

● CHANGING DIMENSION OF MORAL RIGHTS UNDER DIGITAL ENVIRONMENT



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Abstract

The social, economic and political development of a nation depends to a very great extent on the creativity of its people. The author special rights are aspect of copyright law that seeks to protect the non-commercial, personal or spiritual interest of an author in his work. The moral rights raise the status of author's beyond material gains. Even if the work of author is sold, some basic rights remain vested in author; these basic rights are known as moral rights of the author. These rights vest in authors independent of their economic rights. On the other hand, technologies of the digital age have profound implications for the creative arts, they challenge many of the fundamental concepts at the heart of artistic tradition. The same concepts provide the underlying framework for moral rights protection, so that current technologies challenge the validity of existing moral rights doctrine, law, and practice. Notably, the information era has generated new technologies for the creation of artworks, and the possibility of new kinds of works, themselves, leading to problems with the established understanding of authorship, creative work, and the relationship between the two. The paper makes an attempt to explaining challenges of moral rights in present digital environment.

Key words

Author's Special Rights, Copyright, Moral Rights and Digital Environment.

I. INTRODUCTION

The social, economic and political development of a nation depends to a very great extent on the creativity of its people. The encouragement of national creativity is a sine qua non for further progress. The enrichment of the national culture heritage depends directly on the level of protection afforded to the cultural creations. The copyright protection is an important means to promote, enrich and disseminate the national culture heritage. The higher level of protection the greater the encouragement for authors to create. The greater the number of a country's intellectual creations, the higher it's renown. It is because of this reason that every nation protects its creative genius by copyright law.

In the Copyright Act, 1957, section 57 provides for Author's Special Rights. These special rights are by and large based on the Berne Convention Art.6 bis. The Act provides for paternity and integrity right. The Moral Rights (Author's Special Rights is popularly

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known as Moral Rights¹, thus the present paper refers it as Moral Rights) are the aspect of copyright law which raises the status of authors' beyond material gains. Even if the work of author is sold, some basic rights remain vested in author; these basic and spiritual rights are known as Moral rights² of the author. These rights vent in authors independent of their economic rights. This notion of independence is basic to the moral rights. The concept of moral rights assumed importance on the international legal horizon, with the conclusion of Berne convention in 1886. The growth of law in relation to moral rights had to overcome various objections, primarily those raised by United States of America. The conclusion of Universal Copyright Convention and TRIPs Agreement and further growth by inclusion in WIPO internet treatise are some of the landmark in the growth of moral rights.

II. CONCEPT AND MEANING OF MORAL RIGHTS

The moral rights are aspect of copyright law that seeks to protect the non-commercial, personal or spiritual interest of an author in his work. The traditional theory of Moral Rights is that authors of copyrightable work have inalienable rights in their works that protect their moral and personal interest that supplement the set of economic rights which is traditionally granted to copyright holder in all jurisdictions.³

The Moral Rights doctrine is premised on the idea that creators have certain rights in the integrity of their work that transcend the protection of economic rights.⁴ An artistic creation is not merely a product that can be bought and sold but rather it is direct reflection on the authors personality, identity, and even his or her 'creative soul'.⁵ These rights are often conceived as a fundamental human rights or a personal rights, grounded

