New media: Subject, media literacy and educational technologies

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Abstract

The essay is an attempt to understand the constituent elements of new media educational technology while traversing through various definitions and possibilities of new media and educational technology. The paper argues that it is not just appropriation of the code or programme of the new media, but a reappropriation and reconceptualisation of the new media forms for educational purpose that is the chief quest of the new media educational technologies. In order to make this educational new media proactive, one needs to have not only the familiarity with the computer or new media technology but also needs to have certain knowledge in the field of new media literacy, especially when new media educational technologies are proven to give a space for automation and autono my for its user. It is in this context that the paper attempts to conceptualise the 'processual' formation of new media text and its subjectivity, in conjunction with the contemporary digital turn of educational technology.

Keywords: New media educational technology, new media text, digital literacy, interactive subject, convergence, sensory experience

Introduction

The emergence of the computational apparatus in the field of everyday life has substantially brought not only some new generative changes in the appropriation and reappropriation of educational technologies but also facilitates a salient move toward new media educational initiatives in India. This transitional phase of educational technology may be best understood as the digital or new media turn in the field of the teaching and learning cultures across India. Undoubtedly, this turn or the integration of new media into the field of educational technologies is dynamically widening the scope of the digitally mediatised pedagogical practices (Singh, 2019). Nevertheless, the transition is also marked by certain conceptual ambiguities over the very definition of the constituent elements of new media form as well as the nature of the mediated text and the enunciation of the interactive, but decentralised, subject (user) of the new media (NCERT 2006). It is in this context that the paper attempts to conceptualise the 'processual' formation of new media text and its subjectivity, in conjunction with the contemporary digital turn of educational technology.

New Media

The pervasive influences of the electronic digitality to transfer data, provide interactive information, pleasure, and knowledge is one of the distinguishable features of the present, which has its resonances in the spheres of educational technology, without radically destabilising or rejecting the forms and residues of analogue media practices. The technological and mediatised experiences of the latter—analogue—is indivisible from the ubiquitous flows of the digital mediation or networked communication of the present. In other words, there is no radical or complete rupture between 'old' and 'new' media. In fact, as Lister et al. (2003) states, 'net worked media distribution could not exist without the technological spine provided by existing media routes of transmission, from telephone networks to radio transmission and satellite communications' (p.30). 'Old' media systems of distribution are reconfigured into the logic of convergence of new media as essential and integral to it (Lister et al, 2003).This convergence of the analogue and digital united by computational language and optical fiber networks to transfer coded data in various formats for production and mediated consumption of the generative text or its alteration and modification through a hyperlink always makes it a difficult task to reach a unique definition about the new media forms. There are a number of conceptual schemes being used to define the constitutive 'epistemic technological and cultural regimes' of new media in relation to the 'digital' and the 'post-digital era' of the technology. It refers to new media as digital, innovative, convergent, everyday, appropriative, networked, global, generational, and unequal. In addition to this, interactivity, interconnectivity, and the formation of networked public and intersubjective communication are the major defining features of the new media (Samuels, 2009). Dispersal is yet another key characteristic that distinguishes new media from the existing form of mass media. As traditional analogue media is epitomised by standardisation of content, distribution and production processes, 'dispersal is the decentralisation that created a non uniform media that sends non-limited number of messages to a heterogeneous mass' (Lister, 2003). All these definitions primarily address two significant aspects of new media: the first one is related to the computational language and the processual formation of the new media text and the second one, indicates the nature of digital mediatisation, which is united by the technology and culture.

These definitions are grounded in the basic idea that the Internet' explosion' and the era of networks in the late 1990s, the sprawling assimilation of computer-generated digital modalities and media convergence as well as their transcoding and transcending power to code and decode data, text and image not only created a new sense of perception but also radically changed the existing field of technology and culture. It opens up a new era of 'new media' whereby individuals and masses immersed within the logic of

ICTs (Hassan, 2004, p. 15). Hence, the 'new' in new media refers to both the technological and perceptual change that has occurred as well as anticipate an optimistic utopian and progressive ideological change along with this technological rupture. However, the second sort of definitions, which focuses on the proliferation of new media activities such as new media art, education, popular culture, and politics, points to an emergence of a new interactive media subject (user) who is not only active & decentralised but also articulates embodied sensibilities that itself became an integral element of the new media practices. This approach, on the one hand, helps us to think of new media as something which is not entirely attached to the computational algorithms and data/codes. Rather they are, in some sense, 'a project that is not just static text on a screen but a temporal structure that has a past, a processing present and a futural orientation to the completion of a computational task' (Berry, 2014, p.185).

