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DRONE JOURNALISM AND COPYRIGHT: AN ANALYSIS OF THE DUO UNDER INDIAN COPYRIGHT LAW

ANJANA GOPINATH*

Abstract

With countries connecting as a global economy, and international treaties and bodies forming laws to maintain global unity and security, journalism has become a vital component connecting nations across the world. A single event that occurs in a small part of the world may cause a ripple effect introducing new circumstances in different parts of the world. From the print revolution to the emergence of computers and digital cameras, to the intense use of the internet, and now the developing use of drones, journalism has gone through a wide range of development. Earlier, the idea of copyright being vested in a computer or machine was not a concern, as they were merely used as tools for producing the desired creation. However, in the present era, Artificial Intelligence, and works generated through AI with little human intervention have not only created wide commercial implications but have also become a concern in the field of Intellectual Property. The introduction of drones into journalism has raised several Intellectual Property considerations and concerns including the ownership of copyright. This paper seeks to analyze the concept of drone journalism in light of the Copyright law and regulations in India. The reforms needed and precautions to be taken for the protection of Intellectual Property, particularly, copyright in the field of drone journalism is yet another aspect that the author has placed significance upon. The paper concludes with suggestions for reform regarding the laws connecting and concerning drone journalism and Copyright protection in India.

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* The author is a B.A. LL.B (Hons.) graduate from Symbiosis Law School, Pune, currently working as an Associate in the Law Office of Navarre Roy.

I. INTRODUCTION

The emergence and evolution of technology have benefited a vast number of fields including mass communication. The development of technology has brought about new ways to approach digital journalism. One of the latest developments in the world of journalism is the use of Unmanned Aerial Vehicles ("UAVs") or Drones. Drones or Unmanned Aerial Vehicles/Systems are aircrafts that have the capacity to fly without being controlled by a pilot on board.[1] The International Civil Aviation Organisation, which oversees the regulations concerning airways has also defined them as Remote Piloted Aircraft Systems.[2] They are controlled by radio waves or work autonomously using a programmed route.[3] The number of countries using or planning to obtain drones has been increasing over the years. Similarly, the uses of drones are also increasing, and they also vary from basic civilian use to military uses. One of the recent developments regarding the use of drones involves its presence in journalism. Named *drone journalism*, it refers to the use of Unmanned Aerial Vehicles/Systems for journalistic commitments.[4] Drone journalism has the capability of becoming a primary source of journalism. However, the law governing drone journalism and its relation to the concept of intellectual property, particularly, copyrights, is still under development. With the advent of an era that promotes drone journalism, there arises a need to discuss the concept to curb any potential legal threats and loopholes surrounding the same.

II. DRONE JOURNALISM AND INTELLECTUAL PROPERTY

In 1858, Gaspard-Félix Tournachon, a French Photographer, Balloonist, and Journalist used aerial photographs in journalism for the first time.[5] With the help of cameras attached to hot air balloons or even kites, photographers in the late 19th and early 20th century captured photos of landscapes, the damage caused by earthquakes and the aftermath of battles.[6] Subsequently, the world also saw fixed-wing aircrafts and helicopters being used during the emergence of

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[1] Ram Gopal Lakshmi Narayanan & Oliver C. Ibe, *Joint Network for Disaster Relief and Search and Rescue Network Operations*, Wireless Public Safety Networks 1, (2015).

[2] *Unravelling the Future Game of Drones*, NISHITH DESAI ASSOCIATES (Apr. 2018), http://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research%20Papers/Unravelling_The_Future_Game_of_Drones.pdf.

[3] Piotr Kardasz et al., *Drones and Possibilities of Their Using*, 6 J. CIVIL ENVTL ENGINEERING, no. 3, 2016, at 1, 1.

[4] *Drone Journalism and the Law*, UNC CENTRE FOR MEDIA LAW AND POLICY, https://medialaw.unc.edu/resources/drone-journalism/ (last visited Nov. 28, 2021).

[5] Elina Martinique, *How the History of Aerial Photography Ultimately Inspired the Creation of Drones*, WIDEWALLS (Mar. 26, 2017), https://www.widewalls.ch/magazine/aerial-photography-drone.

[6] Avery E. Holton et al, *Unmanned Aerial Vehicles: Opportunities, Barriers, and the Future of "Drone Journalism",* 8 JOURNALISM PRAC. 634, 636 (2014).

