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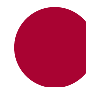

Introduction to the Special Issue - The internet, social media and trade union revitalization: Still behind the digital curve or catching up?

Geelan, Torsten

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The Internet, Social Media and Trade Union Revitalization: Still Behind the Digital Curve or Catching Up?

Abstract

This article introduces this special issue titled 'The Internet, Social Media and Trade Union Revitalization: Still Behind the Digital Curve or Catching Up?' The *first* and *second part* provide a historical overview of the debate on the trade union movement and new ICTs during the 'web 1.0' era of the 1990s and early 2000s, and the 'web 2.0' and 'web 3.0' era of the past decade. The *third part* begins by discussing the dialectical and socially mediated relationship between trade unions and new ICTs. The three union revitalisation strategies that are the focus of the special issue – organising, coalition building and political action – are then outlined and an analytical framework is presented with which to view the contributions of this special issue and to use in future research. With all this in mind, the *fourth* part highlights the ways in which each of the seven contributions in this special issue further our understanding of how trade unions around the world *can* and *are* using the Internet, social media and artificial intelligence as a means of revitalisation. Taken together the geographical scope ranges from single-country cases studies in Germany, the United Kingdom (UK) and Canada, to a cross-national case study in Australia and the United States, and a comparative study across Europe. In terms of ICTs, attention is given to websites, Twitter, Facebook, YouTube and an AI chatbot. Finally, *the conclusion* reflects on the implications of the Covid-19 pandemic and discusses future directions for research.

Introduction

The question of how the trade union movement around the world is engaging with, and transforming through, new information and communication technologies[i] (ICTs) to retain and rebuild power remains a crucial one and has become a growing part of the contemporary debate on revitalisation (See Pasquier et al. 2021; Carneiro and Costa 2021). The aim of this special issue is to chart new terrain in this area of research. The objectives are threefold. *First,* to develop an analytical framework that can help researchers assess the contribution of ICTs to union revitalisation in different institutional contexts. *Second*, to explore new methods and digital sources for studying the relationship between the trade union movement and the rapidly expanding digital media environment. *Third*, to generate new empirical insights into how the various actors that constitute the trade union movement (e.g., confederations, trade unions, and worker networks) (Tapia et al. 2015) *can* and *are* using the Internet, social media and artificial intelligence as a means of revitalisation. Particular attention is paid to the role that internal and external factors play in mediating the nature and scope of union experimentation with new ICTs and its contribution to the outcomes of revitalisation.

This article introduces the special issue. The *first* and *second part* provide a historical (and by no means exhaustive) overview of the debate on the trade union movement and new ICTs during the 'web 1.0' era of the 1990s and early 2000s, and the 'web 2.0' and 'web 3.0' era of the past decade.[ii] The *third part* begins by discussing the dialectical and socially mediated relationship between trade unions and new ICTs. The three union revitalisation strategies that are the focus of the special issue – organising, coalition building and political action – are then outlined and an analytical framework is presented with which to view the contributions of the special issue and to use in future research. With all this in mind, the *fourth* part highlights the ways in which each of the seven contributions in this special issue further our understanding of how trade unions around the world *can* and *are* using the Internet, social media and artificial intelligence as a means of revitalisation. Taken together the geographical scope ranges from single-country cases studies in Germany, the United Kingdom (UK) and Canada, to a cross-national case study in Australia and the United States, and a comparative study across Europe.

In terms of ICTs, attention is given to websites, Twitter, Facebook, YouTube and an AI chatbot. Finally, *the conclusion* reflects on the implications of the Covid-19 pandemic and discusses future directions for research.

The web 1.0 era

Since the birth of the trade union movement in the late 19th century, unions have been using interpersonal communication (conversations between people in person) and traditional mass communication (e.g., union journals, leaflets, pamphlets, newspapers, radio, film, television) to organise and mobilise workers and shape public opinion. In doing so, they have fought struggles over ownership of the means of communication, which political, economic, and social issues are discussed in the media, and the ways in which ICTs are integrated into the labour process. One of the watershed moments in the long and storied history of the relationship between the trade union movement and ICTs took place in 1989, when the British computer scientist Tim Berners-Lee invented the World Wide Web, and shortly after, the world's first web browser: this expanded access to the internet from government and universities to the general public and made it easy and low-cost to communicate information via static websites and interact with people via email, chat rooms, online discussion forums and intranets (Web 1.0). Coupled with the explosion of wireless communication and the needs of the business world, as well as the growth in computer ownership, the number of internet users on the planet expanded dramatically from around 40 million in 1995 to over 1 billion in 2000 – increasing continuously thereafter (Castells 2009: 62).

The debate on the trade union movement and the internet and its revitalising potential began in earnest with the publication of Eric Lee's 1996 book *The Labour Movement and the Internet: The New Internationalism*.[iii] The same year the sociologist Manuel Castells published the first volume of his influential trilogy *The Information Age: Economy, Society and Culture (*which largely overlooked trade unions). Lee's view was that the internet was "a challenge… that would allow the trade union movement to renew itself and address gaps in its national and international systems of communication, leading to a broader and more meaningful dialogue within labour and beyond it" (Lucio and Walker 2005: 139). This early optimism was shared by Pliskin et al. (1997) who studied an industrial dispute involving Israeli academic staff members and found that email served as the major means of communication between the strikers – enabling them to succeed in what was presumed to be a hopeless battle. A few years later, Shostak's (1999) book *CyberUnion: Empowering Labor through Computer Technology* added a further layer of exploratory empirical insight, shedding light on how US unions were adopting new ICTs with varying degrees of sophistication.

