

CRITICAL STUDY OF DEEP-LINKING, FRAMING AND EMBEDDING VIS-À-VIS INTELLECTUAL PROPERTY INFRINGEMENT IN INDIA

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Abstract: Internet has undeniably benefited human society as a whole and has become the fulcrum of every sector across the globe. Cyberspace, a borderless world, has thrown various challenges which need to be maneuvered with care and caution as the future belongs to internet and information age. The research article projects light on the problems of protection of- copyright in the information age. Infringement of copyright in cyberspace has become very ordinary. Copyright can be infringed in cyberspace through multiple ways; the study discusses the problem caused by hyperlinking in form of deep-linking, inlining and framing. These types of linking violates the exclusive rights of owners of copyright which makes it imperative to strike a balance in usage of linking to promote freedom of information and protection of copyrights. The researcher adopted a doctrinal method to conduct this research. It tends to analyse the legislative stand on hyper linking in India.

Keywords: Copyright, Infringement, Deep-Linking, Framing, Embedding.

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1. INTRODUCTION

Internet is a vast global network that interconnects computers all across the globe and has made availability of information and communication easier. WWW is an internet information system providing inter-connection between documents on the web from one page to another with usage of hypertext links. The central feature internet provides to its users is its ability to connect one web page to another with the click of a button. The nature of internet providing information and switching from one location to another happens with the usage of linking. Linking is the part and parcel of the convenient nature of internet. With passage of time, the use of linking has been done for purposes which cause wrongful loss to owner of 'linking in' webpage either in form of loss of revenue or bad impact on goodwill or infringement of IP. Various ways are used for linking such as deep-linking, framing, inlining/embedding. The different types of hyperlinks cause problem of infringement of IP in cyberspace.

Linking is a hypertext in a web page that allows user to navigate to a specified web page. The act of linking is fundamental to the use of internet which facilitates free information from one web page to another. The different acts of linking basically displays the content of the another web page which is linked without making a duplicate copy of the same and place it on server. It raises the question of reproduction, communication and adaptation rights of owners of IP in cyberspace which are at stake through linking. The problems associated will be discussed in later part of the research.

The research article is intended to comment on the meaning and working of various forms of hyperlinking. The authors discussed the judicial decision on hyperlinking, followed by critical analysis of Indian legislative framework and its application to various forms of linking.

2. CONCEPT OF LINKING, DEEP-LINKING, INLINING AND FRAMING

A web page is created and constructed with the help of HTML. It is a language which is used for encoding of documents. The links that are provided on a web page to navigate to other web pages is done through HTML as it is responsible for the kind of display and content available on a web page. The commands on HTML enable specific appearance of the web page. The HTML tags are not visible to the user on web page but are usually accessible through a viewing option to see HTML source code.

The customary use of HTML is done for Hyper-linking. In simple words, Hyper-link is used to move to another web-page or another part of the same web page such as endnotes or Index. Every web page on internet has a unique address which is embedded in the HTML coding of web pages by the developers of web page to facilitate linking.¹ It appears on the webpage as a text different from the general content by special color (mostly blue), font or underlining as directed in the coding. By clicking on such link, the user moves to contents of another web page which is hyperlinked. This navigation from one page to another is the essence of 'Hyperlinking'.² It allows connection with different web pages with a single click making retrieval of information quick and easy. World Wide Web is called so, owing to the web that is created with the help of linking making interconnections between web pages. After having a clear understanding of this mechanism, we can easily move to detailed understanding of Linking.

By now, it is understood that Linking is indispensable part of World Wide Web and it is the links which make it a Web. Linking has made our lives easier by smooth flow of information which otherwise would have been really cumbersome. Linking has made navigation on internet easier. Linking has occupied a fundamental position in networking. HTML used for coding of web pages provides the following types of linking.

2.1 Surface Linking

It is also famously known as Home Linking. When a web page provides link to the Home Page of any another website, it is termed as Home page linking or Surface linking. This kind of linking is generally

¹ 2 Yee Fen Lim, *CYBERSPACE LAW: COMMENTARIES AND MATERIALS* (Oxford university Press, 2008).

² Artur Marques, *ON THE EVOLUTION OF HYPERLINKING*, 5, No. 2, Revista da UIIPS, 117-124, (2017).

preferred by the owner of these web pages. Hyperlinking to home page is beneficial to the owner from two perspectives. Firstly, commercial gain as when any user reaches home page of a website, it contains advertisements and the page get hits. Through these hits, revenue is earned by way of advertisements by a web page. The rate of advertising is decided keeping in mind the traffic of number of people visiting the web page. Thus, the owners usually promote home page linking that helps in generation of revenue. Second is dissemination of information done by such web page and about the existence of web page. Thus home linking is the one which is promoted and preferred by web page owners in cyberspace.³

2.2 Deep Linking

It is linking to an internal web page of a website by surpassing the home page together with many other pages of such site. The page which is linked comes several pages after the home page which takes the user at a subsidiary webpage, by avoiding a visit to the home page or other pages that might be visited by user, had such deep link not be provided. It basically nullifies the means of navigation provided on the home page of a website and its intended means of navigation. The two reasons which promote surface linking and derogate deep linking are:

- ❖ Loss of revenue: Deep links reduce the number of hits on the home page of a website thereby reducing the traffic leading to loss of revenue generated from advertising on the home page.
- ❖ Abridgement of information about the web page: Deep links are such subsidiary pages to a website that it does not contain any information about the association of such page to the website. There is absence of logo or any other sign which might indicate its connection with the site to which it belongs. Thus, deep linking might create an impression in user's mind that the linking and linked webpage are related to each other or belong to one person.

