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The International Journal of Media Studies (IJMS) provides a venue for the discussion and dissemination of frontier research in media and communication. This cross-disciplinary journal aims to foreground the reconfiguration of contemporary social, political, economic and technological contexts while engaging with theoretical, empirical and methodological inquiries at the intersection of mass communication, journalism,, cultural studies, film studies, policy studies, technoscience, visual communication and digitality. The mandate of the journal is to provide a platform for an understanding of the above fields through disciplinary and cross-disciplinary inquiries spanning the social sciences and the humanities. IJMS is a double-blind peer reviewed open access journal that will carry original research articles, research notes, book reviews and scholarly commentary.

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Deconstructing a Utopian Space   A Perspective on Trans Representation

Sindhu Eradi
MICA, Ahmedabad

Abstract:
This article examines the production of transgender* visibility through a recent popular media message, an advertisement that featured a transgender woman that was released on YouTube. The concept of transgender identity as a real gendered core trapped in the wrong body has achieved a lot of attention and has progressively become the standardized discourse within popular media. This paper through an analysis of the trans representation done in the recent advertisement for the jewelry brand, argues that the emphasis on bodily work brings in a problematic prominence to outwardly appearance. Upholding the hegemonic ideals of "acceptable" trans bodies further puts the existence and safety of trans people at risk. Although these messages contend the social integration of the marginalized, upholding ideals that are utopian to everyday realities of trans population further pushes them to possibilities of danger and pressurizes them to shape themselves in ways as endorsed by these commercial domains. I reason that social change can be pursued only if we start showing more holistic representations that accommodate varied narratives of transgender subjectivities and not simplistic archetypes based on repeated performance of certain gender stereotypes that confine identity expressions.

Keywords: Transgender identities, Representation, Popular Media

Introduction

Gender is not necessarily binary. The "third gender" or "transgender" movement has been gaining a lot of attention and mobilisation in media, law, politics and other social institutions where the debates around a wider understanding of gender are ongoing. (Plummer, 2013) Specifically, in the context of India, a huge shift in the way transgender people were perceived took place in Kerala in the year 2015, after the state picked up on the 2014 Supreme Court verdict recognising the civic and political rights of transgender people and their right to a life with dignity. The social justice department of Kerala conducted a survey to understand the social and personal aspects of the

transgender people's lives and adopted a transgender policy unveiled under the name of "State Policy of Transgenders in Kerala 2015". (State Policy for Transgenders Kerala, 2015, 2015) The policy and the extensive measures advised to be taken up by each department in the state focused on ensuring and encouraging the social participation of transgender people through education and employment. Ever since the policy came into light, numerous visual representations have followed suit and have featured trans people and their stories in magazine covers, advertisements, movies etc. bringing them to the forefront of discussions and debates. (Peethambar, 2018) The simplistic yet benevolent aspects of the policy have been hugely disputed upon by the transgender people themselves, in terms of the ambiguous nature of the policy where self-identification of a trans person with their preferred gender identity seemed to be at the mercy of approval of a few authorities who were approved by the state government. (Reddy, 2005) However, in the light of these debates and discussions and due to the ease of access and less restrictions on social media platforms, there has been an increasing visibility of the transgender population especially in the context of Kerala in the last few years. The most recent one being the advertisement by Bhima jewellers featuring a transgender woman that was hugely applauded and appreciated. (Roy, 2021)

The Advertisement and its Reception

In April 2021, Bhima jewellers, a leading jewellery brand in Kerala, dropped an advertisement on their YouTube channel featuring a transgender woman Meera Singhania. Due to its casting of a trans person to play a trans woman as opposed to casting a cisgender* male actor to play a trans woman, the ad immediately caught the larger public's attention and was discussed and accepted positively by the larger audience. The much-appreciated advertisement traces the journey of a trans person who starts by being shown as gloomy, sad, and lonely, feeling her beard and gradually how she loses all the gender markers such as facial hair that is stereotypically associated with maleness and embodies the "womanly aspects" of her identity such as long hair, ear piercings, shapes her eyebrows, embraces pink, dresses more feminine and finally at the zenith of her perceivable femininity, she is adorned with jewellery which till now she was only staring at and appreciating from a distance. (Roy, 2021) It is only at the peak of her feminine embodiment that she is shown worthy of adorning all the jewellery. At the end of the ad, the protagonist trans woman is shown walking with her family to what looks like a marriage function with all laughs and happiness.

The public reception of the ad that could be gauged through news articles, blogs, YouTube comments was mainly unanimously positive, admiring mostly the jewellery brand for a seemingly progressive message and casting a trans person. (Team, 2021)

The positives of the message of course being acknowledged, one also needs to probe into these woke advertisements that portray trans people in positive light which often sanitises their struggles by only showcasing the most palatable aspects of their identities. They capitalise off of controversial issues in the most non-controversial manner and in an attempt to do so, they superficially stray into a provocative terrain where the creators mainly attempt to make trans people legible to the wider cis-het* audience. (Gray, Precarious Diversity - Representation and Demography, 2016)

By analysing and opening the woke ad by Bhima jewellers for discussion, one is not advocating that such representations should be discontinued or dismissing the goodness of positive representation but rather one may critically think about them and question who benefits and who gets harmed when a brand merely uses an identity to sell a product and scoops out of a burning social movement as per their convenience to majorly perpetuate normative ideas about what a trans person should be like or act like and framing queer interests. (Finn & Dell, 1999)

Gender - A Performance

Gender is seen as a performative achievement and it is in the replication of acts as sanctioned and tabooed by society that an identity is reified. (Butler, Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory, 1988) Through the course of shooting for the advertisement, the protagonist mentions about her experience in her social media profile, as having "performed" her two years of transitioning journey in two days and how she feels less dysphoric in certain items of clothing now as opposed to earlier times (before the ad shoot). The protagonist also mentions wearing binders, wigs and sporting facial hair for enacting the parts that showed her pre transition phase. Meera, the protagonist of the ad mentions how through the process of the shoot, she felt more at ease with herself inspite of these masculine identity markers reminding her of her dysphoria, transition and everything in between. Although the protagonist through the course of shooting for this ad, self admittedly (in her social media profile) spoke about how she managed to free herself from the rigid

notions of masculine and feminine stereotypes, the ad establishes the contrary. The rigid ways of considering gender in a binary logic and celebrating behaviours that are conventionally linked to a certain sex needs to be challenged. By parodying fixed gender expressions time and again, one negates the differences of subjective experiences that comprise this very difference. (Hines, 2006)