¹For literature on the moral rights, see generally, Sterling J.A.L. *World Copyright Law* (London: Sweet & Maxwell 1998) at 280 ; Kevin Garnett, *et.al.*(ed.) *Copinger and Skone James on Copyright*, (London: Sweet & Maxwell Ltd 200415th Edition) at 627; Lionel Bently and Brad Sherman, *Intellectual Property Law* (New Delhi: Oxford University Press 2003) ; Ahuja, V.K., *Law Relatingto Intellectual Property Rights*, (Nagpur: Lexis Nexis Butterworth Wadhawa, 2007) ; W.R. Cornish, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* (New Delhi : Universal Law Publishing Co. Pvt. Ltd. 2003 Third Edition); Cornish, W.R., Authors in Law (1995) 58(1) *The Modern of Review* pp.1-16 ; Beitz, R. Charles, The moral Rights of Creators of Artistic and Literary Works (2005) 13(3) *The Journal of Political Philosophy*: pp. 330-358; Louise Longdin and Eagles Ian, Technological Creativity and Moral Right: A Comparative Perspective (2004) 12(2) *International Journal of Law and Information Technology* pp. 209-235; Masiyakurima, Patrick, The Trouble With Moral Rights (2005) 68 (3) *Modern Law Review* pp. 411-434; Mira T. SundaraRajan, Moral Rights in Developing Countries: The Example of India (2003) 8 *Journal of Intellectual Property Rights* pp. 357-371; Mira T. SundaraRajan, Moral Right in Information Technology: A New King of 'Personal Right' (?) (2004)12 (1) *International Journal of Law and Information Technology* pp. 32-54; R. Eg. Sarraute, Current Theory of Moral Rights of Authors and Artists under French Law (1968) 16 *American Journal of Comparative Law* at 159; Satish Chandra, Moral Right: Moving from Rhetoric in India (2005) 34 *Banaras Law Journal* pp.187-195; Ruth Towse, Copyright and Artists : A View From Cultural Economics (2006) 20 (4) *Journal of Economy Survey* pp. 567-585; David Vanver, Moral Rights Yesterday, Today and Tomorrow (1999) 7(3) *International Journal of Law and Information Technology* pp. 270-288; Amy M. Adlert, Against Moral Rights (2009) 97 *California Law Review* pp.263-301.

²The term 'moral rights' derives from the French expression '*droit moral*'.

³Bently and Sarman, *Intellectual Property Law* (New york: Oxford 2003 1st Edition) at 234.

⁴Ilhyung Lee, Toward an American Moral Rights in Copyright, (2001)58 *Wash and Lee L. Rev.* 795, 801.

⁵Neil Netanel, Copyright Alienability Restrictions and the Enhancement of Author Autonomy: A Normative Evolution,(1993) 24 *Rutgers L.J.* 347, 402-03.



in the author's essentials personhood and the projection of that personhood on an artistic or creative work.⁶

Moral rights grant authors control over their creative projections in so far as subsequent performance or transmissions must identify the original creator and not distort the meaning and essence of the original creation. This right is independent from copyright protection. An author can convey away his copyrights in a creation, thus denying the ability to receive revenues from that work. The author however, will still retain moral rights and can at least in theory maintain the integrity of his creation as it is expressed through performance and transmission.⁷

III. MORAL RIGHTS IN NEW TECHNOLOGIES

Technological works that are now considered to be copyrightable works, creative works that utilize new technological methods of creation, new kinds of creative works, or some combination of all of these? In fact, international copyright instruments have made little progress in addressing the issue of moral rights in these new areas of human creativity. Rather, this area remains largely unexplored in international copyright law, a situation that is reflected in a corresponding lack of consideration in most national copyright statutes. As result, moral rights issues in information technology remain in an uncomfortable state of neglect that may ultimately have negative consequences at the practical, legal and conceptual levels.⁸

The technologies of the Digital Age have profound implications for the creative arts, they challenge many of the fundamental concepts at the heart of artistic tradition. The same concepts provide the underlying framework for moral rights protection, so that current technologies challenge the validity of existing moral rights doctrine, law, and practice. Notably, the Information era has generated new technologies for the creation of artworks, and the possibility of new kinds of works, themselves, leading to problems with the established understanding of authorship, creative work, and the relationship between the two.

New Technologies for Creation

Recent technological developments have generated a variety of technologies that may be applicable to the creation of artworks. In some cases, these technologies are new variants of means that have traditionally served to facilitate artistic expression - for example, the development of dictation software that allows text to be typed directly from dictation by a computer. In other cases, new technologies have a more direct impact on the nature of the final product, as in the case of new means of creating and reproducing sounds, colors, or images. It is interesting to note that the range of creative possibilities generated by the Digital Era has yet to be explored to its full potential by authors and artists.⁹

All of these new technologies intervene between the author and the creative work in its

⁶Robert C. Bird, *Moral Rights: Diagnosis and Rehabilitation*. (2009) 46 issue 3 *Ame. B. L. J.* at 410.