Aside from that, the URL address of a deep link that is provided by a web page to reach an internal page of a website by bypassing the website's home page and any other intervening pages is not a subject-matter of copyright protection. Deep links are provided by websites to allow visitors to reach internal pages of websites. Therefore, copying URL addresses in order to utilise them for hyper-linking is not a criminal offence. Nevertheless, this technology could facilitate the dissemination and exchange of content that are protected by copyright belonging to a third party.

2.3 IMG Linking

Image Linking is also commonly called as 'Inlining'. An IMG link allows the browser to fetch graphical content from another web page and display it on its own web page. Unlike the HERF link, it does not take the user to a different web page but helps in displaying of certain images from another web pages to the page user is visiting. The web pages displaying some such images have no connection with the web pages from where it is linked and they do not own it. The graphic content from different web page/pages is not copied but rather a 'pulling in' technique is used for displaying the same. This technique of 'pulling in' and not copying content makes it an issue under the subject of copyright infringement where without copying of content, the work is being hindered and displayed to the user without showing any association with the true owner of such work and creating an impression on the mind of user that it belongs to the web page displaying it.⁴

To illustrate, a web page containing the text title as, 'Now, I will share with you my favorite pictures on scenic beauty' followed by a few images. These images do not really exist on this web page but are linked through encoding and are displayed through retrieving of such images from one or more original web sources containing that image, placing them immediately below this text. Such usage creates an impression on the mind of end-user that the text and image is seamless i.e. there is no obvious established relationship between the two. However, the content contained in such web page is taken

³ Ritwika Sharma, *Implications of Online Copyright Violation: Balancing the Enigmas of Technology with Copyright in the Internet Age*, 1 Issue 8, Int. j. law leg., 1-38, (2015).

⁴ SK Verma, Raman Mittal, *LEGAL DIMENSIONS OF CYBERSPACE*, Indian Law Institute, New Delhi, 2004 Chapter 5, 113-151.



from different sources. The user will never know that the image was not created or belong to that web page.

2.4 Framing

Framing is yet another way of linking which was developed by Netscape in 1996. In framing, a web page displays within its window a small frame of another web page which the user can view and access without moving on to such page. The frame of another website contained on a website creates an image that the content of framed website is theirs by placing its banners and advertisements surrounding such frame on their website. The frame so placed is independently controllable and the user by placing cursor on such frame can scroll and view whole content available in the framed webpage.⁵ This type of linking allows the owner of a webpage to make gains through the creative content owned by another entity by placing its advertisements alongside such frame. Moreover, the URL address also remains the same as that of framing website.

3 JURISPRUDENCE DEVELOPED OVER THE TIME- OVERVIEW OF JUDICIAL DECISIONS ON LINKING

Introduction:

When the use of linking emerged with the introduction of WWW, a doctrine of implied license was said to be in existence. In legal sense, implied license is a principle where a person's specific conduct is taken to be grant of permission for doing something. It meant that the presence of a website on internet is to reach out to people and that mere presence is an implied license for linking a webpage at some other page on the web.⁶ With the growth of WWW and the complex nature of websites, the problems started to emerge with various types of linking. It is however argued that the surface linking/home linking is legally permissible and fundamental to the nature of the web. Home linking does no harm to the linked website. Let's have a look at the judicial outcomes that emerged on deep linking and framing.

In *Ticketmaster Corp. v. Microsoft Corp.*,⁷ the plaintiff, Ticketmaster brought a suit against Microsoft Corp. who launched a website called Seattle Sidewalk which was a city guide and gave details of the various shows, concerts, operas, movies being organised around the city. It provided deep links of the Ticketmaster's website for the booking of such events which was objected by Ticketmaster and a suit for trademark dilution, confusion of source, unfair competition and commercial misappropriation was raised. The plaintiff contended that Microsoft shall get a license for providing deep links of its website. The defendant said that the Ticketmaster is benefitted by sale of tickets by directing users to its site. However, the claim made by defendant was substantiated by Ticketmaster stating that providing deep links to its website surpassed the home page which contains advertisements for revenue that was diverted by providing deep links. The case settled out of court between the parties where the Microsoft agreed to not to link deep within Ticketmaster's site. The case did not provide any legally binding precedent yet these questions on deep linking was raised.

In *Shetland Times Ltd v. Dr. Jonathan Wills and Zetnews Ltd.*,⁸ the plaintiff Shetland Times was a news reporting company which had wide circulation of its newspaper and also operated a website making available news on the web. The defendant also owned and operated a news publishing website wherein many of the news headlines were provided as a as it is on the Shetland times. These headlines were deep linked within Shetland Times taking the reader directly to the news related story. The plaintiff sued for copyright infringement of the headlines which was verbatim copied by defendants and also for causing commercial loss by diverting the web users directly to internal pages of their website. An interim injunction was passed by the court directing defendants to refrain from copying the news headlines and providing deep links from plaintiff's website, without the consent of plaintiff.

⁵ JEFFREY R. KUESTER AND PETER A. NIEVES, *HYPERLINKS, FRAMES AND META-TAGS: AN INTELLECTUAL PROPERTY ANALYSIS*, JLT, 243-279, (1998).

