This is a peer-reviewed, post-print (final draft post-refereeing) version of the following published document and is licensed under All Rights Reserved license:


Official URL: http://www.thecritique.com/articles/goal-line-technology-a-retrospective-look-at-scholarship-on-the-issue/

EPrint URI: http://eprints.glos.ac.uk/id/eprint/3110

Disclaimer

The University of Gloucestershire has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

The University of Gloucestershire makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

The University of Gloucestershire makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

The University of Gloucestershire accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.
This is a post-print (final draft) version of the following published document:


Published in The Critique, and available online at:


We recommend you cite the published (post-print) version. The URL for the published version is:


**Disclaimer**

The University of Gloucestershire has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

The University of Gloucestershire makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

The University of Gloucestershire makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

The University of Gloucestershire accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

**PLEASE SCROLL DOWN FOR TEXT.**
The years of seemingly endless discussion and equivocation about the introduction of goal-line technology in football (soccer) finally came to an end when FIFA agreed to implement it for the 2014 World Cup. One particularly prominent incident in the 2010 World Cup was influential in this change of stance. When England met Germany in their second round match, the English mid-fielder, Frank Lampard, struck the ball towards the goal, only for it to ricochet off the crossbar and bounce back out to the field of play. Whilst the replay showed that the ball had in fact crossed the goal line, the referee called for play to continue. FIFA President, Sepp Blatter, who was watching the game in the stands and had access to the replay, finally accepted that when the stakes are this high and sport is this serious, the issue of justice outweighs that of tradition. It is these two concepts that lie at the heart of the debate on this issue. Traditionalists in football have always argued that one of the key facets of the game is its simplicity, in that all that is required is a ball and somewhere to play: the game is the same whether it is played on a dusty patch of land in Sierra Leone or on the frozen tundra of Siberia. Yet at the same time, the rules of sport require justice to be served and to be seen to be served. In the modern age, it was the latter that was becoming increasingly unapparent.

The question over goal-line technology can be traced back to the beginning of the century when other sports began to use officiating technology in order to make more accurate calls. Despite the differing roles and respect afforded to officials in sport, at the very least, they ought to be fair, impartial and ultimately just. That is, they do not favour one competitor over the other and they attempt to apply the rules consistently. However, justice is not the same as accuracy: an official may be unbiased or unpartisan but still make errors of accuracy. That the human eye is fallible and that even the most experienced officials are not always able to discern whether a ball crossed a line (as in tennis) or touched a bat (as in cricket), meant that justice was not always served. And the increasing use of replay and video technology for the spectator meant that justice was seen not to be served either.

Technology that allowed for a greater accuracy of rule based calls was first driven by sports broadcasters than the sports themselves, in order to provide a greater depth of analysis for the spectator. Broadcasters have the luxury of time in which to analyse and re-assess officiating
judgements. The discordance between the official’s judgement and what the spectator was seeing on screen amplified the effect of any human error. As a result, an increasing number of sports began to utilise the technologies that were being used by the broadcasters to assist with the officiating process itself.

In contrast to other sports that were quicker to embrace officiating technology, the highly conservative sphere of football, and its governing body FIFA, aimed to retain its traditional roots. This was expounded in a statement on FIFA’s website (now removed) by Sepp Blatter which gave eight reasons why goal line technology should not be implemented. These reasons can be broadly separated into three categories: those dealing with the nature and value of the game of football, such as the simplicity and universality of football and the way in which technology would affect the fluidity of the game; those related to issues of justice, such as the way in which that fans like to debate controversial decisions and the view that technology would undermine the authority and quality of the referees; and those concerned with its practical implementation, such as cost and reliability¹ (Ryall, 2012).

It is the issue of justice and authority that scholars in the area of officiating technology have primarily been concerned with. This conflict was highlighted by Collins² who noted that as the visual technology afforded to the spectator had increased, the authority afforded to the official had decreased. Traditionally, referees possessed both an ontological authority and an epistemological privilege. Ontological authority refers to the ability of the official to determine reality and is captured in the phrase ‘the referee is always right’. In this sense, if the referee awards or disallows a goal, it is recorded as a fact about the game (and will be recorded as such in the official statistics) regardless of whether others agreed with the decision or not. Epistemological privilege refers to the view that the official is the best person, in the best position, to determine those facts. This is based upon assumptions regarding the following: officials have a superior view of the game in a physical sense, i.e. the umpire’s chair above the centre of the court, or the referee who is close to the ball; and that officials possess specialist or expert knowledge about the game and its rules that enables them to make correct calls.