At the start of the 21st century, Jack Fiorito and his colleagues began trying to determine the *causes* and *consequences* of unions adopting Web 1.0 technologies in a more systematic fashion by surveying officials and staff members. The results found considerable variation across US unions in the use of new ICTs (e.g., email, websites, video conferences) and in the areas to which these technologies were being applied (e.g., bargaining, organising, communicating with members). Notably, three-fourths of respondents believed that the success of their union depended on the implementation of new technology (Fiorito et al. 2000a). Union use of new ICTs also appeared to be positively correlated with the size of the union (due partly to differences in organisational resources) and pre-existing experiences of innovation (Fiorito et al. 2000b). In a later article the same authors focused more closely on the impact of new ICTs on union effectiveness and concluded that the influence may be especially important for organising outcomes such as membership growth (Fiorito et al. 2002: 653).

The question of the role of new ICTs within and across unions and the nature of change they could catalyse was taken a step further by Diamond and Freeman (2002). Drawing on data

from the US and the UK, they identified three areas of opportunity: 1) to present the union case on various issues to the online population through provision of information; 2) to communicate directly with union members or potential members through targeted electronic messages; and 3) to engage in interactive discourse with members or others on online discussion forums and by responding to queries (Ibid., 577). The authors speculated that if trade unions began to seriously engage with the internet – to develop new methods of organising, improve services to members, enhance union democracy, support industrial disputes, and strengthen international cooperation – they could potentially morph into a new 'e-union' organisational form. Ultimately, though, this would depend on the choices that union leaders, activists and members would make (Ibid., 592). Interestingly, at the time, Ward and Lusoli's (2003) comprehensive study of the extent to which British unions were embracing ICTs found that the hype about the potential of the internet far exceeded reality (Ibid., 171). In order to explain the patchy pattern of union activity online, the authors pointed to differences in *organisational resources* and *organisational incentives* (e.g., a large proportion of members with access to ICTs) as well as the influence of *organisational policy entrepreneurs* (engaged communication officials driving innovation from within) (Ibid., 173-174).

One of the seminal moments in the debate came with the first ever special issue published on the topic which focused on union democracy and the potential of new ICTs (Green et al. 2003). The central argument of the special issue co-editors (Anne-Marie Greene, John Hogan and Margaret Grieco) was that electronic forms of communication had the potential to act as countervailing devices to the forces that often generate Michelsian oligarchy[iv] within trade unions. Namely, by "creating *greater equalities of knowledge*; *distributing control over means of communication*; *reconfiguring the time-space dimension of communicative practice*; and *enhancing the communicative skills of ordinary members"* (Green et al. 2003: 284). One of the red threads running through all the contributions, though, was the complexity of trade union use of ICTs in practice. For example, Green and Kirton's (2003) investigation of whether ICTs could enhance the participation of under-represented groups (e.g., women and atypical workers) in UK union activism found some positive benefits, but also a range of obstacles, barriers and potentially negative consequences. Similarly, Martinez Lucio's article (2003) showed how the responses of Spanish union federations to ICTs were politically contested internally, and shaped by existing traditions of communication, identity, democratic structures and processes, and organisational culture. Indeed, as Carter et al. (2003) demonstrated with the unofficial Liverpool dockers dispute, union bureaucracies may try to stifle the use of technologies that offer the prospect of greater membership participation and accountability.

Another ground-breaking moment was the publication of a special issue in *Critical Perspectives on International Business* which helped broaden the geographical scope of the debate (beyond the UK and the US) to other parts of the world: South Africa, Malaysia, Mexico, and the Balkans (Grieco, Hogan and Martinez Lucio 2005). A couple of the articles are of particular relevance to the focus of this special issue in *New Technology, Work and Employment.* The first article by Cockfield (2005) examined the relationship between an Australian trade union that had adopted the organising strategy of revitalisation (to increase membership participation and activism) and the unions approach to ICTs. In light of the case study, the author concluded that the potential of ICTs to support renewal could only be fully realised if unions supplemented the integration of technology with broader structural and cultural changes (Ibid, 98). And, as Martinez Lucio had been at pains to emphasize, such changes in practices and behaviour would not occur without a political struggle within the union (Ibid., 105). Despite this formidable barrier, the second and third article by Martinez Lucio and Walker (2005) and Freeman (2005) argued that new 'networked' or 'open source' organisational forms of unionism able to fully utilise new ICTs were emerging within and

outside of the trade union movement. Relatedly, Saundry (2007) later dismissed the threat of independent web-based networks of workers, concluding, to the contrary, that they could help unions extend organisation among isolated hard-to-reach freelancers and migrants.[v]

The web 2.0 and 3.0 era

By the time of the North Atlantic financial crisis of 2008, the number of internet users in the world had reached 1.4 billion, with wireless phone subscriptions almost three times that at 3.4 billion (Castells 2009: 62). This was the same year that Facebook reached 100 million subscribers, cementing a fundamental shift in the way people use the internet from static websites to a more participatory, interactive and user-generated web facilitated by social media sites, video sharing sites, image sharing sites and micro-blogs (web 2.0). Castells (Ibid., 54-55) termed this historically new form of communication "mass self-communication". Other scholars later elucidated how this evolution in the internet made it possible to share, like, recommend and comment on content in ways that re-frame its meaning and enable the personalisation of collective action (Bennett and Segerberg 2011). In more recent years, the internet has been undergoing yet another noticeable evolution (web 3.0) that heavily relies upon artificial intelligence (AI) – machines, software and algorithms that act intelligently by recognising and responding to their environment (Acemoglu and Restrepo 2019). All the while the diffusion of the internet has continued unabated: at the moment of writing, there are now 4.66 billion users (59.5 per cent of the global population) of which most are active on social media (3.6 billion) and can access the internet using a smartphone (3.6 billion) (Kemp 2021).

