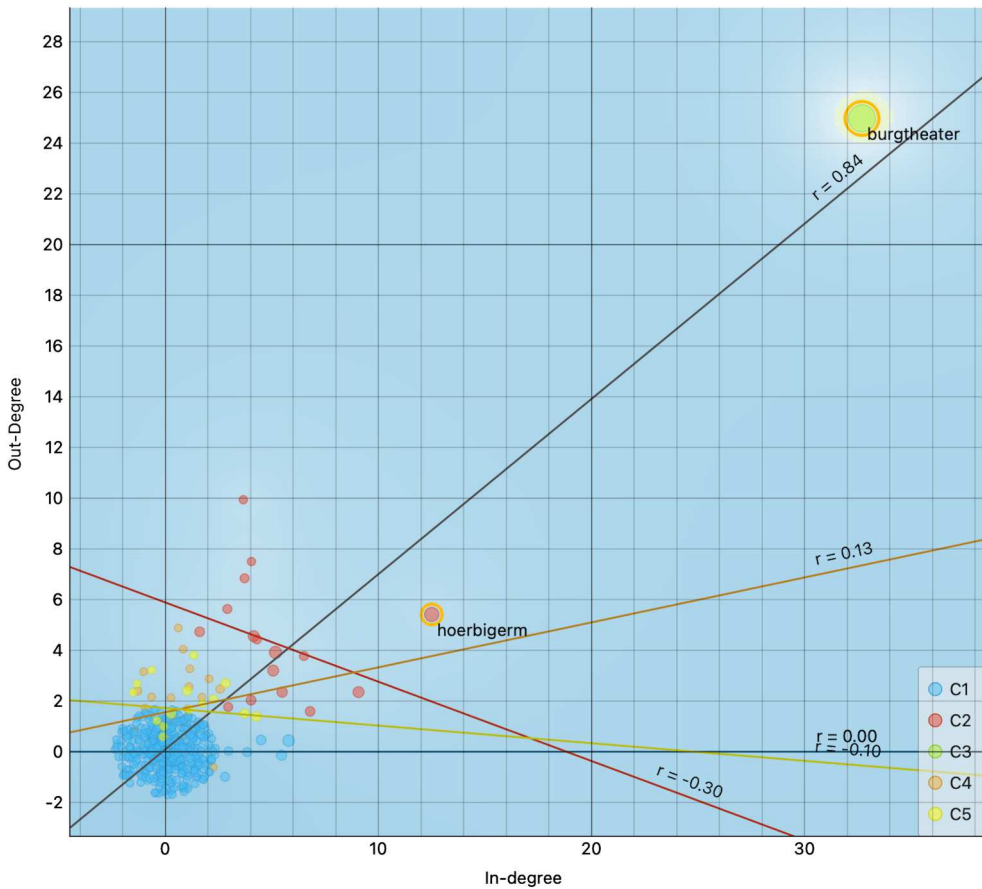


Figure 5. #vorstellungsänderung clusters.

Ensemble (@blnensemble), Teatr Ludowy in Krakow (@Hopeteatr), and PlayOn (@EuPlayon is a cooperation project between nine theatres with experience in the use of digital technologies). On the graph, the Berliner Ensemble appears as the co-facilitator within the green cluster. PlayOn is grouped with Hopeteatr, which appears to be the node with the biggest authority in the network.

Cluster 5 (yellow) is characterised by a high out-degree, indicating these accounts are key initiators of interactions or multipliers. In this cluster, nodes are both receivers and initiators of connections to some extent. However, relatively high out-degree and moderate in-degree values suggest that these accounts actively engage and send information to many other nodes but receive comparatively less interaction. They play a crucial role in disseminating information and driving the discussion within the network, which aligns with the role of multipliers or influencers. For example, the national radio station Österreich 1 (@oe1) exemplifies this behaviour.

Cluster 2 (red) combines accounts that receive significant interaction from other nodes as they usually have more followers and engage with others, though not as actively as the multipliers. These nodes can be considered as narrative instigators. Some of them, however, could also be recognised as engagers if they do not have a vast followership. Distinguishing