Electronic News Gathering.[7] Drones or UAVs in the present-day work in a similar manner – by capturing numerous photos, videos, and even other data without demanding the direct presence of the operator in the location concerned.[8] Thus, with the help of UAVs, the persons operating them do not have to deal with challenging or dangerous circumstances themselves. Additionally, with other benefits like the flexibility to reach inaccessible areas quickly, easy manoeuvrability, and cost-benefit, the concept of drone journalism will see significant growth in the coming years.

Intellectual Property advances with inventions that increase day by day. Drones, being classified as one of the recent advancements in technology, have become one of the most debatable issues in the field of Intellectual Property. With the application of robotic technology on these systems, the development of robotics in IPR has also seen the limelight.

The responsibility of any infringement by the drone shall lie upon the inventor who carries the right in the invention, and thus, it will be the owner, controller, or holder of the drone who shall be liable to respond in case of any civil or penal action.[9] Moreover, there are several rights that are associated with the author of a work as well as a copyright holder[10]. Hence, it is important to discuss who shall have the major IP right of the copyright associated with drone journalism.

III. COPYRIGHT AND DRONE JOURNALISM: AN ANALYSIS OF THE CONCEPTS UNDER THE COPYRIGHT REGIME IN INDIA.

Copyright legislation concerns itself broadly with the creation of the human mind and seeks to protect the interests of innovators and creators through protection over their works.[11] The same protection extends to a variety of creations, which includes photographic works. With the usage of drones in journalism, it is vital to discuss the ownership in copyright in circumstances that involve drones, employees, and employers in the field of journalism.

It is pertinent to note that the use of drones in journalism to assist the latter implies the use of Artificial Intelligence (AI). AI algorithms enable robots to thrive in the field of journalism in all

[7] Kriti Singh, *Drone Journalism: Potential and Challenges*, CENTRE FOR AIR POWER STUDIES (Mar. 25, 2014), https://capsindia.org/wp-content/uploads/2021/10/CAPS_Infocus_KS4.pdf.
[8] Avery E. Holton et al., *Drone Journalism*, *in* 2 THE SAGE INTERNATIONAL ENCYCLOPAEDIA OF MASS MEDIA AND SOCIETY 509 (Debra L. Merskin ed., 2020).
[9] *Drones and the Challenges of Intellectual Property*, BRLATINA, (Feb. 10, 2016), https://brlatina.com/blog/2016/drones-and-the-challenges-of-intellectual-property-for-new-tech/.
[10] Copyright Act, 1957, No. 14, Acts of Parliament, 1957(India) [hereinafter Copyright Act, 1957]
[11] WORLD INTELLECTUAL. PROP. ORG., UNDERSTANDING COPYRIGHTS AND RELATED RIGHTS (2d ed. 2016).

kinds of activities, including data gathering, data analysis, and the writing of narratives[12]. Drones, being a significant creation of robotic technology,[13] have been utilizing similar algorithms while being employed in the field of journalism. And for the same reasons, it is significant to analyse the concept of copyright in drone journalism particularly in the light of authorship, while giving due regard to the legal status of AI in India.

A. The Products of Drone Journalism and the Copyright Law in India

Drones have brought about impressive results as a tool to capture footage for news agencies. The technique has been used to cover news in areas damaged by earthquakes and floods like those in Nepal and India, for investigative journalism like the infamous case of the Columbia meatpacking firm, and the recent cases of police brutality in the USA.[14] Drones have the potential to deliver a massive amount of work for journalism, with less human touch or work involved. However, the legal lacuna, especially in the area of copyright, is intricate.

As far as work created by AI is concerned, the US case of *Feist Publications v. Rural Telephone Service Company, Inc.*;[15] the Australian case of *Acohs Pty Ltd v. Ucorp Pty Ltd*[16] and *Infopaq International A/S v. Danske Dagbaldes Forening*[17] from the Court of Justice of the European Union are examples where it has been held that copyright only subsists on works that are created by human beings or are results of a human's intellectual creativity. Moreover, countries like Germany, Spain, and France require works to bear the "*imprint of the author's personality."* The lack of a "personality" in AI, thus denies authorship to AI in the AI-generated works.[18] In the case of India, it can be interpreted from Section 2(d)(vi)[19] which accords authorship in a computer-generated work in the person who causes the work to be created, that an AI, or a drone for the purposes of drone journalism, does not in itself hold the authorship in the work it creates.

However, the concept of copyright needs to be further studied based on two main factors, namely, the scope of protection and the ownership in the right.