Most of the positive representation done especially of the marginalised groups rests on the erasure of the very nuances that create the marginalisation of the community. All trans people don't have the same needs and don't suffer the same kind of oppression. In a scenario where still very, few people have any sort of personal relationships with transgender people, these few instances of representations or popular trans celebrities play an important role in shaping the perceptions of the larger public. (Skidmore, 2011)The simplistic understanding of a trans person's life where very few repeatedly publicised aspects of their lives mostly relating to their own anguish due to the wrongly assigned gender projects as if all pain endured by trans people are self-inflicted and a quick fix of aligning with their desired gender identity in terms of their outwardly appearance and material consumptions solves all the issues faced by them. (Stryker, (De)Subjugated Knowledges: An Introduction to Transgender Studies, 2006)

The visual adherence of the protagonist to traditional female beauty signifiers such as impeccable grooming, slender gait, and adorning of saree and bindi* seemed to be the central trope through which the protagonist's femininity was endorsed to fit into the more prominent female subjectivity. One understands that a trans person's life's complexities through the entire journey from dysphoria to that of self-affirming gender identity cannot be distilled into a one-and-a-half-minute advertisement. However, one cannot overlook the fact that as much as this message seemingly pushes for the acceptance of trans people, it still ends up creating a privileged space in the creation of their protagonist which is a very rare reality when it comes to most trans people and their personal journeys. (Ghazali & Nor, 2012)

Politics of Representation

A vast majority of the larger population still don't know a trans person personally. Most of their information comes from the popular media representations. There are numerous transgender representations on television and in films in India (Stryker, 2006; Philips, 2006). The

representations differ in terms of their casting, content, style, language, and performance, all of which reveal the discourses of gender and sexuality in the respective societies where the representation has been conceived (Sandercock, 2015). A recent study of transgender individuals and media in the United Kingdom observed that participants often experienced ill-treatment due to prevalent media representation of transgender people. More than 20% of respondents divulged experiencing verbal harassment, and 8% recounted experiencing physical harassment primarily emanating from negative media representation (Trans Media Watch, 2010). Additionally, most felt that media had informed adverse reactions that they experienced from family and friends. Participants reported occurrences of being called sex workers or mentally ill, which they felt came from typecasts shown on media (Trans Media Watch, 2010).

Gender diversity and its subsequent representation have been a topic of dispute and debate politically and legally at various platforms of global eminence. It has been taken up on legal and political platforms, and the representation of trans people has been subjected to more and more open discussion in recent times. (Alston, 2018) The popular culture enunciations around these identities have received academic attention as well. (Westbrook & Schilt, 2013). However, in popular imagination and academe, especially at a global level, there has been less focus on the India centricity of transgender studies. Conversely, trans people are a part of a very publicly institutionalised sub-culture in India. The "hijra" has been the most recognised South Asian icon of sex/gender non-conformism (Reddy, 2005). A critical regional approach to understanding queer studies and their representation in the respective countries will decentralise Euro-American centrism and help us understand the politics of regionalisation and its bearings on sex and gender regimes (Hossain, 2018, p. 327).

The Trans community is distinguished in the local context not just based on gender identity alone but also caste/class (Dutta and Roy, 2014), which risks being subsumed by the increasing popularity of the 'wrong body' discourse. The media representation of gender-diverse communities is still defective; nevertheless, trans women, in particular, have gained steady media visibility in recent times. They were invited to debates on Section 377 and the Transgender Bill (Murphy, 2019).

Indian production house Y-Films launched the country's first transgender band, the Brooke Bond Red Label 6 Pack Band. Along with Ogilvy Mumbai, Channel V shot a 2-minute video at a traffic light in Mumbai that showed a group of trans persons teaching road safety. Gauri Arora, a

contestant on the MTV reality show Splitzvilla, was a participant on India's Next Top Model (India Today, 2016).

Nevertheless, transgender imagery continues to be created and disseminated chiefly from outside the community. These portrayals put the transgender population in a position of symbolic obliteration. Through the normative constructions and reconstructions of what it means to be a trans person, the identity is assimilated in a narrow and standardised manner for the ease of bringing them under media attention (Capuzza, 2016).

The same can be said for the recently done representation of a trans woman in the ad for a jewellery brand based in Kerala although it met with overwhelmingly positive response and shared via social media platforms. The state of Kerala, has been at the forefront in welcoming and launching policy- level initiatives to create a transgender-inclusive society. Kerala also became the first state in India to unveil the transgender policy in 2015 (Gupta, 2018). However, despite the state being transgender-friendly on paper, the trans people are still victims of violence and ostracisation, which emerges from deep-rooted discriminatory biases. Amidst this vulnerable socio-political climate, it is essential to sensitise the people in power and the ordinary people so that trans people can live a life of dignity and freedom from all kinds of violence (Ameerudheen, 2018).

Cinema and popular media are one of the prominent mediums to influence public perception and opinion (Pautz, 2014). Especially in the case of Malayalam cinema which has always been rooted in contemporary social reality. Visual medium is an essential tool to study the representation of identities, and they need to depict trans people without reducing them to promiscuous caricatures. Given the vulnerable socio-political climate of the state, many trans representations done on screen have been scrutinised for their exaggerated and mostly offensive depictions. Films such as Chanthu Pottu (the story of a straight man with exaggerated effeminate characteristics who ultimately is accepted as a man only when he impregnates a woman and agrees with the norms of conventional masculinity) and Ardhanari (the story of a hamam, a hijra community, the movie catered to the popular notion of all transgender people to only belong to a specific cultural identity. It treated the storyline in an archaic way, doing very little to portray trans people as people in contemporary social settings). These were the hinge points for the larger public to get a peek into the lives of transgender people. These films, which unfortunately struck a chord with the audience reduced their understanding of trans people to

literally the title of these movies. These titles, especially the title of "Chanthupottu," are still used as a derogatory epithets for trans people in Kerala. Films in the recent times, like Nyan Marykutty bring about a shift in public perceptions, with trans persons proudly referring to themselves as "Marykuttys" as well. (Neela, 2017).

In the light of how much a positive and a negative representation can affect a person especially with a marginalised identity, it is imperative that we have a deeper look and the dominant themes explored or under explored in the celebrated ad through this article to understand the creation of the protagonist and the world around them. The article seeks to explore how linked or disjointed the depiction is, to the average realities of majority of the trans people.

Analysis

Wrong Body Trope
The media representation of a trans person who possesses an authentic gendered core that does not match their corporeality is not new. This discourse theorises transgender subjectivity as a feeling of being in the wrong body made 'right' through corporal modifications to physically resemble one's 'accurate' and perceived gender.

The journey of the protagonist, whereby it is being shown that the appropriate application of fashion and beauty can make palpable one's authentic self, is a sought-after narrative far beyond the specific context of transgender people's portrayals. Such discussions of legitimacy via bodily transformation span a spectrum of media texts defined by Alice Marwick (2010, p. 22) as 'body culture media' of which advertising, cosmetic surgery discourses, makeover TV shows, and fashion magazines are a part of. The dissemination of such dialogues through popular culture strengthens a contemporary cultural norm of cisgender female subjectivity. Work on the body has become positioned as 'a morally correct solution to personal problems and the primary means to attaining an authentic self. (Lovelock, Call me Caitlyn: making and making over the 'authentic' transgender body in Anglo-American popular culture, 2017)

Such representations of transgender people, has become culturally intelligible and usable, through the wrong body discourse in part because this conception of trans subjectivity makes sense in the context of a broader cultural terrain, in which the construction and maintenance of a beautifully

feminine appearance have been positioned as the channel to realising one's 'authentic,' inner female self. (Namaste, 2006)

In the context of the recent work by the jewellery brand, the transgender women's journeys to actualise her purportedly authentic female self has been positioned on a continuum particularly focused on the practices of bodily work. Due to this, the wrong body trope has become consolidated as the normative understanding of transgender identity in the popular imagination and thus problematically and increasingly reinforces the cultural ideas of gaining one's authenticity via bodily work. (Hall, 1980) My analysis here also works to illuminate how the production of "acceptable" trans subjectivities characterised by increasing pop-cultural visibility and civic integration of transgender subjects needs immediate amendment. These representations work to construct the self-sufficient, self-managing, hegemonically feminine transgender person as the 'ideal' trans subject, capable of overcoming dysphoria through individualised and atomised means, thus further marginalising those outside of this regulatory frame. (Alston, 2018)

Barker-Plummer (2013) has noted, the cultural normativity of the wrong body trope contradicts the multivalence of gendered expression found in contemporary queer politics and subcultures. It is almost exclusively through the narrow parameters of being trapped in a mismatched body that transgender identity has been made intelligible within media products marketed towards cisgender*-identified consumers. Emphasis needs to be laid on the fact that due to the commodifiable nature of feminine identities, the media constructions and portrayals of transgender women (those who were assigned male at birth, but who identity as female) are much more than the trans males who have remained largely underrepresented in popular culture. This invisibility of trans males have also have been instrumental in regulating the wrong body discourse as the homogenous understanding of trans subjectivity commonly and within immediate contexts as well. While showcasing diversity is crucial on-screen, one cannot solely view it from the perspective of the number of times a trans person has been shown on screen or the number of times they have been featured as the leads of a show (McInroy, Craig, & Austin, 2014). One needs to see representation and the magnitude of it from the viewpoint of exposing conjectures around gender diverse identities and how much the representation has been meaningful in revealing the nature of social differences and the inherent inequality around us. (Gray, 2016)

The high visibility and pervasiveness of popular media through television series, advertisements, etc., make us see these platforms as mediums for visual representation that create meaning within the framework of culture and feed off and feed into the cultural fabric of society (Zotos and Tsichla 2014). Media representations are an undeniable force of modern capitalism that enhances the negotiations and conflicts between various social groups. Particularly crucial is its role in creating a stereotyped iconography of femininity and masculinity (Hall 1980; Gerbner 1998; Schroeder and Zwick 2004; Y., & E., 2014; Grau & Zotos, 2016).

Although there has been increase in transgender people's visibility on screen, much remains left in terms of diversity, complexity, and authenticity in the representation, which has often been subsumed under the gendered subjectivity of the larger cis heteronormative crowd. The "relative invisibility" (Gomillion MS & Giuliano PhD, 2011) of transgender subjectivity in daily life and across popular media representations creates a void in the cultural imagination of people (Coleman, Means, Yochim, & Chivers, 2008). While attempting to produce queer subjectivity, one also can see how these messages are also largely amalgamated within the mandates of heteronormativity that constantly underlines the need to align the physical appearance of a person to match their internal sense of self to gain acceptance in society. (Stryker, 2006).

Utopian Space
As discussed earlier, advertising is mostly under the pressure to appeal to potential customers therefore ends up being highly stereotypical which sometimes in an exaggeration of reality or a distant truth from the actualities.

According to a 2018 study conducted by Kerala Development Society on behalf of the NHRC reports that only 2% of the entire transgender population in the country of India stay with their parents. Social exclusion especially beginning with family is one of the major issues faced by most trans people. In such a context, the advertisement that shows a supportive family across different generations towards the protagonist who is a trans woman itself is a creation of a coveted space. According to the state wide survey conducted on trans people, majority of them have been economically deprived due to lack of educational and employment opportunities which is majorly due to the gender-based bias of the employers. In this scenario, even though more and more trans people are being vocal in public and political spheres, one needs to question how many trans people can afford to or would prioritise indulging in hedonistic consumption of gold. Therefore,

what does the ad intend to do by representing a community which probably has lower estimated buying power. Do they mean to say that buying gold from this brand from now on would mean the allyship towards LGBTQIA community? One is not familiar with the intention of the brand with a sudden and a one-off association with a trans member. (Society, 2017)
In the first shot of the ad, where the protagonist shares the frame with her friends, there is hardly any visibility of another trans person in the image. In light of the above discussed data, it is only understandable that most trans people survive or are willing to face their life because of the support from the LGBTQ+ community members and the feeling of not being alone in their struggles. In such a scenario, it was only fair to at least show another trans person in the images so that the hegemonic ideals of beauty and privileges upheld by the protagonist could be widened beyond this simplistic universe which is a bubble of privilege.

The protagonist of this advertisement is shown as economically privileged who can afford to be in secluded spaces with only supportive family members and thus is shielded from most harsh realities and biases of society that is the reality of everyday existence of a trans person. We see the setting of the ad done in a well-built home in the presence of a heteronormative family that possesses various jewelries including a giant piece of jewellery that the grandmother facetiously places on the protagonist's head while oiling her hair. In the oddly almost 2-minute ad, we see the protagonist adorning and being made to wear a variety of ornaments barring the end where she literally transforms into a walking brochure of all the jewellery pieces of the brand. All these are markers of economic privilege that one knows is mostly beyond the accessibility of a trans person who struggles for their daily survival amidst unjust rejections and constantly making a Faustian bargain of their identity in return of their safety. The ad is undeniably utopian and more than it being the reality, it is what one wishes could be the reality.

The casting of a binary trans woman playing her narrative is probably the start and end of where the ad got it right but that gets reduced to mere tokenism when it is so far-fetched from the realities of the community one represents. The grand manifestations of acceptance are even rarer though they are most crucial in a transgender child's and a person's life. (Butler, Bodies That Matter - On the Discursive Limits of Sex, 1993)

Lack of a Voice
The voice plays a huge role in the social perception of individuals. Transgender people often comment that they "pass" * (Watt, Tskhay, &

Rule, 2017) till they start speaking. The trans person's perception of their own voice quality is a huge factor for them to gauge the quality of their lives. In the advertisement being analyzed and notably in most of the previous ads where the transgender people have been represented, the voice is never played or the protagonist is never shown speaking in their own voice. The melancholic music in this advertisement that plays through the length of the video, also symbolises the silencing the trans community faces in order to place them conveniently into the larger cis heterosexual audience's imagination. Previous studies have argued affirmatively that the way others perceive a transgender person's voice quality impacts the quality of life of a trans person. As mentioned previously, since majority of the people haven't known a trans person personally, literally bringing the voice of a trans person to the forefront through such representations becomes important. The psychological sense of well-being and an added sense of safety and security that this population in question can have by showcasing one of the most crucial aspects that the trans people consider important for their well-being, needs to be considered. If such facets are considered, representations such as these can aid significantly to the positive social perception of a trans person. (Watt, Tskhay, & Rule, 2017)

But, if trans identities are expected to be shaped in a way that guarantees consent from the dominant ideologies, then it is illegitimate and merely coercion of the existing biases in a deeper sense. Prioritising facets of representation is important especially when it comes to talking about marginalised sections. At this stage, rather than creating conduits of utopian and overtly privileged individual characters that are far from the reality of the majority of trans people's everyday lives, one needs to focus more on the community and emphasise on their connections with each other and how they rely on each other which in fact is a huge strength for their everyday survival and the struggle they continue to endure to whatever magnitude. (Butler, Bodies That Matter - On the Discursive Limits of Sex, 1993) (Capuzza, 2016)

Stereotype Creation
Articulation of identities in the social world is a complicated task and definitely cannot be done in isolation by alienating one from the realities around. In creative explorations such as these, one needs to move beyond conservative representations that have been done so many times, to a more progressive representation. That can happen only when representations of marginalised

communities and people focus more on creating a balance between their everyday lives and gendered subjectivities rather than reducing them to stereotypes and cliches. As Butler argues, we need to create a "space in the regime of truth" where such instances of representations and discussions should add to expand the possibilities of a livable life and reduce the possibilities of an unbearable life leading to social or literal death that can come from a very tailored showcasing of identities. The visual culture's heightened investment in feminine consumption as the sole means of accessing their authentic femininities not only makes identity a tangible construct but adds to the existing societal pressure of surgeries and medical treatments. (Irving, 2008)

Conclusion

In this article, I sought to explore the stereotyping discourse around transgender identity that has been promulgated in popular media about a real gendered core trapped inside an unmatched body. I have argued about how upholding such ideals and erasure of nuances in their identities further puts the marginalised individuals at risk. Even in terms of conceptualisation and representation of the liminal identities, the primary motive is to cater to the cis-het gaze and create a goodwill amongst the consumer base for the product rather than creating a deeper awareness about the population in question here. "Relative invisibility" (Gomillion MS & Giuliano PhD, 2011) which deals with stereotypical and narrow scoped representations as commonly seen in popular media, not only limits the identity expression of individuals but further excludes them from society.

To bring the above argument into better perspective, one can comprehend the recent death by suicide of Ananya Kumari, the first trans woman RJ in Kerala after a botched gender affirmation surgery once gain brought to the forefront of how a trans person accommodates with negligent and mediocre medical facilities for the sake of social acceptance and to align self-according to the upheld notions of feminine identity through bodily transformation. Anaya's social media profile is crammed with instances where she was subjected to social harassment by eve teasers who demanded sex from her and have used unacceptable and indecent language only because she was a trans woman. In the wake of such positive representations and discussions one needs to understand that the grassroots reality is far from the bubble created in these representations. The lack of safety a trans person faces on a day-to-day basis where their identity needs to be proven in order to pass in the larger public's reading is an unfortunate

part of their daily reality. (The Body and Social Theory - Theory, Culture & Society, 1993) Representations such as the one discussed here that show outward alterations as the mandatory path to be celebrated and accepted even within the immediate family circle is further bringing them under threat by making them feel unsafe and unconfident of themselves if they don't have access to technologies of self-improvement presented by the commercial domain.

Dovetailing a selected narrative about a person of an identity of whom the public has very limited knowledge, as seen in this advertisement and many other prominent messages in media featuring transgender women needs to be debated. Hegemonic discourses such as these need to be dismantled. If the representation of marginalized groups in such visual messages shows a vast disconnect to their authentic everyday experiences, especially when they are at the brunt of violence, bias and exclusions on a daily basis, it not only fails to challenge the governing discourses that form the basis of their discrimination but also feeds off it as much it is feeding into it. Reinforcing a binary logic in the understanding of gender and self while being seemingly progressive in much of the media and commercial domains needs to stop not only for the sake of creating a safe space for diverse identities but also to reduce the consequences of not fitting into the prevailing gender regimes. Representations need to create a better bridge between the private troubles of individuals that also are larger public issues before viewing them as meagre fodder for popular entertainment. (Skeggs, 2001)

Notes

- Transgender - "Transgender" denotes a person whose gender identity and/or gender expression varies from what is characteristically associated with their birth assigned sex. It is an umbrella term and can indicate to people at varying points in transition. "Trans" is often used as an abbreviation for transgender. Other deviations of the term include trans person, trans people, transwoman (Wrongly assigned male at birth) and transman (wrongly assigned female at birth) (National Center for Transgender Equality, 2009)
- Cisgender is term used to indicate a person whose gender identity and gender expression match with what is typically concomitant with their birth-assigned sex.
- Bindi is a colored dot worn on the forehead by women in the Indian sub-continent.
- Pass – Being perceived as the gender that a trans person wishes to associate with. (Borsel, Cuypere, & Berghe, 2001)

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Rapping the Gendered City: Khadar ki Ladkiyan Reclaim Public Spaces

Radhika Khanna
Pondicherry University

Abstract:

This paper focuses on *Khadar ki Ladkiyan* (Girls of Khadar), a rap music video co-produced with young women from a marginalised settlement in Delhi's urban periphery, Madanpur Khadar JJ Colony. The paper examines the music video produced by *Khadar ki Ladkiyan* using textual analysis to demonstrate how the group fosters voice and enables agency by contesting the deeply entrenched patriarchal social and cultural values of their families, neighbourhoods, and social networks to reclaim public spaces in India. The production and circulation of the music video on YouTube is about enabling visibility and opening up a representational space in the digital ecology for women to have their voices heard. While the paper endorses the *Khadar ki Ladkiyan* project as an exemplary instance of fostering voice and enabling women's agency, it suggests that such creative endeavours confront a significant paradox: the call for inclusion in public spaces must be connected to women's exclusion from basic infrastructure like water, sewage, sanitation, electricity; and the potentialities enabled by digital technologies is contingent on access, digital literacy, data speed and costs. The paradox does not diminish the creativity of *Khadar ki Ladkiyan* in fostering voice and agency; rather it demonstrates the complex network of issues women from the global south confront in articulating their voice and construction of agency. The complexities that women face further substantiates why voice and agency built upon collective aspirationalism is significant to tackle the intricate webs of oppression women in the global south contest.

Keywords: Khadar ki Ladkiyan, gendered city & mobility, public spaces & women's safety, YouTube rap video, WhatsApp diaries

Since the 2000s, India has witnessed an increase in appalling instances of violence against women. For instance, the Delhi rape case in 2012, the 2013 rape of a photojournalist in Mumbai, and the 2014 Badaun rape and murder of two teenage girls in Uttar Pradesh are some of the globally reported incidences of crime against women. Violence against women makes growing up in India difficult for girls, especially if they are from a

disadvantaged socio-economic position arising from their class and caste. The assault on various women across India has strengthened the dominant, patriarchal view that women need protection and therefore curtailing of freedom to move outside the safe precinct of their homes is normalised. In short, survivors are blamed for the atrocities and curtailment of women's mobility is the suggested solution. A majority of women in India are denied the right to go out of the 'safe space' of the home into the city without the guardianship of the family that seeks to 'protect' the women from the dangers on the city's public spaces. Restrictions on women's mobility not only constrain their employment prospects but also do not allow them to harness opportunities for capability building (Chant, 2013). Drawing on literature on gender and urban development, the paper will discuss how restrictive mobility deprives women in India access to essential rights (Brosius, 2014; Caldeira, 2014).

Women have responded to restrictions placed on their mobility by demanding safer public spaces through myriad of tactics including blogs, social movements, music, videos, and organised gatherings, and protests. Some of these movements include Why Loiter?, *Pinjara Tod* (Break the Cage), #Meet to sleep, Blank Noise, *Khadar ki Ladkiyan* (Girls from Khadar), and Walk Alone. A key feature of these movements is to exercise agency and voice by reclaiming public spaces and sensitising men and women to the idea of women's right to experience public spaces safely. As Singh, the curator of the blog Why Loiter? points out, "we cannot, as a nation, claim progress until women can feel safe anywhere at anytime" (Chandran, 2016).

When the circumstances demand it, voices find a way. Such is the story of a few girls in Madanpur Khadar JJ Colony (one of the many marginalised resettlement colonies in New Delhi's urban periphery) who co-produced and performed in a music video titled '*Khadar ki Ladkiyan*' – a rap rendition that talks about the social conditions and daily struggles of their lives. As noted by Sahasrabudhe (2019), "a few young girls … have taken to rap … to create … a music video that talks about a simple struggle: travelling to the city and coming back home, unscathed". The issue at hand, mobility, is about empowering women because as Hanson points out, "mobility and immobility is implicated in creating, reinforcing and changing the meanings and practices of gender" (2010, p. 9). Mobility, whether articulated as the ability to move out of the house into the public domain, or the ability to form new social networks via social media, can engender changes in young women's identity and challenges normalised gendered practices. This is what is at stake in *Khadar ki Ladkiyan*: the reclaiming of the masculine

streets of Delhi. The paper critically charts the journey of the women in this group to demonstrate how this initiative materialised through the coming together of a number of individuals, organisations and technologies to produce a creative, political music video. In doing so the paper details the strategies at play in the articulation of voice and the construction of agency enabled by the convergence of multiple collectivities. More importantly, this critical mapping is theoretically instructive for it suggests that in the time of neoliberal individualism, women's voice and agency can be fostered by a collective aspirationalism (Appadurai, 2013).

Why have they chosen to call themselves *ladkiyan* (girls) as opposed to *auratein* (women) even though all of them are over 18 years of age? In India, even this nomenclature is often decided by the role a woman plays in her household or in her family. *Khadar ki Ladkiyan* is a deliberate preference of the women involved in the music video.

These girls are born and raised in one of the most cosmopolitan cities in the entire continent. Yet, their struggle against the stigma of being dwellers of a marginalised settlement is a constant uphill battle that is an integral part of their lives. Some of them are unmarried, some are divorced, some are single mothers while others are working and studying at the same time. Being second-generation dwellers they are better off than their parents when it comes to interacting with the world at large. They are constantly talking to each other using the tools they discover on their fingertips – social media keeps them connected. They are actively pursuing education or struggling to find respectable paid employment against a declining economy. They also participate in gender training programmes offered by a number of NGOs. They give it their all and some more, and they do it all from within the shackles of a patriarchal society. At home, they must seek permission to make their own decision – even the decision to participate in this video. Outside their homes, they must cope against the male gaze, the eve teasers and the elements who have made New Delhi the most dangerous city in India for women.

In post-Nirbhaya Delhi, women's safety became one of the most raging issues for the capital. The city, which is an educational hub for students of the entire nation, came to be unofficially called the 'rape-capital of India'. Parents from other parts of the country became apprehensive about sending their young daughters to study here. Even though the perpetrators of Nirbhaya were caught and tried with severe impunity, it did not discourage others in the city that would do women harm. In other words, even though

conversations around women's safety increased, it did not create a huge impact in the reduction of crime against women.

Gendering the Smart City

In a nation where women struggle for a semblance of power, these young women of Khadar chose to reclaim the streets through a music video using the form of freestyle hip hop rap. The significance of this single piece of music video lies in the background of 'neoliberal masculine urban spaces'. From a Marxist perspective or even otherwise, capitalism's detachment and downsizing of labour has progressively increased giving a further free hand in the neoliberal era. This has resulted in rural-urban migrant labour largely male and consequently the feminisation of agriculture in the rural. But for the landless marginalised in the rural spaces both genders migrated to urban spaces for livelihood.

Neoliberalism is ruthlessly focussed on profits and in the process creates increasing inequality. This inequality has a profound impact on the marginalisation of labour with an increase in migrant labour to urban spaces, and a corresponding increase of ghettos in urban spaces. Living in the margins, in the urban ghettos are 'also' women, forgotten for their needs and specificities and forced to labour in the domestic space and outside and yet invisible in the labour market. The creation of masculine urban spaces contributes to the invisibility of women's labour drowned by the limited vision of dominance, of the majority, undermining women as doing the man's job.

Ayona Datta in her book, *The Illegal City: Space, Law and Gender in a Delhi Squatter Settlement*, "uses a gendered intersectional lens to explore how a 'violence of law' shapes how 'public' subjectivities of gender, class, religion and caste are encountered and negotiated within the 'private' spaces of home, family and neighbourhood." As a professor of Urban Geography in University College London (UCL), she teaches several courses including 'Cites and Citizenship' that "focuses on the links between emergent forms of citizenship and their particular spatial manifestation in cities in the global north and south." Ayona Datta's project, 'Gendering the Smart City' combined "approaches from urban geography, gender studies and Geographic Information System (GIS). This project was an international collaboration between King's College London and societal partners Safetipin and Jagori in India. As stated on Datta's website, this two-year research network aimed to shape current smart city agendas by focussing on women's everyday lived experience of safety. It focused particularly on women living in low-income settlements of metropolitan cities of India and

explored how smart city agendas of creating safe and sustainable cities can be gendered through the voices, experiences and digital practices of subaltern citizens. The project used innovations in digital technology and open source mapping, collected data on infrastructural blind-spots, and on VAW (Violence against women) through participatory mapping of infrastructure and social usage of public spaces by women in the selected low-income neighbourhoods, Madanpur Khadar and Badarpur, in Delhi, India."

Nation, City and the Neighbourhood

As per the 2011 census report by the Indian government, women form only up to 17% of all people commuting to work in urban areas. The number doesn't rise beyond 20% even in the biggest metropolitan areas such as Delhi, Mumbai, Kolkata and Chennai. The ratio of men to women commuters is about 5:1, indicating there are five men to every one woman who commute to work. More than 33% (one-third) of the women who work in Indian cities, work from home. This is done for the sake of safety and it largely leads to social exclusion (Goel, 2019). In other words, they are cut off from developing a social network based on human connections – this leads to losing out on many benefits such as emotional or financial support, access to opportunities, or even participation is social and political decision-making of the community. What is lacking here is the correct spatial freedom that are open to the needs of women – they are missing because no one has designed them, because no one has felt the need to design them, because the key decision makers are all men, who even in their most earnest times are oblivious to the plight of their women co-workers. When it comes to drivers' license holders, the men to women ratio goes up to nine to one. Even so, vehicle ownership in India is low. There are only 20 cars for 1000 people. This means that most of the women (up to 83%) travel on foot, cycle or via public transport – which increases the chances of violence against women, giving further reason for these women to stay indoors. The entire space, infrastructure and facilities are designed to put women at a disadvantage – and even though multiple research studies have proven this, some of them state-sponsored, there is very little undertaking to improve the situation.

The girls of Khadar reside in Madanpur Khadar. According to the data gathered by Gendered Data in Smart Cities, it is on the south-western fringe of Delhi, just across the Yamuna river from the Noida expressway. Established as a resettlement colony after communities evicted from East Delhi settled here in 2002, it has a population of approximate 0.25 million. Approximately 50.9 percent of the population earn below Rs. 2500 (£30) a

month which puts them in the BPL category (Below Poverty Line). Major occupations of this neighbourhood are low-income jobs such as domestic workers, drivers, guards, sweepers, rag pickers, hawkers and vendors, industrial and construction workers.

The women are mostly homemakers. Some of them run small tea/food stalls or shops out of their shacks or rented spaces. A few are *Balwadi* (Pre-School) Teacher while others are *Aanganwadi* (Health Centre) helpers, which help them push the economic boundaries that have been forced upon them by the larger masculine neoliberal world. This is also how they find a reason to step out of their homes and reclaim the public spaces.

WhatsApp Diaries

As part of Ayona Datta's project, 'Gendering the Smart City' she and her team sought to understand the lives of the women who would go on to co-produce the music video '*Khadar ki Ladkiyan*'. "The project is basically to empower the young women living at the margins in the border towns of the city in terms of urban commute and safety as well as to negotiate the freedom of choosing to enter the digital space or of leaving home and conventional barriers to work in the city," said Ayona Datta. To that end, they created a WhatsApp group with 11 of these girls along with an admin. The group was created so that they could "send in diary entries of their daily experiences in the form of images, text, audio or video, as they travelled from their homes to the city over the course of six months." (Datta, 2019) The WhatsApp group became the medium of research for the project, allowing the researchers to delve deep into the lives of these girls of Khadar. These eleven girls along with a moderator shared their daily life experiences of commuting across the city, documenting their everyday experiences, digital lives and how they negotiated public spaces.

For example, if someone behaved inappropriately with them in the public transport, they wouldn't be able to speak up at times, but they would vent out in the WhatsApp group which was a safe space for them. The diaries included the day to day successes and stigma that the girls faced. From the obstacles and dilemmas they faced while commuting, to the small moments of pleasant surprises, they shared everything on the group.

But acquiring phones was tougher than Datta had initially imagined. The families of these girls only permitted the women to have phones after a series of difficult negotiations, as the elders believed that the mobile phones would be a gateway to social transgressions such as 'disobeying parents, breaking curfew, talking to men, or wearing Western clothes.'

Datta writes, "Our participants convinced their families that having a phone is essential for keeping safe and staying in touch, when they have to go into the city for 'legitimate' reasons such as work or education."

Smartphones are often the first step towards self-liberation for these women – the personal phone allows these women a medium to communicate with others in private. Privacy is a not a very universal concept in India – even the middle class are known to curtail the privacy of their young ones. For these girls, it is an entirely foreign concept. Datta writes, "Having a personal phone gives women the ability to leave the home and communicate with others away from the gaze of the family, so they see it as giving the gift of freedom… Women celebrate this freedom using the phone's front-facing camera."

An entry into WhatsApp reads:
"*WhatsApp me aana, facebook me jaana, yeh hai smart zamaana* – translated as 'coming on WhatsApp, going to Facebook, these are the smart times."

What began as a perfunctory exercise to stay connected during a workshop soon became a platform for these girls to share daily experiences, akin to a day-to-day journal. The diaries were repurposed to share experiences of safety, discomfort, pleasure and risk in the form of audio recordings, text, pictures and videos from the city that these girls navigated every day. Ayona Dutta writes, "We are building a thick narrative of the city from the perspective of young girls who live on the margins of the city. As mobile phones have become an intrinsic part of our lives, one had to think of ways to 'involve' the medium actively in this research project. Many engagements and conversations take place through the phone- from access to public services to job opportunities, to discovering and finding new friends, to narratives of discomfort in these interactions, the phone and internet are crucial to the merging subjectivity in the neo-liberal order. They used the group to share the difficulties they face on an everyday basis, to the larger issues troubling them."

One of the entries in the WhatsApp group reads as follows:
"When we come in a dark lane in the neighbourhood, a lot of vehicles pass by us. They comment things like, 'Will you go with me', 'Come! I'll drop you off", '*Kya cheez hai*, you look very beautiful.' There are no police or lights in that area, it is very deserted. Finally, when you reach the market, you can see the lights and people passing, but nobody cares for anyone, nobody would even ask the men 'Why did you say this?'"

The city they live in, the nation's capital often fails to provide their communities with the most basic infrastructure which leads to various problems for everyone living there. Here's a WhatsApp entry, addressing that issue, "In this morning's rains, the roads got filled with so much water that it was difficult for people to get out, the water from the drains were also overflowing, and people were forced to wade through it."

The messages are not in isolation. They are accompanied by photographic evidence every step of the way. Datta writes, "Our participants didn't really regard taking selfies as a political act. But when you consider how, when and where they take selfies the images are a barometer of their social, economic and political exclusion from the city. They speak to the paradoxes experienced by women living in Delhi's urban peripheries, as both technology – and the city itself – can be at once liberating and dangerous."

In a country like India where sex education is limited, and often considered a taboo, yet pornography is readily available through internet in any corner of the country, stalking can often become a serious issue for women – both online and offline. Even uploading a photo on Facebook can be dangerous for online stalking. Datta expresses her concerns about the same, "A disturbing picture entry in the WhatsApp diary, captioned 'my selfie in a bus full of men', evoked the Nirbhaya case of 2012 – when a young woman was fatally gang raped on a bus – and suggested that the selfie is also a way for these women to witness and record danger in their everyday life."

Homes are usually meant to be places where women can be safe, can observe privacy. Yet, for these girls, home often became synonymous with confinement and that can be seen in the absence of selfies at home. "Home is where the women's daily struggles with poor infrastructure for drinking water, sanitation, waste collection and transport take place. More significantly, family control over women's bodies – through strict curfew hours and restrictions on where they can go – highlight older and younger generations' very different understandings of freedom and danger. While older generations who grew up without mobile phones are mainly concerned about women's physical safety, the young women in our research have to deal with daily invasions of privacy, sexual harassment and abuse both at home and in the city, online and in real life. Their selfies tell a story about what it's like to navigate the journeys between home and the city, as the boundaries between public and private, freedom and danger become increasingly blurred in these 'smart times'."

In the project, WhatsApp Diaries, an everyday tool like a 'selfie' transforms its purview from a narcissistic mode of self-indulgence to a medium to assert identity and seek representation within male dominated public spaces. She writes, "Our participants turned out to be avid selfie takers. But there's much more to this than a simple rendition of a millennial trend. Their selfies are digital, visual stories from the margins which capture their struggles and accomplishments as they step out from women's traditional role in the home and navigate the largely male-dominated realm of the city…In some ways, the selfies show that being in the city is liberating for women, as they represent a new-found freedom outside the home and the constraints of traditional gender roles. Through these selfies, women curate the city at arm's length, placing themselves in the centre of the frame as they stage their own arrival in many different public places."

Breaking Boundaries

The use of music as a political instrument has a long history. It can be seen in two ways, one is for recognition of the self/group, to retain a place, an identity. The second way of using music as a political instrument is when there has been a denigration of rights and so the struggle here is for a political assertion in using their agency through music to voice their rights that have been deprived. Music has the power to create awareness and education through a critique of the dominant discourse that marginalises lives.

Using music by the oppressed in voicing their oppression is common. People from around the world record how their lives have become marginalised, what threats they face and expose the oppressors hoping to bring about change. Examples include Reggae by Rastapharians, Gana songs from Chennai by the ghettoised migrant labour and Ghadar songs from Telangana on class-caste oppression.

In 2019, the World Economic Forum released the Gender Gap Index-2019 in which India slipped down four places to its 112th position (in 2006, the first WEF Gender Gap Index, India was at 98th position). Okin (1998) discusses how even the Bill of Rights (UDHR, 1948; ICCPR, 1970; ICSECR, 1970) was short sighted in thinking that equality across gender will ensure women's rights. It took many international forums across many years to have CEDAW passed and even after to get nations across the globe to recognise that exclusive rights are necessary for women in protection against violence both in public and domestic spaces (Okin, 1998).

"What is it about our culture that leads to such violence against women and this pervasive sexism?" This was the question that Deepa Narayan, a sociologist based in Delhi pondered on after the 2012 gang rape case in Delhi. This led her and her researchers to conduct wide scale research that included "600 interviews, — about 3,000 hours over three years, documented in more than 8,000 pages of notes, published in a book called 'Chup,' the Hindi word for the imperative 'Quiet.' Narayan's interviews sought to delve into the 'inner lives' of urban women. Even in the postmodern neoliberal world, modern women were still exposed to widespread gender inequality and conservative attitude towards women's gender roles." Narayan says that "Women, even those who said they were feminists, often used words such as 'mother,' 'sacrifice' or 'giving' to describe themselves, while men often described themselves as a 'leader' or 'powerful'." (Doshi, 2018).

Women in India have had a long history of being confined to the domestic spaces and discouraged from being independent. "Girls (of my grandmother's background) were married off barely past puberty, trained for nothing beyond household tasks and the rearing of children, and passed from economic dependency on their fathers to economic dependency on their husbands to economic dependency on their sons in old age. Their criticisms of their lot were articulated, if at all, in terms that precluded a desire for any radical change. They saw themselves as personally unfortunate, but they did not locate the causes of their misery in larger social arrangements." (Narayan, 1989)

Uma Narayan and Chandra Talpade Mohanty, post-colonial feminists, have brought wide and deep attention to the lives and struggles of women of the global south. Urging for a non-westernised perspective, rooted in one's location, Mohanty emphasises a political praxis for transformation of culture. "Culture itself is thus redefined as incorporating individual and collective memories, dreams, and history that are contested and transformed through the political praxis of day-to-day living….Similarly, the point is not simply that one should have *a voice*; the more crucial question concerns the sort of voice one comes to have as the result of one's location-both as an individual and as part of collectives." (Mohanty, 1989)

Creation of the Rap Video

The process of exploring their dreams and aspirations, both individually and collectively through the WhatsApp diaries and the weekly theatre workshop, for more than four months, culminated in the co-production of a music video for YouTube. The Khadar girls experimented with rhyme and rhythms

while interplaying their daily lives and struggles into the song. The self-reflective music video portrays the way in which the marginalised resettlement dwelling girls live and demand for safe public spaces.

The 3 minutes and 35 seconds long rap video about the life at the marginalised settlement in Khadar has been produced by Dr. Ayona Dutta, as part of her 'Gendering the Smart City' project with seed-funding from King's College, London. The project wasn't always about the rap song. It began as a WhatsApp diary project to ''understand the journeys between physical and digital spaces of Violence Against Women (VAW).'' These women used simple conversational tools to share their stories and create bonds of friendship so that they could stand with each other when no one else would. The project was done in collaboration with *Jagori*, a feminist NGO working in Delhi, and *Safetipin*, a social enterprise working around issues relating to gender safety across the world. The WhatsApp group became the medium of research for the project, allowing them to delve deep into the lives of these women.

After about four months of working with WhatsApp Diaries, the idea for the song presented itself during one of the brainstorming sessions. The eleven girls who participated in the video were immediately excited about the video. Rap and Hip-Hop music in India had been immensely popular in the recent years. Yet, the songs that talk about disenfranchised and underrepresented sections of the society were far from becoming mainstream. Even so, both spaces were mainly dominated by men and there was a great vacuum when it came to the voices of women from the underbelly of the society.

Having taken part in the workshops of Jagori which included street theatre, and training programmes, these girls were already accustomed to writing verses, but to sing and perform in front of a camera which will then become a music video – that was an entirely different story. It wasn't something any of them were familiar with. Yet, the idea excited them. They felt it would help them 'speak', it would provide their side of the story with much-needed importance. It would give them the space to talk back to the city that otherwise doesn't allow them to voice their opinions.

Patriarchy and the city were not the only things they were struggling against – it was a race against time to create this video which almost did not get made. It began as regular face-to-face sessions where the girls focused on telling their own story. In each session, they wrote short pieces on different themes such as ''*hawa* (wind), *andhera* (darkness), *ujala* (light), *rang*

(colour), *mera sheher* (my city)" etc. Afterwards, these proses were turned into the lyrics of the song which turned them into local celebrities.

Sunayana Wadhawan, sound artist and music director, explains in her blog, "Discussing the history of hip-hop as a medium of protest and expression, we watched videos and grooved to different songs to become more familiar with the sound and delivery of messages through spoken word. Apart from clapping and dancing, one of the exercises I conducted was an attempt to find a shared rhythm using timing that we are all familiar with—the sound made while washing clothes. It was an extraordinary moment as all the women were well versed with the actions and sound involved in washing clothes—a domestic chore often delegated to women in the house."

As much as composing the song was tough – the video was even more challenging. To turn this idea of self-expression into an unforgettable reality, these girls had to fight against their families, against curfew times, against all the unwarranted attention they got for shooting on the same streets that they lived in. Some of them were restricted from showing their faces on YouTube – restrictions they were happy to ignore. Shooting where they lived drew a lot eyeballs. People began to notice – and even though it was a bit of a hindrance at first, slowly a realisation dawned upon them.

The song they were singing, the story they were trying to tell – it wasn't just their story. It was the story of millions of other girls who had lived similar lives. It was the story of every woman who had ever felt unsafe in their own city. It was the story of every woman who never got to live life on her own terms. It was the story of all women.

Stepping out with the Rap Video
In the process of mapping the voices of the Khadar girls, through the making of the video, the author has relied on the interviews of four performers with Firstpost. