Citation:
Petersen-Wagner, R and Lee Ludvigsen, JA (2022) The Video Assistant Referee (VAR) as neo-coloniality of power? Fan negative reactions to VAR in the 2018 FIFA Men's World Cup. Sport in Society. ISSN 1743-0437 DOI: https://doi.org/10.1080/17430437.2022.2070481

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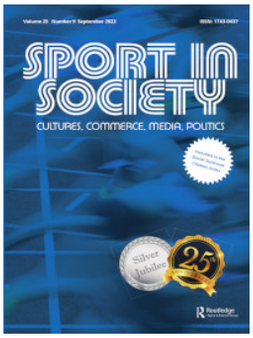

Sport in Society
Cultures, Commerce, Media, Politics

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/fcss20

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To cite this article: Renan Petersen-Wagner & Jan Andre Lee Ludvigsen (2022): The video assistant referee (VAR) as neo-coloniality of power? Fan negative reactions to VAR in the 2018 FIFA Men's World Cup, Sport in Society, DOI: 10.1080/17430437.2022.2070481

To link to this article: https://doi.org/10.1080/17430437.2022.2070481

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SPORT IN SOCIETY
https://doi.org/10.1080/17430437.2022.2070481

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The video assistant referee (VAR) as neo-coloniality of power? Fan negative reactions to VAR in the 2018 FIFA Men's World Cup

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ABSTRACT
The 2018 FIFA Men's World Cup saw the controversial introduction of VAR in the global stage, meanwhile little research has examined supporters' reactions to it. To understand how fans experienced VAR we employed a digital sociological approach by focusing on one loosely defined online community. We scraped over 300,000 comments from 31 videos on YouTube that were subsequently critically analysed. Three main categories emerged: Global North vs Global South; Non-Neutrality of Technology; VAR is Killing the Beautiful Game. In this paper our analysis focus on the first category to argue that VAR was experienced by supporters as neo-colonial technological tool. Fans recognised VAR as: favouring loosely defined Global North sides; and improving Global North sides' chances of winning. Our nuanced analysis of technologization of sport shows how it was both experienced by supporters as a power implementing artefact, but also provide a place for loosely defined antisystemic movements to emerge.

KEYWORDS
YouTube; VAR; Football; FIFA; fans

Introduction

Sport, and particularly football, as ubiquitous element of popular culture (Rowe 1995) is characterised as one of the most serious ordinary passions (Bromberger 1998) where loathe and love emotions are worldwide nurtured (Armstrong and Giulianotti 2001; Petersen-Wagner 2017a). Perhaps, an occasion where those feelings are markedly expressed is during the tournaments organised by *Fédération Internationale de Football Association* (FIFA), and more specifically the Men's and Women's World Cup. Football supporters' culture has been contexts for shedding light on distinct social issues such as violence and deviance (Dunning et al. 1998), racism (Back, Crabbe, and Solomos 1999), diaspora, migration, and transnational belongings (Giulianotti and Robertson 2007; Petersen-Wagner 2017a), protests and political movements (Millward 2011; Lee Ludvigsen 2019a; Numerato 2015), gender inequalities (Pope 2017), and homophobia (Cashmore and Cleland 2012).

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In an ever-increasing digital condition (see Arvidsson 2019) it is important to ask ourselves how technologies made inroads into sport. This relationship remains contested and still sociologically complex, and the 2018 FIFA Men's Football World Cup (June 14 - July 15) (hereafter: 2018WC) manifested itself as a landmark regarding the implementation of decision-aid technologies. The video assistance referee (hereafter: VAR) system was for the first time employed in the world's biggest single sporting event. VAR had then been approved and cleared for use by the FIFA Council in March 2018 (FIFA 2018) and was piloted in elite competitions including the 2017 Confederations Cup. Importantly, VAR entered football as a novel technology aiming to assist match officials' decision-making in contentious and crucial aspects of the game. However, VAR was never uncritically received by pundits, managers, or fans. Critical voices quickly emerged, especially because of VAR's perceived ineffectiveness and its ability to construct confusing situations. In 2018WC, VAR decisions caused controversy on a series of occasions especially when a Neymar (Brazil) penalty was overturned by VAR (Independent 2018a), and the incident became the catalyst for the viral #neymarchallenge. VAR was relentlessly discussed by experts in tabloids and on social media, with allegations of it 'killing the game' and being 'unacceptable' (Independent 2018b).