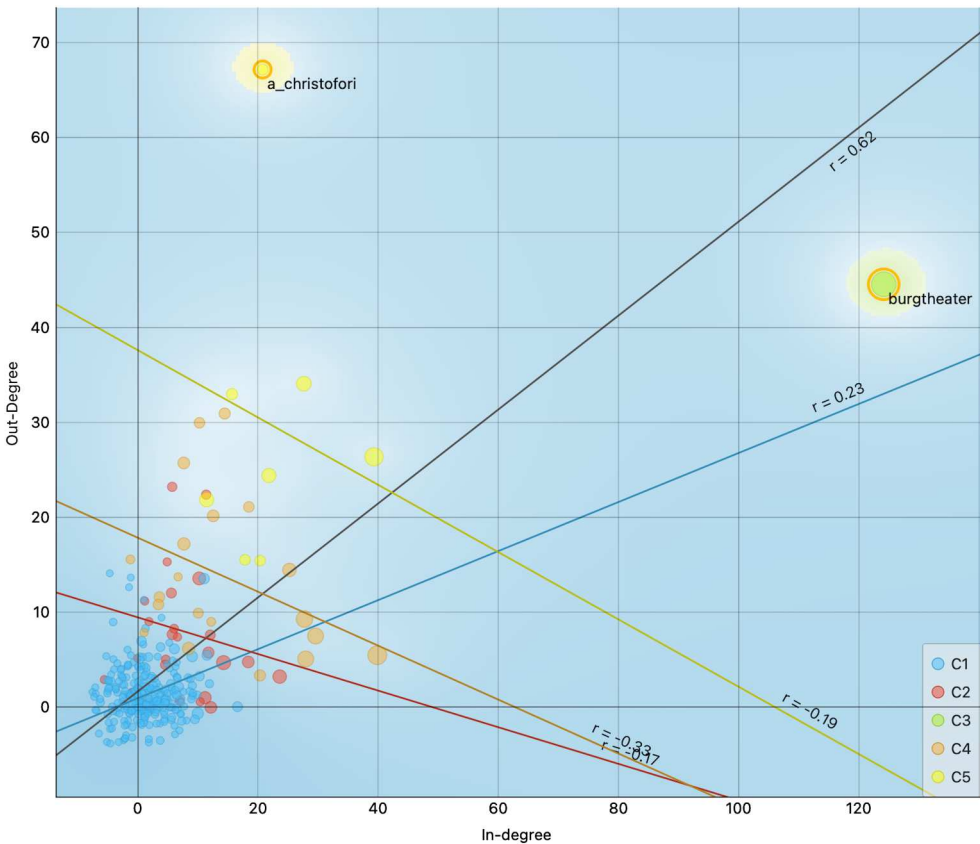


Figure 6. #wunschvorstellung clusters.

between narrative instigators and multipliers in general is quite challenging. Depending on the importance within the network or cluster, a multiplier's account could be recognised as a narrative instigator due to their narrative commenting or engagement levels, or vice versa. Therefore, thematic analysis should serve as a distinguishing tool here.

Additionally, a varied public presence surrounds the staged event, suggesting different levels of audience participation and interaction. Cluster 4 (C4, brown) contains core engagers, who more actively interact with the other nodes. In this cluster, receiving many connections does not translate to initiating many.

Finally, Cluster 1 (C1, blue) includes sporadic engagers with few incoming and outgoing connections. They are not well integrated into the network and appear loosely surrounding the interactive network centres in Figures 1–4. They are mostly inactive spectators who sporadically engage in the conversation, but others rarely mention them. However, some nodes in C1 might be part of smaller or more specialised subnetworks or serve as bottlenecks for the cluster (connecting to other clusters).

Thematic analysis of tweets

Our thematic analysis of the most interactive tweets identified four key roles among participating accounts: core engagers, facilitators, idea providers, and multipliers. However,

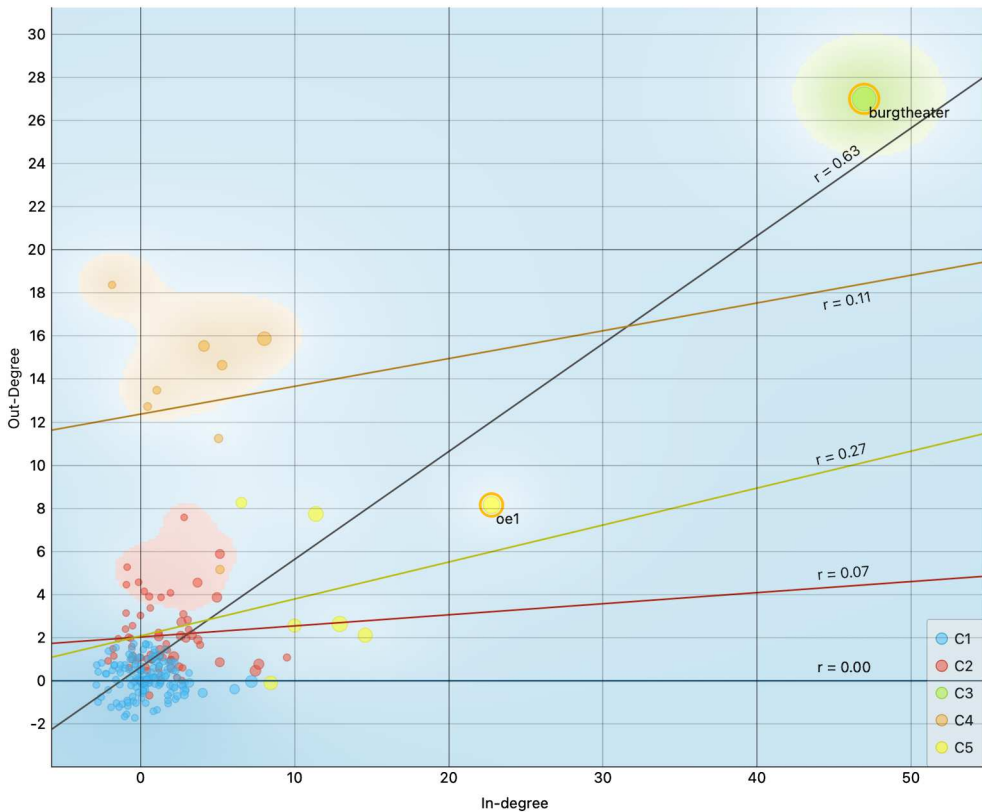


Figure 7. #gehörtvorgestellt clusters.

the initial sampling of tweets by interaction rate excluded less interactive accounts on the network's periphery from the qualitative analysis. Further examination of these peripheral accounts revealed a fifth role: sporadic engagers. Table 2 presents the classification of cues, the codes, the roles, as well as examples of the tweets.

These roles were defined thematically as follows:

Facilitators. The inviting theatre primarily acted as a facilitator, structuring and organising the evening. Most tweets from this role were technical in nature. Other accounts, like a stage manager, occasionally shared this role. As shown in the network analysis, facilitators accounted for the majority of the most interactive tweets across all evenings.

Multipliers engaged indirectly, often reflecting on events from a critic's perspective or amplifying the facilitator's announcements rather than sharing unfiltered impressions. Their key contribution was spreading the event's highlights, thus amplifying its reach and impact.

Narrative instigators. These accounts acted as characters taking part in the virtual stage action or preparing to do so behind the scenes. They provided plot cues, creative ideas, humorous backstage insights, or cultural allusions, driving the play's collective development.

Core engagers. Active participants were distinguished by their immediate, experience-oriented perspectives, focusing on events on the virtual stage and the social

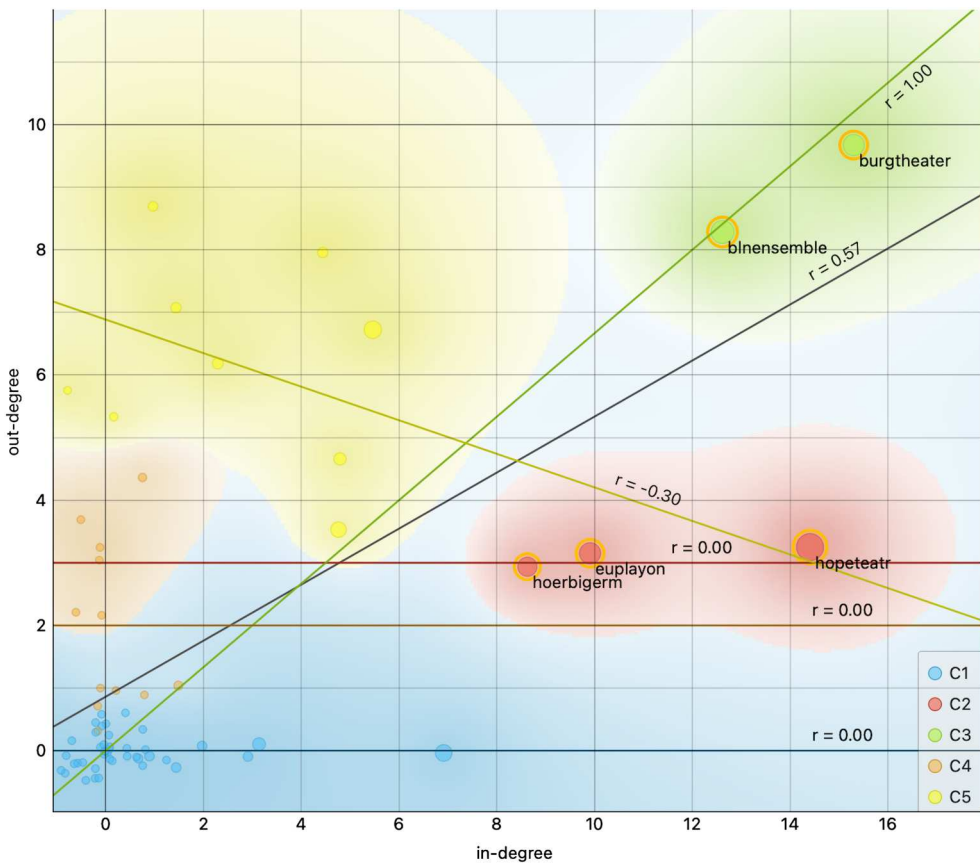


Figure 8. #hopevorstellung clusters.

aspects of theatre attendance. Emotional responses – gratitude, confusion, or anticipation – were common, often expressed through GIFs, emoticons, and comments on audience behaviour. Their tweets often conveyed enthusiasm, gratitude, and the challenges of understanding the plot.

Sporadic engagers. Peripheral accounts, though similar in behaviour to core engagers, differed structurally. These accounts often had a smaller reach, were not part of the facilitator’s network prior to the event, participated only occasionally, or used the hashtag in unrelated contexts.

While theoretically possible, pure observers – individuals following the hashtag without participating – could not be analysed because the study focused on tweet-based interactions.

To better understand how the different roles contribute to the enactment of the virtual theatre event, we coded the tweets based on their content. This revealed four key topics that were central to the interactions within the network:

The *description of events* centred around three aspects: Many tweets depicted the virtual stage action. Others captured the atmosphere and occurrences in the foyer and

Table 2. Roles and typical behaviour.