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[12] Noam Lemelshtrich Latar, *Can Robot Journalists Replace Human Journalists in the Coverage of Wars?* (2016), https://www.researchgate.net/publication/315685166_Can_Robot_journalists_Replace_Human_Journalists_in_The_Coverage_of_Wars.

[13] Geetali Tilak, *Drones and Media Industry*, 25 RUDN J. ST. LIT. & JOURNALISM 360-366 (2020).

[14] Usha Rani Das, *How drones changed the face of Journalism*, BUSINESS INSIDER (Jun 19, 2015), https://www.businessinsider.in/how-drones-changed-the-face-of-journalism/articleshow/47735970.cms.

[15] Feist Publications v. Rural Telephone Service Co., 499 U.S. 340 (1991) (India).

[16] *Acohs Pty Ltd v Ucorp Pty Ltd*. (2009) 201 FCR 173 (Austl.).

[17] Case C-5/08, Infopaq Int'l A/S v. Danske Dagbaldes Forening, E.C.R 2009 I-06569.

[18] Brigitte Vézina & Brent Moran, *Artificial Intelligence and Creativity: Why We're against Copyright Protection for AI-Generated Output*, CREATIVE COMMONS (Aug. 10, 2020), https://creativecommons.org/2020/08/10/no-copyright-protection-for-ai-generated-output.

[19] Copyright Act, 1957, § 2(d)(vi).

1. The Scope of Copyright Protection

The 1957 Copyright Act of India, under Section 13,[20] confers protection to all original literary, dramatic, musical, and artistic works, along with cinematographic films and sound recordings, and this copyright refers to a bundle of exclusive rights vested in the owner under section 14 of the Act.[21] This bundle of rights includes the right to reproduction, publication, adaptation, translation, communication of the work to the public, and the like. These rights can be exercised only by the owner of the copyright or by any person licensed by the owner in this regard.[22]

For any work to be protected under the Copyright laws in India, it has to be:

i. Original;[23] and
ii. Fixed in a tangible medium of expression.[24]

Copyright subsists in literary works as well as photographs among other works, as long as they are original. Here, 'original' in regards to literary work does not imply the originality of an idea, but the originality concerning the expression of the thought.[25] Similarly, an original photograph on which some degree of skill and effort has been expended, will be protected as an original artistic work, irrespective of their artistic quality.[26]

Additionally, as stated above, copyrightability also depends on whether the work has been fixed in a tangible medium of expression. Copyright subsists in expressions and not ideas. The Supreme Court of India has held that there could be no copyright in an idea, subject matter, themes, or plots and that copyright is confined to the form, manner and arrangement, and expression of the idea by the author of the work.[27] The Bombay High Court has also observed that an idea is not protected by the Copyright law and that it becomes a copyrighted work only when it is given embodiment in a tangible form,[28] and minor forms of expression including concept notes also fall under the same.[29]

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[20] Copyright Act, 1957, § 13.
[21] Copyright Act, 1957, § 14.
[22] Copyright Act, 1957, § 30.
[23] Camlin Private Limited v. National Pencil Industries, 2002 (24) PTC 349 (Del) DB (India); Eastern Book Company v. D.B. Modak, (2008) 1 SCC 1 (India).
[24] Zee Telefilms Ltd. v. Sundial Communications Pvt. Ltd., 2003 (27) PTC 457 (Bom)(DB) (India).
[25] Rediff.com India Ltd. v. E-Eighteen.com Ltd., 2013(55) PTC 294 (Del) (India).
[26] VK Ahuja, Law Relating to Intellectual Property Rights, 42 (3rd ed., 2017).
[27] R.G Anand v. Delux Films, AIR 1978 SC 1613 (India).
[28] *Supra* note 22.
[29] Zee Telefilm Limited v. Aalia Productions, 2000 PTC 382 (India).

With India's minimum requirements for originality, and with the fixation of a work captured by a drone in an electronic medium, the work can effortlessly pass the two criteria, and thus no legal issues would ideally arise in regard to the qualification of the work to be protected under the copyright law in the country.

The major question, thus, is as to who shall be considered as the copyright owner of a picture taken by a drone, while being utilized for drone journalism.

2. Ownership of Copyright

Section 17 of the Copyright Act[30] states that the author of the work shall be the first owner of the copyright therein. However, there are certain exceptions to the same, like in case of work made for hire. This shall be discussed in detail later in this section.