For Foucault (2000, 364) '[a] very narrow meaning is given to "technology": one thinks of hard technology, the technology of wood, of fire, of electricity'. Seeking to extend our knowledge on 'technology', we argue that technology in sport is of high sociological relevance. Additionally, the sociological importance of 'technology' *per se* remains incontestable in present-day societies (Kerr 2016; Matthewman 2011), especially when thinking how such technologies are incorporated or contested in individuals and groups' social fabrics. Against this background, this paper focuses on how technology makes inroads into football. It also contributes to the wider pre-existing literature on mediated fandom (Millward 2011; Petersen-Wagner, 2017a; Petersen-Wagner, 2017b; Petersen-Wagner, 2018; Lee Ludvigsen, 2019a), and more particularly to the cultural consumption of football (see Numerato and Giulianotti 2018).

Our findings possess a special sociological worth; not solely because of the 'ever-increasing' (Kerr 2016) new technologies in global sports, but because technologies' implementations are contested and characterized by expected and unexpected consequences. Given that an emerging but still limited number of studies examine fans cultures' perceptions of decision-aid technologies we add to these debates (Stoney and Fletcher 2020; Winand and Fergusson 2018; Hamsund and Scelles 2021; Winand et al. 2021; Scanlon, Griggs, and McGillick 2022). Moreover, our discussion seeks to overcome the reliance on the nation-state as frame of analyses within Wallerstein's (1980) world system theory by providing a distinct reading regarding antisystemic movements (Arrighi, Hopkins, and Wallerstein 1989) by taking into consideration Castells (2015), Beck (2005a, 2005b), and Quijano's (2000) views on power asymmetries. Hence, our main argument is that the implementation of VAR during WC2018 was considered by football supporters as a further expression of FIFA's neo-colonial power (see Darby 2001; Bar-On and Escobedo 2019).

Literature review: technologies, decision-making and sport

'Technology' is broad and multidimensional (Kerr 2016), and evaluating exactly what 'technology' *means* is beyond the scope of this article. Yet, it can refer to objects, knowledge or human activity (MacKenzie and Wajcman 1996). It may also refer to a mode of socio-organisation and socio-technical systems (Winner 1977). Regardless, the impacts of

technologies are not necessarily uncomplicated. Augé (1995) has observed how technologies had spatial and temporal ramifications in what he called 'supermodernity'. Despite these definitional opportunities, however, the anticipated utilitarian benefits perceived to be offered lie at the heart of any technology. Essentially, technologies are rational interventions that when implemented symbolize progress (Matthewman 2011; Quijano 2000). Moreover, Quijano (2000) argues that technology is not *politically neutral* and thus understanding its contestations and the (un)intended consequences of its implementation is paramount for uncovering global power asymmetries.

Football referees and officials face enormous pressure from fans, players, managers and football associations, and their decisions can directly impact games' outcomes (Kerr 2016). Sport has not been untouched by technologies (ibid.) and in several sports, referees have been assisted by tools that can help them with their own and their assistances' decision-making and intra-communication. Normatively, this is assumed to limit crucial errors that impact results. Technologies provided to referees correspond with the core principles of technological progression; namely easing processes whilst improving the quality of 'something' (Matthewman 2011).

In football, match-officials use technologies that are believed to act as a panacea for referee errors (Colwell 2000). This is exemplified by headsets with microphones that provide intra-communication with linesmen and the fourth official, the introduction of Goal-Line-Technology (GLT) (Winand and Fergusson 2018), the 'vanishing spray' for free kicks (Surujlal and Jordaan 2013), and most recently VAR. VAR was introduced throughout the 2017/18 season and approved in the Laws of the Game in 2018. Compared to other global sports, including cricket, tennis, and rugby, which previously have adopted similar technologies (Collins 2010; Collins and Evans 2008), football has long resisted such implementations (Surujlal and Jordaan 2013). In tennis, referees' authority *vis-à-vis* decision-making can be challenged when a player objects to the referees' initial call allowing for the consultation of decision-aid technologies (Winand and Fergusson 2018).

Such technologies have also been contested, Kerr (2016) demonstrates through case studies of 'hawk-eye' in tennis and cricket and Instant Reply and Control System (IRCS) in gymnastics. She concludes that these cases revealed unexpected consequences that were not envisaged by the respective sporting bodies. In rugby, video technology can be used to assess whether a try was scored, and the rationale for introducing such decision-aid technology was to reduce the number of incorrect decisions made by the referee (Stoney and Fletcher 2020). Overall, technologies are regularly deployed to make sense of and revisit contentious decisions with game-changing consequences. The logics behind VAR included a fairer game, minimal interference, and maximum benefit (BBC 2018). While such aims connect with technology's core idea of improving the quality of 'something' (Matthewman 2011) and saving time, a main criticism of VAR was the extent to which it successfully manages to not interfere and actually save time, given the bureaucratic process it imposes on the game *if* a situation requires a check (Lee Ludvigsen 2020). For example, for the first 32 games that were played in 2018WC, it was reported that VAR reviews – on average – stopped the game for 31 seconds (FiveThirthyEight 2018). Although 31 seconds, compared to free-kicks (which on average took 10 minutes and 29 seconds per game), may seem scarce – there is still a sentiment of VAR effectively halting the game and constituting an 'unnatural' aspect of the flow of the game. Moreover, in the relevant literature, scholars have raised critical questions regarding technological systems' implementation and accuracy (Nlandu

2012). As Collins (2010) argues, technologies can construct a false sense of transparency and challenge the officials' authority.

Although decision-aid technologies' practical workability, implications and ethics have been questioned, very few scholars consider how they impact supporter experiences. This area of research remains extremely under-researched and following the implementation of GLT in the 2010s, it was highlighted that there also had been minimal academic appreciation of supporters' perspectives and responses of GLT (Winand and Fergusson 2018). We do not intend to conflate GLT and VAR. Whilst sharing some similarities, they represent two distinctive decision-aid technologies. GLT provides a clear-cut 'yes/no' answer on whether the ball crossed the goal line or not. Although GLT, when implemented, was trusted, supporters did not fully endorse the technology. Supporters were also against showing GLT decisions on large screens inside stadiums. Importantly, some fans were uneasy with the idea of implementing additional decision-aid in football (Winand and Fergusson 2018). In their examination of decision-aid technologies' impact on fan experiences, Stoney and Fletcher (2020) find that rugby fans wanted transparency and more information including audio communication between the referee and the Television Match Official concerning decision-making.

Then, in terms of the emerging research on VAR, Winand et al. (2021) explore German and English fans' satisfaction with the technology. The findings from their online questionnaire suggest that most fans favoured VAR. However, the technology also impeded the joy of debating contentious situations of the game. As they argue, 'VAR alters the debating component of football as perceived by football fans, which is crucial to fandom identification and the match atmosphere' (pp. 106). Hamsund and Scelles (2021) and Scanlon, Griggs, and McGillick (2022) explore VAR following its introduction in the English Premier League (EPL). Here, Hamsund and Scelles (2021) conclude that fans were happy for VAR remain in use, but concurrently suggested changes *vis-à-vis* its on-the-field application. Based on interviews with 100 football fans in the EPL, Scanlon, Griggs, and McGillick (2022) maintain that VAR was seen to impede the match-day atmospheres for fans, as well as the overall "flow" of the game. In all, this recent literature remains important because it demonstrates that fan perceptions of VAR are mixed. In other words, VAR remains contested. And, apart from the mentioned studies, there is still limited research on fans' and fan cultures' experiences of decision-aid technologies in the wider context of international football. Therefore, we aim to build upon the extant literature and investigate exactly how fans perceived VAR following its debut in the most popular football mega-event globally: the 2018WC.

Methods

Football fandom - in line with societies' digitalisation - increasingly takes place 'online' (Gibbons and Dixon 2010; Millward 2008; Petersen-Wagner 2017a; Petersen-Wagner 2017b; Petersen-Wagner 2018; Lee Ludvigsen 2019a; Lee Ludvigsen 2019b; Woods and Lee Ludvigsen 2021). Scholars have yielded invaluable findings from online supporter discourses (see Lee Ludvigsen 2019a; Lee Ludvigsen 2019b; Cleland 2014; Cleland et al. 2017; Petersen-Wagner 2017a; Petersen-Wagner 2017b; Petersen-Wagner 2018; Millward 2011). Thus, the spaces wherein football fandom manifest itself have, in some respects, moved from orthodox places such as stadia to heterodox spaces such as social media

platforms (see Petersen-Wagner 2018). As such, this study notices the importance of this paradigm shift in supporter culture and draws upon football supporters' online discourses on a particular social media platform as data source

As argued by Marres (2017) a digital sociological turn does requires accepting novel spaces for socialisations – as with YouTube (see Burgess and Green 2018) in the case of this study – and calls for the implementation of distinct methods to understand those spaces. Following this plea, we automatically collected fans' comments in YouTube by way of data extraction. Following ethical approval from first author's institution, we used YouTube Data Tools (Rieder 2015) to scrap comments from the official FIFA YouTube channel videos highlights of games where VAR has been used. YouTube Data Tools (Rieder 2015) is a web-based collection of modules that connect to YouTube's Application Programming Interface (API) and automatically extract datapoints accessed through YouTube's API v3 (YouTube 2022). As mentioned previously, VAR was available in all the 2018WC's 64 games and there were 455 situations checked by VAR during 2018WC, with 20 of those being reviewed during the game by the on-field officials. Using a list compiled by ESPN (2018), we have identified 30 games where VAR was reviewed by on-field officials according to FIFA's own statistics or should have been reviewed according to pundits. From the 30 games, we have scraped a total of 319,358 comments. Hence, important to acknowledge, the comments collected reflect the time of the 2018WC, its automated data collection (26th July 2018), and users who were *vocal* on this particular social platform. The comments varied in length from just a word to an entire paragraph, meaning those 300 thousand comments yielded over 3 million words worth of data. After cleaning the data, both authors independently found 4,035 comments where the word VAR was mentioned, ranging from games with only 16 comments (Saudi Arabia v Egypt) to games with 1516 comments (Morocco v Spain). Those comments were then condensed in a single file for later analysis. From a representative stratified sample of 351 comments (confidence level 95%; margin of error 5%) we have initially classified them into negative, positive, and neutral. We found that most comments were negative (211 – 60%), with 92 neutral (26%) and only a small fraction being positive (48 – 14%), leading our discussion towards the negative perceptions by fans in terms of VAR implementation during WC2018.

Subsequently, the authors independently performed thematic analysis (see Nowell et al. 2017) on all 4,035 comments mentioning VAR in the following languages: English, Portuguese, Norwegian, Spanish, French, German, Swedish and Danish – languages that the authors command. In terms of the most mentioned category (negative comments) three main themes emerged: Global North vs Global South; Non-Neutrality of Technology; VAR is Killing the Beautiful Game. In this paper, due to space restrictions, our focus rests on the first and uses the remainder two as supporting themes. Whilst the emergence of themes was informed by comments in all the different languages, here our focus is on comments written in a *lingua franca* (English) as it provides the condition for intercultural communications to emerge (see Baker 2018). In the second phase, the English comments within this first theme were analysed following Chouliaraki and Fairclough (1999) four stage critical discourse analysis technique, where VAR *vis-à-vis* fans' opinions regarding technology was identified as the kernel for analysis. In this respect, the *social wrong* the authors have identified was the implementation of VAR technology during 2018WC and its apparent non-neutrality stance, whereas the *social order* sustained by this *social wrong* was the Global North/

Global South dynamic within football, as we explore further in the results and discussion sections below.

Results

Whilst our analysis of negative comments reveals broader dissatisfaction with how the system was employed, it is also clear that those responsible for its implementation – FIFA – were the main recipients of criticism. Thus, fan responses to VAR demonstrated a perceived injustice caused by this technology, and clearly singled out a particular actor who was to 'blame'. VAR became another facet that some fans use to articulate their resistance to a loosely defined modernization of the game (Hughson 2019; Hill, Canniford, and Millward 2018; Numerato 2015; Vimieiro et al. 2019). Indeed, fans sought to resist the different '-*ization*' processes (Numerato and Giulianotti 2018) by taking aim at one issue that encapsulated the malaises during 2018WC. As this section underlines, 'technologization' became the 'scapegoat' for the different antisystemic feelings towards FIFA. As seen below, technology was a central aspect for the criticism directed at football by Supporter #1.