⁷Susan P. Liemer, *Understanding Artists' Moral Rights: A Primer*, (1998) 7 *B.U. Pub. Int. L.J.* 41,42.

⁸*Supra* note 8 at 49.

⁹RajanSundara T. Mira, *Moral Rights in Information Technology: A New of 'Personal Right'?* (2004) Vol. 12 No. 01 *International Journal of Law and Information Technology* at 49.

final form. However, depending on the nature and extent of the intervening technology, the manner in which the work is created may fundamentally alter the nature of the relationship between the author and the final product. Protection of moral rights is based on the presumption of a personal, intimate, and unbreakable connection between the author and the creative work. However, where the influence of technology is powerful, this relationship may become tenuous.

New Kind of Works

A related effect of new technology is the possibility of creating new kinds of artistic works. Works that incorporate digital technology, such as 'multimedia' creations also present problems in the satisfaction of the basic concepts underlying copyright law. If the multimedia work incorporates text, images, or sound from pre-existing sources, when does the new work cease to be 'original'? Are new kinds of work based on technology expressive of the personality of the creator in a way that is analogous to traditional works? Is the appropriation or alteration of these works likely to affect the author in the same way as a traditional author?

The Problems of Authorship

It is apparent that the most serious challenges to moral rights presented by digital technologies occur at the level of authorship. In particular, there is a confusion of identity among the individuals who are involved in artistic creation at every stage.

Programmer as Author

Where a computer programmer creates a work of art through the medium of programming technology, he arguably becomes an 'author' in the traditional sense of the expression. However, does the programmer fit the traditional model of an author as an independent and original being, whose work reflects a unique, creative genius? The work of a programmer seems intuitively different from that of an artist, all the more so if the work that is created is the product of electronic events that are, to some extent, self-propagating. Nevertheless, moral rights require an author. If we refuse to consider the programmer as the author, who will then fulfill this role? How can authorship be associated with a machine, or an impulse of software, without human involvement?

Performer as Author

If the performance of an electronic work of art requires the involvement of a human being for example, someone to manipulate the program or carry out certain steps at different stages of its realization what will the law consider to be the role of this person in the artistic creation? Is he a performer, a performer-cum-author, or a co-author of the program?

The merging of identities between performer and author is increasingly a feature of global culture. The reasons for this trend are both technological and cultural, having to do with the impact of technology on artistic creation, and with the increasing emphasis on performance as an artistic activity in its own rights in the Digital Age. Interestingly, this trend is reflected in the latest international regulation on copyright in performances, the WIPO Performances and Phonograms Treaty (WPPT) of 1996, which entered into



force in mid-2002.¹⁰ Article 5 of the WPPT creates moral rights in performances, on identical terms to the moral rights enjoyed by original authors under Article 6bis of the Berne Convention. From the perspective of moral rights doctrine, this change is a radical one. However, it appears to reflect a determination at WIPO to ensure that moral rights protection is available to a broad range of creators a new legal approach to situations where the distinction between performer and original author is increasingly difficult to separate, in practice.

Audience as Author

The widespread ease and availability of technological means for intervening in ostensibly finished works of art potentially allows 'end-users' an unprecedented role in reshaping, modifying, criticizing, and disseminating them. This trend has widely been portrayed by copyright scholars as an indication of the 'unenforceability' of moral rights. However, digital technologies affect other aspects of copyright equally, for example, the maintenance of an exclusive right of reproduction, or communication to the public. The power of the public to deal with artworks directly through technology after a certain point, without the mediation of the author brings to light a number of important changes in the relationship between authors and their public. In particular, the supremacy of authorship is now challenged by the power of the public to intervene. The protection of moral rights therefore depends, to an increasing extent on the support of the public. By an appropriate irony, the future protection of the personal and cultural interests involved in moral rights depends upon the evolution of a cultured and educated attitude towards artistic creation among the public. In effect, through technology, in combination with cultural training and values, the audience, too, has become an 'author'.¹¹