Classification of cues	Codes	Typically used by	Example tweets (translated from German)
Description of events	Virtual stage action	Narrative Instigators	(...) We're leaving the boy behind. And take him with us. The serum is just a quantum leap away #HOPEVorstellung
	Frame events and ambience	Core engagers	Can you feel and smell it too? A gush of fresh air just came into the auditorium from the Volksgarten via the ventilation system. https://t.co/lemNfNIZi #Vorstellungsänderung
	Audience behaviour and theatre rituals - Behind the scenes - Front of house	Narrative instigators Core engagers	Toitotoi everybody #HOPEVorstellung Ah, good evening, the gentlemen also have to get in their seats. So typical, those sitting in the middle are always the last to arrive 😊 #wunschvorstellung
Meta commentary	Pop-cultural, political or other allusions	Narrative Instigators/ Core engagers	#GehörtVorgestellt „Hello, I am a HAL 9000 computer. I was designed and programmed at the HAL factory on 12 January 1992. My instructor was Mr Langley and he also taught me a song. If you would like to hear it, will I sing it for you?“ (Narrative instigator)
	Being ironic	Facilitator/Core engager	Who should we not reserve a box at the Burgtheater for on the first Sunday of Advent? 😞😞 #wunschvorstellung https://t.co/TraYuivQQj (Facilitator)
	Appraising	Multipliers	#LandausSchnellkritik, “What do you imagine, a #wunschvorstellung“ From the @burgtheater in #Vienna, out into the world ❤️ One beginning, four parts, one end. Sad because it's over? No, happy because it was, and just as it was, simply beautiful 🙏
	Emotions like gratitude, confusion or expectation	Core engagers	I don't understand anything. I'll probably have to read the review in @derStandard tomorrow 🙄😞 #vorstellungsänderung
Fostering interaction	Announcing	Facilitator	Come on, come on! And above all: Tweet along! This production is in your hands alone! It starts at 5.30pm. #vorstellungsänderung https://t.co/Tf3xPi6Te5burgtheater
	Engaging participants by instructing, calling to action and asking questions	Facilitator	Attention. No break today! If you have to go to the toilet, please make sure that your mobile phone camera is off and your microphone is turned off. You are also welcome to use the theatre bar. Maybe bring something for your neighbour? #gehörtvorgestellt
	Keeping the flow of imagination	Narrative instigator	Who brings the sheep home?
	Reflecting	Core engager/ Multiplier	@burgtheater @ASvGayl #vorstellungsänderung I hope the @burgtheater, including the team, tells us about the #makingof #vorstellungsänderung at some point, including the background. Because that's how #theatreimnetz works (among other things) Well played. :) #klong (Multiplier)
Semiotics (beside text, which was used in all tweets)	Emoticons	Core engagers	Brief summary of what has happened so far. 👉👈🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘🐘 #vorstellungsänderung
	Links to other content or websites	Facilitator	#wunschvorstellung World premiere Rose Garter ADVENT Commissioned work for the Burgtheater Director: Via Zusamm 29 November 6, 13, 20 December each from 6pm 90 min, no intermission “Admission” from

(Continued)

Table 2. Continued.

Classification of cues	Codes	Typically used by	Example tweets (translated from German)
	Video content	Multipliers	5.30pm https://t.co/TraYuivQ0j https://t.co/Ses2WKgOXH https://t.co/7oXm5e7tZ0 @burgtheater @TeatrLudowy We are coming! #HOPEVorstellung https://t.co/htdzdYOUYjTeatroTestori
	Images or GIFs	Facilitator	The employee in charge walks through the building: Evacuation routes clear? Are the actors there? Everyone happy? Mrs. stage manager?! #wunschvorstellung (...) https://t.co/clEiK5yzcT

auditorium, while a third category focused on audience behaviour along with typical situations and rituals both front of house and backstage.

Meta-commentary. Another category of tweets provided meta-commentary, incorporating pop-cultural, political, and other references to add depth to the event. Irony was frequently employed to playfully reflect on the action. Appraisal was also common, along with expressions of gratitude, confusion, or anticipation, reflecting participants' emotional reactions to the event.

Fostering interaction. A significant part of the tweets aimed to initiate or sustain conversation and facilitate the event. Announcements kept participants informed, while instructions, calls to action, and questions encouraged involvement. Beyond these more technical modes of fostering engagement, maintaining imagination flow was crucial to keeping the experience vivid and engaging. Encouraging reflection further deepened participants' connection to the event.

Semiotics (beyond text). The events leveraged semiotic elements beyond text to enhance interaction. Emoticons conveyed emotions, links provided context, and videos illustrated and emphasised key points. Images and GIFs added visual interest, enabling dynamic, nonverbal communication that enriched the virtual theatre experience.

The cross-tabulation of the roles and types of content showed that each role used preferred communicative techniques and modes of interaction. Table 2 illustrates these roles, typical behaviours, and example tweets. However, the boundaries between cues are not always clear-cut. Multiple codes could apply to a single tweet if it addressed various aspects of the virtual theatre evening (e.g. an ironic description of backstage occurrences). Additionally, the attribution of roles was not fixed, allowing participants to shift perspectives at any time. Interestingly, such shifts occurred less frequently than the open setting allowed. Participants largely adopted roles that they would take in a traditional theatre context. They mostly adhered to them, except for situational changes of perspective. In general, the framework conditions established by the theatre remained intact despite the possibility of being reimagined or overthrown within the creative space of Twitter.

The results of the network and thematic analyses were compared, and it revealed that clusters at the matrix's extremes – high or low values on both axes – align with roles described in the thematic analysis: Facilitators combined high authority with a high hub score, while sporadic engagers lacked both. As described in the network analysis

section, trends were observed for other roles, but no definitive link between structural position and role could be established. This pattern was consistent across all events.

Combining both analyses provided a comprehensive understanding of the event's structure and content. Network analysis mapped the overall structure, and thematic analysis identified roles and their contribution to the event. This approach enabled us to do a more nuanced analysis, which, for example, uncovered the role of sporadic engagers that was overlooked by thematic analysis alone and highlighted cues and role-switching dynamics invisible in the network analysis. Together, these methods offered a holistic view of the events' structural and thematic dimensions that are important for the aims of this paper.

Discussion

Our research extends existing knowledge about roles and their function for enacting co-creation processes and offers several theoretical and practical implications.