> Supporter #1 - (Peru vs Denmark) *Goal line technology, VAR, makes football today not the football of the 80s where there was engagement*. Today, bizarre goals, faults, from these *new technologies* causing temporal stops in the game. Balls deflated or not well inflated, more incidents still to come with the way the football governing body is revolutionising the game. *Money here, money there!!! Today football is artificialised* (emphases added)

Nostalgic feelings expressed by Supporter #1 find echoes in the wider movement against modern football (see Hill, Canniford, and Millward 2018; Numerato 2015; Vimieiro et al. 2019), but what is important to highlight in the above comment is how technology is central to the discourse. For Supporter #1 technology removes the excitement surrounding the *authentic* football culture, especially by sanitizing the game. This is echoed by other fan comments:

> Supporter #2 (Peru vs Denmark) TAKE OUT VAR. Referees mistakes are part of the beautiful game.

> Supporter #3 (Sweden vs Korea) VAR is good, But VAR also made football being not interested, no drama, and no…. Fill below what u feel…

What both Supporters #2 and #3 highlight is that technology sanitizes the spectacle by removing the errors that are part of the game (Hughson 2019). Mistakes are part of the drama and one of the causes for generating unforgettable moments in World Cup's history (Hughson 2016). Supporters appreciate the aesthetics of football because of its own rhythmic expressions, and the introduction of an extraneous element has repercussions to its dramatic unfolding. This is better encapsulated by Supporter #4's comment:

> Supporter #4 (Colombia vs Senegal) This VAR is killing the flow of the game. The conspiracy against Africa tho

What Supporter #4 highlights relates both to the disfigurement of the aesthetically and culturally diverse spectacle and provides initial weight to this paper central reading of supporters' views regarding technology as a tool for neo-coloniality of power. Supporter #4's comment alludes to a perceived conspiracy against African nations, which found echo

on a range of comments from diverse supporters and in different games. As we can see from Supporters #5 and #6's comments VAR did not only disenfranchise African sides (Supporter #5) but did so in relation to bigger and smaller nations in footballing terms (Supporter #6):

> Supporter #5 (Colombia vs Senegal) FIFA use VAR against African countries

> Supporter #6 (Belgium vs Tunisia): First goal on a penalty which is not one? What is the VAR for? Seems VAR only comes when it favours big teams!

What the above comments highlight, is that the lines that define what is considered Global North or Global South are not mechanically imposed (see Petersen-Wagner 2017a; Rosa 2016) but organically reflect a myriad of status that relate to both position within global football culture and world capital system (see Wallerstein 1980). If Supporter #5 saw VAR favouring other nations bar African countries, Supporter #6 and Supporter #7 (see below) complicate the matter by demonstrating how the lines are drawn and re-drawn. The below comment is emblematic as Brazil can be considered a Global North side in strict footballing terms (see Petersen-Wagner et al., 2018), nevertheless in pure Wallersteinian analysis Switzerland would have been the Global North and Brazil the Global South:

> Supporter #7 (Brazil vs Switzerland) Brazil should have won if VAR was utilised. Swiss goal should have been disallowed for pushing. A penalty should have also been awarded in another instance for Brazil.

Because of FIFA's Eurocentrism (see Bar-On and Escobedo 2019) – its Swiss HQ, its Chief Refereeing Officer (CRO) the Italian Pierluigi Collina (see FIFA 2020a), previously UEFA's CRO (see UEFA 2018), the International Football Association Board (IFAB 2019) that is the universal decision-making body for the laws of the game being composed by the five founding members (The English Football Association, the Football Association Wales, the Irish Football Association, the Scottish Football Association, and FIFA), and IFAB's technical subcommittee composed solely by Europeans (IFAB 2020) – unsurprisingly supporters directed their criticism towards European countries who they believed were favoured. FIFA and IFAB's Eurocentric compositions add to our reading of supporters' negative comments regarding VAR as an expression of FIFA's neo-coloniality of power, or what Bar-On and Escobedo (2019) conceptualise as its pro-colonialist practices. In a way, the conflation of sporting and political elements within those games (see also Bar-On and Escobedo 2019; Scelles 2021 for a broader discussion in football) is further exacerbated by the VAR decisions that fans understood as contentious. Both comments from Supporters #8 and #9 (see below) emphasise this but interestingly it does so by reflecting the social position of the author. If Supporter #8 saw VAR in a negative light, Supporter #9 in contrast sarcastically saw it positively:

> Supporter #8 (Spain vs Morocco) VAR IS BULLSHIT;) ONLY FOR EUROPEAN COUNTRIES, and you claim no to racism…. hypocrisy

> Supporter #9 (Peru vs Denmark) Love VAR. Less bad calls hopefully. Looks like EU teams have been winning against other continents. Congrats Denmark.