⁶ Orit Afori, Implied License: An Emerging New Standard in Copyright Law, 25 Issue 2, Santa Clara Comput High Technol Law J, 275-325, (2009).

⁷ *Ticketmaster Corp. v. Microsoft Corp.*, No. 97-3055, (CD CA, Complaint filed on April 28, 1997).

⁸ *Shetland Times Ltd v. Dr. Jonathon Wills and Zetnews Ltd.*, FSR 6.4 (1997).

Like The court further stated that access to plaintiff's website shall be provided or obtained only through home page of Shetland times. And the contention of defendant was rejected that the plaintiff is benefitted for greater public benefits by virtue of its availability on defendant's website. This case was also settled out of court wherein the defendant agreed to not to provide deep links to plaintiff's website but only to Shetland Times online headline page and not to articles themselves.

In another case of **Ticketmaster Corp. v. Tickets.com, Inc.**,⁹the plaintiff Ticketmaster sued the defendants for providing deep links to its website for booking of tickets which tickets.com itself cannot sell. The plaintiff claimed an action against copyright infringement and unfair competition on part of tickets.com. The defendant Tickets.com contended that the link that was provided by them used the text "Buy Ticket from another On-line Ticketing Company" and the page to which user navigated by clicking on the link contained logo and trademark of Ticketmaster. Relying on this, the court decided that-

- ❖ There was no copyright infringement as mere representation of facts does not constitute infringement of copyright.
- ❖ Providing deep links to plaintiff's website does not constitute copyright infringement until confusion of source of information in the mind of end user is created. Here the link stating 'another ticketing company' and presence of logo and trademark of the linked webpage proves absence of unfair competition.

The court did not issue preliminary injunction to the plaintiff. The plaintiff subsequently approached in appeal but was unsuccessful. It again appeared for hearing before the district court of California where three main contentions of the plaintiff were decided and discussed by the court in **Ticketmaster Corp. v. Tickets.com, Inc.**¹⁰

Copyright Claim for infringement- Here the defendant was using a program called spider that extracted information of plaintiff's event page temporarily to obtain source code of such web pages. It was done with the purpose of getting details of event, date, day, time and venue for displaying the same on its own page. Any other copyrightable detail was instantly discarded by the system.

The court took into consideration various provisions of Copyright law such as what is the subject matter of copyright, fair use doctrine and issue of deep linking in copyright infringement and concluded that-

- The temporary storage of information of facts which are 'unprotected public fact' constitutes fair use. The defendant's act of extracting factual information about the events and their date, time and place are pure facts and fall under doctrine of fair use.
 - URL is not a copyrightable subject matter. It is neither creative nor original expression. It is like a street address in the physical world to reach a location and copying of URL by defendant is not infringement.
 - Providing a deep link to a web page does not infringe exclusive rights. Deep links provided didn't cause unauthorised public display of defendant's page. Rather it directly took the user to plaintiff's webpage which was clearly identifiable by two reasons, the link stated "buy ticket from another ticketing company" and the linked to webpage contain logo and TM of Plaintiff.
- ❖ **Trespass to chattel-** This argument was out rightly rejected by the court stating that the plaintiff has failed to show actual harm caused to its property in the absence of which no trespass could be established.

⁹ Ticketmaster Corp. v. Tickets.com, Inc., CV 99-7654 (C.D. Cal. Mar. 27, 2000).

¹⁰ Ticketmaster Corp. v. Tickets.com, Inc. WL 21406289 (C.D. Cal. Mar. 7, 2003).

- ❖ **Breach of contract-** Any person visiting the website of Ticketmaster.com and its internal pages accepts its terms and has to comply with the use restrictions imposed by it. It stated that any person visiting internal pages of Ticketmaster shall not deep link to its website, use spider programs on the site or use the information gathered for commercial purposes. It was established that defendant has seen and accepted to the terms and conditions of the website and has repeatedly visited these terms and conditions. This was the only issue which was accepted in the summary judgment by the court that sending of spider program in plaintiff's webpage by defendant was against the contract.

After this case, certain basic problems associated with deep linking were discussed such as copyright infringement, trademark dilution, unfair competition, trespass to chattel, and misappropriation of property. Each of such issue has to be decided by application of law on factual situation of every case arising thereby.

In case of **Intellectual Reserve, Inc v. Utah Lighthouse Ministry, Inc**,¹¹ another legal issue of linking was raised here. The plaintiff sued for preliminary injunction on the acts of defendant. The defendant posted a copyrighted book titled 'Church Handbook of Instructions' on its website belonging to plaintiff. When the court directed removal of handbook, the defendant provided links to different websites where plaintiff's work was accessible. The plaintiff called for an action of direct and contributory infringement of his work wherein the defendants stated that the scope of injunction shall be restricted to prohibit direct infringement only.

The court considered a variety of factors that shall be established for claiming temporary or permanent injunction for copyright infringement. The plaintiff established that he is owner of copyright by presenting copyright registration certificate giving a presumption of ownership in favour of plaintiff unless rebutted. He also exhibited the fact of direct infringement of substantial parts of his copyrighted work by the defendants. Further, when the defendant was directed to take down infringing contents, notice of availability of the same content online on 3 websites with their web address was provided by the defendant which constitutes 'inducing, causing or materially contributing' to the infringing conduct of others. Based on this, the defendant argues that posting of infringing contents by three different websites has no substantial connection with the defendant. The defendant is neither gaining anything from the information provided on its web page nor has materially contributed to the infringing activity.