Section 2(d) of the Copyright Act of India,[31] provides that the author of a literary work is the author of the same; and similarly, in relation to a photograph, it is the person who takes the photograph who is the author of it. Similarly, as stated before, Section 2(d)(vi) of the Act defines the author of any literary, dramatic, musical, and artistic work which is computer-generated to be the person who causes the work to be created. Thus, the Indian Copyright law does not give rights to AI for creating work as the Indian law has always laid importance to human interference as a prerequisite for giving copyright protection.[32] Furthermore, the Practice and Procedure Manual issued by Copyright Office in 2018 also states that only the details of natural person(s) must be provided as the Author of the work for the purpose of Copyright.[33] AI, not being a natural person, shall not be able to meet such a condition. Therefore, it can be seen from the language of the legislation that the legislators intend to give copyright to the person involved in the making of the work, and not to any "inanimate machine" involved in the process of the creation of the work.

When drones are being used in journalism, the owner of the copyright would be decided according to Section 17 of the Copyright Act. Section 17 provides that the author of the work shall be the first owner of the copyright. However, clause (a) to the section provides an exception to the same. In case the author of artistic work made the same under the employment

[30] Copyright Act, 1957, § 17.
[31] Copyright Act, 1957, § 2(d).
[32] Lucy Rana & Meril Mathew Joy, *India: Artificial Intelligence and Copyright- The Authorship*, MONDAQ (Dec. 18, 2019), https://www.mondaq.com/india/copyright/876800/artificial-intelligence-and-copyright-the-authorship.
[33] Lukas Schroth, *Drones and Artificial Intelligence*, DRONE INDUSTRY INSIGHTS, (Aug. 28, 2018), https://www.droneii.com/drones-and-artificial-intelligence.

of a proprietor of a newspaper, magazine, or similar periodical under a contract of service or apprenticeship for the publication of the same, it will be the proprietor who will be considered as the first owner of the copyright unless a contract to the contrary has been entered into.[34] Similarly, clause (b) to the section states that in case of a photograph taken at the instance of any person, such person shall be considered as the first owner of the copyright, again, if no contract to the contrary has been made between the parties.[35] This implies that if a journalist under the employment of a news channel or newspaper, uses a drone for capturing images, the owner of the copyright would automatically be the newspaper proprietor that has hired the journalist, and not the drone or the journalist. Even if the drone belongs to the journalist, it merely acts as a tool for newsgathering.[36] Thus, even then, according to the act, the copyright owner would be the newspaper or the channel. The only exception to the proprietor not holding the ownership is when an agreement has been formed between the parties specifically stating that the author of the work shall be considered as the owner of the copyright and not the proprietor. However, this is possible between human beings, being legal persons. This is because under Indian law, only a "legal person" can be competent to enter a valid contract. The general rule thus far has been that an AI may not qualify as a legal person, and therefore, a contract entered into by an AI of its own volition may not be regarded as a valid contract in India.[37] Furthermore, section 11 of the Indian Contract Act, 1872 states that "*every person is competent to contract who is of the age of majority according to the law to which he is subject, and who is of sound mind and is not disqualified from contracting by any law to which he is subject*."[38] The criteria of the age of majority and soundness of mind cannot be calculated for a drone or any AI stimulated robot for that purpose. In such a case, a drone or the AI connected to the same, cannot be made a party to a contract. Consequentially, a drone or its AI technology cannot enter into an agreement with the proprietor of the newspaper or media channel to assign the copyright to the former.

A drone or the AI technology associated with the same, cannot be granted copyright ownership also due to the following reasons:

i. Term of Copyright Protection

[34] Copyright Act, 1957, § 17 (a).
[35] Copyright Act, 1957, § 17 (b).
[36] Epp Lauk et al., *Drone Journalism: The newest global test of press freedom, in* FREEDOM OF EXPRESSION AND MEDIA IN TRANSITION: STUDIES AND REFLECTIONS IN THE DIGITAL AGE 117 (Ulla Carlsson ed., 2016).
[37] Huzefa Tavawalla, *Can Artificial Intelligence Be Given Legal Rights And Duties?*, MONDAQ (Jun. 25, 2018), https://www.mondaq.com/india/new-technology/712308/can-artificial-intelligence-be-given-legal-rights-and-duties.
[38] Indian Contract Act, 1872, § 11.

Section 22 of the Copyright Act[39], provides that "*copyright shall subsist in any literary, dramatic, musical or artistic work published within the lifetime of the author until sixty years from the beginning of the calendar year next following the year in which the author dies*." A drone or AI does not die like a human being and can exist for an infinite period. The calculation of the copyright period shall be an issue in such a scenario.