Theoretical implications

First, we offer a depiction of roles in co-creation that goes beyond the producer-consumer duality. We identified five distinct roles or clusters in the co-creative process: facilitators, multipliers, narrative instigators, core engagers, and sporadic engagers, each playing a specific part. This expands existing literature that traditionally focused on the duality of producer and consumer (Humphreys & Grayson, 2008; Waseem et al., 2018). Lusch and Vargo (2014, pp. 101–118), Ekman et al. (2016), and Lipp et al. (2023) moved beyond this, showing that participants in a co-creative setting are dynamically adopting various roles and functions depending on the situation. Our findings align with this view, recognising all participants as actors. This is also due to our methodological approach, as we only looked at accounts that used the relevant hashtags and became active in some way. Given the nature of the event, it is unlikely that a significant number of people merely observed in passive enjoyment, as is usually the case in traditional theatre. Following the *value-in-use* paradigm (Ranjan & Read, 2016), we therefore conclude that the event's entertainment value stems from participant interaction and playful engagement with stimuli from the network. This generates a distinctive, game-like experience that cannot be replicated in the non-digital world. By embodying this specific quality, the co-creative format can represent a digital theatre experience in its own right, beyond merely being a substitute or teaser for in-person participation (Leguina et al., 2025).

Secondly, our analysis identifies distinct functions within the co-creative network associated with specific roles. In this context, the network is not just a collaboration of generic actors with a narrowly defined set of behavioural functions that each actor reconfigures depending on the situation. Instead, we identify a specific constellation of roles, characterised by their function in the network and their contribution to event development. Regarding enactment theory (Weick, 2003), these roles shape the network's reality as an environment for other actors through social interactions. This understanding does not contradict the perspectives of Lusch and Vargo (2014) or Ekman et al. (2016). Rather, it expands their view by not attributing every action to a generic actor but to

specific roles. These roles are not generic and adaptable depending on the situation. They remain consistent and specific in themselves. However, actors are not tied to a specific role and can switch between roles, each time exhibiting the consistent behaviour associated with the role. Our results suggest that the decision to contribute value to or benefit from the network or to take on an active or passive role does not depend on the situation. Instead, this enactment is strongly characterised by expectations of traditional social roles. This distinction of different roles helps to clarify the specific dynamics and contributions of different participants, offering a more comprehensive understanding of how co-creation processes unfold in digital environments. This division of roles could be traced and consistently observed at the content level, but they are not as distinct regarding structural characteristics. We observed that the facilitator role had high values in hub and authority scores across all events. Sporadic engagers differ structurally, but not content-wise, from core engagers. The other roles could not be reliably assigned to the network data clusters. This can be explained by the fact that individual accounts could switch between roles and structural characteristics and, therefore, only clearly correlate with content-defined roles in extreme cases (such as with the facilitators).

Thirdly, our study confirms the importance of preconceptions for enactment processes in a structurally open setting. It sheds light on how this complex constellation of roles, enabling sophisticated social interplay, emerges in an ad hoc digital network. The content analysis revealed that these roles correspond with traditional social roles in the theatre context and their typical behaviour. This aligns with the enactment perspective (Jennings & Greenwood, 2003; Weick, 1979, 2003), which posits that individuals and organisations interpret and respond to their environment based on preconceptions. These preconceptions navigate which cues are being extracted from the environment and initiate the continuous process of interpreting and acting as a mode of co-creation. Initial cues by the theatre instigated responses from different participants, influencing subsequent interventions and the overall event structure. This illustrates the dynamic influence loop between organisations and their environment, as per Weick's (2003) theoretical explanation. Structurally, conventions in physical theatre provide a framework for understanding the formation of co-creative theatre events, which mirror the spatial organisation of their physical counterparts. More specifically, as seen in Figures 1–4, focal points like a virtual stage emerge, where most activities occur, and attention is concentrated. At the same time, peripheral spaces mirror a foyer with scattered participants who do not directly influence the main action on stage, but who discuss and reflect on it.

The event setup suggested this alignment of enactment with traditional theatre practices, behaviours, and structures. However, it is not a given that this approach would be followed so consistently. The creativity/open imaginative space of Twitter offered the opportunity to go beyond or at least challenge real-world behavioural expectations, roles and stage action. Interestingly, this happened relatively little, despite the fluidity of role identification in the digital space and the lack of social or other consequences for breaking role expectations. The familiarity of theatre conventions is most likely the reason why participants did not switch so much between roles. On the contrary, they seemed to need these conventions as a grid to navigate the otherwise loosely structured setting and cues, enabling them to perform the

enactment and establish some degree of structure. These cues have the advantage that all participants can relate to them without further explaining the mechanics or introducing a complex set of rules.

Practical implications

Our research has several practical implications for cultural managers in the performing arts. Firstly, the prominent role of the facilitator suggests that organisers of such events should set frameworks and conditions that engage participants and encourage participation. This can be achieved through structuring interactions that directly address participants or feed their contributions back to the community. Secondly, in line with literature highlighting the low-threshold possibilities of digital tools for co-creation (Füller et al., 2009; Meijer & Boon, 2021), our paper demonstrates that a simple technical setup can allow for a large imaginative space and enable relatively broad participation, albeit with varying intensity. Thirdly, understanding that participants assume roles based on their real-world experiences and knowing which roles contribute to which content formats, provides insights into how the event can be structured, stimulated with cues that build on familiar real-world experiences, supporting both the conceptual design and engaging response to the dynamics of the co-creative event. However, our example shows that knowledge of theatrical cultural codes is crucial for participation, as their absence can create an access barrier that has not been explicitly discussed yet (Brilli et al., 2023). Our results suggest that lowering technical barriers alone may not be sufficient; introducing equity focused measures such as reducing social and content-related barriers would also play a crucial role in increasing participation in co-creative formats.