What the above comments stress is that the lines that divide Global North and South can also be coupled with issues of racism. Whereas traditionally sociological inquiry on racism focused on fans and players (see Back, Crabbe, and Solomos 1999; Cleland 2014)

what the comments draw our attention to is how technology can be part of a potential institutionalized racism that seeks to control the *other* (see Quijano 2000). In a way, those comments open a new avenue for understanding how the rules of the game and in particular the implementation of VAR might have been designed with an orientation to regulate *others*' bodies and actions.

> Supporter #10 (Colombia vs Senegal) *VAR is a total racism tool* against Africans and Arabs what a shame to see politics into a fun game like football (emphasis added)

> Supporter #11 (Spain vs Morocco) If only Moroccan players paint their faces white and geographically move their country to Europe then VAR will be applied, and justice will be served. Only then we may see Morocco play the World Cup final.

The conflation of race, racism, and technology (Supporter #11) is also coupled with wider political issues as Supporter #10 stated. Moreover, the articulation of this antisystemic feeling towards technology and VAR also include the key element that supporters tend to associate with the malaises in modern football: commercialization.

> Supporter #12 (Iran vs Portugal) Sad to see how corrupt FIFA is. *They use VAR to benefit the big teams*. Ronaldo should have been sent off yesterday *but is kept just for publicity* (emphases added)

As Supporter #12 indicates, the Global North and Global South dichotomy does not only reflect the mechanic or previously discussed organic definition based on football historical force, but also includes the commercial valuation of specific athletes. For Supporter #12, VAR operated in a certain way to keep Ronaldo on the pitch purely for marketing reasons as he is an asset for the tournament's global value. Moreover, this quote by Supporter #12 gives weight to our argument regarding neo-coloniality of power as it demonstrates how this technology operated to *control* who plays or not with aim of generating maximum profit for the *owner* (see Quijano 2000).

Therefore, our results inform the three inter-connected arguments this section advances. First, our analysis shows how fans' dissatisfaction of VAR were tied up to perceived injustices that were caused by those responsible for introducing VAR, namely FIFA. This connects with Hughson's (2019, 317) observation, as he writes that, '[f]ootball has come under much criticism in recent years for the way the sport has been administered at the highest level' with FIFA being the 'main target for criticism'. Secondly, VAR as the epitomizer of the intensifying technologization was perceived by fans as another '-ization' process that characterizes the contested domain of 'modern football' (Hill, Canniford, and Millward 2018; Numerato 2015; Vimieiro et al. 2019). Evidently, the decision-aid technology was negatively perceived by fans as sanitising their experiences and was regarded as incompatible with both nostalgic and idyllic notions of football (Hughson 2016, 2019). Thirdly, VAR was experienced by those fans on YouTube as a technology that served underlying commercial interests for the event owner and partners and simultaneously favoured loosely defined Global North sides' chances of progressing in the tournament. In other words, VAR was experienced as a non-neutral technology that deliberately assisted 'big teams' and served as an obstacle for 'smaller' sides.

Discussion

Departing from the idea that technology is an artefact (MacKenzie and Wajcman 1996) that has socio-organization repercussions (Winner 1977), we follow Foucault (1969, 2000) in recognizing that it goes beyond its *hard* expression to encompass its implementation (*techniques*) and power repercussions. The nuanced reading we provide seeks to overcome an apparent either/or position where technology is perceived solely as a power implementing apparatus to accept a both/and standpoint where technology also provides space for anti-systemic movements.

