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# Technological Nudges and Copyright on Social Media Sites

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# Technological “Nudges” and Copyright on Social Media Sites

Corinne H.Y. Tan\*



## Abstract

*Using an adapted taxonomy, this article identifies the technological features on predominant social media sites—Facebook, YouTube, Twitter and Wikipedia—that encourage and constrain users from engaging in generative activities. Notwithstanding the conflicting narrative painted by recent litigation around copyright in relation to content on social media sites, I observe that some of the main technological features on social media sites are designed around copyright considerations. References are made to the legal positions in the US, the UK and Australia. I argue that users of social media sites are subject to the mixed signals given by those sites, as a result of which they are unfairly exposed to the risks of allegations of copyright infringement. Given the ubiquitous usage of social media sites, the article questions the resulting vulnerability of users who act under the influence of these sites, and hopes to stimulate further discussion in this area.*

## Introduction

The recent controversy involving Facebook’s manipulation of the news feed of users to influence their moods<sup>1</sup> highlights that it is important to be conscious of how social media sites can be designed to have an impact on us. We are increasingly aware that we are “nudged” by social media sites to behave in certain ways, but we fail to articulate exactly how we are so “nudged”.<sup>2</sup>

In the second part of this article, I delineate the taxonomy I will use to understand how the surveyed social media sites—namely, Facebook, YouTube, Twitter and Wikipedia<sup>3</sup>—influence generative behaviours, before proceeding in the third part of this article to identify the technological features of the four surveyed social media sites that encourage and constrain the generative activities undertaken by their users. The classification of the technological features into these two main categories is the starting point from which I can evaluate the influence of technological features on the generative activities of users. These generative activities could be considered across three broad categories, being the creation, modification and

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<sup>1</sup> See, e.g., R. Shrimley, “Facebook: why we’re all lab rats now” (July 4, 2014), FT Magazine, <http://www.ft.com/cms/s/2/81196950-023c-11e4-ab5b-00144feab7de.html#axzz37quSjedp>; Thomas Jones, “Short Cuts” (July 17, 2014), London Review of Books, <http://www.lrb.co.uk/v36/n14/thomas-jones/short-cuts>; G. S. McNeal, “Facebook NewsFeed Manipulation Prompts FTC Complaint, Investigation Possible” (July 4, 2014), Forbes, <http://www.forbes.com/sites/gregorymcneal/2014/07/04/facebook-faces-possible-ftc-investigation-for-manipulation-study/> [All accessed December 11, 2014].

<sup>2</sup> There is a dearth of literature elaborating on how we are so influenced. In respect of being “nudged”, see generally R. Taler and C. Sunstein, *Nudge* (Penguin Books, 2008).

<sup>3</sup> In an earlier article, I explained that these four sites are chosen because they represent a wide spread of the different types of social media sites based on the frequently cited classification system proposed by Kaplan and Haenlein. See C. Hui Yun Tan, “Terms of Service on Social Media Sites” (2014) 19 *Media and Arts Law Review* 195, 196. See also A.M. Kaplan and M. Haenlein, “Users of the World, Unite! The Challenges and Opportunities of Social Media” (2010) 53(1) *Business Horizons* 59.

dissemination of content. The technological features identified will include the site interfaces that users interact with and which enable their engagement in generative activities, as well as the filtering software that processes the content of users.

In the fourth part of this article, despite the popular perception of social media sites as sites of flagrant copyright infringement, I identify the technological features on social media sites that are designed around copyright considerations. In the latter respect, I refer to the established legal positions in the US (being the nationality of the internet companies operating the social media sites examined), the UK and Australia. In the fifth part of this article, implications of recent copyright litigation concerning content on social media sites are highlighted.<sup>4</sup> This is done within the context of the article’s earlier discussion on the encouragement of generative activities by technological features on such sites, which the article notes also increases users’ exposure to the uncertainties and risks of copyright lawsuits.

I conclude by arguing that there are mixed signals given by social media sites on the types of activities which are permissible on such sites. Users are rendered extremely vulnerable, even though they have simply responded to the technological “nudges” on such sites, by engaging freely in generative activities. I question whether this is fair outcome to arrive at, particularly because users are not accorded the same levels of tolerance under the safe harbour legislation<sup>5</sup> that shields the internet companies operating these social media sites. This is notwithstanding the fact that these internet companies reap commercial benefits from the content generated on such sites.

## Taxonomy

In this section, I will explain my adaptation of a taxonomy proposed by Yeung, a regulatory theorist, which guides my evaluation of the impact of technological features of the four social media sites, on the generative behaviours of users.

There are implicit decisions made in the design of social media sites, and one of Yeung’s taxonomies<sup>6</sup> allows for a more nuanced discussion beyond Lessig’s wider concern with code architecture.<sup>7</sup> This method of classification proposed by Yeung focuses on the modalities of design.<sup>8</sup> Particularly, the ways in which the desired social outcomes are intended to be achieved define this way of categorisation. One way is to *encourage the requisite changes in behaviours* by altering the surrounding conditions for action and by directing these conditions either at the external environment or at the internal environment.<sup>9</sup> In this instance, it is assumed that the regulatees, or people in the regulated environment, are autonomous and their displayed behaviours are manifestations of the choices they have made.<sup>10</sup> Another approach is by way of *changing the impact of the harm-generating behaviours*<sup>11</sup>—for instance, the harm caused after such behaviours have occurred can be mitigated. A third is by way of *preventing the harm-generating behaviours* from occurring in the first place—this will include techniques to reduce the probability of the undesirable conduct occurring, and other techniques employed to eliminate the harm-generating behaviours entirely.<sup>12</sup> Yeung notes that the first two categories under the taxonomy, being the modalities of design which seek to promote behavioural changes *or* to change the impacts of harm-generating behaviours, are likely to be less effective than the third category, which overrides behaviours altogether. This is because the last modality “designs

<sup>4</sup> I have discussed, in the fifth part, one US, as well as another English case. There is no Australian case on point.

<sup>5</sup> Digital Millennium Copyright Act, 17 USC §512(c) (1998) (DMCA).

<sup>6</sup> I note Yeung’s acknowledgement that the broad categories of instruments are not watertight and frequently overlap. See K. Yeung, “Towards an Understanding of Regulation by Design” in R. Brownsword and K. Yeung (eds), *Regulating Technologies* (Oxford: Hart Publishing, 2008), p.79 at p.81.

<sup>7</sup> Lessig’s view is that code can incorporate regulatory imperatives and hence obviate any real opportunity for users to make real choices as to whether they wish to confirm to desired outcomes. See L. Lessig, *Code Version 2.0*, 2nd edn (Basic Books, A Member of the Perseus Books Group, 2006).

<sup>8</sup> Yeung, “Towards an Understanding of Regulation by Design” in *Regulating Technologies* (2008), p.85.

<sup>9</sup> Yeung, “Towards an Understanding of Regulation by Design” in *Regulating Technologies* (2008), p.85.

<sup>10</sup> Yeung, “Towards an Understanding of Regulation by Design” in *Regulating Technologies* (2008), p.85.

<sup>11</sup> Yeung, “Towards an Understanding of Regulation by Design” in *Regulating Technologies* (2008), p.86.

<sup>12</sup> Yeung, “Towards an Understanding of Regulation by Design” in *Regulating Technologies* (2008), p.86.

out” the possibility for undesired individual action, while the first and second approaches retain the scope for individual choice. As such, with reference to the first two categories, the consequential probability of the desired regulatory objective being thwarted is still entertained.<sup>13</sup>

For the purpose of this article, I have adapted and simplified the modality-based taxonomy to evaluate the generative activities made possible by the technological features of Facebook, YouTube, Twitter and Wikipedia, since my interest lies in the behavioural changes evoked from users. By identifying and discussing the features *that encourage generative activities*, as well as those which *constrain generative activities*, using the four sites as examples, I demonstrate how I have applied the taxonomy in the context of generative behaviours. My view is that the technological features which can *reduce the harmful impact as a result of the generative activities of another user* are not easily differentiated from those which constrain generative activities—for instance, the notice and takedown mechanisms established by the sites to remove content after such content is reported for the harm caused to a user arguably *also* constrain subsequent generative activities. This is because they lead to the removal of content with which other users can engage in acts of modification and dissemination.<sup>14</sup> As such, I have chosen to categorise the technological features broadly into two main categories (i.e. those which encourage and those which constrain generative activities).