Furthermore, Section 23[40] (term of copyright in anonymous and pseudonymous works) or Section 24[41] (term of copyright in posthumous work) would also not apply in the case of a drone or an AI, as work created by it would not fall under the said categories.

Therefore, there exists a lacuna in regards to the term of copyright protection in relation to works created by an AI.

ii. Rights Associated with Copyright Ownership

There are a few rights that a copyright owner enjoys, including moral rights, right of paternity and right of integrity, right to sue and be sued, right to assignment, and the right to license. These are rights that can only be enjoyed by human beings.

(a) MORAL RIGHTS

The High Court of Delhi, in the celebrated case of *Amar Nath Sehgal v Union of India,*[42] had recognized the moral rights of the author as the "soul of his works." Moral rights emanate from the recognition of human emotions. Emotions cannot be associated with an AI. The Copyright Act under Section 57 also recognizes the right to paternity (*droit de paternite*) and the right to integrity (*droit de respect de lóeuvre)*. While the former states that the author of a work shall have the right to claim its authorship,[43] the latter provides that an author shall have the right to claim damages for any mutilation or distortion of the work if it is prejudicial to his/her honour or reputation.[44] A drone or an AI, being an inanimate object cannot have honour or reputation attached to it.[45] Thus, any instance of determining honour or reputation would automatically rest with the individual having ownership in the said drone or AI. Therefore, it can be concluded that a drone cannot have moral rights.

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[39] Copyright Act, 1957, § 22.
[40] Copyright Act, 1957, § 23.
[41] Copyright Act, 1957, § 24.
[42] Amar Nath Sehgal v Union of India, 2005 (30) PTC 253 (Del) (India).
[43] Copyright Act, 1957, § 57 1(a).
[44] Copyright Act, 1957, § 57 1(b).
[45] Legal Remembrancer v Manmatha Bhusan Chatterjee, (1924) ILR 51 Cal 250 (India).

This brings us to the next issue faced in providing copyright ownership to AI.

(b) RIGHT TO SUE AND BE SUED

In the absence of AI being recognized as a legal entity, it will be impossible for it to sue for an infringement of copyright, or to assert its rights as a copyright holder. The purpose of copyright protection itself would fail if a right exists, but cannot be claimed. In such an instance, a representative, who would be a human being, would be necessary to assert the rights held by an AI.

Additionally, the law as it currently stands does not attach liability for infringement on an AI system; and the liability for such copyright infringement will thus fall on a natural person. Where a work infringes on a copyrighted work, it is the author of the infringing work who is generally held liable. Accordingly, if the creator of an AI is considered to be the author of any works created by the AI, then the creator of the AI will be held responsible for infringements of copyright by the AI.[46]

A drone/AI can also not be held liable to pay damages to the person whose copyright has been infringed. This again has to be paid by the person or company having ownership of the drone or AI.

Therefore, an AI holding copyright ownership would unnecessarily complicate a situation that would not occur, had the copyright subsisted on the person who designed the AI or has the ownership to it.

(c) THE OWNER'S RIGHT TO ASSIGN OR LICENSE COPYRIGHT

The copyright owner has the right to assign or license the interest in the copyright to any person at his or her will, as per sections 18[47] and 30[48] of the Copyright Act, respectively. However, the incapacity to contract would make it impossible for an AI to assign or license its rights to a third party. Thus, two of the very important rights in relation to copyright cannot be enforced by a drone or AI, even if it holds ownership in the same.

It is pertinent to note that in November 2020, for the first time in India, the copyright office recognized an artificial intelligence tool named RAGHAV Artificial Intelligence Painting App

[46] Bharucha and Partners, *Copyright in works created by artificial intelligence: issues and Perspectives*, LEXOLOGY (Feb. 18, 2021), https://www.lexology.com/library/detail.aspx?g=4513277a-6571-40f1-923d-c09ec5366fdd.
[47] Copyright Act, 1957, § 18.
[48] Copyright Act, 1957, § 30.

(RAGHAV), as the co-author of a copyright-protected artistic work[49]. RAGHAV is the co-author of a painting titled "Suryast" along with Ankit Sahni, an IP lawyer who owns the AI-based app, and commissioned the said painting. Here, it is important to note that Mr. Sahni's initial copyright application which listed RAGHAV as the sole author of an artistic work, was rejected by the Copyright Office. It was the second application, on which both Sahni and RAGHAV were named as co-authors, that was granted registration on the 2nd of November 2020. This has opened a new pathway to India recognizing AI as a co-author. The possibility of AI technology being regarded as the sole author is still a pending question.