If the case against moral rights in information technology remains superficial, the spurious exclusion of moral rights from the artistic consequences of digital technology seems ill-informed. While some areas of digital creativity are greatly removed from the basis of moral rights doctrine, in other respects, digital creation has only enhanced the value and importance of these rights. In the first instance, a consideration of the nature of creation in computer-generated works shows that, in this area, the difficulty of identifying the author, analysing the nature of the work, and establishing the nature of the relationship between the two may make moral rights protection inappropriate. However, the growing participation of individuals at different stages of the creative process through technology suggests that the protection of the relationship between the author and the work through moral rights may actually enhance culture and creativity. An all-encompassing conclusion about the appropriateness of applying moral rights to the creative endeavors of the Digital Age cannot be drawn, particularly if that conclusion implies the complete exclusion of moral rights protection from technological creation altogether. Rather, moral rights appear to be necessary and desirable in some areas, but may be inappropriate in relation to others.

¹⁰WIPO performance and Phonograms Treaty, adopted by the WIPO Diplomatic Conference on Certain Copyright and Neighboring rights Questions in Geneva; on December 20, 1996 [WPPT]. Available in the WIP Collection of Laws for Electronic Access, online: <http://clea.wipo.int>.

¹¹*ibid.*

Rights to Integrity

Infringement of an author's moral rights could occur by the simple fact of digitisation of his work. Translating a work into digital form necessarily provokes a loss in quality due to the compression into a format capable of being understood by a computer. The differences in loss of quality will vary with the nature of the work. For instance, the digital version of a painting where the original is very detailed and with nuances in its colours might not be a satisfying copy of the original. An author might consider such changes violate his moral right of integrity. In the UK, however, it is very unlikely that this digital version of the painter's work would be considered as derogatory treatment by the courts since objectively it is unlikely to be seen as sully his honour or reputation, amounting instead only to a slight loss in quality. The other view could be taken in France where the test for the violation of the integrity of the work is much lower and more subjective.¹² The artist could successfully argue that the lower quality affects his work to such a degree that is not acceptable to him. Going further, arguments could be taken from the size of the digital copy. In the UK, a court has said that the reduction of size of a number of paintings of dinosaurs for inclusion in a catalogue was not derogatory treatment¹³ and so a UK author would be unlikely to have a remedy as a result of the change of size of a work brought about by digitisation. In another French case, the court considered that 'the suppression of the lower part of the drawing which included the name of the represented person and the author's signature' infringed moral rights. As a consequence, in France an author could argue that the reproduction on the Internet of his work in a normal size infringes his moral rights of integrity either because that work has to be compressed to fit the screen, or because of the impossibility to have the entire the creation on the screen. The user has to scroll down to get the visual effect of the work.

The Right of Disclosure

The second instance in which the territorial approach of copyright laws in the domain of moral rights can lead to considerable problems is the right of disclosure. Extensive rights are granted in this category by the French Code. The right of disclosure (or non-disclosure) does not exist as such in UK legislation although it is fair to say that there is no compulsion on an author to disseminate a work once created. The author is perfectly at liberty to lock the work away and never make it available either in public or private. The French Code by contrast explicitly provides that "*only the author has the right to disclose his creation. . . and he defines the means and conditions of this disclosure*".¹⁴ This right of disclosure is considered as absolute and exclusive. The courts have clearly affirmed that the author has the right to "*remain the sole judge of the opportunity of the publication*" of the work and that therefore no compulsory order for the disclosure of the work can be obtained before the courts. The author could prevent the dissemination of his work on a medium he considers inadequate as to the presentation and or quality of

¹²In this sense, see French case on acts infringing the "spirit" of the creation : The moral rights of the author were infringed where a certain direction of actors was considered contrary to the spirit of a theatre creation : TGI Paris, 27 November 1985, Gaz. Pal. 1986. 2. Somm. 369.

¹³*Tidy v. The Trustees of the Natural History Museum* (1995) 37 IPR 501.

¹⁴French Intellectual Property Code Article L, 121-2: "*L'auteur a seul le droit de divulger son œuvre. Sous réserve des dispositions de l'article L. 132-24, il détermine le procédé de divulgation et les conditions de celle-ci*".



his creation. This is of particular relevance in the case of dissemination in digital form over the Internet bearing in mind that such disclosure has to be agreed on by the author even after the transfer of the economic rights of exploitation to an assignee or licensee.