The discussion in the following section will highlight the features that can influence the engagement of users in generative activities. Such features can elicit new behaviours from users, or cause them to modify behaviours, in order to work with the available technologies effectively.<sup>15</sup>

## Survey of technological features

### *Technological features which encourage generative activities*

In this section, I will identify the technological features on social media sites that encourage and constrain generative activities. The features described are by no means intended to be exhaustive.

### Creation

The following are ways in which users can create content, as a result of the available technological features on the four sites.

For instance, there are options on a user’s Facebook page to post a “status update” that can comprise content in text, images or video clips, or any combination of these formats of content. Alternatively, a Facebook user can directly upload content for sharing with others, in the form of an image or video clip, without writing a status update. The technological design of the Facebook site also allows a user to comment on the status update of another, and to attach an image with the comment, if he or she so wishes.

The YouTube site is designed such that a user who selects the “upload” option is directed to tools such as one to create a slideshow from photos, as well as another to edit videos. More specifically, the latter video editing tool enables a user, inter alia, to conveniently: create new video clips by combining other uploaded video clips and images; and add or substitute audio clips with a “swapping tool” provided by YouTube, from YouTube’s library of approved tracks,<sup>16</sup> to video clips. In addition, on the YouTube site, users can rely on a technological feature that automatically generates transcripts for video clips uploaded

<sup>13</sup> Yeung, “Towards an Understanding of Regulation by Design” in *Regulating Technologies* (2008), p.87.

<sup>14</sup> For instance, this can happen when we refer to the notice and takedown mechanisms established by the sites to remove content which is alleged to be copyright infringing.

<sup>15</sup> See M. Hildebrandt, “A Vision of Ambient Law” in *Regulating Technologies* (2008), p.175 at p.178.

<sup>16</sup> See, e.g., J. Cohen, “YouTube Gives Creators Updates and Tools to Help With Content ID” (March 18, 2014), Tubefilter, <http://www.tubefilter.com/2014/03/18/youtube-content-id-updates-tools/>; C. Boris, “YouTube calms angry vidders with new tweaks in Content ID process” (March 19, 2014), Marketingpilgrim, <http://www.marketingpilgrim.com/2014/03/youtube-calms-angry-vidders-with-new-tweaks-in-content-id-process.html> [Both accessed December 11, 2014].

to its server.<sup>17</sup> In the instance where a transcript cannot be automatically generated, a user can manually type the transcript in.<sup>18</sup> Finally, on the YouTube site, a user can also choose to comment on a video clip shared by another user.

On the Twitter site, a user can easily compose and post a short message called a “tweet” to his or her followers. A user can also respond to another user’s tweet. The tweet or response to another’s tweet can comprise an image, if the user wishes to upload one.<sup>19</sup> The added image, incorporated as a link in the tweet, can be viewed if the link is followed.

On the Wikipedia site, a user can contribute text, insert links, as well as embed images, audio and video clips within the contribution. It is noted separately that there is a book-editing tool available on the site,<sup>20</sup> which allows a user to create a book from separate pages on the site and thereafter to arrange for this book to be printed.

## Modification

The following are ways in which users can modify content, as a result of the technological features on the four sites.

A Facebook user can choose to modify the content from another user or website in a few ways. One form of modification occurs when a user selects the “share” option on his or her Facebook page to share the post of another user, upon which he or she is prompted to comment on the shared post. If the user decides to do so, the comment, together with the original post, is arguably a modified composite as a whole. Another form of modification occurs when the “download” option, which is available when a user expands an image, is used. While Facebook does not provide any specific content editing tools that allow users to rearrange text, images and video clips, etc., after downloading an image, a user can store the image for subsequent modification with external tools, with applications such as Gimp<sup>21</sup> and Photoshop.<sup>22</sup>

Similarly, on the YouTube site, a user is prompted to comment on a video clip he or she decides to share on other social media sites such as Facebook, Pinterest and Twitter, by selecting the “share” tab on YouTube.<sup>23</sup> Given that the user’s comment will be presented with the link to the relevant video clip on the YouTube site when this happens, the user arguably has engaged in an act of modification as a result of YouTube’s technological design, in respect of the new modified composite displayed on such other site. Separately, the video-editing tool discussed earlier also enables the modification of content. This happens, for example, when many video clips are modified to custom create one new video clip.

A user on the Twitter site can be said to engage in an act of modification when he or she uses the reply function available on Twitter, to respond to a tweet of another user.<sup>24</sup> It is noted that there is little room

<sup>17</sup> This feature uses voice search technologies and automatic speech recognition to automatically generate transcripts of videos. See, e.g., L. Klie, “YouTube Expands Video Transcription Option for All” (March 5, 2010), *Speech Technology*, <http://www.speechtechmag.com/Articles/News/News-Feature/YouTube-Expands-Video-Transcription-Option-for-All-61571.aspx>. It is noted that since this article was written, YouTube has expanded the transcription options to include other languages, including Spanish, French and Italian: see Google, “Transcripts”, <https://support.google.com/youtube/answer/2734799?hl=en> [Both accessed December 11, 2014].

<sup>18</sup> This can be because the sound recording is in a language that is unsupported by YouTube, or the recording has a poor sound. A user can also request for a translation of the captions he or she has created on YouTube. See Google, “Add captions”, <https://support.google.com/youtube/answer/2734796>; Google, “Request professionally translated subtitles”, [https://support.google.com/youtube/answer/2780526?hl=en&ref\\_topic=3014331](https://support.google.com/youtube/answer/2780526?hl=en&ref_topic=3014331) [Both accessed December 11, 2014].

<sup>19</sup> Up to four images can be added and will be displayed as a preview collage. Each individual image can be expanded for viewing. See Twitter, “Media: Using photos for musicians”, <https://media.twitter.com/best-practice/using-photos-for-musicians> [Accessed December 11, 2014].

<sup>20</sup> See, e.g., Wikipedia, “Manage your book”, <http://en.wikipedia.org/wiki/Special:Book>; Wikipedia, “Help: Books”, <http://en.wikipedia.org/wiki/Help:Books> [Both accessed December 11, 2014].

<sup>21</sup> Gimp, “GNU Image Manipulation Program”, <http://www.gimp.org/> [Accessed December 11, 2014].

<sup>22</sup> See Photoshop, <http://www.photoshop.com/> [Accessed December 11, 2014].

<sup>23</sup> Social plugins (i.e. tools used so that experiences on YouTube, for instance, can be shared on Facebook) are used. Whether the user uses the Facebook, Pinterest or Twitter social plugin, he or she will be prompted to write something at the same time

<sup>24</sup> As compared with other sites discussed above, there appears to be less opportunity for a user to use the tweet of another to comment on another matter. This is because when a user “re-tweets” (i.e. re-distributes the message of another user), the user is not given an option by the site to add his or her own comment to the re-tweet.

for a user to engage in alternative forms of modification, in light of the fact that there are no content editing tools made available to him or her on the Twitter site.

There are sophisticated technical co-ordination mechanisms on the Wikipedia site that separate contributions, mark them chronologically and attribute them to specific usernames or internet protocol addresses,<sup>25</sup> therefore allowing a contributor to edit content comfortably. The user is said to have engaged in an act of modification. Modification can also occur when the option to download an image, audio or video clip on the site is taken by a user, and stored for subsequent modification with external tools. In contrast to the other social media sites, I note that Wikipedia does not allow its users to comment on content; hence there is little room for this alternative form of modification.<sup>26</sup>

## Dissemination

The following are ways in which users can disseminate content to a wide audience, as a result of the technological features on the four sites.

A user can disseminate content in multiple ways on Facebook. This happens when the user: posts a status update; comments on another user's post; uses the "share" option; uses the "embed post" option; chooses to embed an image; or uses the "send" option for an image. First, in respect of a status update, the user gets to choose the audience to whom his or her post is disseminated. This audience can be the public, the user's group of "friends"<sup>27</sup> on Facebook, or people on a custom list created by the user. Secondly, when a user comments on the post of another user, the audience will instead be the selected audience of the latter user. Thirdly—if, for instance, a user decides to use the "share" option available on Facebook, he or she can again select the audience to whom such content is disseminated. The constituent members of the audience will depend on: whether the user shares the content on his or her own timeline; on a friend's timeline; in a social group to which he or she belongs; or in a private message to a few selected friends on Facebook. Fourthly, a user can also choose the "embed post" option to place the code of a post on another website such as his or her personal blog,<sup>28</sup> if such a post is publicly available on Facebook. The relevant content is then additionally disseminated to the audience of this other website incorporating the original post. Fifthly, a user can choose to "embed" an image put up by another Facebook user on another website. Sixthly, subject to the other user's privacy settings, a user can use the "send" option on Facebook, to send an image put up by the first user, to selected friends on Facebook.