On the other hand, it stresses the extended materiality of new media and its power to activate and reactivate the multicultural and multisensorial embodiments of the subject or user. This latter idea is crucial to understand the realms of new media educational technologies in India where it is becoming a tool to disseminate or signify knowledge and learning practices to impart and incite the affective senses of the user (student/teacher/practitioner). In the post-digital era, new media educational technologies are often concerned with the processing present of the media text to converge the past experiences and future orientation, rather than completely sticking to the computational logic and its language. It is not just appropriation of the code or programme of the new media, but a reappropriation & reconceptualisation of the new media forms for educational purpose that is the chief quest of the new media educational technologies. In the context of educational technology and the process of remediation of a media text, the processual media text itself functions as a digital medium for educational communication & further interaction and modification. So, in the context of educational technology, 'functioning digitally' is the key aspect of new media. However, in order to make this educational new media pro active, one needs to have not only the familiarity with the computer or new media technology but also have certain knowledge in the field of new media literacy, especially when new media educational technologies are proven to give a space for automation and autonomy for its user. Hence, when used or appropriated for a multicultural context to disseminate or symbolically signify educational knowledge, either through a new media visual, verbal, or sound text, or through any specific infotainment forms, both the sender and the receiver (student, teacher, practitioner, user, etc.) should be aware of the historical preludes associated with the new media representations such as Eurocentric, stereotype imaginaries or the bounded ideological implication of the digital capitalism.

The next section of the paper will

further elucidate the existing—both conventional & new - characterisations of new media to understand the aspects of new media literacy or digital literacy in the context of educational technologies.

New Media: some preludes

In general, what we understand today as new media can probably be described best as a seamless convergence of media and computers. The two trajectories had been born around the same time, with Charles Babbage's Analytical Engine as the prototype of computers and Louis Daguerre's daguerreotype as the first prototype of a photographic device. The former evolved into the modern-day computer and found large scale use in recording and storing the database of the population, while media expanded in prolific directions and made possible dissemination of images, music, and motion pictures across the mass society. Mass media & data processing are complementary technologies which appear together and develop alongside one another, making modern-day mass society possible (Manovich, 2001, p. 20). They travelled separate trajectories until around 1936 when German engineer Konrad Zuse came up with the first working digital computer. This invention allowed media as a whole, with all its audio-visual elements to be read, written and stored electronically in the form of binary code (Manovich, 2001). Therefore we are locating the newness of new media at a particular moment in modern human history where the birth of a new form of technology announced with new forms of consciousness.

New media are those forms of media that are native to and restricted to computers, are computational in their interface, and rely on computers for redistribution. They perform by the strict system of binary coding that reduces any material information to a series of binary compositions. Some examples of new media are computers, virtual worlds, single media, website games, human-computer interface, computer animation, and interactive computer installations. It might help to understand the newness when contrasted to "old media" such as television, radio, and print media, although scholars in communication and media studies have criticised rigid distinctions based on oldness and novelty. New media does not include television programs (only analog broadcast), feature films, magazines, books,– unless they contain technologies that enable digital generative or interactive processes. However, as we have already discussed the features of new media are processual and function digitally as well as have the potential to enact the user's sensibility. These preliminary and strict distinctions are sometimes not adequate to understand the new media educational practice, as it often used only as a converged digital text in a classroom to explain or signify a concept, theory or scientific or a mathematical formula. Here, it is the digital simulations and convergence of the forms as well as their bounded aesthetic & technological competence to enhance the listening, learning, and

sensing capacity of the student that could be assessed as the features of the new media education technologies. It is not the networked interconnectivity or interactivity that could be read as the main essence of new media. Rather, it is the digitally enabled media form that makes the new media as a tool or framework for educational resources and pedagogic practices. Interactivity, in this context, is not necessarily idealised as merely a physical engagement, rather it is enmeshed in and activated through the convergent and digitally-enabled new media program; interactivity is embedded in the form itself and activated by sonic, visual, verbal, or symbolic signifiers. This aspect is explained in the last part of this paper. It is imperatives here to go back to Manovich's classifications to get some earlier conceptualisation of new media.