Compilation Problem

The Compilations of data and other material are required to be protected under TRIPS whatever their form (machine readable or other) if the selection or arrangements of their contents constitute intellectual creations.¹⁵ While TRIPS stipulates that 'computer programs' are to be protected as literary works it does not require that compilations be allocated to any particular category of copyright subject matter only. Most, if not all, jurisdictions allow the authors of compilations to claim the full range of moral rights. If they then define 'compilation' in such a way that it can include copyrightable web pages, databases,¹⁶ or suites of computer programs¹⁷ then the creators of these products will have rights denied to the authors of their constituent or organizing programs. Once again it is hard to see the policy reasons for this distinction.

IV. INDIAN PERSPECTIVE

At present, in India, the management and protection of copyright in digital works is looked after by copyright societies formed by copyright owners. These societies registered under Section 33 of the Copyright Act, 1957 work on the concept of collective administration of copyright. These societies are entitled to issue licenses, collect fees and distribute such fees among the owners of the copyright. But it is not an effective means to protect and control piracy of a copyrighted work in modern digital environment. Therefore, comparable provisions to WIPO Treaties are proposed in Copyright Amendment Act, 2012 to The Copyright Act, 1957. It includes the definition of The RMI under Section 2(xa)¹⁸ and the protection of The RMI under Sections 65A and 65 B.

Section 65A¹⁹ of Copyright Act deals with protection of technological measures. Subsection (1) provides that any person who circumvents an effective technological

¹⁵TRIPS, Art. 10 (2).

¹⁶Indeed TRIPS does not specify that they even be protected via copyright at all. At. 2(5) of the Berne Convention (Paris Revision 1971) which only refers to collections of literary or artistic works such as anthologies or encyclopedias.

¹⁷Authors of copyrightable databases are not denied paternity and integrity rights under the Copyright, Designs and Patents Act 1988 (UK). Moral rights have no application, however, to the sui generis database right.

¹⁸Inserted by Act 27 of 2012, (The Copyright Amendment Act, 2012) S. 2 (w.e.f 21-06-2012)

(xa)- "Rights Management Information" means,

(a) the title or other information identifying the work or performance;
 (b) the name of the author or performer;
 (c) the name and address of the owner of rights;
 (d) terms and conditions regarding the use of the rights; and
 (e) any number or code that represents the information referred to in sub-clauses (a) to (d),
 but does not include any device or procedure intended to identify the user.

¹⁹Inserted by Act 27 of 2012, (The Copyright Amendment Act, 2012) S. 37 (w.e.f 21-06-2012).

measure applied for the purpose of protecting any of the rights conferred by the Act, with the intention of infringing such rights, shall be punishable with imprisonment which may extend to two years and fine. Sub-section (2) provides that nothing in sub-section (1) shall prevent any person from doing anything referred to therein for a purpose not expressly prohibited by the Act. It also provides that any person facilitating circumvention by another person of a technological measure for such a purpose shall maintain a complete record of such other person including his name, address and all relevant particulars necessary to identify him and the purpose for which he has been facilitated or doing anything necessary to conduct encryption research using a lawfully obtained encrypted copy or conducting any lawful investigation or doing anything necessary for the purpose of testing the security of a computer system or a computer network with the authorization of its owner or operator or doing anything necessary to 26 circumvent technological measures intended for identification or surveillance of a user or taking measures necessary in the interest of national security

Further section 65 B²⁰ runs as "Any person, who knowingly removes or alters any rights management information without authority, or distributes, imports for distribution, broadcasts or communicates to the public, without authority, copies of any work, or performance knowing that electronic rights management information has been removed or altered without authority, shall be punishable with imprisonment which may extend to two years and shall also be liable to fine. It also provides that if the rights management information has been tampered with in any work, the owner of copyright in such work may also avail of civil remedies provided under Chapter XII of the Act against the persons indulging in such acts described above".