Similarly, a user can disseminate content in multiple ways on YouTube. This happens when the user: uploads a video clip; comments on the video clip of another user; using social plugins, shares the video clip on other social media sites such as Facebook, Pinterest and Twitter; uses the "embed" option in respect of the video clip so that the content is accessible to readers of another website; uses the "email" option available to distribute the content. First, when a video clip is uploaded, the user gets to decide on the audience who can view his or her video clip—by selecting, using a drop down menu, whether the video clip will be public, private or unlisted.<sup>29</sup> Secondly, the audience to whom a user's comment is disseminated will depend on whether the video clip is made public, private or unlisted. Thirdly, when a video clip is shared on other social media sites, the constituent members of the audience will depend on the user's

<sup>25</sup> A. Hyde et al., "What is Collaboration Anyway?" in M. Mandiberg (ed.), *The Social Media Reader* (New York University Press, 2008), p.53 at p.54.

<sup>26</sup> I note that the site is an online encyclopaedia intended to provide information on various topics to the public, and further that there is no provision of more elaborate content editing tools (beyond tools which are used to modify existing articles or to write new articles).

<sup>27</sup> These are the members who are part of a user's defined network of "friends" on Facebook.

<sup>28</sup> This may be a personal website such as a blog.

<sup>29</sup> Public videos are those which are made publicly available to all; private videos can only be seen by the people a user selects—they do not show on search results and are invisible to other users; and unlisted videos are those which can be seen by people to whom the relevant links are sent—again, they do not show on search results and are invisible to other users. See YouTube, "Change the privacy settings for your video", <https://support.google.com/youtube/answer/157177?hl=en> [Accessed December 11, 2014].

privacy setting on each of these sites.<sup>30</sup> Fourthly, a video clip embedded on another website, such as a personal blog, will be accessible to readers of that blog. Fifthly, a user disseminates content to a select audience, whose email addresses are specified, when he or she emails the link to a video clip on YouTube to such addresses.

On the Twitter site, a user has the option of embedding a tweet. A user can place the tweet on another website where he or she has administrative rights, such as a blog, by using the code given to him or her. The tweet is therefore disseminated to readers of the website. On the other hand, when a user chooses to tweet a post, or respond to another tweet, he or she disseminates this content to a group of Twitter users—the constituent members of this group depends on whether his or her tweets are protected.<sup>31</sup> Similarly, when a user re-tweets the tweet of another user, the user disseminates the latter user’s tweet to his or her audience on Twitter. Again, the size of this audience depends on the user’s privacy settings.

On a separate note, any content, once published on the Wikipedia site, is available to the public—this is consistent with the ethos of the Wikimedia Foundation as an online encyclopaedia. The technological features on the site allows a user to share the link of the Wikipedia page on which content in the form of images, audio and video clips, is hosted, as well as embed such content on a separate website. In the latter case, the content will be accessed by the audience of the website. In either instance, the user engages in an act of dissemination, when he or she uses the technological features on the Wikipedia site to share the link, or to embed the content on another website.

As illustrated above, by virtue of the technological features on all four sites, there are multiple possibilities for a user to indulge in generative behaviours, such as the creation, modification and dissemination of content. On the whole, I observe that the technological features of YouTube are more generative than those of the other sites. In this respect, Zittrain’s theory of generativity arguably contributes depth to our understanding of the term “generative activities”, as has been used in this article. The term “generativity” has been defined by Zittrain to denote a technology’s capacity on the whole to produce spontaneous changes driven by mass and uncoordinated audiences.<sup>32</sup> Generativity is further defined in reference to four specific criteria: leverage across a range of tasks; adaptability to different tasks; ease of mastery; and accessibility.<sup>33</sup> While all four social media sites have been constructed in a user intuitive way so that it is easy for a user to master the individual technological features available, the technological features on YouTube provide more leverage, are more adaptable and more accessible to a user than is the case with the other three sites. For instance, the video editing tool and the automatic generator of transcripts on YouTube, allow a user to create and modify content (i.e. the rearrangement of images, audio clips and video clips) conveniently and with minimal effort onsite YouTube—on the other hand, in respect of Facebook, Twitter and Wikipedia, with the exception of text, the images and video clips uploaded have to be created on other platforms and stored for later use. Demonstrably, the technological features on YouTube best facilitate the *modification* of content. In addition, the adaptable features on YouTube demonstrably allow for more functions than is the case with the other sites. Finally, YouTube makes more features accessible to a user, who does not have to seek external tools offsite to fulfil the same functions. For instance, without needing to conduct searches on other sites, there is a library of free licensed video clips and audio clips, as well as special customisation tools for special effects, available on YouTube.

<sup>30</sup> For instance, when a video clip is shared on Facebook, who the constituent members of the audience are will depend on a user’s privacy setting on Facebook.

<sup>31</sup> If a user’s tweets are protected, the tweets are only visible to a user’s approved followers. On the other hand, if a user’s tweets are not protected, they are available to the public. See Twitter, “Help Center: About public and protected Tweets”, <https://support.twitter.com/articles/14016-about-public-and-protected-tweets#> [Accessed December 11, 2014].

<sup>32</sup> J. Zittrain, “The Generative Internet” (2006) 119 *Harvard Law Review* 1974, 1980–1982.

<sup>33</sup> Zittrain, “The Generative Internet” (2006) 119 *Harvard Law Review* 1974, 1980–1982.

### *Technological features which constrain generative activities*

In this section, I will identify the technological features on the four sites that I perceive to constrain the generative activities delineated above. While some of these technological features are interacted with (by a user) at the point of dissemination of content, other technological features limit subsequent generative possibilities after the content is disseminated.

#### Limited modification (or re-mixing) of the original content

The technological features on the sites that allow for the retention of the initial presentation of the content and for the identification of the original generator of the content arguably constrain generative activities. This is so because no matter the amount of modification a user *intends* to effect to another user's content, these technological features allow for limited modification (or remixing) of the original content.

For example, when a user selects the "share" option on Facebook and disseminates the content of another user in this way, the user who originally uploaded the content can still be identified by his or her user name. The post of user X, who shares the content of another user Y (who in turn lifts the content off another website), will include a display message positioned above the shared post that reads: "via Y". The link to the source website is also indicated. Furthermore, if the user Y is the original generator of the content, the shared post will clearly incorporate some other identifying information of the generator of the content, such as whether the content is a status update of user Y or an album of images uploaded by user Y, etc.

Similarly, whether a YouTube user uses social plugins to share a video clip on other social media sites, or emails a video clip to a few email addresses, the link to the video clip on the YouTube site is provided, and as such, the user who originally uploaded the video clip can still be identified. Even where a user decides to embed the code of a video clip on another website such as a blog, an information tab on the video clip indicates to the viewers of this blog the identity of the YouTube user who originally uploaded the video clip.

When a user decides to re-tweet the content of another user on the Twitter site, there is no change to the original tweet in its entirety, and the user is not given the option to modify the original tweet by commenting on it. In view of this site-specific feature, other users on Twitter viewing a user's re-tweet will know the identity of the user who originally generated the tweet. Moreover, even if the re-tweet is of a re-tweet from another user, the original generator of the tweet can still be identified.

There is no such equivalent feature on the Wikipedia site.<sup>34</sup>

#### Limited opportunities to engage in generative activities

On the Twitter site, it is noted that there is a word constraint of 140 characters imposed by Twitter on a tweet or a response to one.<sup>35</sup> This essentially confines a user to a brief message, whether in his or her tweet, or response to another's tweet. Thus the range of generative activities that can be taken in relation to a brief text message is logically a very narrow one.

<sup>34</sup> Wikipedia, "Help: File page", [http://en.wikipedia.org/wiki/Help:File\\_page](http://en.wikipedia.org/wiki/Help:File_page) [Accessed December 11, 2014]. It is noted though that on the Wikipedia site, when a file such as an image, audio or sound clip is uploaded, an associated file page is created. This file page reflects the modifications made to the page to date, the list of pages that embed the file and other technical information about the file. In general, the information on the file traces the generative activities undertaken in relation to it, although some information such as the file description and copyright information can be edited. This feature ensures that contributions can always be traced to the original generators of the content with some due diligence.