The following seven propositions by Manovich (2003) help us understand some specificity of new media:

i) New media does not mean cyber culture: The former deals with new cultural objects that are made possible by network communication technologies and computing in general. Cyberculture is concerned with the social and on networking and not on cultural and computing.

ii) New media as a distribution platform: This specifically and exclusively uses computer technology for distribution and exhibition. Other cultural objects such as TV programs, feature films, magazines, etc. which might use computing for production & storage but not distribution, thus do not fall under new media.

iii) New media, as digital data controlled by software: This form of media, by the principle of variability, can exist in potentially infinite different states. However, fundamentally it is digital data that can be manipulated by software just like any other data, which allows a multiplicity of media operations to be performed and the variability to be affected in the first place. This software being culturally coded, through data structures and algorithms, computers today model reality.

iv) New media as a hybrid of cultural and software conventions: Despite technological possibilities, cultural impediments or checkpoints often come in the way of a total and often culturally irresponsible proliferation of new media outputs. The creative industry is probably the most skeptical with regards to entirely giving in to the automated modularity of evolving media technologies, e.g. film making. Computer games, on the other hand, have almost wholly responded to technological changes and incorporated them to the best of effects. Besides altering the dynamics of production, this shall profoundly impact the way users interact with the automated interfaces. The interactive module that continuously learns from the actions of the user and builds onto itself is an exemplary and ideal image of what new media automation is. For this reason, there is a massive demand for media literacy, which must catch up

with the ever-evolving trends of the media mechanism.

v) New media as early stage of every new modern media technology: Some authors have suggested that rather than trying to seclude new media as an utterly novel phenomenon, it is helpful to look at common aesthetic techniques and ideological tropes that have accompanied the introduction and dissemination of any modern media technology as photography, telephone, cinema, television, etc. the advantages of such ideological attitudes include better democracy, more realistic representation and greater representation in general. Pessimistic takes on such novelties are abundant, the most common being the erosion of moral values, destruction of the human-world natural relationship by obliterating the distance between the observer and the observed. Aesthetic similarities in the structure are many, where the general trend is towards a loosening up of media conservatism, towards capturing more immediate and realistic depictions.

vi) New media allows for faster execution of algorithms which earlier would be required to be done manually. In a world determined by capitalist clock time, speed has undoubtedly been a factor behind the popularity and purchase of new media across the world.

vii) New media as metamedia- Manovich suggests that with the coming of new communication techniques in the 1920s that became embedded in the commands and interface metaphors of computer software, new media did represent a new stage of the avant-garde. This aimed to filter the visible reality in new ways, with artists trying to represent the outside world with seeing it in as many different ways as possible. Decades of analog media archives became the raw data to be processed, re-articulated, mined and re-packaged through digital software, reformulating the accumulated, rather than trying just to represent the world in new ways (Manovich, 2003, p. 13-25).

Manovich's model is extremely resourceful in trying to understand new media as a phenomenon distinct from its predecessors. He lays down five characteristics by which we can make sense of the codes and languages in which new media works (Manovich, 2002, p.49-65). They are numerical representations, modularity, automation, variability, & transcoding (Ibid). In short, it is the numerical representation or digital figurations and its cultural transcoding while using appropriate imaginary, symbolic or simulation, which makes new media a consumable media object or digital image. Hence, new media focuses on culture and computing rather than a simple convergent reconfiguration of media and computational logic. Most significantly, new media's transcoding itself involves the facets of reconceptualisation of culture. New media, therefore, is a medium for conceptual transfer.