The Copyright Act neither defines the term 'effective technological measure' nor covers TPMs that restrict those actions which are not permitted by law. It protects only the 'act' of circumvention and not the trafficking circumvention devices or services. The exception of Section 65A (2) (a) appears to permit circumvention for any purpose that would not amount to infringement under the Act; it dilutes protection under Section 65A because proposed new section 52 already provides a very broad exception. For example - Section 52(b) (v) along with exceptions for copying of computer programs that permits copying for any 'noncommercial personal use' beyond the usual making of a back-up copy. Further Section 65(A) is silent on civil remedies.

V. CHALLENGES TO MORAL RIGHTS IN THE DIGITAL ENVIRONMENT

Conceptual Challenges

In the Digital Age, the fundamental concepts underlying moral rights doctrine are brought into question. Problems arise in relation to the identity of the author, who may be a human being, a machine, or most likely, a combination of the both. The nature of the work raises another series of issues: it may not be what is traditionally understood as a work of human creative expression, leading to the question of whether the mistreatment of this kind of work will affect the author in the same way as it would in the case of a work. The relationship between the author and the work may itself be somewhat

²⁰Inserted by Act 27 of 2012, (The Copyright Amendment Act, 2012 S.65(B).



different in the environment of digital technology, where technological means of creation may intervene between the author and the work in such a way as to make the link between them somewhat tenuous, and therefore, difficult to protect.²¹

Relationships among the parties involved with the works may also be affected by technological change, whether between the author and the performer, or between the author and his audience. For example, performance of an author's original work may acquire a new importance in its own right.²² The performer may be putting into action instructions of the author that would otherwise be incomprehensible to an audience, or incapable of being perceived by them, as in the situation where the 'performer' may be executing the instructions in a computer program.²³ At the same time, the ability of the public to intervene in a work which is presented in digital format and make seamless changes has the potential to transform the audience into a more active participant in the creative process. The active involvement in artistic creation means much more than physical manipulation, it is the re-creation and development of the mind-set of the artist within the person who receives the work. The idea of the audience as aesthetic participant may be somewhat unfashionable in Western 'high' culture; however, it is an ancient and well-established aesthetic doctrine in certain cultures of the East.²⁴ By enabling a physical rapprochement between author and audience through technological means, digital technology brings the possibility of a new and closer relationship between author and audience into the consciousness of society, and may ultimately lead to real, spiritual closeness between the two.

Enforcement Difficulties

The technological developments that make possible greater audience involvement in creativity also create great difficulties of the enforcement of moral rights, and copyright restrictions, in general. The nature of digital technology is such that, once a work appears in digitized form, it can be altered in such a way that someone who subsequently sees the work will be totally unaware of the changes that have been made. Information, such as the identity of the author, may easily be removed without anyone's knowledge. Reproduction of the work can also be made without any loss of quality, regardless of the number of copies made. Finally, the Internet may provide a means of worldwide distribution of the work at virtually no cost, and access to the work may be available on an individual basis.²⁵

A number of technological measures have been developed in an attempt to protect works from copyright infringement. These include encryption technology, which

²¹RajanSundara T. Mira, *Moral Rights in Information Technology: A New of 'Personal Right'?* (2004) Vol. 12 No. 01 *International Journal of Law and Information Technology* 42.

²²*Ibid.*

²³It is interesting to note the parallel that the situation of technological creation presents with the traditional situation of music performance: the average person is most often unable to read the musical score, itself a form of 'code' notation.

²⁴For example, see the detailed study of Indian art and aesthetics in S Pandit, *An Approach to the Indian Theory of Art and Aesthetics* (Sterling New Delhi 1977) 88-89. The intersection of traditional culture with digital technology is explored by J Tunney, 'E.U., I.P., Indigenous People and the Digital Age: Intersecting Circles?' (1998) 20(9) *EIPR* 335, 335.