<sup>35</sup> This word count includes the fully spelt link to an image incorporated, or the link to any other website, as the case may be.

Separately, if a user decides to start an article that does not already exist in the Wikipedia repository, there are requirements to be met before the article is published on Wikipedia.<sup>36</sup> In addition, there is a process to be completed<sup>37</sup> before a new user is registered and can upload files, without the assistance of other more experienced contributors on Wikipedia. These requirements constrain a user against engaging in generative activities.<sup>38</sup> Additionally, each of all media uploaded to the Wikipedia site in the form of images, audio or video clips requires a source and a copyright tag, without which the relevant content will be deleted after a week.<sup>39</sup> This deletion obliterates the possibility of other users subsequently engaging in generative activities with respect to the same content.

There are no such equivalent features on the Facebook or YouTube sites.

## Removal of content

There are mechanisms on the four social media sites with which a party can request for the removal of content that he or she perceives to be harmful, thereby preventing others from engaging further with such content.

A user can, by selecting an option on a dropdown menu, report a post or image to Facebook for reasons including, inter alia,<sup>40</sup> offence against personal sensibilities, unauthorised use of intellectual property, etc. Facebook can decide to remove the content based on its assessment of the user’s report. For instance, if the user decides to inform Facebook of the unauthorised user of his or her intellectual property, the user will be presented with two options: the first is to contact the party the user believes has violated his or her rights directly, to request for the removal of the content; the second is to read up more about the reporting of violations of intellectual property rights.<sup>41</sup> If the user takes the earlier option, a pre-crafted message by Facebook can be sent to inform the other party that the specified content is his or her intellectual property, and request for the removal of this content, or to contact the first user directly to reach a resolution.<sup>42</sup> Alternatively, the user can fill in the online Digital Millennium Copyright Act (DMCA)<sup>43</sup>-compliant form made available by Facebook that incorporates all the elements of a copyright claim,<sup>44</sup> to report a copyright violation on Facebook.<sup>45</sup>

On the YouTube site, a user who hopes for the removal of a video clip can report it to YouTube for various reasons, including, inter alia, for containing violent content or content infringing his or her rights,

<sup>36</sup> These requirements are, inter alia, that the subject must have been discussed in some detail in at least one independent and respectable academic source, and further that the article has passed the review process. See Wikipedia, “Wikipedia: Starting an article”, [http://en.wikipedia.org/wiki/Wikipedia:Starting\\_an\\_article](http://en.wikipedia.org/wiki/Wikipedia:Starting_an_article) [Accessed December 11, 2014].

<sup>37</sup> This is set at 4 days and 10 edits. What a user-contributor can do on Wikipedia depends on his or her user access level. See Wikipedia, “Wikipedia: User access levels”, [http://en.wikipedia.org/wiki/Wikipedia:User\\_access\\_levels](http://en.wikipedia.org/wiki/Wikipedia:User_access_levels) [Accessed December 11, 2014].

<sup>38</sup> This is arguably a sensible position, in light of the purpose of Wikipedia as an online encyclopaedia.

<sup>39</sup> Wikipedia, “Wikipedia: Basic copyright issues”, [http://en.wikipedia.org/wiki/Wikipedia:Basic\\_copyright\\_issues](http://en.wikipedia.org/wiki/Wikipedia:Basic_copyright_issues) [Accessed December 11, 2014].

<sup>40</sup> The options are as follows: “It’s annoying or not interesting”; “I think it shouldn’t be on Facebook”; and “It’s spam”. If the user selects “I think it shouldn’t be on Facebook”, he or she gets directed again to another longer list of options. The options are as follows: “It’s annoying and distasteful”; “It’s pornography”; “It goes against my views”; “It advocates violence or harm to a person or animal”; and “Something else”. If the user selects “Something else”, he or she gets asked to choose again from yet another list of options. See Facebook, <https://www.facebook.com> [Accessed December 11, 2014].

<sup>41</sup> In respect of the second option, the user is directed to Facebook’s information page on intellectual property, in particular, copyright and trade marks. Facebook’s page on copyright contains a brief description on the nature of copyright, as well as the links to the US copyright office website, and the website of the World Intellectual Property Organization (WIPO). The website of WIPO contains the links to the copyright websites of specific countries, including the UK and Australia. See Facebook, “About Copyright”, <https://www.facebook.com/help/www/249141925204375> [Accessed December 11, 2014].

<sup>42</sup> The message reads: “Hey X, I am writing to let you know that this post [or photo] is my intellectual property. There is a legal issue with the way you are using it, so I’d like you to please remove it, or message me back to see if we can figure out another solution. Thanks!” See Facebook, <https://www.facebook.com> [Accessed December 11, 2014].

<sup>43</sup> DMCA §512 (1998).

<sup>44</sup> Facebook, “Copyright Report Form”, <https://www.facebook.com/help/contact/1409697672616547> [Accessed December 11, 2014].

<sup>45</sup> Alternatively, such party can also submit a notice of copyright infringement by traditional mail to Facebook’s designated agent. See Facebook, “Reporting Copyright Infringements: What is the contact information for your Digital Millennium Copyright Act designated agent?”, <https://www.facebook.com/help/www/249141925204375?rdrc> [Accessed December 11, 2014].

etc., by selecting a flag icon positioned under the video clip. Again, through selecting specified options,<sup>46</sup> the user is directed to a page<sup>47</sup> where he or she can use the online web form provided by YouTube, to submit a DMCA notice of copyright infringement and to request for the removal of content.<sup>48</sup> A user can also report the comments of another user to a video clip on YouTube, by clicking on a tiny arrow positioned at the top right hand corner of the comment, for “spam or abuse”. Through more rounds of interacting with the site interfaces and selecting the relevant options<sup>49</sup> than is the case with a video clip on the site, the user finally arrives at the page where a DMCA-compliant notice of copyright infringement can be submitted using YouTube’s online web form. Notably, the process for reporting a comment for copyright infringement is much more labyrinthine than that for reporting a video clip for the same.<sup>50</sup>

On the Twitter site, a user can report a tweet of another user for various reasons, including, inter alia, for breach of privacy, unauthorised trade mark use, etc.<sup>51</sup> While a user can utilise a DMCA-compliant online web form provided by Twitter to notify the latter of a copyright violation, and to request for the removal of content, unlike the other social media sites discussed earlier, the user is not automatically directed to the page with the online web form when he or she decides to report a tweet. This web form can, however, be accessed when the user searches for the form directly on the site.<sup>52</sup>

There are a few reasons with which a user of the Wikipedia site can request for the removal of content, such as the inaccuracy or inappropriateness of content.<sup>53</sup> A user who is an editor of an article can, for instance, initiate a contributor copyright investigation against an individual contributor who infringes the copyright of others on a large scale. The content of this individual contributor will be subject to scrutiny, and subsequently removed if suspected to be infringing.<sup>54</sup> Separately, it is noted that a user who wishes to dispute the source of licensing information, or to list content with copyright issues, can use the discussion pages administered by Wikipedia to conduct discussions with other interested contributors, even where there is uncertainty on whether the content is indeed copyright infringing.<sup>55</sup> The user can also choose to send an email to Wikipedia directly to seek resolution, if the user believes that his or her copyright is being infringed on the site.<sup>56</sup> Unlike the other sites above, there is no DMCA-compliant online web form provided by Wikipedia to its users. Instead, there are a few options, including those discussed above,

<sup>46</sup> The user is queried as to the issue, and the options presented are as follows: “Sexual content”; “Violent or repulsive content”; “Hateful or abusive content”; “Harmful dangerous acts”; “Child abuse”; “Spam or misleading”; “Infringes my rights”; and “Captions report (CVAA)”. If the user selects the option which reads “Infringes my rights”, there is a dropdown menu from which three other options are presented. The three options are as follows: “Infringes my copyright”; “Invades my privacy”; and “Other legal claim”. See YouTube, <https://www.youtube.com> [Accessed December 11, 2014].

<sup>47</sup> Google, “Submit a copyright infringement notification”, <https://support.google.com/youtube/answer/2807622> [Accessed December 11, 2014].

<sup>48</sup> On this same page, the user is warned against making false claims, which can lead to the suspension of his or her account, among other legal consequences. Alternatively, the user, or any party for that matter, can choose to notify YouTube of copyright infringement via email, fax or traditional mail instead. See Google, “Submit a copyright infringement notification”, <https://support.google.com/youtube/answer/2807622> [Accessed December 11, 2014].

<sup>49</sup> The options are as follows: “Unwanted advertising content or spam”; “Pornography or sexually explicit material”; “Hate speech or graphic violence”; “Harassment or bullying”; “Copyrighted material”; and “This account might have been compromised or hacked”. If the user selects “Copyrighted material”, he or she is asked to complete a form, so that YouTube can investigate the report. Unlike the case with a video clip, when the user wishes to report a comment, he or she is not directed immediately to the page which has a link to the online web form. The user is first asked instead which Google product his or her request is related to. When the user indicates that the request relates to content on YouTube, the user is directed to a page where he or she is warned that any misuse of YouTube’s legal forms may result in the termination of his or her YouTube account. The user is again presented with another list of options, and when he or she selects the “Copyright” option, the user reaches the page where a DMCA-compliant online web form can be submitted to report copyright infringement. See YouTube, <https://www.youtube.com> [Accessed December 11, 2014].

<sup>50</sup> Arguably, this may be because there are fewer instances anticipated by YouTube, for comments to be copyright infringing than is the case with video clips on YouTube.

<sup>51</sup> The options are as follows: “Spam”; “Compromised”; “Abusive”; and “Block @[Name of user]”. If the user selects “Abusive”, which, based on its explanation (i.e. that the tweet is in violation of the rules under Twitter), is the most plausible through which copyright infringement can be reported, he or she is directed to another form which makes reference to a list of different issues, namely: “impersonation”; “trademarks”; “harassment”; “report self harm”; and “report an ad”. See Twitter, <http://www.twitter.com> [Accessed December 11, 2014].

<sup>52</sup> This may be because Twitter does not anticipate many opportunities for copyright infringement on its site.

<sup>53</sup> Wikipedia, “Wikipedia: Content removal”, [http://en.wikipedia.org/wiki/Wikipedia:Content\\_removal](http://en.wikipedia.org/wiki/Wikipedia:Content_removal) [Accessed December 11, 2014].

<sup>54</sup> Wikipedia, “Contributor copyright investigations”, [http://en.wikipedia.org/wiki/Wikipedia:Contributor\\_copyright\\_investigations](http://en.wikipedia.org/wiki/Wikipedia:Contributor_copyright_investigations) [Accessed December 11, 2014].

<sup>55</sup> This is done by an administrator, or a person referred to as a “copyright problems board clerk”. The action to be taken (for instance, to remove content or otherwise) can be decided after the review period. See Wikipedia, “Help: File page”, [http://en.wikipedia.org/wiki/Help:File\\_page](http://en.wikipedia.org/wiki/Help:File_page) [Accessed December 11, 2014].

<sup>56</sup> Wikimedia Foundation, “Terms of Use: DMCA Compliance”, [http://wikimediafoundation.org/wiki/Terms\\_of\\_Use](http://wikimediafoundation.org/wiki/Terms_of_Use) [Accessed December 11, 2014].

available to the user who wishes to notify Wikipedia of a copyright violation. One option among others is for the user to send a DMCA-compliant notice to the designated agent at the mailing address indicated on the site.<sup>57</sup> In this case, the user has to be self-cognisant of the requisite elements to be incorporated in such a DMCA-compliant notice for copyright infringement.

### Filtering<sup>58</sup>

Arguably, filtering technologies such as YouTube’s content identification (Content Id) system<sup>59</sup> that can apply at the point of dissemination of content, or after dissemination, can limit subsequent generative activities. It noted that, as of now, Facebook, Twitter and Wikipedia do not use a similar system to detect potential instances of copyright infringement by pre-emptive filtering. This is a situation that may change over time.

YouTube’s Content Id software automatically scans all video clips uploaded on the YouTube website for content used without the permission of copyright holders. For this system to work, copyright holders have to provide information of their copyright content to the system upfront, and further specify ahead of time the policy for YouTube to follow in the event that copies of their copyrighted content are detected. Such a policy is implemented automatically, and at the moment, YouTube allows copyright holders the following choices when there are Content Id matches with their copyright content: (1) requiring that the content is blocked from further access; (2) diverting the revenue stream while not blocking the content from access, so that copyright holders can garner revenue from advertisements; or (3) tracking the viewership statistics of such content.<sup>60</sup>

### Technological embodiments of copyright considerations

This article has discussed, in the previous part, how the technological features on Facebook, YouTube, Twitter and Wikipedia facilitate generative behaviours such as the creation, modification and dissemination of content. However, just as the technological features create these possibilities for generative activities, they also render the resulting content vulnerable to unauthorised exploitation. This consequence echoes Zittrain’s sentiment that generativity is also vulnerability,<sup>61</sup> as the technological features that facilitate generativity render the same content resulting from such generativity vulnerable to copyright infringement. Through my survey, YouTube appears to be the most generative site of the four. The logical corollary of this is that there will be a higher incidence of unauthorised exploitation of content on YouTube.

Notwithstanding the above, I have noted, in the latter part of the discussion in the third part, that there are technological features that constrain generative activities. Some of these features ameliorate to some extent the vulnerability accompanying the generativity of social media sites. In the section below, I will explain how the technological designs of social media sites arguably embody copyright considerations, regardless of whether the embodiments reflect conscious choices made by the sites.

<sup>57</sup> Wikipedia, “Copyright violations”, [http://en.wikipedia.org/wiki/Wikipedia:Copyright\\_violations](http://en.wikipedia.org/wiki/Wikipedia:Copyright_violations) [Accessed December 11, 2014].

<sup>58</sup> In view of my decision to use Yeung’s modality based taxonomy as a guiding post, it is worth mentioning that Yeung has excluded filtering technologies from the taxonomies she proposed. With reference to the modality based taxonomy, Yeung has argued that the power of filtering does not fall under any of three modalities of design discussed above, but instead in its ability to detect and discriminate between units (of content) with specified characteristics in a large population. As such, Yeung views filtering technologies as tools of identification and selection, rather than as constituting a modality of control, upon which there is choice from a range of actions to be taken, including to privilege, restrict, exclude or extinguish the relevant units. These technologies are suggested to have an adjunct function, since they can be employed in pursuit of each of the three modalities of design. However, for the purpose of my thesis and as explained above, I have categorised the technological features, including filtering technologies, into two broad categories instead. See Yeung, “Towards an Understanding of Regulation by Design” in *Regulating Technologies* (2008), pp.87–88.

<sup>59</sup> YouTube, “Dispute a Content ID claim”, <http://youtube.com/yt/copyright/content-id-disputes.html> [Accessed December 11, 2014].

<sup>60</sup> YouTube, “Dispute a Content ID claim”, <http://youtube.com/yt/copyright/content-id-disputes.html> [Accessed December 11, 2014].

<sup>61</sup> Zittrain, “The Generative Internet” (2006) 119 *Harvard Law Review* 1974, 1995.

*Attribution of generator (or creator) of content*

The technological features which limit the modification or remixing of content arguably ensure that certain principles under copyright laws are respected. This is because such features operate to ensure the identification of the original generator (or creator) of the content and the acknowledgement of the original source of the work. The technological features on each of the four sites arguably accommodate the specific copyright principles that an author of a work has rights of attribution, and of integrity, to the work. This mirrors the values under the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention).<sup>62</sup> Article 6bis of the Berne Convention, to which many countries including the US, the UK and Australia, are contracting parties, provides that an author is entitled to moral rights<sup>63</sup> (specifically in the provision, the rights of attribution and integrity) which exist independently of economic rights. This means that the author of a work can claim authorship and object to the modification of his or her work if such modification is derogatory or prejudicial.<sup>64</sup>

Ironically, the instrument widely recognised as the broadest of international treaties on intellectual property protection—the Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)—expressly excludes rights conferred by art.6bis of the Berne Convention.<sup>65</sup> This is the case although the TRIPS Agreement requires compliance with a large part of the Berne Convention.<sup>66</sup> Notwithstanding the express exclusion of art.6bis, it has been argued that there exist other provisions under the Berne Convention that similarly allude to moral or quasi-moral rights,<sup>67</sup> and further that these provisions are enforceable under the TRIPS Agreement, as they are distinct (rather than derivative) from art.6bis.<sup>68</sup>

Essentially, moral rights allow the creators of works to control the treatment and presentation of such works by others.<sup>69</sup> These moral rights are to be governed by the legislation of the country where protection is claimed,<sup>70</sup> and are therefore unclear, given that they can be framed with varied cultural conceptions of what authorship entails across different countries. I will illustrate these variations, using as examples the equivalent legislation for moral rights in the US, the UK and Australia.