¹ Ryall, E. (2012). Are there any good arguments against goal line technology? Sport, Ethics and Philosophy, 6(4), 439-450.
Until recently, an official’s epistemological privilege and ontological authority was generally taken for granted. However, the official’s epistemological privilege has been eroded with the introduction of technology. The clearest illustration of this is through the use of multi-angle cameras and video replay, which has resulted in the epistemological privilege of ‘superior view’ being transferred to the armchair viewer sitting at home with the live-pause facility via the remote control. This means that officials and referees are no longer in the best physical position to judge facts of the matter. The view afforded to those watching on screen via multi-angle cameras has become superior to the one provided to the referee. This was starkly illustrated by a match in the 2010 football World Cup when the referee awarded Argentina a goal against Mexico. A replay of the incident was immediately shown inside the stadium to spectators, players and officials alike and clearly indicated an offside infringement prior to the goal. There was a clear disparity between the referees’ ontological authority and his epistemological privilege, since, through the video replay, the spectator was able to make a more accurate judgement as to what occurred on the field of play. Collins clarifies this disparity further by distinguishing between two types of justice: presumptive justice and transparent justice. Presumptive justice can be defined as the justice that is assumed to have been done from the position of the official who exercises ontological authority, and transparent justice can be understood as justice that is seen to have been done from all other perspectives. Prior to the television replay, presumptive justice was sufficient in matters of adjudication in sport, since everyone had to accept the official’s decision because the official qua official was always right. As there was no ability to review play via technological means, any argument about what ‘really’ happened was always academic since it relied upon first person experience and memory. But when replays of incidents are now available to all both inside and outside the stadium, presumptive justice has become increasingly inadequate: epistemological privilege, in the sense of a superior view, now rests with others rather than the official.

Such a disparity reduces the credibility of both match officials and the sport itself. As Tijs Tummers, secretary of FIFPro’s (the professional football player’s union) technical committee said of the Argentina incident,

“[The referee] would undoubtedly have heard that Tevez was offside, the whole stadium had already seen it by then via images on the scoreboard. Yet, because the referee was not
allowed to rely on video images, he had to award the goal which he knew should have been disallowed. You could see the doubt in his eyes.\textsuperscript{3}

As a result, the introduction of goal-line technology in the 2014 World Cup made use of the superior position provided by multi-angle cameras in order to display a graphic replay of the incident for both spectators and officials. The effect was both added entertainment for the spectator whose sense of anticipation was enhanced by waiting to see the verdict on the big screen, but more importantly, it provided the official with additional information from which to make a accurate judgement about events.\textsuperscript{4} FIFA’s evaluation of goal-line technology following the 2014 World Cup was overwhelmingly positive and they cited a range of incidents within the tournament which benefitted from its use.\textsuperscript{5}

Nevertheless, there are still problems that are raised by the use of this type of technology and were highlighted in FIFA’s initial reasoning not to use it. One of the effects of the debate is the unquestioned assumption that infallibility of judgement is possible\textsuperscript{6} (Nlandu, 2012). However, as is demonstrated in other sports, technology is both imperfect and ultimately still relies upon human judgement to apply rules correctly. There have been many cases within rugby union for example where despite multi-angle cameras it still is not possible to clearly say whether a try has been scored. Equally, in cricket, the use of the ‘hotspot’ and ‘snickometer’ has been shown to be fallible and has led to wrong calls being made. Moreover, technology that predicts the path of the ball, such as HawkEye, is based upon assumptions about physical properties and therefore contains an error range that could mean a ball is called in when it should have been called out. Nlandu also highlights the flawed emphasis that is placed upon single ‘crucial’ decisions that supposedly determine the outcome of the game. Deconstructing the game to solitary incidents downplays the richness of the game in its totality. Such \textit{reductio ad absurdum} could equally lead one to argue that a foul that was missed by the official in the middle of the pitch ultimately led to a goal being scored. Had this foul been noted, the goal would not have been scored. This highlights a further concern with the introduction of goal-line technology in the way that it may lead to calls to introduce the technology to other elements of the game such as off-sides and fouls. This creeping use of technology has been


\textsuperscript{4} FIFA TV. (2014) \textit{Benzema v Honduras – Goal-Line Technology EXCLUSIVE} [Retrieved from: https://www.youtube.com/watch?v=-8e_cdg0NDw]


criticised in rugby union whereby referees are reviewing play several phases prior to a score, or are being asked to stop play to review incidents of suspected foul play minutes after it occurred.⁷

Ultimately the fear about the introduction of officiating technology is that the human value attached to the game is being eroded by a desire for both certainty and accuracy. Again it points to the balance to be struck between justice and tradition. This is a balance that the sporting authorities need to strike with a degree of consideration and reflection. Prior to 2014, FIFA tended towards tradition at the expense of justice but they need to ensure that it does not swing the other way as some have feared has been the case in other sports. Considering FIFA’s history of conservatism, this is unlikely. The main barrier in introducing goal-line technology at other levels of the game seems to be the practical one of cost rather than any philosophical concern.⁸ If its cost falls in the way that the cost of technology has done in other areas then its use is likely to be much greater as the years progress. In the end, the controversy as to whether goal-line technology would make the game better or worse seems to have dissipated, and players, fans and management all seem to have accepted it with barely a passing concern.