²⁵*Supra* note 8, p. 43.

prevents someone from gaining unauthorized access to the work, and watermarking, which allows copying of the work to be traced, though not prevented. Measures aimed at circumventing these safeguards have become criminal offenses in some countries; nevertheless, these so-called 'anti-circumvention' measures quickly become technologically outmoded, and have achieved only limited effectiveness, to date.²⁶

Given the ease with which digital technology allows moral rights to be circumvented, some commentators have raised the possibility that moral rights may be irrelevant to the creation and dissemination of artistic works in the Digital Age. However, this question should not be assessed on the basis that moral rights have become difficult to enforce, in practice. Rather, to what extent does the moral rights of authors continue to be relevant to their concerns in the environment of digital technology? The answer to this question should determine how moral rights are protected, and how to encourage a sufficient degree of compliance and enforcement. Above all, the viability of moral rights in digital environment will depend on the knowledge and willingness of the public to champion the rights of creators: the creative community must attempt to develop a more cooperative relationship with its public, and realize the potential contribution of the public to its creative interests.²⁷

The unspoken assumption in international copyright law that moral rights are not and should not be applicable to computer programs is based on an insufficient consideration of the policy issues at stake. Programmers may well have moral interests in their technological creations. Rather than rejecting outright the possibility of moral rights in these works, the problem deserves to be considered comprehensively, in terms of legal doctrine, economic consequences, and the public policy of providing adequate access to new technology. Like India, many countries may conclude that software development will not be especially strengthened by the elimination of moral rights. Instead, the exclusion of these rights may bring inconsistency to copyright protection for software, while preventing the potential moral interests of programmers for being explored.

VI. SOLUTIONS WITH REGARD TO DIGITAL CHALLENGES

The practical challenges of exercise and administration of moral rights led to solutions being suggested around two related lines. First, technology could be used to solve problems created by technology and various options like Digital Rights management, Digital fences Encryption, Watermarking, Digital signatures along with Monitoring and tracking devices could be used to tackle infringement. Second, acknowledging that technology may not provide a full solution as such, additionally collecting societies

²⁶The relevant United State provisions are SS 1201 (a) (1) and 1201 (a) (2) of the Digital Millennium copyright Act, 17 USC (1994 & Supp V 1999). The American approach to circumvention technologies is discussed by D Balaban, 'The Battle of the Music Industry: the Distribution of Audio and Video Works via\ the Internet, Music and More' (2001) 12 Fordham, IP, Media S Ent. LJ 235, 259-265. The relevance of anti-circumvention technology to moral right of integrity considered briefly by TP Heide, 'The Moral Right of Integrity and the Global Information Infrastructure: Time for a New Approach?' (1996) 2 UC Davis J Intl L § Poly 211, 263-66.

²⁷SundaraRajan the importance of the cooperative element in the development of copyright in the era of digital technology is emphasized by JAL Sterling 'Philosophical and Legal Challenges in the Context of Copyright and Digital Technology' (2000) 31(5) IIC 508, 525.



could play a role in administration of rights while implementation and enforcement of the rights would largely depend on the public. As to enforcement of rights, most commentators suggested the way forward was international moral right harmonization, but acknowledged that such result is unlikely. The conceptual challenges were harder to provide specific solutions to. The solutions around the right of identity did not create as divergent opinions as the right of integrity did. The thrust of the concerns around scope and definition of rights arose from two issues. First, digital environment had disturbed the existing balance between interests of producers, creators and users. Second, the nature of the different types of creative works present in the digital realm could have no one allen compassing solution as the strength of cases for moral rights differed with the particular type of creative work in question. Accordingly, most commentators agreed that the solution lied in retaining a flexible version of moral rights.²⁸

Various guidelines were offered as to the shape of such relatives version of rights. These guidelines were based around tempering the scope of moral rights to account for perceived interests of users, industries, society and technology and judging the scope of protection according to the type of creative work in question. In principle, both criteria though fair, were to be applied on the basis of assumptions rather than evidence.

The post-modernist attack challenging the justification of giving protection to personality rights did present a sensitive assessment of some of the realities of present day world. It was suggested that if we have outgrown the romantic notion of authorship, then the rationale for moral rights needs to be associated with a broader understanding of creativity. It is submitted that in understanding such creativity, along with assessing other concerns, the authors' perspective will play an important role.

Further, according to the new realities of the digital environment, newer justifications were forwarded as reasons to retain moral rights in that they could serve other purposes apart from protecting authors. They could serve public interest in two ways, by ensuring authenticity of information and preserving our intellectual history and cultural heritage in an environment where original versions of works are hard to retain and trace.