It is noted that an author has limited exercise of his or her moral rights in the US. In the US, under the Visual Artists Rights Act (VARA),<sup>71</sup> being the main federal copyright legislation on moral rights, the author is entitled to prevent the use of his or her identity as the author of the work in the event of a modification that would be prejudicial to his or her reputation.<sup>72</sup> The VARA, however, only applies to a very narrow subset of works of visual art—such as paintings, drawings, prints or sculptures, existing in single copies or as limited editions, or still photographic images produced for exhibition purposes.<sup>73</sup> On the other hand, under the main copyright statute in the UK, while moral rights can apply to a broader range

<sup>62</sup> Berne Convention for the Protection of Literary and Artistic Works, signed September 9, 1886 (entered into force December 5, 1886) (*Berne Convention*). See especially art.6bis.

<sup>63</sup> More broadly, moral rights are the rights of authors to decide on the eventual fate of their works, in terms of the rights: of disclosure; of withdrawal; to be identified as author; against misuse of name; and of respect and integrity: see E. Adeney, *The Moral Rights of Authors and Performers: An International and Comparative Analysis* (Oxford: Oxford University Press, 2006), pp.44–59.

<sup>64</sup> Berne Convention art.6bis(3).

<sup>65</sup> Agreement on Trade-Related Aspects of Intellectual Property Rights, signed April 15, 1994 (entered into force January 1, 1996) art.9(1).

<sup>66</sup> TRIPS Agreement art.9(1).

<sup>67</sup> For instance, art.10(3) of the Berne Convention provides for the naming of the author when a quotation is permitted; art.10bis mandates the naming of a source when works are used for news reporting; and art.11bis preserves the moral rights of authors when works are made available by electronic means. See Adeney, *The Moral Rights of Authors and Performers* (2006), p.151.

<sup>68</sup> It has been suggested that the rights under these provisions are not covered by the exclusion under art.9(1) of the TRIPS Agreement. While art.11bis of the TRIPS Agreement refers to a “moral right” and extends beyond the confines of the Berne Convention, arts 10(3) and 6bis of the Berne Convention are said to be distinct, rather than derivative from, art.6bis. See, e.g. Adeney, *The Moral Rights of Authors and Performers* (2006), pp.151–153; S. Ricketson and J. Ginsburg, *International Copyright and Neighbouring Rights* (Oxford: Oxford University Press, 2005), para.10.46.

<sup>69</sup> Adeney, *The Moral Rights of Authors and Performers* (2006), p.1.

<sup>70</sup> It should be noted that this can depend on the place of first publication or (for unpublished works) the nationality of the copyright holder. See Berne Convention art.5(4).

<sup>71</sup> Visual Artists Rights Act (VARA), 17 USC §106A (1990). See especially §106A(1) and §106A(2).

<sup>72</sup> VARA. See especially §106A(2).

<sup>73</sup> VARA. See especially §101.

of works, including literary and artistic works, they have to be distinctly asserted to be effective in protecting the author.<sup>74</sup> Under the main copyright statute in Australia, moral rights have a similar scope of application (i.e. to, inter alia, literary and artistic works) to that in the UK,<sup>75</sup> but without the requirement of assertion.

Even on assuming that the relevant content on the four social media sites meets the subsistence requirements for originality, authorship and fixation, it is submitted that such digital content may not fall within the definition of visual art under the VARA, therefore entitling the author of such content to the moral rights specified under the VARA. Given the broader scope of moral rights in the UK, and more so in Australia, a user based in either country will have moral rights to the same digital content. Although the user will have to fulfil the requirement of assertion in the UK, the identification of the previous user, pursuant to and enabled by the technological features on the four sites, plausibly amounts to this general assertion<sup>76</sup> required for the protection of his or her moral rights.

Regardless of where a user is based and the different conceptions of moral rights across different countries, the technological features on all four sites ensure that a consistent approach in terms of attribution (i.e. identification) is adopted. A reason for this may be that the social media sites recognise that clear attribution of contributions to individual users is important to give users a sense of control over the content they create on social media sites—this in turn will encourage continuing user-led creation, modification and dissemination of content.<sup>77</sup>

### *Notice and takedown mechanism*

As mentioned above, the DMCA notice and takedown mechanism has been integrated into the site interfaces of three social media sites, specifically, Facebook, YouTube and Twitter—potential copyright claimants can fill DMCA-compliant web forms made available to them to notify the sites of copyright infringement, and request for removal of infringing content. While social media sites need to integrate the DMCA mechanism into their operations to be exempt under the safe harbour provision from copyright liability,<sup>78</sup> the online web forms made available to users on each of these sites mentioned are a convenience granted on the initiatives of such sites to their users, outside the prescriptions of copyright legislation. Separately, it is noted that while the DMCA mechanism is incorporated into the copyright policy of Wikipedia, Wikipedia does not provide an online web form to make the process of initiating the DMCA notice and takedown mechanism more convenient for a user. Among the four sites, Facebook and Wikipedia also offer self-help or community options through which potentially infringing content can be removed, without the initiation of the DMCA mechanism.

### *Filtering out of copyright infringing content*

YouTube has integrated filtering technologies into its operation with the intention of filtering out potentially copyright infringing content. However, filtering is a form of technological control that applies automatically—there is often no room to raise disputes against its application, let alone the room to exercise discretion in its implementation.<sup>79</sup> This form of automatic enforcement results in an over-inclusive all or nothing approach to governance which is non-proportionate, simply because most websites using such

<sup>74</sup> Moral rights in the UK apply to a wide range of works including literary works and artistic works. See Copyright, Designs and Patents Act 1988 ss.77–89.

<sup>75</sup> Moral rights in Australia apply to a wide range of works including artistic works and written material. See Copyright Act 1968 (Cth) Part IX.

<sup>76</sup> Copyright, Designs and Patents Act 1988 s.78(2).

<sup>77</sup> See Axel Bruns and Mark Bahnisch, “Social Media: Tools for User-Generated Content — Social Drivers behind Growing Consumer Participation in User-Led Content Generation” (March 2009), Vol.1, [http://www.smartservicescr.com.au/files/files/Social\\_Media\\_State\\_of\\_the%20Art\\_March2009.pdf](http://www.smartservicescr.com.au/files/files/Social_Media_State_of_the%20Art_March2009.pdf) [Accessed December 11, 2014].

<sup>78</sup> DMCA §512(e)(i)(1).

<sup>79</sup> See T.J. McIntyre and C. Scott, “Internet Filtering” in *Regulating Technologies* (2008), p.109 at p.112, citing the oral testimony on anti-circumvention mechanisms under the DMCA, April 11, 2003. The transcript is available at <http://www.copyright.gov/1201/2003/hearings/transcript-apr11.pdf> [Accessed December 11, 2014].

technologies have not evolved to be adequately granular so as to restrict their application only to the targeted content.<sup>80</sup> As a result of this limitation, websites with no connection to the offensive material may be blocked, particularly if the less sophisticated method of internet protocol address filtering is used.<sup>81</sup> Because filtering technologies are better at implementing rules than imposing standards,<sup>82</sup> filtering software can be efficient in identifying whether excerpts of copyright material are used, but cannot assess, with reference to standards, whether a use is permissible under exceptions including “fair use”.<sup>83</sup> Thus, the overzealous enforcement of copyright may result in the unjustified blocking of valuable content from further access by other users.<sup>84</sup>

The Content Id system offered by YouTube for copyright holders to detect copyright infringement has been the subject of criticism for a few reasons.<sup>85</sup> One is that the automated system immediately diverts revenue from advertisements to the filer of the claim under the Content Id system—it is only when the respondent files a dispute that the revenue stream ceases for all parties.<sup>86</sup> Furthermore, the implementation of the policy, whether diverting revenue from a video clip or blocking the same, is automated under the system, even if the copyright holders may have no desire to pursue action against the particular makers of the video clip in a specific context. This inaccurate diversion of monetisation can hence occur even if the copyright holders remain unaffected by the relevant video clip. Yet another reason for criticism is that, as a result of the limitation of filtering technologies discussed above, many of the Content Id claims are erroneous and do not consider the rights of other users to exceptions to copyright such as fair use. A fortiori, the same technologies cannot take into account the variations in copyright legislation across different jurisdictions that may govern an infringing act—a reality given the dissemination of content globally on social media. This means that legitimate non-copyright infringing generative activities beyond those targeted may be unjustifiably restrained.

## Of mixed signals, technological “nudges” and conflicting expectations

I mentioned earlier that the technological features allowing users to generate content simultaneously increases the risk of copyright infringement of content on social media sites. The exclusive rights of copyright holders—namely reproduction, adaptation, distribution, performance and display<sup>87</sup>—overlap, and at any one time, more than one right can be infringed. In the paragraph below, I will set out how the exclusive rights of copyright holders are threatened by the same technological features on social media sites that encourage generative activities.

The reproduction right (i.e. the right to reproduce copies of the copyright work), a fundamental right, is one that is frequently violated on social media sites—this is because many of the technological features on the sites essentially allow users conveniently to copy some part of the original content. In particular, the specific acts of creation, modification and dissemination enabled by the technological features on the four social media sites could involve, in part or in entirety, the reproduction of earlier content. The right

<sup>80</sup> McIntyre and Scott, “Internet Filtering” in *Regulating Technologies* (2008), p.115.

<sup>81</sup> McIntyre and Scott, “Internet Filtering” in *Regulating Technologies* (2008), p.116.

<sup>82</sup> J. Frimmelman, “Regulation by Software” (2005) 114 *Yale Law Journal* 1719.

<sup>83</sup> McIntyre and Scott, “Internet Filtering” in *Regulating Technologies* (2008), p.116.

<sup>84</sup> See McIntyre and Scott, “Internet Filtering” in *Regulating Technologies* (2008), p.116.

<sup>85</sup> See, e.g., Paul Tassi, “*The Injustice of the YouTube Content ID Crackdown Reveals Google’s Dark Side*” (December 19, 2013), Forbes, <http://www.forbes.com/sites/insertcoin/2013/12/19/the-injustice-of-the-youtube-content-id-crackdown-reveals-googles-dark-side/>; Philippa Warr, “YouTube responds to Content ID copyright kerfuffle” (December 20, 2013), Wired, <http://www.wired.co.uk/news/archive/2013-12/20/youtube-content-id> [Both accessed December 11, 2014].

<sup>86</sup> See, e.g., Tassi, “*The Injustice of the YouTube Content ID Crackdown Reveals Google’s Dark Side*” (December 19, 2013), Forbes, <http://www.forbes.com/sites/insertcoin/2013/12/19/the-injustice-of-the-youtube-content-id-crackdown-reveals-googles-dark-side/>; A. Karbasfrooshan, “It’s Time for YouTube’s Content ID and Copyright Policies to Reflect Reality” (December 23, 2013), Tubefilter, <http://www.tubefilter.com/2013/12/23/youtube-content-id-reflects-reality/>; J. Cohen, “YouTube Gives Creators Updates and Tools to Help With Content ID” (March 18, 2014), Tubefilter, <http://www.tubefilter.com/2014/03/18/youtube-content-id-updates-tools/> [All accessed December 11, 2014].

<sup>87</sup> Copyright Act, 17 USC §106 (1976). There are similar exclusive rights in the UK and Australia provided for under their copyright legislation: see Copyright, Designs and Patents Act 1988 s.16; Copyright Act 1968 (Cth) s.31.

of *adaptation* (i.e. the right to translate, rearrange or recast a copyright work) could foreseeably be transgressed when the acts of modification that users engage in on social media sites to produce derivative works are considered. The right of *distribution* (i.e. the right of the copyright holder to distribute the copyright work to the public) is greatly diminished by how social media sites are structured around the sharing of content and their consequent encouragement of acts of dissemination through the provision of technological features. The right of *public performance*<sup>88</sup> is, for instance, threatened, when songs embodying musical works are made accessible and can be played by other users on social media sites. Last but not least, the right of *public display* is similar to the earlier public performance right, but is instead relevant mainly to pictorial, graphic or sculptural works. The advent of the internet, and of social media, means that this right is more frequently infringed than in the past—courts have ruled that placing pictures on a website can amount to a public display; previously, the right could only be violated where a copyright work was put on display in a gallery or in a movie without the consent of the copyright holder.<sup>89</sup>

There are, however, technological features that embody copyright considerations to ensure that: authors are attributed for their content; copyright holders can initiate the notice and takedown process to request for the removal of content they believe to infringe their copyright; and content with prima facie matches to the content owned by copyright holders can be filtered out.

What will this mean? Arguably, the technological features constituting social media sites emit mixed signals to their users, and it is not always clear what social media sites expect of their users. On the one hand, social media sites are solicitous about being perceived to discourage users against undertaking generative activities that are not respectful of the copyrights owned by others.<sup>90</sup> On the other hand, social media sites have structured themselves, through their technological features, around the generation of content. That generative activities resulting in such content can be easily undertaken on such sites exposes users to higher risks of copyright infringement. Moreover, there is a gap between what social media sites *purport* to do, and what they *actually* encourage their users to do onsite. This chasm, I argue, exposes users to unfair expectations of their generative behaviours online (i.e. that their activities are copyright-compliant), given that the technological features “nudge” users to behave in certain ways. Such conflicting expectations, albeit not addressed explicitly or in great detail, are slowly but surely emerging from recent copyright litigation involving allegations of infringement of copyright on social media sites. In the following paragraphs, I will discuss the observations I have made of some of these cases.

In *Hoge v Schmalfeldt*<sup>91</sup> (the *Hogewash! blog* case), a blog owner in the US, Mr Hoge, filed a motion for a preliminary injunction against a retired writer under the US Copyright Act<sup>92</sup> and the DMCA, alleging that the defendant had made infringing users of his blog posts on books, internet websites and on social media services such as Twitter.<sup>93</sup> The judge did not grant the injunction after considering the likelihood of success of Mr Hoge’s claims. In relation to technological “nudges” influencing users to behave in certain ways and conflicting expectations, there are some interesting points worth noting from this case. The first relates to the defendant’s argument that Mr Hoge’s blog entries were short and mostly contained information from other sources—as such, the content was not creative and hence not copyright protectable. The defendant further stated he did not apply for copyright protection for his works online as he “rejects the whole idea of suing someone for using inconsequential snippets from another person’s blog or Twitter account”.<sup>94</sup> This may mirror the views of many users on social media sites, who assume that their generative

<sup>88</sup> The right of transmission (i.e. the right to transmit the sound recording using digital audio) is arguably a special variant of the performance right. See D. Hunter, *The Oxford Introductions to U.S. Law: Intellectual Property* (Oxford University Press, 2012), p.52.

<sup>89</sup> See, e.g., Hunter, *The Oxford Introductions to U.S. Law: Intellectual Property* (2012), p.53.

<sup>90</sup> The copyright policies of the four social media sites are discussed in an earlier article I have written: see Tan, “Terms of Service on Social Media Sites” (2014) 19 *Media and Arts Law Review* 195, 202–204.

<sup>91</sup> *Hoge v Schmalfeldt*, Civil Action No. ELH-14-1683 (US District Court for the District of Maryland, July 1, 2014) (the *Hogewash! blog* case).

<sup>92</sup> Copyright Act, 17 USC (1976) §§101 et seq.

<sup>93</sup> In particular, Mr Hoge noted that his complete blog posts were incorporated in the defendant’s tweets as captured images embedded within the defendant’s tweets.

<sup>94</sup> *Hogewash! blog* case, Civil Action No. ELH-14-1683 (2014).

activities onsite are inconsequential in attracting liabilities under laws, including copyright laws. On the contrary, some users who are creators, such as Mr Hoge, may believe that their generative activities attract rights. That copyright may, though it is unlikely, exist in the most prosaic of works<sup>95</sup>—these can include Facebook status updates, video clips on YouTube, tweets on Twitter and contributions on Wikipedia—is a notion that contradicts the practices of the majority of users on social media sites. The expectations of many users on social media sites (i.e. that their generative activities will not attract liabilities under copyright) are represented by the defendant’s views in the *Hogewash! blog* case, and conflict with the expectations of a handful of creators who believe that their content attracts the protection of copyright.

The second is that in Mr Hoge’s application, he sought an injunction, inter alia, against the defendant’s use of image capturing in order to quote words presented in a text format as part of anything posted on the internet.<sup>96</sup> Given that the screenshot capturing function is made available by the operating systems of digital devices, users are inclined to take such functionalities for granted. If the specific injunction Mr Hoge sought was granted, it would have grave implications on how we may be compelled to turn away from the conveniences technological advancements have afforded us, and such counter-intuitive directives cannot be reasonable. Moreover, the judge in the *Hogewash! blog* case noted that the DMCA provides immunity to service providers from liabilities for copyright infringement, in respect of “passive” and “automatic” actions in which a service provider’s system engages through a technological process initiated by another without the knowledge of the service provider.<sup>97</sup>

This shielding of social media sites that design their interfaces to “nudge” users to behave in certain ways (for instance, to engage in generative activities), but not with regard to their users who merely interacted with the technological features made available to them, is a discomfoting situation. If such sites provide technological features intended to encourage the generation of content, should we not be more accommodating, vis-à-vis users who have simply responded to the technological “nudges” onsite? This is particularly the case because the social media sites discussed would not have been successful if not for the fact that they have attracted millions of users through the large volume of content generated and accessible onsite. Such sites effectively “nudge” users to engage in generative behaviours with the technological features made available online. This in turn contributes to the substantial disconnect between copyright laws and the creative practices of users. I argue that it is not reasonable to expect users to refrain, out of the fear arising from the uncertainty of the applicability of copyright to their actions, from using the technological features on social media sites, to reinterpret, reuse and share content.<sup>98</sup>

The above points around conflicting expectations is further exemplified when the English case of *John Walmsley v Education Ltd (t/a Oise Cambridge)*<sup>99</sup> is considered. In this case, the court awarded to the plaintiff photographer and author Mr Walmsley licence fees and damages for breach of his moral rights, owing to the defendant educational institution’s use of his photographs on the defendant’s blog. In delivering the judgment, the judge remarked that the employee of the defendant, Ms Roberts, “found out how easy it is to copy images by the single click of a mouse and these do get republished all over the internet, often without attribution”. The judge noted then that this problem of infringement “can continue and escalate almost logarithmically” with people copying photographs on the internet, many of which are published in breach of the rights of the respective copyright holder.<sup>100</sup> Acts leading up to infringement, as with acts that do not lead up to infringement, are arguably made possible with technological features accessible to an everyday user of the internet—in this case, the copying of photographs can be done using operating system features, for example. This same copying of content is also made possible by the technological

<sup>95</sup> See, e.g., Hunter, *The Oxford Introductions to U.S. Law: Intellectual Property* (2012), p.33.

<sup>96</sup> *Hogewash! blog* case, Civil Action No. ELH-14-1683 (2014) at p.4.

<sup>97</sup> *Hogewash! blog* case, Civil Action No. ELH-14-1683 (2014) at p.7.

<sup>98</sup> It is worth noting that some of these contents may qualify as public content, if the content has been in the public domain for a while.

<sup>99</sup> *Walmsley v Education Ltd t/a Oise Cambridge*, Case No.IP13504792, March 13, 2014 Intellectual Property Enterprise Court.

<sup>100</sup> *Walmsley* Case No.IP13504792, March 13, 2014 Intellectual Property Enterprise Court at 4.

features of specific social media sites to their users, such as those discussed in the third part of this article. The judge further commented on the naivety of Ms Roberts and the educational institution, how “shockingly low” their level of understanding of the nature of copyright was, and that there is no excuse in this day and age to assume that it is all right to use photographs which have been professionally taken whenever there are no copyright notices on them. The judge’s remark conveys his expectations of the level of understanding an everyday user is expected to have, of copyright laws. Again, these expectations conflict with the expectations most users have, of the activities they engage in, on social media sites.

Essentially, users receive mixed signals from social media sites, as there are technological features that encourage generative activities, as well as those which constrain generative activities. On a separate note, however, the vulnerability of content that necessarily accompanies the generativity of such sites is tempered by the technological embodiments of copyright considerations discussed in the fourth part of this article. Expectations of users and their understanding of copyright have to be checked against users’ expectations that their activities will not attract liabilities under copyright, and also the fact that users are “nudged” to engage in generative activities. If users were not responsive to these technological “nudges”, social media sites would never have succeeded in amassing the clout they now have. Given that anyone can potentially infringe copyright by engaging in generative activities on social media sites (for instance, by remixing, vidding or creating “mashups”), there is a pressing need to rethink the vulnerability of users vis-à-vis social media sites, because unlike social media sites, users are not afforded the shelter of safe harbour legislation.<sup>101</sup> The conclusions can be deeply troubling, if one considers the texture of previous cases involving appropriators such as Richard Prince, Jeff Koons and Damien Hirst.<sup>102</sup> The mood of the moment—that we are living in a generation that believe in free information and instantaneous availability and access<sup>103</sup>—appears to be one forged heavily by the technological features available on social media sites.

## Conclusion

The fundamental tension at the heart of copyright is that while we do not want people to get away with flagrant copying, and to reap where they have not sown, progress depends on a “generous indulgence of copying”.<sup>104</sup> The technological features available to users of social media sites have made social media the perfect battlefield on which this tension most significantly plays out. Just as technology creates the possibilities for generative activities, it renders the content generated vulnerable to unauthorised exploitation, arising from the increased opportunities to engage in acts of creation, modification and dissemination of content, on social media. Generativity has been said to be both the good *and* the bad, “at war with itself, bearing within itself the seeds of its own destruction”.<sup>105</sup>

What this article has shown is that most of the technological features on social media sites encourage or “nudge” users to engage in generative activities. There are also technological features on social media sites that constrain generative activities. Additionally, other technological features: ensure the attribution of authors of content; allow for copyright holders to request for the removal of content pursuant to notice and takedown mechanisms; as well as filter out content with direct matches to the content of some copyright holders. These features arguably embody copyright considerations, and reflect the intentions of social media sites to keep on the (copy) right side of laws.

<sup>101</sup> DMCA §512(c) (1998).

<sup>102</sup> See, e.g., Hunter, *The Oxford Introductions to U.S. Law: Intellectual Property* (2012), p.75.

<sup>103</sup> See, e.g., O. Herzfeld, “Kaskade and Michelle Phan: Burn the Copyright Law!” (July 23, 2014), Forbes, <http://www.forbes.com/sites/oliverherzfeld/2014/07/23/kaskade-and-michelle-phan-burn-the-copyright-law/>; Pew Research Internet Project, “Arts Organizations and Digital Technologies: Section 6: Overall Impact of Technology on the Arts”, <http://www.pewinternet.org/2013/01/04/section-6-overall-impact-of-technology-on-the-arts/> [Both accessed December 11, 2014].

<sup>104</sup> See, e.g., B. Kaplan, *An Unhurried View of Copyright* (Columbia University Press, 1967), cited by Hunter, *The Oxford Introductions to U.S. Law: Intellectual Property* (2012), p.27.

<sup>105</sup> D.G. Post, “The Theory of Generativity” (2010) 78(6) *Fordham Law Review* 101, 106.

Owing to the technological designs of social media sites, users have been exposed to conflicting messages on social media sites. On the one hand, they are encouraged to create, modify and disseminate content freely on social media—this reasonably gives rise to their legitimate expectations that such activities which everyone is indulging in on a widespread scale will not attract liabilities under copyright laws. On the other hand, the availability of the notice and takedown mechanisms incorporated to exempt social media sites from liability under safe harbour provisions, as well as the use of filtering technologies, send contradictory messages to their users—that the threat of being sued for copyright infringement is omnipresent in this environment. The uncertainties of users in following technological “nudges” or, for the more informed, treading with caution on the side of copyright laws, are exacerbated by the impossibility of sieving out the minority of content on social media that attracts copyright protection, against the volume of content that does not. Such uncertainties expose users to great risks, as they are not afforded the same accommodations under copyright laws, as is the case with social media sites.<sup>106</sup> These risks are a real concern when we consider that users who use content in their generative activities may have conflicting expectations with regard to copyright, in contrast with users who create content on social media. The concern becomes more acute when we consider what was discussed concerning recent copyright litigation, particularly the expectations of awareness of copyright legislation that judges have imputed to everyday users of technology. In this new terrain called social media, we need to reassess the effect of the mixed signals emitted on the behaviours of users, and our expectations of users to behave in counter-intuitive ways to those encouraged by social media sites, even if such ways are copyright-compliant. Addressing this stark gap between social media sites that are sheltered under safe harbour legislation,<sup>107</sup> and users of such sites that are not, will ensure the continuity of social media, as well as the relevance of copyright.

<sup>106</sup> In addition to the safe harbour provisions, it has been observed that fair use may be applied in a way that shields technological entrepreneurship from copyright litigation. See generally Graeme Austin, “The Two Faces of Fair Use” (2012) 25 *New Zealand Universities Law Review* 285.

<sup>107</sup> DMCA §512(c) (1998).