As argued by Arrighi, Hopkins, and Wallerstein (1989) antisystemic movements arise from struggles for power and in opposition to hierarchical oppressive systems and forming around traditional solidarity lines such as class and nationality. Commonly antisystemic movements gravitate around oppressive systems that have the accumulation of power and capital as a constant (Arrighi, Hopkins, and Wallerstein 1989). Inasmuch Arrighi, Hopkins, and Wallerstein (1989) provide sociological lenses to comprehend past antisystemic movements, they do so by relying on the nation-state as unit of analysis whereas this is problematic at least on two levels: firstly, because currently solidarity lines are constantly drawn and re-drawn (see Beck 2005a, 2005b); secondly, it does not account for historical colonial experiences (Hall 2018; Quijano 2000; Said 2000). As discussed above, the antisystemic feelings expressed through negative comments *vis-à-vis* VAR did not run along the lines of nation-states' political borders but provided a nuanced reading of world society where periphery and core are mutable. The mutability of lines is better encapsulated when a semi-peripherical nation as Brazil can be understood as core in footballing terms (see Petersen-Wagner et al. 2018), but also when footballing semi-peripherical nations as Portugal are perceived as core. The drawing and redrawing of solidarities and the mutability of core and periphery reinforce Bhaba's (1991) arguments that postcolonial politics are subversive rather than directly oppositional. In a way, those supporters, when expressing those negative feelings on YouTube, are subverting one of the key elements of colonial modernity, namely the confined solidarity lines of nation-states (see Said 1994).

Furthermore, our findings reinforce the position where solidarities are not solely confined within the modern nation-states – either by class or nationality – but express themselves transnationality along the lines of haves and haves-not (see Santos 2014; 2018; Petersen-Wagner 2017a). The haves and haves-not are not uniquely confined to 'positive' phenomena (e.g., who has power, status, control) but also imply 'negative' experiences (e.g., who is at the other side of the abyssal line) (see Said 1994; Santos 2014; 2018), meaning those experiences are consciousness articulated through negative comments. In a way, this expresses a long historical colonial unconscious (see Hall 2018; Said 1994) that now shows signs of being voiced by those distinct individuals when they take aim at VAR – and ultimately at FIFA – in respect of injustices (see also Bar-On and Escobedo 2019 for a broader postcolonial analysis of FIFA). In a way, YouTube as a content agnostic platform (see Burgess and Green 2018) become a space for voices from the other side of the abyssal line to *freely* express themselves (see Spivak 1988). Moreover, YouTube's affordances meant that the voices of those speaking did not have a predetermined value where the loosely defined Global North individuals could maintain their hegemonic power in shaping the narratives and experiences to a point where the *other* is kept on a position of (identity-construction)

dependency (see also McSweeney et al. 2019). The ability to *speak for themselves* reinforces Said's (1994; 2003) discussion regarding coloniality and culture especially by highlighting how the other is in a constant struggle to challenge and resist a dominant narrative.

For Arrighi, Hopkins, and Wallerstein (1989) one of the causes for antisystemic movements' lack of success is the inability to relate to previous ones, meaning that ephemerality consequently leads to unfulfilled dreams. If in a pre-Internet world ephemerality was conceived as the main barrier for antisystemic movements, in current digital societies it is possible to assume that such movements would encounter even stronger obstacles. Nevertheless, as Castells (2015) argues social network platforms such as YouTube become places for individuals to congregate and share their hopes and sorrows beyond the control of governments and corporations such as FIFA. In a way, supporters while showing their discontent with a particular digital technology (VAR), are doing so by utilising another digital technology (social media platform) to voice and amplify such views. Furthermore, what this antisystemic feelings against one digital technology via another digital technology highlight is a necessity to embrace methodological cosmopolitanism that accepts a nuanced both/and perspectives where technologies per se are not inherently bad or good. Moreover, methodological cosmopolitanism allows for reframing notions of state, power, inequality, and risk (see Beck 2005a, 2005b, 2007, 2016), in a way that is possible to move past Arrighi, Hopkins, and Wallerstein (1989) methodological nationalism lens where inequality refers to traditional *positive* class/capital dynamic, to one where we see the *negative* inequalities, or how the distribution of *bads* took place along the lines of coloniality (Quijano 2000).

Moreover, in contrast to Arrighi, Hopkins, and Wallerstein (1989) analysis that primarily focus on nation-states' power, what our critical reading of supporters' comments showcases is the redefinition of power where transnational organisations such as FIFA and their partners as Adidas, Coca-Cola, Hyundai/Kia, Qatar Airways, Wanda, and Visa (FIFA 2020b) take prominence. In a way, VAR was perceived by supporters as technological aid for vested interests, controlling players' labour, and ultimately deciding who is to perform. This last point can be better expressed by Supporter #12 quote, as this supporter reflects on who should continue to play (Ronaldo) and for what reason. Somehow, the *metropolitan centre* Said (1994) alludes to is metamorphosed from nation-states to transnational organisations. In its current metamorphosed form, the *metropolitan centre* is more diffuse and operates via networks that connect and distance distinct actors according to their own vested interests (see Cleland et al. 2017; Millward 2011).

In sum, it become impossible to read those negative comments in isolation, meaning that referee on-pitch decisions, VAR decisions, the organisation of the WC2018, FIFA's historical and present organisation are all intermeshed to a point where sport and identity politics becomes indistinguishable. Instead, they should be comprehended in conjunction with wider changes in society. This interpretation allows us to firstly appreciate the current nature of antisystemic movements reshaping our understanding of solidarities and injustices; secondly it allows us to move towards methodological cosmopolitanism, reframing our understanding of where those movements take place.

Conclusion

This study has extended our understanding of 'technology' in elite sports through a critical interpretation of fans' experiences of VAR during WC2018 within a technological place. Furthermore, considering the proven sociological and cultural relevance of football and football fans' online discourses (Cleland et al. 2017; Millward 2011; Petersen-Wagner 2017a, 2017b, 2018) we have adopted a digital sociological approach (Marres 2017) and have drawn our analysis from fan interactions on YouTube. Our critical reading of fans' negative comments shows that they expressed dissatisfactions around the implementation and use of VAR. As highlighted, this argument can be read in conjunction with the wider discontent around notions of 'modern football' (Hill, Canniford, and Millward 2018; Vimieiro et al. 2019) and the increased technologization of sport. Fan discourses also revealed a perceived injustice attached to VAR's application: as a non-neutral apparatus that favoured loosely defined Global North teams and players' chances to succeed. Nevertheless, technology should not be understood from an 'either/or' position where it is used solely for control but ought to be understood from a both/and perspective as it can also be the necessary space for loosely defined networks of hope to emerge. Moreover, what we have demonstrated are the limits of an orthodox interpretation of world system theory that relies on nation-states as units of analysis; our nuanced approach not only moves away from nation-states but takes to the fore redefined concepts of power and inequalities.

To this end, this article makes a series of valuable and timely contributions to the existing knowledge in both mainstream sociology and the sociology of sport. It is one of the first sociological studies, to our knowledge, that empirically examine fans' experiences of VAR by approaching it via digital discourses on social media. As such, this study makes an important addition to the emerging scholarly understandings on football fans' perceptions of VAR. More specifically, this article extends this literature by building upon the recent empirical findings of Scanlon, Griggs, and McGillick (2022), Hamsund and Scelles (2021) and Winand et al. (2021) which illustrate how VAR has been received differently within diverse football cultures and remains a contested tool. Furthermore, this study can work as a window for the reading of the contested nature of broader processes of 'technologization' in sport (Kerr 2016), and the paper concomitantly sheds light on wider societal aspects regarding technology and society (Chomsky 2017).

With regards to our exploratory paper's limitations, it remains important to, first, acknowledge that we do not seek to generalise the overall fan perceptions of VAR based on what was discussed solely on a particular YouTube channel. Nor do we argue that VAR was used for excuse objectives – namely favouring loosely defined Global North sides – but the discontent of some fans pointed towards that direction. Second, as another limitation we would acknowledge that this paper has focused primarily on one specific theme that emerged from our analysis (Global North vs. Global South). In essence, this theme – by its nature – composed mostly of comments where fans framed VAR negatively. Thus, in unpacking and focusing specifically on this theme, we acknowledge that some of the positive fan responses to VAR have been given limited discussion in this paper, partly due to space restrictions and our main focus on the negative perceptions of the technology. Notwithstanding, football fans comprise a heterogenous social group. Thus, it is important to capture in future research that some fans have positive perceptions of this technology (see e.g., Winand et al. 2021). We would argue that future research should continue to

explore the reactions to technology in other competitions or sporting events for more comparative studies. Moreover, akin to algorithm bias (Noble 2018) it is important to question actual decisions made by the help of technological aid in sport and possible bias against particular athletes, clubs or nations. Notwithstanding, against the background of technologies being introduced in the name of a 'fairer game' and given the fact that sporting technologies intensify and have a range of unintended and intended consequences, our findings are particularly valuable because they empirically and critically capture VAR's paradoxical nature in a time wherein decision-aid technologies are likely to remain contested and dominant in global sport.

Disclosure statement

No potential conflict of interest was reported by the authors.

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