Limitations and future research

Our research examines event formats developed during the exceptional COVID-19 lockdowns. After the pandemic, theatres resumed their regular operation. However, formats developed during the pandemic, such as Twittertheater, showcase how digital theatre events can be designed and expand theatres' traditional range of offerings. The extent to which experiments like the one examined here have (or have not) changed theatre programming and practices beyond the pandemic can be the topic of further research. This should, for example, explore post-COVID challenges, such as audience expectations towards digital formats and how these can be integrated into and aligned with traditional theatre programming. Our paper does not aim to generalise but to identify practices and see how these can advance the theoretical underpinnings of theories of co-creation and enactment. Future research could extend this study's scope to include more co-creative events and varying forms of digital engagement in different platforms and formats to offer a more comprehensive understanding of how collaborative practices can affect the work of arts managers and the management of performing arts. We focused on the events as they unfolded in the tweets during the Twitter evenings but not on the participants' motivations to engage in them. Future research could, therefore, investigate how co-creation can be encouraged and stimulated and how participants perceive the unique experiential quality of such Twitter events. Our research also highlights that audiences

must be familiar with traditional theatre conventions to participate in these formats. Future research in this direction could offer insights into how to mitigate this barrier to accessing digital performing arts offerings.

Conclusions

Our study of the Burgtheater's Twittertheater events explored how co-creation can be enacted in digital artistic formats. Building on a case study from the COVID-19 lockdown, we contribute to co-creation theory by expanding upon the producer-consumer duality. We found a diverse set of roles, each playing a distinct and consistent part in enacting co-creative experiences. While prior research often conceptualised participants as generic actors capable of assuming various functions, our findings suggest more defined roles, characterised by consistent behaviours and expectations, that collectively shape the co-creative event. Our study also sheds light on the enactment processes underlying digital co-creation. Drawing upon enactment theory, we demonstrate how participants relied on familiar conventions and frameworks from real-world theatre experiences to navigate the digital co-creative space. These conventions provided structure in a non-structured setting and served as a framework for extracting cues from the stream of tweets, facilitating the event's continuation. This reliance on established roles and conventions mirrored physical theatres' spatial organisation and social dynamics. From a practical viewpoint, our findings emphasise the facilitator's pivotal role and offer recommendations for designing co-creative experiences.

This research contributes to understanding digital co-creation in the performing arts sector. By elucidating the roles and specific role contributions in the Burgtheater's Twittertheater experiment we provide insights for designing and managing co-creative projects, and indicate directions for new, digital forms of cultural expression emerging from experiments.

AI statement

The authors, who are non-native English speakers, have utilised DeepL 25.1 for translation and ChatGPT 4o and Grammarly 1.103 for editing as well as for correcting grammatical, syntactical, and spelling errors. All AI suggestions were thoroughly reviewed by the authors and adjusted whenever necessary, to ensure meaning was accurate and as per the authors' intentions.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Christian Holst  <http://orcid.org/0000-0001-6609-4909>

Yulia Belinskaya  <http://orcid.org/0000-0002-9666-392X>

Olga Kolokytha  <http://orcid.org/0000-0001-7817-165X>

References

- Alhashem, M., Moraes, C., & Szmigin, I. T. (2021). Use and social value in peer-to-peer prosumption communities. *European Journal of Marketing*, 55(1), 193–218. <https://doi.org/10.1108/EJM-03-2019-0235>
- Amankwah-Amoah, J., Khan, Z., Wood, G., & Knight, G. (2021). COVID-19 and digitalization: The great acceleration. *Journal of Business Research*, 136, 602–611. <https://doi.org/10.1016/j.jbusres.2021.08.011>
- Aschenbrenner, A., & Huber, S. (2023). *Was macht ein Pizzabote auf dem Zauberberg? Über digitale Kulturproduktion am Wiener Burgtheater*.
- Bonazzi, M., Cancellieri, G., & Casarin, F. (2024). Omnivorous cultural consumption and the co-creation of cultural products: Interactive versus participatory art. *Journal of Consumer Culture*, 24(1), 24–44. <https://doi.org/10.1177/14695405231181510>
- Branden, T., & Honingh, M. (2018). Definitions of co-production and co-creation. In T. Branden, B. Verschuere & T. Steen (Eds.), *Co-production and Co-creation: Engaging Citizens in Public Services* (1st ed., p. 8). Routledge. <https://doi.org/10.4324/9781315204956>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *Handbook of Research Methods in Psychology* (Vol. 2, pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Brilli, S., Gemini, L., & Giuliani, F. (2023). Theatre without theatres: Investigating access barriers to mediated theatre and digital liveness during the COVID-19 pandemic. *Poetics*, 97, 101750. <https://doi.org/10.1016/j.poetic.2022.101750>
- Chatzichristodoulou, M., Brown, K., Hunt, N., Kuling, P., & Sant, T. (2022). COVID-19: Theatre goes digital – provocations. *International Journal of Performance Arts and Digital Media*, 18(1), 1–6. <https://doi.org/10.1080/14794713.2022.2040095>
- Comunian, R., & England, L. (2020). Creative and cultural work without filters: COVID-19 and exposed precarity in the creative economy. *Cultural Trends*, 29(2), 112–128. <https://doi.org/10.1080/09548963.2020.1770577>
- Cova, B., Dalli, D., & Zwick, D. (2011). Critical perspectives on consumers' role as 'producers': Broadening the debate on value co-creation in marketing processes. *Marketing Theory*, 11(3), 231–241. <https://doi.org/10.1177/1470593111408171>
- Dinardi, C., Wortman, A., & Muñoz Hernández, M. (2023). "It's been a roller coaster": Insights from performing artists on the COVID-19 pandemic and cultural policy. *Cultural Trends*, 33(5), 525–541. <https://doi.org/10.1080/09548963.2023.2227865>
- Donato, H. C., Farina, M. C., Donaire, D., & Santos, I. C. D. (2017). Value co-creation and social network analysis on a network engagement platform. *Revista de Administração Mackenzie*, 18(5), 63–91. <https://doi.org/10.1590/1678-69712017/administracao.v18n5p63-91>
- Ekman, P., Raggio, R. D., & Thompson, S. M. (2016). Service network value co-creation: Defining the roles of the generic actor. *Industrial Marketing Management*, 56, 51–62. <https://doi.org/10.1016/j.indmarman.2016.03.002>
- Florida, R., & Seman, M. (2020). *Lost Art: Measuring COVID-19's Devastating Impact on America's Creative Economy* (p. 32). Brookings.
- Fruchterman, T. M. J., & Reingold, E. M. (1991). Graph drawing by force-directed placement. *Software. Practice and Experience*, 21(11), 1129–1164. <https://doi.org/10.1002/spe.4380211102>
- Füller, J., Mühlbacher, H., Matzler, K., & Jawecki, G. (2009). Consumer empowerment through internet-based co-creation. *Journal of Management Information Systems*, 26(3), 71–102. <https://doi.org/10.2753/MIS0742-1222260303>
- Galvagno, M., & Dalli, D. (2014). Theory of value co-creation: A systematic literature review. *Managing Service Quality*, 24(6), 643–683. <https://doi.org/10.1108/MSQ-09-2013-0187>
- Hantrais, L., Allin, P., Kritikos, M., Sogomonjan, M., Anand, P. B., Livingstone, S., Williams, M., & Innes, M. (2021). COVID-19 and the digital revolution. *Contemporary Social Science*, 16(2), 256–270. <https://doi.org/10.1080/21582041.2020.1833234>
- Hatch, M. J. (2018). *Organization Theory. Modern, Symbolic, and Postmodern Perspectives*. Oxford University Press.

- Holst, C., Aschenbrenner, A., & Huber, S. (2021). Vorstellungsänderung. Co-Creation in digitalen Theaterformaten – Eine Fallstudie. *Journal of Cultural Management and Cultural Policy*, 7(1), 117–136.
- Humphreys, A., & Grayson, K. (2008). The intersecting roles of consumer and producer: A critical perspective on Co-production, Co-creation and prosumption. *Sociology Compass*, 2(3), 963–980. <https://doi.org/10.1111/j.1751-9020.2008.00112.x>
- Jennings, P. D., & Greenwood, R. (2003). Constructing the iron cage: Institutional theory and enactment. In R. Westwood & S. Clegg (Eds.), *Debating Organization: Point-Counterpoint in Organization Studies* (pp. 195–207). Blackwell Publishing.
- Khlystova, O., Kalyuzhnova, Y., & Belitski, M. (2022). The impact of the COVID-19 pandemic on the creative industries: A literature review and future research agenda. *Journal of Business Research*, 139, 1192–1210. <https://doi.org/10.1016/j.jbusres.2021.09.062>
- Leguina, A., Manninen, K., & Misek, R. (2025). Beyond the “substitution effect”: the impact of digital experience quality on future cultural participation. *Cultural Trends*, 34(1), 105–124. <https://doi.org/10.1080/09548963.2023.2295883>
- Lember, V. (2018). The increasing role of digital technologies in co-production and co-creation. In T. Brandsen, T. Steen, & B. Verschuere (Eds.), *Co-production and Co-creation* (pp. 115–127). Routledge.
- Lember, V., Brandsen, T., & Tönurist, P. (2019). The potential impacts of digital technologies on co-production and co-creation. *Public Management Review*, 21(11), 1665–1686. <https://doi.org/10.1080/14719037.2019.1619807>
- Liodaki, D., & Velegrakis, G. (2022). Theatre minus physical coexistence – A glimpse into theatrical experimentations in Greece during the pandemic. *International Journal of Performance Arts and Digital Media*, 18(1), 128–144. <https://doi.org/10.1080/14794713.2022.2040290>
- Lipp, B., Baudrin, M., Cuevas-Garcia, C., Pepponi, F., Rozwadowska, M., & Tsui, S. (2023). Co-creating end-user roles. Understanding the new variety of user involvement in public sector innovation. *Science and Public Policy*, 50(1), 146–159. <https://doi.org/10.1093/scipol/scac050>
- Luke, D. A. (2015). *A User's Guide to Network Analysis* in R. Springer. <https://doi.org/10.1007/978-3-319-23883-8>
- Lusch, R. F., & Vargo, S. L. (2014). *Service-dominant Logic: Premises, Perspectives, Possibilities*. Cambridge University Press.
- Mahling, D. E. (1993). Enactment Theory as a Paradigm for Enabling Flexible Workflows. *COCS '93: Proceedings of the Conference on Organizational Computing Systems*, 202–209. <https://doi.org/10.1145/168555.168578>
- Meijer, A., & Boon, W. (2021). Digital platforms for the co-creation of public value. *Policy & Politics*, 49(2), 231–248. <https://doi.org/10.1332/030557321X16115951032181>
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*, 22, 16094069231205789. <https://doi.org/10.1177/16094069231205789>
- Nakajima, S. (2012). Prosumption in Art. *American Behavioral Scientist*, 56(4), 550–569. <https://doi.org/10.1177/0002764211429358>
- Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1), 83–96. <https://doi.org/10.1007/s11747-007-0070-0>
- Prahalad, C. K., & Ramaswamy, V. (2004). *The Future of Competition. Co-creating Unique Value with Customers*. Harvard Business School Press.
- Ramírez, R. (1999). Value co-production: Intellectual origins and implications for practice and research. *Strategic Management Journal*, 20(1), 49–65. [https://doi.org/10.1002/\(SICI\)1097-0266\(199901\)20:1<49::AID-SMJ20>3.0.CO;2-2](https://doi.org/10.1002/(SICI)1097-0266(199901)20:1<49::AID-SMJ20>3.0.CO;2-2)
- Ranjan, K. R., & Read, S. (2016). Value co-creation: Concept and measurement. *Journal of the Academy of Marketing Science*, 44(3), 290–315. <https://doi.org/10.1007/s11747-014-0397-2>
- Ritzer, G. (2014). Prosumption: Evolution, revolution, or eternal return of the same? *Journal of Consumer Culture*, 14(1), 3–24. <https://doi.org/10.1177/1469540513509641>
- Ritzer, G., & Degli Esposti, P. (2020). The increasing centrality of prosumption in the digital capitalist economy. *Osterreichische Zeitschrift Fur Soziologie*, 45(3), 351–369. <https://doi.org/10.1007/s11614-020-00422-z>