The first major attempt by scholars to begin grappling with the significance of the web 2.0 era for union revitalisation was the publication of a special issue in *Labor History* titled *Labor in the Information Age* (Trumpbour 2010). Focusing on the global level, Hogan, Nolan and Grieco (2010) argued that while the surveillance and monitoring capabilities of new ICTs[vi] were a serious threat to workers and unions, the ability to communicate and coordinate globally at little-to-no cost also created novel possibilities and dilemmas for the promotion of *transnational labour solidarity*. Turning to the stark contrast between the continued decline in union membership and the exponential growth of the social media site Facebook, Bryson, Gomez and Willman (2010) suggested that the debate could benefit from thinking more about how the union movement could appropriate the *attributes* driving the popularity of online social networking (Ibid., 42). In particular, the simplicity of Facebook, low (to non-existent) entry costs for members, a 'use-as-you-go' system that doesn't lock members in, and strong network externalities (Ibid., 49). Last but not least, Muir's (2010) study of the Australian union movement's historic political campaign – 'Your Rights at Work' – demonstrated the power of combining innovative multi-media campaigning (incl. a dynamic web presence, television advertising and radio) with clever framing and traditional on-the-ground organizing.

In the years that followed, a quartet of publications broadened the debate further. The article by Panagiotopoulos (2012) surveyed members of a Greek trade union to understand how members perceived opportunities for online engagement. The practical implication of the findings, as the author put it, were that unions needed to begin actively seeking knowledge about the diverse characteristics of their online audiences and adapt communication strategies accordingly (Ibid., 187). In a similar vein, the article by Kerr and Waddington (2014) surveyed all the union members of twelve branches of UNISON (one of the UK's largest unions) that had recently introduced websites. The study found that branch websites required large amounts of human resources and cultural adjustment to set up and maintain, but they also made substantial (albeit uneven) contributions to various aspects of union renewal including organisation and participation, union democracy and the conduct of industrial disputes. Staying with the focus on websites, Rego et al. (2014) conducted a rare comparative study of union

confederation websites in the UK and Portugal to fine-tune a new typology for their analysis along the dimensions of *content*, *interactivity*, and *form*. Finally, Heckscher and McCarthy (2014) demonstrated how the increasingly fluid 'friending' relations enabled by social media could potentially be mobilized by unions into effective collective action. In their view, this required an *orchestrator*, a *collaborative platform* (designed to maximise the ability of members to use the organisation for their own purposes), a *shared purpose* (to inspire people to orient their actions around the same cause) and *self-governing processes* (Ibid., 644-648).

The next discernible wave of research investigated the trade union movement's use of social media in much greater detail and across a range of countries and actors. In the United States, Wood's study (2015) of the OUR Walmart campaign found that the networks formed by low-wage retail workers using social media (e.g., Facebook) complemented physical mobilising: by helping workers to develop a strong collective identity, generate high levels of participation, and amplify offline collective actions by increasing their visibility (Ibid., 268). The findings also suggested that unions such as the ones funding the worker centres (labour-oriented advocacy groups) driving OUR Walmart could be well suited to providing strategic oversight as envisaged by Heckscher and McCarthy (2014). Similar conclusions were reached by Dencik and Wilkin (2015) in their examination of the role of new ICTS in three low-wage workers movements in Hong Kong, Singapore and the US.[vii] In Denmark, Geelan's (2015) study of the union movement's largest ever multi-media awareness campaign to enhance union organising further established the efficacy of collaborative networks. Finally, in the UK, Upchurch's (2015) study of the British Airways cabin crew dispute found support for previous research on the empowering potential of social media but also stressed how new ICTs could challenge internal union authority, aid counter mobilisations by employers, and deepen the processes of marketisation and commodification. While Hodder and Houghton (2015) concluded that in the case of the University and College Union's use of Twitter, the engagement opportunities remained underutilised.[viii]

The final substantial wave of research can be grouped into two broad areas of enquiry. The first has continued to explore the complexities of how the trade union movement actually uses social media in practice. In a comparative analysis of the Facebook pages of six trade union confederations from Brazil, Canada, Portugal and the UK, Carneiro and Costa (2020) found that they all maintained an outdated 'one-way' model of communication, hindering opportunities to reach and engage with union and non-union actors. Similarly, a cross-sectional study of the extent to which the youth sections of three UK unions were using the interactive capabilities of Twitter, Hodder and Houghton (2020) concluded that they remained underused. Turning to Sweden, Jansson and Uba's (2019) book examined the use of YouTube by three trade unions representing different social classes and walks of life. In short, the findings showed that all the unions used YouTube to distribute information about union activities, but there were also tendencies that distinguished one from the other: the working-class union was active in electoral politics, the upper-middle class union targeted young people, and the white-collar union sought to attract members by focusing on benefits rather than on ideas of solidarity. The authors therefore argue that a more nuanced understanding of how unions use social media requires researchers to consider the class background of each unions members as well as the broader workforce they are seeking to represent (Ibid., 107-114).

The second area of enquiry of the most recent scholarship has focused on more innovative approaches to union organising, coalition building and political action. The most notable case is the 'Fight for 15' (FF15) movement advocating for the minimum wage to be raised to $15 per hour in the United States. One of the factors that helps to explain the achievements of FF15 is its huge presence on social media: more than 300,000 likes on its main Facebook page, tens of thousands of followers on Twitter, and online videos that have been viewed more than

millions of times. Pasquier et al. (2020: 10-19) demonstrate how this has been achieved through mobilisation activities that combine the traditional logic of collective action (e.g., top-down and hierarchical) with the new connectivist logic (e.g., decentralised and grassroots) of web 2.0. In terms of expansion, the movement relied on establishing an offline coalition of allied organisations and building bridges with social movements online. Another factor has been the support of the Service Employees International Union, both in terms of human and financial resources and substantial contributions to the FF$15 debate on Twitter (Frangi et al. 2020). Wood (2020: 8) has urged caution, though, arguing that focusing on mobilising at the expense of organising is a shortcut to nowhere. That said, in a case study of three successive campaigns to unionize workers in Israel, Lazar (2020) found that activists achieved the mobilization of workers *and* recognition by management by leveraging the "portable-visibility" afforded by social media networks (Facebook and WhatsApp) and mobile devices (smartphones).[ix]

Trade union revitalisation in the digital age

From the historical overview of the literature, it becomes clear that one can think of the relationship between the power of the trade union movement and new ICTs as being *dialectical* and *socially mediated.* Technologies are designed and produced by people in society and these technologies may in turn enable, constrain and condition human activity in unpredictable ways. As a result, technology does not have one clearly determinable impact on society, but rather has multiple ones that stand in opposition: The Internet, social media and artificial intelligence can be a means of exploitation, control and surveillance while simultaneously being a means of empowerment and resistance (Fuchs, 2020: 164). In this sense, trade unions are faced with challenges that may undermine their influence as well as opportunities which they may benefit from if they are able to actively translate them into revitalisation (Frege and Kelly 2004: 32). Indeed, the effective use of the internet and social media by trade unions is resource-demanding, in terms of the expertise, funding and personnel required to manage online communication (Rego et al. 2016). We must therefore always be mindful of the importance of choices and the political – in the sense that the *design*, *use* and ultimately *impact* of technology is *socially mediated* (Martinez Lucio and Walker 2005: 142; Hodder 2020: 268) by actors seeking to further their own interests such as corporations, trade unions and other parts of civil society. So, where do we stand today?

On the one hand, there is overwhelming evidence that the digital age is now dominated by the power of corporations (McChesney 2013) who are shaping large parts of societies' technology use according to their needs (Holtgrewe, 2014: 10). For example, multi-national corporations such as Uber and Deliveroo are using new ICTs to transform transforming vast swathes of the traditional economy by undercutting taxi drivers and restaurants through exploitative work practices (See Moore et al. 2018). A similar story is unfolding in relation to the world's largest social media sites (Facebook, YouTube, Instagram, Twitter, and WhatsApp). The design of these new communication technologies heavily priorities the logic of consumption, entertainment and the commodification of personal data to generate profits through targeted advertisement now known as surveillance capitalism (Zuboff 2019). This development has been accompanied by largely invisible collaborative arrangements between tech companies and state security apparatuses who are using it to monitor and suppress political organisation and dissent (McChesney 2013: 130-171). Similarly, anti-union employers are increasingly engaging in surveillance of online protest activities as part of their counter-mobilisations against trade union campaigns, activists and dissenting employees (Upchurch and Grassman, 2015; Taylor and Moore, 2019; Thompson et al. 2020). There is also the very real threat of cyber-attacks targeting the trade union movement (Geelan and Hodder 2017: 358). This state of affairs poses a serious challenge to the trade union movement around the world.

On the other hand, new information and communication technologies continue to simultaneously present trade unions with a range of opportunities for revitalisation. In response to the substantial decline in trade union power around the world discussed at length elsewhere (e.g., Gumbrell-McCormick and Hyman 2018 & Kelly 2015), trade unions have adopted a variety of revitalisation strategies aimed at (re)gaining power where it has been lost. While this has generated a substantial body of literature (for an overview see Ibsen and Tapia 2017), much more research is needed that specifically examines how trade unions *can* and *are* revitalising through the use of the internet and social media (Ibid., 178). For example, by using new ICTs to amplify the impact of 'offline' collective action, strengthen a sense of collective identity among dispersed workforces, and enhance the legitimacy of union campaigns (Pasquier and Wood 2018). Of the six major union revitalisation strategies identified by Kelly and Frege (2004), this special issue focuses on the role of the internet and social media in three of them: organising, coalition building with other social movements, and political action vis-à-vis political parties and governments.[x]

The following section outlines each of these strategies, the outcomes of revitalisation, and the factors that mediate them both.

Union revitalisation strategies

The first strategy, *organising*, refers to recruiting, representing and retaining members, and increasing the mobilisation capacity of unions. It has been "at the heart" of the debate on union revitalisation and "brought forth a range of contributions on the meaning of organising and its development and potential" (Martínez Lucio et al, 2017: 32). Sidestepping discussions about the boundaries and definitions of different forms of organising (Holgate et al. 2018), an emerging body of research has demonstrated how the internet and social media can enhance membership communication (Kerr and Waddington 2014) as well as the organisation and representation of hard-to-reach young people (Geelan 2015), migrants (Fitzgerald et al. 2012; Dencik and Wilkin 2015), precarious workers in the service sector (Wood 2015) and women who have typically been marginalized by unions (Thornthwaite et al. 2018). New ICTs can also be used to increase organisational ownership of, and participation in, collective action, providing a discursive space to voice grievances and expand activist networks (Pasquier and Wood 2018). Yet several questions remain unexplored. To what extent is the trade union movement using the 'big social data' generated by online interactions to improve their recruitment and retention efforts through audience segmentation? And what types of frames[xi] are unions producing and circulating online to aid organising in countries around the world?

The second strategy, *coalition building with other social movements*, refers to "discreet, intermittent, or continuous joint activity in pursuit of shared or common goals between trade unions and other non-labour institutions in civil society, including community, faith, identity, advocacy, welfare and campaigning organisations' (Frege et al. 2004: 148). For example, union coalitions with the anti-austerity movement, the environmental movement or the anti-racism movement. This strategy can help trade unions access key individuals and build new networks within specific communities, thereby broadening the range of interests and agendas that they represent (Gumbrell-McCormick and Hyman, 2017: 145). To date a wealth of literature has been produced on union coalitions (for an illustrative recent example, see Milkman and Ott, 2014). Only recently, though, have scholars begun to examine the role of the internet and social media in shaping the nature, composition and efficacy of union coalitions (Hecksher and McCarthy 2014; Pasquier et al. 2020) and how they connect and interact with a diverse range of audiences online (Carneiro and Costa 2021). The importance of this line of enquiry is highlighted by the work of Manuel Castells (2009) who has convincingly argued that power in the digital age increasingly lies in the ability to create, maintain and shape networks of media

and communication, combining resources and sharing goals. Therefore, there remains much to be learned about the online networks being formed by the trade union movement.

The third and final strategy, *political action vis-à-vis political parties and governments*, refers to campaigning and lobbying "designed to influence the state's policy-making process and involves union involvement at many different levels of government" (Hamman and Kelly 2004: 94). Unions electoral activity may involve candidate selection, participation in electoral campaigns, and voter mobilisation (see for example French and Hodder 2016). Whereas with regards to legislation, unions typically become involved in either initiating measures of their own or supporting or blocking measures emanating from party representatives (Hamman and Kelly 2004: 94). The internet and social media can enhance both these aspects of political action by facilitating mass mobilisations and raising public awareness to help build support for candidates, political parties and changes in legislation. Indeed, a small number of studies have demonstrated how new ICTs are being used by unions to promote political campaigns (Jansson and Uba 2019) and deployed in conjunction with traditional means of communication during public sector protests (Rego et al. 2016). Thus, given the lack of literature, it remains relevant to ask: how are trade unions using the internet and social media in contemporary political action? And to what extent is this leading to union revitalisation?

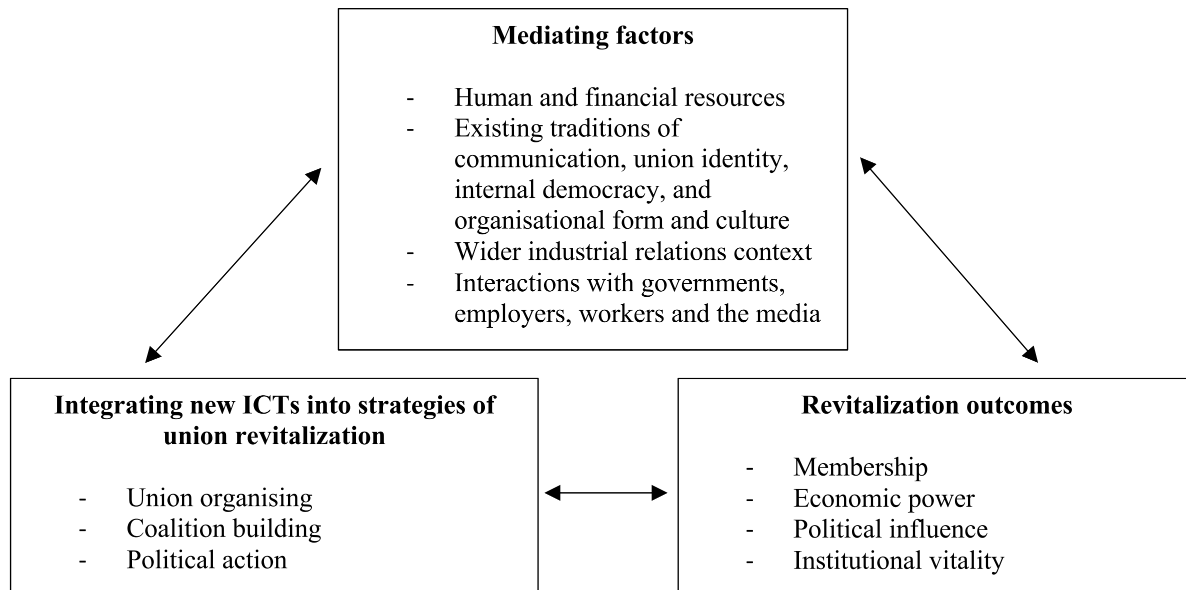
With each of the three revitalisation strategies outlined above – organising, coalition building and political action – the scale and scope of union experimentation with the internet and social media is mediated by several factors: *internally*, these are existing traditions of communication, union identity, internal democracy, and organisational form and culture, whereas *externally* they are the wider industrial relations context and interactions with the Government, employers, workers and the media. Not only strategies but also the *outcomes* of revitalisation are mediated by the same internal and external factors and can be thought of as occurring along four dimensions that capture the main spheres of union activity:

- *membership* (increase in numbers and union density as well as changes in composition and stronger membership participation);
- *economic power* relative to employers (improved ability to deliver higher wages and better benefits);
- *political influence* (improved ability to influence policy-making and public debate);
- *institutional vitality (*enhanced capacity to adjust union structures, governance and internal dynamics to new challenges and embrace new strategies for revitalisation).