The above solutions were of course, offered under the presumption that moral rights continue to be applicable in the digital environment. While there were calls for abolition of moral rights in this environment on grounds such as - practical challenges of moral rights being vulnerable to technology shows that such rights have become irrelevant or that moral rights were against public right to information and promotion of information society and new technologies these were also based on presumptions without any evidence to show that was the case. Overall, the authors fared slightly better in academic discussion than the policy debates as the general conclusion was that a balance of interest should be achieved by taking cognizance of interests of all concerned parties, being authors, publishers, users and wider public interest and without hindering the development of technology. However within the discussion of how such balance could be achieved, the authors went overlooked.²⁹

The discussion in the academic literature being piecemeal in nature needs a clearer direction. The gravity of the conceptual and philosophical challenges to moral rights

²⁸Kheria Smita, Moral rights in the digital Environment "Authors" absence from Author's rights debate (2007) *BILETA*, at 6.

²⁹*Ibid.*

legitimize the exploration of the topic from a bottom up approach by basing the queries at the broadest level. As opposed to a top down approach, such a position of informed ignorance will avoid being blind to the structures in this new environment. Such queries should be broadly as follows:

First, whether personality interests deserve to be recognised by law in the digital environment? The first question will involve assessing issues like the nature of creative authorship and social role of creative authorship to determine to what extent the philosophical basis behind personality interests still hold true. It will also involve assessing whether personality interests protection can be justified on any utilitarian grounds.

If the answer to the first question is in the affirmative then the second question is how should such interests be protected by law? This would require an assessment of all sides concerned with and affected from personality interests like users, intermediaries, original creators, subsequent creators and technology developers to judge the scope of protection that needs to be given to such interests. The fact that the digital environment threatens moral rights at all levels, should be used as an opportunity for a fundamental reassessment of moral rights as suggested above and within such reassessment the presence of two following components, amongst others, are necessary.

Inter-Disciplinary Approach

Most of the policy debates and the academic literature took a purely legal/doctrinal approach to the question of moral rights in the digital environment. As such issues like how technology creates challenges for law, and how can law respond to such challenges, to what extent should law not hinder the development of technology and to how can technology be used to retain the status quo in the law were explored whilst other broader social, cultural and philosophical issues were not explored in depth. Even though such discussions helped in identifying appropriate questions which if probed, analyzed and answered would take the debate further, it is submitted that such probing and analysis cannot be done on the basis of purely legal arguments.

Research on moral rights needs to be undertaken on what one commentator had predicted would be the third generation of issues concerning copyright in a digital environment, being role of author and the economic, social and political aspects of law in a digital environment. The case for interdisciplinary research is the strongest for moral rights because unlike other intellectual property rights arguably more economic in nature, moral rights are the most personal and have a strong cultural emphasis, where the creativity of individual artist is valued over all else. The reasonable way forward for the debate on moral rights in the digital environment is through inter-disciplinary research and whichever way moral rights go in this new environment, whether they continue to exist or get washed out, such consequences should not be allowed to happen without a hearing of all sides concerned, especially the author, the subject of protection of these rights.



VII. CONCLUSION

It is clear that eliminating moral rights protection from the sphere of information technology is a hasty and ill-advised solution to the problems that they present. Rather, scholars and policy-makers should attempt to investigate both the implications of digital technology for the doctrine of moral rights and its embodiment in law, as well as the potential impact of moral rights, in turn, on technological and cultural development. The moral rights that meets the needs of human creativity in the digital era will reflect the variety of human creative experience as never before. In doing so, it will not only accommodate the cultural developments accompanying the digital revolution, but it may also bring a new possibility of recognition and understanding to the existing diversity of human culture-until now, poorly reflected in international copyright law. The challenges brought to traditional concepts of creativity by digital technology have also opened copyright law to the models of creativity and culture that are typical of in-Western cultures, often fundamentally different from the established concepts of the west. Clearly there is much to be gained from a re-assessment of moral rights, their propose, scope, and content. The moral rights of the digital age can hope to attain a truer reflection of the complex dimensions of human creativity in an unprecedented era of global civilization.