The court after hearing both the sides stated that act of defendant of posting of notice regarding availability of Handbook on three website with their web-address and some other facts constitute that he has contributed to the infringement of plaintiff's copyright and irreparable loss or injury will be caused to the plaintiff. Although contributory infringement was not expressly provided by the statute in US, the court held that the infringer will not be precluded from imposition of liability even if he has not directly engaged in infringing activity.

The court decided that act of contributory infringement has been done by defendant and it is in public interest to protect right of copyright holders by granting preliminary injunction to the plaintiff. The legal aspect of copyright infringement with linking seemed a bit clear. It was established that to justify contributory infringement, act of inducing, causing or materially contributing to infringing activity, irreparable loss and public interest must be satisfied.

4 INDIAN LEGAL FRAMEWORK AND ITS APPLICABILITY TO LINKING, INLINING AND FRAMING

Every act done or omission made by a person in physical world has certain legal consequences of their actions which are so mentioned in IPC, 1860 and other statutes. In context of cyber space, difficulty of determining an act in cyberspace under a particular civil or criminal wrong is a challenge. With emerging technologies, the act of linking in its various forms has become a matter of concern in respect of copyright and trademark infringement, unfair competition, contributory liability and misappropriation of property.

¹¹ Intellectual Reserve, Inc v. Utah Lighthouse Ministry, Inc, 75 F. Supp 2d 1290 (D. Utah, Dec. 6, 1999).

4.1 Deep-linking and applicable Indian Laws

As discussed above, deep linking has raised major concerns for website operators from two viewpoints- First, an attack on their exclusive copyrighted works and trademark dilution. Secondly, it hampers the commercial gains or revenue earned by a website owner. An overview of various laws under which liability for such act might arise and elaborate discussion of the provisions of Copyright law which makes deep linking an act of infringement of copyright.

4.1.1 Trademark Infringement/Dilution

Trademark Infringement is the act of causing likelihood of confusion, deception in the mind of end-user that a registered trademark is associated or connected with any other product or service to which the concerned mark has no real connection.

In case of trademark dilution, when a trademark is unauthorizedly linked with any other product or service thereby weakens or reduces the distinctive quality of such mark is trademark dilution. By the literal meaning of the term Dilute, it can be understood to reduce the quality by associating it with something else.

Now when we talk about deep linking and trademark infringement or dilution, links to internal pages of a website without the consent of the webpage owner where mark or logo of the website is not visible to the user causes infringement of trademark. As such deep links are provided without authorised access, causes likelihood of confusion and wrongful association with the linking and linked to webpage. At the same time, trademark dilution may also occur, when the linking website weakens the distinctive quality of the linked to website by associating it with such services which it does not offer. The confusion can be created either by representing selling or same goods or services or by showing association, connection between the two. Resultantly, any link that leads the user to draw an inference of association or selling of same goods by linking and linked to website causes trademark infringement.

In the first ever case of linking in India, **Infoedge (India) Pvt. Ltd. & Anr. Vs. Shailesh Gupta & Anr.**,¹² the Delhi HC held the linking of a famous job website by another competing website to be dishonest and an injunction was immediately passed. The plaintiff claimed that its name was misused by being placed on website of defendant who used a similar name to provide link to plaintiff's website on his own website. The act of defendant constituted trademark infringement and unfair competition.

The Delhi HC's Division Bench, in the landmark case of **Kapil Wadhwa v. Samsung Electronics Co. Ltd.**¹³ enlightened on the problem of deep-linking and meta-tagging. The defendant sold the products with Plaintiff's mark at cheaper rates. He used deep linking through which he established a connection with the plaintiffs in the eyes of customers. He also used meta-tags which diverted the traffic from plaintiff's website. The court held that use of deep linking and meta-tagging has caused infringement of plaintiff's trademark. It also held that meta-tags permit the defendant to capitalise on the plaintiff's goodwill, the use of a third-party mark as a meta-tag was ruled to be unlawful.

It is however to be noted that mere linking to home page is not considered trademark infringement even if no permission is obtained by the owner of such website owing to the fact that it is traditional form of linking which took the user only to home page where all information about its mark and website is available, thereby no likelihood of confusion or association would arise in the minds of user.

4.1.2 False Advertisement- Unfair Competition

Unfair Competition means 'using illegal, deceptive and fraudulent practices' which harms business of others or consumers for gaining a competitive edge in the market.¹⁴ Deep links to embedded pages of a

¹² Infoedge (India) Pvt. Ltd. & Anr. Vs. Shailesh Gupta & Anr, MANU/SC/0462/2004.

¹³ Kapil Wadhwa v. Samsung Electronics Co. Ltd., 194 (2012) DLT 23.

¹⁴ Aankit M., Unfair Competition: A Wave of Threat, Legal Service India, (July. 27, 2022, 7:30 PM), <https://www.legalserviceindia.com/legal/article-6662-unfair-competition-a-wave-of-threat.html#:~:text=Definition%20under%20Competition%20Act%2C%202002,a%20combination%20shall%20be%20void.>

website surpasses the home page, traffic and advertisements, thereby causing loss of revenue to the website. Alongside, deep links to a website deceives the users of its association with the linking website. The act of deep linking harms the business of the linked to website by virtue of false advertisement causing unfair competition which is strictly prohibited under the section 6(1) of the Competition Act, 2002.