The field of remediation & reconceptualisation

What we find in Manovich is a rather restrictive and water-tight description of what is and is not new media. Other theorists have tended to be more accommodative in their definition of new media, to include a wider variety of virtual actions by populations that are facilitated by computation. A lot of them even reject the absolute novelty of the phenomenon and subscribe to the opinion that it is merely a fashionable refurbishment of the old collectibles. Jay David Bolter, for instance, says "if there is already a field of new media studies, it is a combination of strategies established for understanding and working with earlier media" (Bolter, 2003, p.15). He goes as far to say that the new interest in the field and all the brouhaha about it is because of a great deal of money that is expended in the development of new media forms as computer games, websites, computer graphics for film and television.

Similarly, if we look back to the Lister's (2003) and Rogers' (1998) theorisation of new media, we can find certain parallel connections with the conceptual schemas followed by Manovich. For instance, apart from giving specificity to digital, interactivity, hypertextuality, and virtuality as the kernel of new media, what Lister proposes is the idea of 'dispersion' (see the previous sections of the paper), which is similar to the concepts such as 'demassification' and 'asynchronousity' proposed by Rogers. According to them, new media does not transfer homogenous messages to large groups of people; 'demassification is the transfer of unique and personalised messages to every user in a heterogeneous mass.' (Roger, 1998 cited in Tingöy & Barbaros, p. 235). Asynchronousity, according to Rogers, indicates that sending and receiving messages in new media does not need to be synchronous processes. 'Anyone can transfer any knowledge anytime; and the response will likely be transferred when the receiver desires it to be' (Ibid).

These characterisations of new media articulated by Lister and Rogers are significant. They are pointing out a highly decentralised, fragmented and heterogeneous user or receiver—new media subject—of new media forms. It also opens up another critical aspect to the idea of mass mediation. As it always opens to the digital modification through a connective interaction or hyperlink, both the production and distribution of new media have become decentralised, highly individuated, 'and woven ever more closely into the fabric of everyday life. This dispersal is the product of shifts in our relationships with both the consumption and production of media texts' (Rayner, Wall & Kruger, 2004, p. 221). When production and distribution are fragmented in nature along with the multiplicity of messages and sources, the consumable audience is also heterogeneous but selective. In other words, the new media determine a heterogeneous and selective audience that, 'although massive in terms of numbers, is no longer a mass audience in terms of simultaneity and uniformity

of the message it receives. The new media are no longer mass media in the traditional sense of sending a limited number of messages to a homogeneous mass audience' (Castells, 1996, p. 339). In practice, the automation and autonomy of new media text further deepen the idea of segmentation of those who connect or intend to be connected with the specific or nonspecific content of new media text. This foregrounded mechanism of new media, thus creating a profound contradiction within the network society, as Castells points out, deepens our interconnectivity with each other, then so too does it fragment and alienate us (Castells, 1996, p. 3). As the internet reduces time and space, it also creates a sense of alienation. In one way, new media superimposes a sense of being and belonging in the world or always been there though its ubiquitous interconnectivity and signified communication. However, on the other way, it creates a sense of individualism, fragmentation, alienation or a misrecognised subjectivity.

Indeed, this dialectic is crucial in the context of the technological dissemination of knowledge and hence needs to be addressed within the instructional design of new media educational technologies. It is imperative because, as Neil man argues, we perceive the world through the tools and technologies we use. However, technology comes pre-encoded with its values, its own 'embedded ideology.' Technical development[s], for instance, is 'neither good, bad, nor neutral' but that, acting as part of a system, they create the technological and ideological environments that condition or 'predispose' (not compel) us to act in a certain way (Postman, 1993: 13 cited in Hassan 2004,p. 16). New media educational technologies are not exceptional from theses ideological blindness & their acts of predisposition through certain homogenise stereotypes, values, and moral perceptions. To overcome this embedded ideology and blind spots in technology, a critical new media literacy needs to be imparted in relation to production and consumption of new media educational technologies. The next section of the paper will further elucidate this point.

New media subject and new media literacy

When forms of tenacity, authority, popular opinion, and a priori, as well as the aesthetic and presentable rationality of the media, enunciates the experience of the media subject, this process is also being over-determined by the senses of cultural tastes, political self and civic self of the mediated subject (Gaines, 2010, p. 16-19: Corner, 2011, p. 87). This mutually inclusive and interactive relation between media and selfhood not only has both cognitive and affective implications in the process of the formation of the subjectivity but also highlighted with a highly media-dependent aspect of consciousness and action of the subject (Corner, 2011). New media subject, in this context, can be referred to as a person, who is either passively or actively engaging or

interacting with the new media product. As we have seen, new media provides certain degrees of autonomy to the subject, at the same time the formation of subjectivity is also conditioned by the technological predisposition as well as cultural embeddedness of the user. The fragmented and disembodied subject who enmeshes in the convergence logic of new media could reflect only a passive agency, which indirectly poses challenges to all initiatives taken by the new media educational technologies, to activate both the rationality and cultural sensibilities of the user. As the new media product and its grounded aesthetics often tend to reproduce certain stereotypes modularities, gestural politics and commodity spectacles and certainly some homogenous ideals involved in the historical prelude and embedded ideology of the medium itself. Nevertheless, recent researches on the extended fields of new media such as educational technology, new media theatre, new media art, and popular culture argue that the new media forms and technologies help to create a situation where individuals enter into a multicultural environment that stresses the social, dialogical, and interactive foundations of knowledge, communication, and education (Samuels 2009, p. 10). In this regard, let us take new media art as an example. In particular, with regard to its characteristics of interactivity, non linearity, immateriality, & ephemerality, and its intricate interrelation between artist, artwork, and spectator, new media art proposes an absolute reformulation in ways of doing art.

Despite this feature finding increased resonance in other forms of art today, digital technologies exceptionally allow artists to develop interactive artworks, as in Internet art and virtual art, which provide the spectator with specific freedom of (aesthetic) choice. In other words, although it is the artist who assesses the framework and the particular context for the action and participation of the spectator, the aesthetic object is—in a majority of New Media Art—ultimately created by the spectator as a "user." (Grau, 2011).

On one hand, these new media practices, indicating a new era of technology—automodernity—a dialectical combination of automation and autonomy, which 'integrates a new ontology – literally a new way of being – both in the physical world and in the network of networks' (Hassan, 2004. 6). On the other hand, as a result of an encounter with these innovative new media products or texts, a new media subject has emerged, whose individual autonomy is seen as something that has to be constantly negotiated and revised and is thus not a finished product (Samuels, 2009). This new media subject is not someone who lost the self while floating through the network to network transit, rather the one who articulates phenomenological experiences, affective and tactile sensibilities through the new media interactions and negotiations. Here, new media or new media educational technologies are considered as a project (digit text, program, & product) replete with symbolic communication to enact the embodied sensibilities of the subject. The body-sense-impressions

are being 'modified through interactions facilitated by digital technology' (Lenoir, 2004, xx). New media, in this perspective, not only represents but also invokes senses of the subject (user, student, practitioner); 'technologies alter the very basis of our sensory experience and drastically affect what it means to live as embodied human agents. They accomplish this by reconfiguring the senses at a precognitional or even paracognitional level (not to privilege one level over the other) prior to conscious perception and assimilation to language' (ibid). As pointed out above, new media necessitate a reorganisation or reactivation of the human sensorium, and this results in a restructuring of human subjectivity. 'Furthermore, it is introducing new practices for the user, who will have to be taught, and in many cases presented with, quite different ways of consuming and interacting with these new media forms (Berry, 2014, p.73). In other words, to interact, apprehend, and use the new media technologies, a new kind of critical literacy is required. It is precisely at this moment that a crucial and challenging task of educational technologies is envisaged. It is not only to provide new media educational tools & programmes but also to disseminate a new media literacy to the subject, or what Berry calls 'iteracy', and 'which needs to draw back the screens and interfaces, and develop a deeper critical disposition to the underlying materiality and agency of the computational (Ibid, p. 169).