Nevertheless, even if an AI is considered a co-author, it still would not be able to assert the above-mentioned rights on its own. Only the human co-author or the inventor/owner of the AI can represent it before the court as a legal person. In the light of the same, it is safe to conclude that the current legal system in India is unsuitable for according copyright ownerships in drones or any type of AI tool, for that purpose.

IV. SUGGESTIONS AND CONCLUSION

A significant amount of reformation is necessary for the copyright regime of the country to efficiently analyse the copyright implications surrounding drone journalism. After the aforesaid analysis, the author has come forward with the following suggestions taking into regard the current legislations in the country:

1. A major reform required in the light of increased use of drones and robotic technology is the need for domestic drone regulations which provide express provisions over the ownership of IP rights associated with the drone or any data captured by it. This may be made possible by inserting a separate chapter in the Copyright Act, which governs all types of works created by an AI tool of any kind; including, but not limited to drones. The provisions should be wide enough to cover any possible future inventions in technology in addition to existing technologies like robots and drones.

   The reform should also aim to clarify the position of authorship in an AI-created work. This could be done by adding an explanation to Section 2(d)(vi) of the Copyright Act. The said section states that "author" in "relation to any literary, dramatic, musical or artistic work which is computer-generated" is "the person who causes the work to be created". The explanation thus inserted, could be as follows:

[49] ROC No. A-135120/2020, Diary No. 13646/2020-CO/A, https://copyright.gov.in/SearchRoc.aspx.

"Explanation. - For the purposes of this sub-clause, a "computer-generated work" includes work created through tools of Artificial Intelligence."

A similar explanation could be added to Section 17 of the Act. It could state that "*For the purposes of this section, the first owner of copyright in an AI-created work would be the person who causes the work to be created, or in other words, the owner of the AI tool. Provided that, if the work is made under a contract of service or apprenticeship, the person at whose instance the work was created shall, in the absence of any agreement to the contrary, be the first owner of the copyright therein.*"

Insertions and explanations like those mentioned above could remove the ambiguity as well as lacunas in relation to the copyright ownership in works created by an AI-run machine like drones.

2. The complete rejection of AI-created works would discourage inventors from developing new versions of AI, thus conflicting with the essential purpose of Intellectual Property legislation, i.e., to foster an environment in which creativity and innovation can flourish[50]. Therefore, instead of outrightly denying copyright protection to AI-created works, the Copyright Act should provide copyright protection to the same, by recognizing the individual who created the AI, or the owner who uses the same in order to create original works. Thus, in the case of a drone utilized for drone journalism, copyright protection can be given to the proprietor of the newspaper or the journalist who owns the drone.
3. Similarly, provisions regarding cases of copyright infringement by an AI tool should also be addressed under the Copyright Act of India. With AI not being regarded as a legal entity, the next possible and practical way is to hold the inventor or owner of the AI accountable for an infringement. A natural person, can sue and be sued and will be able to pay damages for any infringement that has occurred. This clears the concern on what shall happen if a suit arises around or is related to AI-caused infringements.

The Indian Copyright law provides sufficient clarity regarding the demarcation of rights of authors and news proprietors. The scope of legal provisions to deal with concerns in considering an AI, in this instance, a drone, as the copyright holder, is fairly grey. There is no difficulty in concluding that it is the drone that captures images and footage for journalistic purposes. However, it must be realized that it is the journalist or the owner of the drone who puts in the intellect to decide what to capture and how to associate it with the news matter. Section 17 of the Copyright Act provides for two separate instances in case of works made for hire. The first

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[50] *What is Intellectual Property*, WIPO, https://www.wipo.int/about-ip/en/.

instance deems the person who commissions the work to be made as to the first owner of the copyright. The second instance recognizes a contract in contradiction to the first instance, where the author of the work would be considered as the first owner. The second instance is where the whole legal concern surrounding a drone or an AI, having authorship in the work created, and thus, the copyright in the same, would arise.

The Indian Copyright Office has started recognizing the authorship of AI tools like RAGHAV, the AI painting app. In the light of such developments, and also giving due regard to the ever-developing field of technology and Artificial Intelligence, it is important that the government of the country bring about certain reforms in the copyright regime, to deal with the legal concerns, and above all, to eliminate any ambiguity that exists.