4.1.3 Misappropriation of Property

When deep-links are provided to copyright protected works with dishonest intention either to satisfy his own purpose or to capitalizing on such deep links, the person is said to have done criminal misappropriation of property.¹⁵ As per section 403 of IPC, 1860, the essential ingredients for constituting misappropriation is dishonest intention for property of another and satisfying one's purpose or capitalise for own use.

The word 'Dishonest' has been defined under section 24 which means "intention of causing wrongful gain to one person or wrongful loss to another person." Wrongful gain and wrongful loss is defined in the purview of property. "Wrongful gain is gain by unlawful means of property to which the person gaining is not legally entitled. Wrongful loss is the loss by unlawful means of property to which the person losing it is legally entitled."¹⁶ Considering the time when IPC was coded, there was no existence of intangible or incorporeal property, the definition of property in IPC under section 22 covers only movable property of corporeal nature. Thereby incorporeal property like intellectual property is not included in IPC, 1860 due to which the offence of misappropriation of property does not apply to the act of deep-linking. For deep-linking to fall within the offence under 403 IPC, the ambit of definition of property shall be widened or a new section be inserted to include property of incorporeal nature.

4.1.4 Copyright Infringement

The copyright owners are granted certain rights which are exclusively enjoyed by them. Any unauthorised use of such exclusive rights constitutes infringement of copyright. Section 14, Copyright Act, 1957 provides the list of exclusive rights granted to the owner in case of different copyrights such as literary, dramatic and musical works, artistic works, computer programmes, cinematograph films and sound recordings.

The Section 14 of Copyright Act, 1957 is as follows:

*"14. Meaning of copyright.—For the purposes of this Act, "copyright" means the **exclusive right** subject to the provisions of this Act, to do or authorise the doing of any of the following acts in respect of a work or any substantial part thereof, namely:—(a) in the case of a literary, dramatic or musical work, not being a computer programme,— (i) to **reproduce** the work in any material form including the storing of it in any medium by electronic means; (ii) to **issue copies** of the work to the public not being copies already in circulation;(iii) to perform the work in public, or **communicate it to the public**;(iv) to make any cinematograph film or sound recording in respect of the work;(v) to make any **translation** of the work;(vi) to make any **adaptation** of the work;(vii) to do, in relation to a **translation or an adaptation** of the work, any of the acts specified in relation to the work in sub-clauses (i) to (vi);(b) in the case of a computer programme,(i) to do any of the acts specified in clause (a);.....(c) in the case of an artistic work,—to reproduce the work..... to communicate the work to the public....to issue copies of the work.....To make any adaptation of the work.....(d) in the case of a cinematograph film,— to communicate the film to the public;(e) in the case of a sound recording,....(iii) to communicate the sound recording to the public..."¹⁷*

The owner of a copyright enjoys a bundle of rights such as right to reproduce his work, to issue copies, to perform or communicate the work to public, to make translation or adaptation of the work, to sell

¹⁵ Bharati T V, Criminal misappropriation of Property, Law Times Journal, (July. 28, 2022, 9:30 AM), <https://lawtimesjournal.in/criminal-misappropriation-of-property/>

¹⁶ The Indian Penal Code, 1860, § 23, No. 45, Acts of Parliament, 1860 (India).

¹⁷ The Copyright Act, 1957, § 14, No. 14, Acts of Parliament, 1957 (India).

or give on commercial rental or offer for sale copy of the cinematograph or sound recording or computer programme. When any of these rights as specified in section 14 are violated, the claim of infringement arises. In the present discussion, the right of communication to the public is infringed by providing deep links, framing or embedding to copyright works without the permission of the owner of such work or website.¹⁸

The term Communication to the public has been defined under section 2(ff) of the Act of 1957. While referring to the definition of communication to public, use of words 'display by any means' gives a wider ambit to communication and does not restrict it to physical world. It includes communication of work available on a website or internet. Section 51 of the Copyright Act, 1957 provides certain instance where copyright is deemed to be infringed.

- **Direct Infringement:** By virtue of section 14 and 51, reproduction, issuing of copies or communication to the public without permission causes violation of copyright. In understanding its applicability to deep linking, providing of deep links does not include reproduction of the work or making of copies by the provider of the deep link. However, a temporary copy is made in the system of the end user when he accesses such link, but it does not fall under the reproduction of work. Deep links does not constitute direct infringing activity on the part of provider of such deep link as providing of links itself cannot constitute communication to the public and require action on the part of end user to click on the link to complete act of communication to the public.

Apart from direct infringement, a person can be held liable for secondary infringement which can be either contributory infringement or vicarious infringement.

- **Contributory Infringement:** In case of contributory copyright infringement, the act of infringement is not done directly by violating a copyright. The concept of contributory infringement stems from the law of torts.¹⁹ A knowing action of inducing, causing or materially contributing to the act of violation of copyright constitutes contributory liability for infringement of copyright. A person can be held liable as contributory infringer when his act induces or materially contributes another person to cause copyright infringement.