- Saarijärvi, H., Kannan, P. K., & Kuusela, H. (2013). Value co-creation: Theoretical approaches and practical implications. *European Business Review*, 25(1), 6–19. <https://doi.org/10.1108/09555341311287718>
- Sandberg, J., & Tsoukas, H. (2015). Making sense of the sensemaking perspective: Its constituents, limitations, and opportunities for further development: Making sense of sensemaking perspective. *Journal of Organizational Behavior*, 36(S1), S6–S32. <https://doi.org/10.1002/job.1937>
- Shah, S. H. H., Lei, S., Ali, M., Doronin, D., & Hussain, S. T. (2019). Prosumption: Bibliometric analysis using HistCite and VOSviewer. *Kybernetes*, 49(3), 1020–1045. <https://doi.org/10.1108/K-12-2018-0696>
- Simon, N. (2010). *The Participatory Museum*. Museum 2.0. <https://participatorymuseum.org/>
- Spiro, N., Shaughnessy, C., Waddell, G., Perkins, R., Campbell, A., & Williamon, A. (2023). Modelling arts professionals' wellbeing and career intentions within the context of COVID-19. *PLoS One*, 18(10), e0292722. <https://doi.org/10.1371/journal.pone.0292722>
- Stage, C., Eriksson, B., & Reestorff, C. M. (2020). Understanding cultural participation through participation – inventiveness, multivalence and epistemic modernisation. *Cultural Trends*, 29(1), 19–34. <https://doi.org/10.1080/09548963.2019.1692183>
- Szostak, M., & Sułkowski, Ł. (2024). Creativity management within the aesthetical situation regarding the In-real or digital form of participation in arts: Art receivers' perspective. *Creativity Studies*, 17(1), 41–58. <https://doi.org/10.3846/cs.2024.16418>
- Toffler, A. (1980). *The Third Wave*. William Morrow and Company.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New dominant logic for marketing. *Journal of Marketing*, 68(1), 1–17. <https://doi.org/10.1509/jmkg.68.1.1.24036>
- Vincent, C. (2023). The impacts of digital initiatives on musicians during COVID-19: Examining the Melbourne Digital Concert Hall. *Cultural Trends*, 32(3), 247–263. <https://doi.org/10.1080/09548963.2022.2081488>
- Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review*, 17(9), 1333–1357. <https://doi.org/10.1080/14719037.2014.930505>
- Vriesema, M. A., Kloosterman, R. C., & Van Kempen, S. W. M. (2024). Get back: Analysing the impact of the COVID-19 pandemic on the Lowlands festival. *Cultural Trends*, 1–20. <https://doi.org/10.1080/09548963.2024.2376006>
- Walmsley, B. (2013). Co-creating theatre: Authentic engagement or inter-legitimation? *Cultural Trends*, 22(2), 108–118. <https://doi.org/10.1080/09548963.2013.783176>
- Walmsley, B. (2019). *Audience Engagement in the Performing Arts: A Critical Analysis*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-030-26653-0>
- Waseem, D., Biggemann, S., & Garry, T. (2018). Value co-creation: The role of actor competence. *Industrial Marketing Management*, 70, 5–12. <https://doi.org/10.1016/j.indmarman.2017.07.005>
- Weick, K. E. (1979). *The Social Psychology of Organizing (Topics in Social Psychology Series)*. <https://doi.org/citeulike-article-id:2875270>
- Weick, K. E. (1995). *Sensemaking in Organizations*. Sage Publications.
- Weick, K. E. (2003). Enacting an environment: The infrastructure of organizing. In R. Westwood & S. Clegg (Eds.), *Debating Organization. Point-counterpoint in Organization Studies* (pp. 184–194). Blackwell Publishing.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4), 409–421. <https://doi.org/10.1287/orsc.1050.0133>