New Media Literacy

Being literate in the 21st century must shift from its operation category of being able to read something that is more comprehensive of its virtual engagements. Literacy in the age of new media can no longer remain confined to the words on paper or otherwise but must take into account the variety of media forms of which its content is made up. This has to heavily incorporate an informed understanding of the visual sphere, where engaging with visuals online automatically demands of us a knowledge of the semiotic vocabulary in which they convey meaning. One must also examine the roles that educational institutions and universities have to play in the fostering of such literacy. As noted by Samuels (2008)

The challenge for educators and public policymakers in the period of automodernity is first to recognise the dominant combination of autonomy and automation and then employ this new cultural order in a more self-critical and social way. For example, educators can create learning spaces where students engage in creative file-sharing activities; however, these same students need to be given critical thinking tools to reflect on the social and public aspects of their activities. This process will require the development of critical technology studies as a central core to auto modern educational systems, and essential to this new form of education will be a constant effort of forming a dialogue between "old" school and "new" home models of media and technology (p.236-37).

Media literacy, which is often discussed within the realms of media studies,

deals with a renewed investment in new modes of reading and writing that is taught to students. While reading media now incorporates semiotics, discourse analysis and genre study, writing media is profoundly concerned with the ways of production using technologies that complement the new reading of media. In general, media literacy provides a framework and skill to access, analyse, evaluate and create messages in a variety of forms – from print to video to the Internet' (Kalogeras, 2014). It also includes skills in search & retrieval, ability to identify sources and authorities, to check facts and evaluate accuracy and relevance of any form of media contents (Meikle, 2016). As mentioned above, there are many interpretations that are available on various aspects of media literacy, especially new media literacy to warn us about hallucination and fantasy effects propelled by the media technologies and their hegemonic discourses. Mostly, it asserts to demystifying or dematerialising media messages through critical inquiry is an important starting point for media literacy (Kellner and Jeff Share, 2005, 6). Media literacy enables students to read and analyse media its contents and their strategies symptomatically and enhances thought through active engagement for further apprehension and critical rendering. According to Zettl, 'media literacy is concerned with helping students develop an informal & critical understanding of the nature of mass media, the techniques used by them, and the impact of these techniques…, (I) t is education that aims to increase students' understanding and enjoyment of how the media work,

how they produce meaning, how they are organised, and how they construct reality. Media literacy also aims to provide students with the ability to create media products.' (Zettl, 1998, 90 cited in Kalogeras, 2014, 72).

New media literacy and new media educational technologies are not to be considered as two different entities; rather it is to be understood that both share a common epistemic order—to enrich knowledge through critical pedagogical practices and technologies. In this backdrop, the new media educational technologies' must meet the dual challenges of teaching media literacy in a multicultural society and sensitising students and the public to the inequities and injustices of a society based on gender, race, and class inequalities and discrimination' (Kellner and Jeff, 2005, P. 370). This, on the one hand, helps to create a new critical perception for students and educators to adequately understand what appears to be a deeply computational economic and cultural environment. On the other hand, it offers the framework and insights to help students become subjects in the process of deconstructing injustices, expressing their own voices, and struggling to create a better society (Ibid, p.382).

Thus, literacy in the 21st century no longer remains confined to the traditional paradigm of a literate population receiving institutional education but demands accommodation of a much more diverse and democratic access to knowledge, according to personal interests and background, facilitated

by the Internet. With instruction itself being disassociated from confines of institutional spaces, there automatically comes into question the demand for large-scale evaluation and assessment distinct from those of the past, and more fitted to the emerging technologies, which shall include multimedia exercises and virtual reality simulations (Bennett, 1998). For students to perform well on such kinds of new assessments, they will be required to develop a critical understanding of their position as readers with respect to both print and non-print texts, within different social, cultural and historical contexts (Alvermann and Hagood, 2000). This work, therefore, compels us to look at literacies outside of school, at the possibility of any choice of virtually made available.

This idea is further exemplified in a book edited by Marsh on popular culture that takes into account a series of papers providing empirical work on contemporary technological transformations, with their impact on literacy. The main focus is on how contemporary childhoods are shaped by and in turn, help in shaping communicative practices of the century. The term popular culture with relation to children requires examination in that it is often understood as cultural texts distinct and far removed from what is 'high art.' Popular culture for children usually refers to those cultural texts, artefacts and practices which attract large numbers of children and which are then also mass-produced on a global scale. This finds its proliferation across a wide variety of platforms, and it is this "transmedia intertextuality" which children find very appealing, for encounters with the same narrative in different forms across a diversity of media platforms enable them to integrate various parts of their experiences and thus enhance, their 'narrative satisfaction.' As much as global meta-narratives determine to a fair degree pattern of popular consumption, it must also be noted that culture is not merely consumed but also simultaneously produced. Thus Marsh talks about the localised practices through which global consumer products and cultures are appropriated across the world. This makes it vital to not only look at the globalised production of children's popular culture but also the complex and dynamic interplay whereby children adopt more localised themes and texts that are specific to their cultural contexts(Marsh, 2005, p. 2). Thus screen-based technologies have to be dealt with in conjunction with children's meaning-making practices, how they interact with the available media, and how they make sense of their own subjectivities with respect to media.

The concept of media literacy needs to be stretched beyond its conventional locus of print and audio-visual media to incorporate the internet and other new media, both in academic and policy-oriented discourses. Livingstone (2010) defines media literacy as "the ability to access, analyse, evaluate and create messages across a variety of contexts" (Livingstone, 2010, p.1). This is then examined for its applicability to the

internet. Thus there is an intrinsic logic of skill or ability that underlies such approaches to literacy. The article further goes on to examine three interlinked processes in media literacy that is also crucial for our current endeavour. The processes are "(i) the symbolic and material representation of knowledge, culture and values; (ii) the diffusion of interpretative skills and abilities across a (stratified) population; and (iii) the institutional, especially, the state management of the power that access to and skilled use of knowledge brings to those who are 'literate'." (Livingstone, 2010, p.1)

Alternatively, media literacy has also been attempted to be studied as a reactionary mechanism against the harmful and ill effects of popular culture and mass media. Jim Potter, for instance, argues that media literacy is a response to the "wide range of potentially negative effects on individuals" and positions it as "helping people protect themselves" from potentially negative effects (2010, p. 681). He then goes on to discuss a bunch of literature on parental intervention and mediation, which he posits as a form of media literacy. Concerns about a materialistic, hyper-sexualised, hyper-violent mass media culture are not to be trivialised, as digital media and technology come to increasingly encompass children's lives resulting in an impact on personal and social identity. In new media productions, because of the lack of critical media literacy, there is always a representation of racial, gender, religious and ethnic stereotypes representation as cultural normative,

even though people claim that we no longer live in a period structured by racism, sexism, and ethnocentrism, while they appropriate and remix social stereotypes (Samuels, 2009, 42).

However, positioning media literacy simply as an antidote to popular culture exposure limits the wider range of possibilities and complexities of the field, thereby missing out on crucial evidence and studies that contribute to the growth of digital media literacy across the world (Hobbs, 2011). While all of these studies pay an unprecedented amount of importance on the effects of transforming new media on literacy, focusing on the changes that the latter has to bring about in order to adapt, there has been little that talks about how media itself is evolving in response to the literate audience of today. The landscape of new media has changed drastically with the coming of new media technologies as ICT, its modularities & automated algorithms, and they demand new forms of cultural practice in working, learning and personal domain. These make media more significant and influential than at any point in human history, making it an absolute necessity for individuals to be new media literate to be able to fully function and interact in a society where everyone has a virtual presence and influence.

In a short piece of work on media literacy, Ivanovic traces the importance of inculcating the values and ethos of media communication among beneficiaries of education on a school level. In a work that is admittedly theoretical, she speculates that students today are often exposed to

opposed value judgments of family, school and media - and they are faced with a situation of crisis wherein an integration of all three seems impossibly difficult. The social system faces a challenge of how to successfully integrate all forms of media disclosure and how to alter the educational system adapted to the period in which students are developing and the one they are preparing for. She identifies the huge influence of media exposure on the young maturing minds of the students and that the period of school education is formative in a lot of long-standing life values. Therefore it is important to form a critical attitude towards media content which can be offered as a part of the school curriculum. Acquiring media literacy can be truly successful only if we consider that relationship between specificity of media and the way those specificities are understood by those getting educated, which can then translate into evolved social values.

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