Deep links constitute communication to the public on internet by providing access to the contents of a website. The accessibility of deep links to users is an act of inducing or contributing to the action of infringement. Thus, the linking webpage providing a deep-link to such website wherein copyright of a person subsists constitutes contributory infringement. The two essential elements to constitute contributory infringement liability are Knowledge or intent on the part of infringer and Material Contribution.²⁰ When knowledge about infringing activity is established on the part of the person and his act contributed another person to cause direct infringement, such person is deemed to have contributed to act of infringement. In the **Intellectual Reserve v. Utah Light House Ministry case**²¹ discussed above, the act of defendant providing hyperlinks to infringing copies of the plaintiff's work 'materially contributed' in the direct infringement by third parties and were held liable for contributory infringement. Mere providing of hyperlink itself constitutes material contribution to the act of direct infringement when such hyperlink promotes access to an unauthorised source.²²

- **Vicarious Infringement:** A person is held vicariously liable for the acts of another person when the first mentioned have control or can supervise the act or conduct of another person. The

¹⁸ *Supra* Note 6.

¹⁹ Sneha Jha and Samar Jha, *An Analysis of the Theory of Contributory Infringement*, 11, JIPR, 318, 318-325 (2006).

²⁰ Intepat, <https://www.intepat.com/blog/copyright/secondary-copyright-infringement/#:~:text=Contributory%20infringement%20takes%20place%20when,be%20liable%20for%20contributory%20infringement>. (last visited July. 29, 2022).

²¹ *Supra* Note 10.

²² Jane C. Ginsburg and Luke Ali Budiardjo, *Liability for Providing Hyperlinks to Copyright-Infringing Content: International and Comparative Law Perspectives*, Columbia JLA, 153-223, (2018).



person shall gain from direct infringement caused by person who is under the supervision of such person while imposing vicarious liability.²³ In case of vicarious liability for infringement, two elements for holding a person vicariously liable are control over the infringing activity of another person and a financial or commercial benefits is derived by such person from the act of infringement. When these two elements of control and commercial gain are established, a person can be held vicariously liable.

Deep links serve different purposes and creates different problems depending on the nature of website and its reputation in cyberspace. In case of commercial websites, deep links without their permission can raise problems of infringement of copyright, trademark and when such an act is done by a competitor in cyberspace, it will lead to unfair competition as well. Using of content of a website for free by any person merely due to the fact that technology facilitates the same is in itself a problem. However, there are many websites which does not have a problem with deep linking as well.

However, standards for the provision of deep linkages and the country's legal standing must be clearly defined. The current provision of the Copyright Act, 1957 can be analysed in a manner to include within its ambit act of deep linking as communication to the public and any act of deep linking can be decided on factual matrix. Where the intent of such act is to make wrongful gains or cause wrongful loss, it can fall under the act of infringement and remedy can be provided. Yet a balance between the right of content holders and interest of public shall be maintained. An explicit provision for the act of deep linking shall be provided for either denying deep linking without permission or providing immunity to such links.

4.2 Inlining and applicable Indian Laws

Analogous to deep-linking, the issue of trademark infringement, unfair competition and misappropriation of property is caused when inlining of graphics or images of different web-pages is provided through Hyperlinking and displayed on another web page on which images are extracted from their original sources by the browser.

Embedding of such works on a different web page all together cause trademark infringement when the end user is unaware of the origin, ownership or brand of such graphic so displayed on another site. In case of competitive e-business websites, when inlining is done by one website of the graphics or images of another, act of embedding raises the issue of unfair competition by reducing the traffic of the website of another through display of images on its own website. It causes wrongful loss to embedded website and wrongful gain to embedding website. Inlining with dishonest intention to satisfy its purpose or capitalise for own use causes misappropriation, yet not punishable due to the limited scope of property defined under IPC.

By virtue of section 14 and 51 of the Copyright Act, 1957, reproduction of copyrighted work, issuing of copies or communication of the work to public without permission of the owner constitutes violation of exclusive rights of copyright owner, thereby infringement of copyright. Providing any type of link-deep-link, inlining link or framing, it does not constitute reproduction of the work by the person providing the link. The reason is the technology involved in inline linking never makes a duplicate copy of the work but directs the browser to extract the image from its original source to be incorporated in the linking web page which the user is accessing. It is interesting to note here that a temporary copy of such work, graphic or image is made on the system of end user who is unaware of such browsing activity. Thus, reproduction of work is not done from the end of person responsible for linking. Even, no issuing of copies of the work takes place through inlining.

²³ Robert M. Hirning, *CONTRIBUTORY AND VICARIOUS COPYRIGHT INFRINGEMENT IN COMPUTER SOFTWARE HARMING ONE FORM OF INTELLECTUAL PROPERTY BY PROTECTING ANOTHER*, 6 Issue 10, Chi. -Kent J. Intell. Prop., (2006).

Communication to the public- When we talk about communication or distribution of the work to public, the provider of inline link can be said to have aided, induced or materially contributed in the act of communication of work to public. As we have studied in foregoing part, communication can be done 'by any means of display' so it is not restricted to physical space and extends to communication on internet of the works available on any website. In the act of inlining, a person can be held liable for contributing to violation of copyright.²⁴

Right of adaptation- Section 14 of the Copyright Act, 1957 gives an exclusive right of adaptation of the work to the owner of copyright or to allow other to adapt or modify their work. Permission for adaptation of the copyright work is required from the owner of copyright which if not taken constitutes violation of copyright. In inlining, the linking site takes different multimedia elements from linked website and create a combined work which affects the right of adaptation of the owner of work. It also affects the derivative rights attached to the copyright which belong to the owner and enjoys protection under the original work. Inlining, in a way is an adaptation of the work to create some other work and also falls under making of derivative work, which if done without permission of the right holder constitute copyright infringement.

Attack on Moral rights- Section 57²⁵ of the Copyright Act, 1957 confers certain moral rights on the authors of the work apart from the exclusive economic rights provided under section 14. It gives the right to claim authorship and right to integrity of his work. The right of claiming authorship over his work is effected through inlining in the sense that the end user who is visiting the linking website is unaware that the original source of the graphics displayed on the page is some other web site. Thus, authorship of the work remains unknown in inlining and the moral right is implicated by inlining. Secondly, the author of the work has right against distortion, mutilation or modification of his work, thereby maintaining the integrity of his work.

Inlining combine one image or part of image with other works, creating another work which is different from the original work of the author, attacking on the integrity of the work. Therefore, in many circumstances, an attack on the integrity of the work can be established violating moral rights of the author.²⁶

It is intelligible that the act of inlining has created many legal problems and a clear stand on its legal status needs to be made. While making any such law, it shall be kept in mind that quashing of inlining altogether might restrict the growth of Internet. A balanced view of permitting inlining shall be maintained thereby protecting interest of owner and of general public. The understanding of copyright law amply provides inlining as illegal where such act is done with dishonest intention or without permission.

4.3 Framing and applicable Indian Laws

Problem of trademark infringement, unfair competition and misappropriation of property is caused in case of framing also where frame of another webpage is visible and accessible without actually moving to such webpage. It is done with the help of linking and used for gaining commercially in lieu of creative works of others.

Embedding of such works on a different web page altogether cause trademark infringement when the end user is unaware of the origin, ownership or logo of such literary work so displayed on another site. In case of competitive e-business websites, when framing is done by one website of the content of another website, act of embedding raises the issue of unfair competition by reducing the traffic of the website of another through display of images on its own website. It causes wrongful loss to embedded website and wrongful gain to embedding website. Framing with dishonest intention to satisfy its

²⁴ *Supra* note 15, at 127.

²⁵ *Supra* note 14, § 57.

²⁶ Bitlaw,

<https://www.bitlaw.com/internet/linking.html#:~:text=A%20link%20is%20simply%20a,located%20elsewhere%20on%20the%20Internet>. (Last visited July, 29, 2022).



purpose or capitalise for own use causes misappropriation, yet not punishable due to the limited scope of property defined under IPC.

The provision of the Copyright Act, 1957 which applies to inlining applies equally to Framing. Framing of a webpage does not constitute violation of exclusive right of the reproduction of the works as no copy is made in process of framing of a web page on the system of the person responsible for framing. It merely provides instructions to extract the content and is so displayed on a frame on linking site. Framing of a web page constitutes communication of the work of another person to the public but not directly as the content is actually retrieved from owner's site.²⁷ When a webpage is framed, the end-user is unaware of the real owner of the work and about the web page also which is displayed. The act of framing materially contributes in the communication of the work to the public. Communication can be made both in physical and cyber space. Liability for contributory infringement can be put on the person who has done framing.

Attack on Moral Rights- Section 57²⁸ of the Copyright Act, 1957 confers certain moral rights on the authors of the work. It gives the right to claim authorship and right to integrity of his work. The right of claiming authorship over his work is violated through framing in the sense that the end user who is visiting the linking website is unaware that the original source of the frame displayed on the page is some other web site. The URL of the framed page is not visible on the screen and the user might associate the framed material to the linking site itself. Thus, authorship of the work remains unknown in framing and the moral right is implicated by framing.

Secondly, the author of the work has right against distortion, mutilation or modification of his work, thereby maintaining the integrity of his work. The work is distorted which is not visible throughout to the end user on the linking website, attacking on the integrity of the work. Content from various sites is pulled into single webpage, creating a modified version of the original. Therefore, in many circumstances, an attack on the integrity of the work can be established violating moral rights of the author.

It is now clear that the act of Framing has created many legal problems and a clear stand on its legal status needs to be made. While making any such law, it shall be kept in mind that quashing of framing altogether might restrict the growth of Internet. A balanced view of permitting inlining shall be maintained thereby protecting interest of owner and of general public. The understanding of copyright law amply provides framing as illegal where such act is done with dishonest intention or without permission.

5 EXAMINATION OF ARGUMENT FOR AND AGAINST LINKING, FRAMING AND INLINING

Supportive Argument: Hyperlinking in form of deep-linking, inlining and framing which is considered a threat to copyright infringement has emerged from the natural law theory of implied license propounded by Tim Berners Lee.²⁹ He is the father of WWW who developed the concept of linking. It is believed by many that linking is inherent part of internet and was developed to provide easy access to different web pages by mere clicking on them. By the existence of any website on internet, it gives an implied license to be linked by different WebPages. Lee believed that a link is a digital footnote that helped in development of random connections from one subject to another. Thus, linking without permission shall not be considered illegal.

Opposing Argument: Original design of the web is defeated in the present time where basic purpose of linking is defeated, it was developed to provide easy access to information to user which is being misused for commercial purposes. Deep linking to web pages without permission of the owner of such website causes wrongful loss to the owner and wrongful gain to the linking website. Except for

²⁷ Abu Jaliwala, *Hyperlinks: A Study of the Legal Controversies*, 3 Law Rev GLC 1, (2004).

²⁸ *Supra* Note 14, §57.

²⁹ Sableman, Mark, *Link Law Revisited: Internet Linking Law at Five Years*, 16, no. 3, BTLJ, 1273–1343, (2001).



surface/home linking, the key element is Wrongful gain or Wrongful loss which is dishonestly caused to the owner of website or owner of copyright works in either deep linking or inlining or framing.

Further, it is to be stated that a reader has to go through a number of books to find the one he/she needs, or has to see various advertisements in a magazine to reach the article he/she wants to read. Likewise shall be the case with the websites, an end user shall go through various pages or advertisements on a website to reach his final destination for which he is looking.

Balanced Approach: The use of linking cannot be technically prohibited as it will take away the essence of WWW. What can be done is the regulation of linking through permission from the owner of website. Linking is not always a good option or a bad option. When the researcher says this, it simply means the purpose for which linking is done should be ethical. A website owner exerts control over his website and who links to their sites and the form of linking used. This view arises from the moral rights exercised by the owner or author of copyright. When any website owner/creator puts protection mechanism for the work or data made available by him and a person provides a deep link or frames or embeds such work which thereby circumvents the protection measures so installed by the owner, liability on the link provider arises for copyright infringement. It presents to us that linking shall be done in an ethical manner with due permission of the owner of the work or webpage wherever required.

The discussion of the legislative framework makes one thing clear that the legislation does not directly prohibit linking in any form, whatsoever. When wrongful loss is caused to the copyright owner through any form of linking and the facts shows that wrongful gain is made, the liability for linking will arise. Now the liability for such action lies on the end user or the person providing such link. As in case of deep-linking, the creator only provides the link and the user by clicking on such link violates the exclusive right of display of works of the author. In such cases, contributory infringement liability can be imposed on the creator of website. The jurisprudence developed on linking and liability is majorly US based approach. There are no authorities in India giving a clear stand on the problem of linking and copyright infringement.

6 CONCLUSION & RECOMMENDATIONS

Information and communication technology has been a major change that has impacted every sector in the world. The growth of internet and technology led to the evolution of information age and the protection mechanism installed for the intellectual property got shaky. New means of infringement of IP developed in cyberspace and the article dealt with linking as a means of infringement. The phenomenon of hyperlinking was developed in 1997 and subsequently it developed its various forms which cause infringement of copyrights and trademarks. Linking in form of deep-linking, framing, inlining/embedding faced various challenges to the owners whose works or website were being linked. Such as unfair competition by reducing the traffic through deep linking and surpassing home page of the website carrying advertisements, misappropriation of property by framing work of another individual and increasing traffic and hits on its own website. Copyright infringement is caused through deep-linking when the work is protected on internet by its owner and a person provides a deep-link which circumvents the protection measures installed and makes the work available to public. This further cause violation of exclusive rights of authors by communication and display of the work to the public, raising the liability of contributory infringement as the links induces the person to access the work. Framing constitutes violation of right to make derivative works and inlining cause display or communication of the work to public. Trademark infringement is caused in deep-linking, framing and inlining. Deep-link to websites makes the user believe that the site he is accessing belongs to linking site or there is a substantial connection between the two thereby causing trademark infringement. In framing and inlining, the end user stays on the linking website and access or view the content/ image of linked website from the same page which leads to infringement of the trademark as the user does not see the actual website on providing the work. It has also discussed the judicial interpretation of dealing with linking followed by a arguments for and against hyperlinking.



To conclude the study, the problem of infringement of copyrights and trademark caused by linking shall be coped with by, regulation of linking. It is necessary to adopt various policy measures that can help reduce infringement of exclusive and moral rights of owners.

Recommendations:

1. **Changes to be brought in legal provisions:** Section 22 of IPC, 1860 providing the definition of movable property shall be amended to include within its ambit property of incorporeal nature which will make the act of wrongfully using intangible intellectual property an offence under IPC. Section 403 stating the offence of misappropriation of property will also include in its ambit any dishonest use of intellectual property as an offence of misappropriation of property.
2. **Changes in section 14 of Copyright Act, 1957:** The scope of section 14 of the Copyright Act, 1957 can be extended to include within its ambit the right to linking in form of deep-linking, framing and embedding as an exclusive right of the owner, which shall be done with the permission of the owner. This amendment in the law will help in protection of exclusive rights in an effective manner.
3. **Need of Installation of web protection tools:** With technological improvements, Web page owners can now add software to prevent infringement suits. Netscape Server's software tools are useful. These tools can construct a Web page to accept only queries from a certain address. All other Web page URLs return "404 - file not found." This increases control over the webpage. SiteShield is a new Web content protection solution. SiteShield lets content suppliers install copyright-protected photos on Web pages without worrying about theft. SiteShield uses server-based technology to let Webmasters protect photos and other content.
4. **Need to have Technological Protection Measures:** Technology also allows a website owner to employ passwords and registration to restrict access to a specific page. Dynamic Web pages with changing URLs are another control. To illustrate, Ticketmaster periodically changes URLs to ensure linking to certain pages only.
5. **Need to have linking agreements:** A web-linking agreement may also solve hyperlinking concerns. Many criticise this latest solution, arguing that one of the Web's main functions is to facilitate connection between resources. A difficulty develops when a hyperlink fraudulently suggests relationship with a linked page's host or uses copyrighted or trademarked information without permission. In this circumstance, a web-link agreement that addresses the hyperlink's terms would be useful.