In practice, revitalisation efforts either focus on one dimension or a combination of dimensions but in many cases, it is difficult for unions to revitalize unless they also engage in fundamental organizational change (Behrens et al. 2004: 20; Cockfield 2005). The problem though, as Hyman (2007: 202) puts it, is that "within trade unions, particularly those long established, the widespread respect for precedent and protocol means that the traditions of all the dead generations frequently inhibit learning." Thus, the capacity to adjust existing union traditions to the present context and embrace new strategies for revitalisation is absolutely vital and much dependent on policy entrepreneurs (Ward and Lusoli 2003).

The figure below summarizes these key insights from the historical overview of the literature and provides an analytical framework with which to view the contributions of the special issue.

Figure X. Analytical framework for studying the relationship trade union revitalisation and new ICTs.



Source: Author's elaboration based on Martínez Lucio (2003), Behrens et al. (2004), Martínez Lucio and Walker (2005), Pasquier and Wood (2018), and Ibsen and Tapia (2017: 179).

Contributions to the special issue

This special issue of *New Technology, Work and Employment* seeks to further our understanding of how trade unions around the world *can* and *are* using the Internet, social media and artificial intelligence as a means of revitalisation. Taken together the geographical scope ranges from single-country cases studies in Germany, the United Kingdom and Canada, to a cross-national case study in Australia and the United States, and a comparative study across Europe. In terms of new ICTs, attention is given to websites, Twitter, Facebook, YouTube and an AI chatbot.

Germany

The article by Ronald Staples and Michael Whittall (2020) examines how work councils[xii] in the German car manufacturing industry are tackling the dilemma of social media. On the one hand, digitalisation is creating a growing demand for skilled employees who appear to have become less reliant on the representative services of work councils due partly to greater use of new ICTs within the workplace (Ibid., 2). On the other hand, the affordances of social media for organising and internal democracy could help work councils reach out to skilled employees and demonstrate their continued importance. For example, by enhancing opportunities for participation in the decision-making processes of work councils and creating a greater flow of information and communication between councillors and the workforce (Ibid., 7-8). The results of the case study show that councillors are suspicious of new ICTs (e.g., WhatsApp) because employees can use them to act unilaterally without them (Ibid., 11). In addition, councillors are conscious of institutional and cultural factors that are impeding their ability to utilise the opportunities of social media. The authors conclude that a new legal framework and cultural orientation is the best way to shore up the institutional vitality of German work councils.

Australia and the United States

The article by Frances Flanagan and Michael Walker (2021) is one of the first of its kind to explore how unions are using a reconfigured AI-enabled chatbot (originally created by IBM)

for organising. More specifically, the study focuses on the challenges and opportunities created by transposing the app from an alt-labour network context in the United States to a traditional union context in Australia. The chatbot's contribution to internal union renewal is assessed in relation to four of the key elements identified by Levesque and Murray (2010). Namely, infrastructural resources, internal solidarity, narrative resources and the capability of learning. The ability of web 3.0 technologies to transcend temporal and spatial limits are considered to be similar to web 1.0 and web 2.0, but the authors also highlight important differences (Ibid., 4-5). Chatbots "facilitate the asocial transmission of information between organisations and individuals" which "means that they cannot, by themselves, act as containers for political deliberation or the promotion of 'weak tie' connections and collaborative solidarity in the same way as mass-self communication networks" (Ibid., 4). The findings demonstrate a series of distinctive ways in which AI can potentially be used to increase union power resources and capabilities (Ibid., 10-12). The conclusion, though, is that this is "overwhelmingly dependent upon the particular institutional contexts in which they are introduced and the ways in which they are designed" (Ibid., 13).

Canada

The article by Marc-Antonin Hennebert, Vincent Pasquier and Christian Lévesque (2021) investigates how the head of communication (HCs) at thirteen trade unions in Quebec, Canada, perceive the affordances and constraints of new ICTs across five core union functions. Namely, services to members, internal democracy, organising, mobilisation and influencing societal debates. Two local contextual factors – strong unionization and pluralism – are recognised as creating a dual movement that favours incremental experimentation: providing stability and material resources to invest in new ICTs while also creating a competitive dynamic that compels unions to renew their traditional practices (Ibid., 10). To demonstrate the need for *affordance approach* that puts the perceptions and intentions of users front and centre, the authors provide an overview of the contradictory effects of new ICTs that has been a prominent feature of the debate thus far (Ibid., 3-7). The findings demonstrate that the perceived affordances of ICTs (visibility, intensification, aggregation and addressability) and their respective constraints vary significantly according to the core functions of unions (Ibid., 14-34). In addition, while HCs are found to be experimenting with the entire digital toolbox (Twitter, Facebook, websites, mobile phones), this does not appear to be radically transforming the norms and practices of the trade unions under study (Ibid, 39). This suggests that union experimentation with new ICTs that catalyses a deeper transformation is more likely to be taking place in 'institutionally insecure' countries with everything to gain and little to lose.

United Kingdom

The article by Panos Panagiotopoulos (2021) shifts our geographical focus to the United Kingdom. It is the first large-scale cross-sectional study of its kind, examining the Twitter activity of thirty-three British trade unions to help further our understanding of how '*imagined audiences'* can support organising activities. As the author notes, social media can help broaden the audience of trade union communication beyond those with a clear, expected and immediate interest. But scholars still know fairly little about the characteristics of the audiences on Twitter[xiii] because of "the dynamic way information spreads outside established relationships (i.e., each users followers) through its conversational features" (Panagiotopoulos 2021: 6). The findings show that members are the main "imagined audience" that unions actively refer to, and, as one would expect, the most frequently used hashtags mention industrial action, national union campaigns and other union events (Ibid., 12). With regards to the 300,000 or so Twitter followers, several groups which unions might want to build deeper relationships with are identified. These include potential members (8,353 students) as well as potential amplifiers of

union discourse (5,467 journalists) and potential activists (3,107 socialists) (Ibid., 14). Moreover, the authors' workshop and interviews with communication officers from some of the sampled unions, suggests that there may be a significant influx of candidate members from social media. However, they are unlikely to remain after an initial period (Ibid.,15). Thus, the pathway from information sharing on social media to engagement with digital audiences, recruitment and retention represents an important direction for future research (Ibid., 19).

Whereas the article by David Houghton and Andy Hodder (Forthcoming, 2021) focuses on a single case – the militant Public and Commercial Services (PCS) union – known for organising and mobilising. More specifically, it examines the relationship between the union's use of social media and its identity. In doing so, the study provides the first cross-platform analysis of Facebook and Twitter to date. The authors found that about two-thirds of tweets and posts used the language of mobilisation and were aligned with the 'linguistic framing' used by unions to mobilise workers (Hyman 2007: 207). The most common topics across both platforms were campaigning, news, solidarity and strike action. Interestingly, there were relatively few posts related to recruitment but, as the authors note, projecting a militant and mobilising identity online may still contribute to organising indirectly. There were also some notable differences between the platforms. For example, PCS was considerably more active in demonstrating action or calling for action on Twitter while online audiences were much more likely to engage with Facebook posts. In short, the overall conclusion was that PCS used both social media sites in a way that reflected their union identity.

Finally, the article by Torsten Geelan (Forthcoming, 2021) explores how the trade union movement succeeded in challenging the politics of austerity after the financial crisis of 2008 by founding a union-led coalition: The People's Assembly Against Austerity (People's Assembly). In doing so, it zeroes in on two forms of trade union power: coalitional power as defined by Gumbrell-McCormick and Hyman (2018: 31); and the author's novel conceptualisation of *communicative power* defined as the capacity of trade unions to influence public debate by producing and self-mediating frames and circulating them through the media to a mass audience. The findings reveal that three tactics were key to helping the People's Assembly give the anti-austerity agenda greater visibility in the mainstream media and cement it within the Labour Party. The first tactic was a policy of non-partisanship. This enabled the building of a heterogenous coalition comprising a range of social actors with different political histories, orientations and identities (and key to sustaining the coalition was a consensus-driven governance structure). The second tactic was growing the People's Assembly through the "geographical propagation" (Pasquier et al. 2020: 12) of a decentralized network of grassroots local assemblies orchestrated by a national organisation. The third and final tactic was combining coalitional and communicative power by organising and self-mediating mass mobilisations at key moments in the political cycle using a website and social media (Twitter, Facebook and YouTube). The study demonstrates that this combustible mix of tactics has great potential for revitalising the political influence of trade unions.

Europe

The article by Katrin Uba and Jenny Jansson (2021) shifts our focus from single-country case studies to a comparison of the political action of trade union confederations online in twenty-six European countries. More specifically, the study seeks to understand the ways in which the industrial relations context shapes the political action of confederations on YouTube. The authors begin by grouping the countries into five distinct industrial relations regimes that capture some of most important differences in political opportunity structures: organised corporatism, social partnership, state-centred, liberal and transitional (Ibid., 4). Other facets of the relationship between political action and political opportunity structures are then discussed

to generate several hypotheses (Ibid., 5). The temporal part of the analysis shows that despite expectations, confederations do not seem to increase their YouTube activity during election campaigns (except in Italy). Furthermore, in terms of the proportion of content directly related to political action, there are substantial differences between countries. The only notable exception are confederations in the Nordic countries who appear to have adopted similar approaches to using YouTube (Ibid., 10). Ultimately, the conclusion is that the best explanation for variation in political activism online may be the interaction between the industrial relations regime (structural factors) and the closeness of elections or proposed policy changes such as austerity measures (time-varying factors) (Ibid., 12).

Some concluding remarks

The question of how the trade union movement around the world has been engaging with, and transforming through, new ICTs to retain and rebuild power has generated a substantial body of research over the past two decades. The aim of this introductory article and the special issue as a whole is to chart new terrain in this area of research and it has done so in four ways. *First*, by drawing our attention to the dialectical and socially mediated aspects of the relationship between trade union power and new ICTs. *Second*, by developing an analytical framework that can help researchers to study the integration of new ICTs into strategies of revitalisation, their contribution to revitalisation outcomes, and the internal and external factors that mediate them. *Third*, by presenting new methods (e.g., 'affordance approach') and concepts (e.g., 'imagined digital audiences', 'communicative power'). And *fourth*, by generating new empirical insights into how worker councils, union confederations, trade unions and union-led coalitions across a range of different countries and institutional contexts *can* and *are* using the Internet, social media and artificial intelligence as a means of revitalisation. As the reader may have surmised, there appears to be an overarching trend in which those parts of the trade union movement that are willing to engage in high levels of risk-taking when experimenting with new ICTs reap the greatest rewards.

However, there is also now a sense that the conservative bent of the trade union movement, which often limits the transformative scale and scope of their experimentation, may be changing due to the challenges of the Covid-19 pandemic: especially the massive shift to remote working and the much greater demands on the communications infrastructure of trade unions, no matter how big or how small. In a report for the UK think tank Unions21, Hunt (2021) surveyed and interviewed staff (in a wide range of roles) from thirty-three unions in the UK, Ireland, the Netherlands, New Zealand, Sweden, the US, Australia, and Belgium. In short, the findings suggest that member engagement and activism has deepened and increased online, and that the majority of unions have adopted new forms and methods of campaigning (e.g., virtual lobbying), communications (e.g., online meetings), recruitment (e.g., online joining), negotiating (e.g., online negotiating), training and representation. The research also suggests that trade unions are upgrading, adapting and investing in their communications infrastructure. The author concludes that moving forward, trade unions will need to ensure that they have sufficient analytical capacity to process the large amounts of information they are generating in their interactions with members (Ibid., 21). What remains to be seen is the extent to which these adaptations to the Covid-19 pandemic will have a lasting impact on the communication practices and organisational form and culture of the trade union movement.

As we progress into the third decade of the 21st century, there are four future directions for research on the trade union movement, new ICTs and revitalisation (alongside those identified by the contributors to this special issue). The first direction is towards a much more wide-ranging geographical scope, with research from, and on, countries in Latin America, Southern and Eastern Europe, Africa, the Middle East, and Asia. This will require (among other things)

an enthusiasm for conducting research on the use of new ICTs by the variety of actors that now constitute the trade union movement around the world such as (online) worker networks, civil society organisations, and union-led coalitions (Tapia et al. 2015). The second direction is towards greater use of triangulation (multiple methods and data sources). This will help generate a more nuanced understanding of the nature and scope of union experimentation with ICTs and its contribution to revitalisation by capturing the interplay of the internal and external mediating factors highlighted in the analytical framework presented in this article. The third direction is towards research on incredibly popular social networking sites (e.g., Facebook, LinkedIn), video/image sharing sites (e.g., Instagram, Youku Tudou) and microblogs (e.g., Weibo) that remain largely unexplored. The fourth and final direction is towards more research bridging industrial relations with media and communication, especially those strands that focus on communication, media and power, the gig economy and data justice. This can help researchers produce the new theoretical, empirical and practical insights needed to guide the trade union movement through the digital transformations of the dawning era of web 3.0.

Notes

[i] Old ICTs include the telephone, fax, radio, television, audio and video. New ICTs include the personal computer, mobile phone, the internet and social media.

[ii] Although there is no clear consensus on when the 'web 1.0' era ended and when the 'web 2.0' and web 3.0' era began, nor on what online activities and applications epitomize each catchword, they are useful structuring devices for the historical overview of the literature on the trade union movement and new ICTs.

[iii] For a short review of Eric Lee's book, see Andy Hodder's (forthcoming, 2021) contribution in this special issue of *New Technology, Work and Employment*.

[iv] According to Green et al. (2003: 284), there are four distinct forces that generate oligarchy (a small group of people having control) within trade unions: inequality of knowledge (between officials and ordinary members); differential control over the means of communication; time, energy and space poverty (of ordinary members); and uneven distribution of communicative skill (the art of politics). For a more detailed review of this special issue, see Martinez Lucio and Walker (2005).

[v] Fitzgerald et al. (2012) came to a similar conclusion in their study of Polish migrant workers and community-administered websites.

[vi] For a comprehensive and influential overview of social and technological forms of workplace surveillance, see Kirstie Bell's (2010) article 'Workplace Surveillance: An Overview' in the same special issue of *Labor History*.

[vii] For a detailed discussion, see Geelan's (2016) book review in the *British Journal of Industrial Relations*.

[viii] At the international level, another noteworthy article is by Panagiotopoulos and Barnett (2015) who surveyed 149 unions affiliated with UNI Global Union and found that the use of different channels of communication was based on organizational variables such as membership base and participation in communities of practice.

[ix] Another article which deserves to be included is Maffie's study of how (2020) social networking sits influenced the views of 350 ride-hail drivers on unionisation. The author found that more frequent interaction with other workers in online communities was associated with improved views of union instrumentality and interest in joining a ride-hail drivers' association.

[x] This is not to say that the internet and social media does not play a role in the other three revitalisation strategies identified by Frege and Kelly (2004): mergers and restructuring, union-management and partnership, and international action.

[xi] Framing refers to the construction of a framework of interpretation – a narrative – which shapes how people understand and respond to social issues.

[xii] A works council can be considered a borderline institution which acts as an intermediary between management, the workforce and trade unions, and has the task of managing the interests, expectations and demands of each (See Staples and Whittall, 2021: 5).

xiii Two notable exceptions are Hodder and Houghton (2015) and Geelan and Hodder (2017).

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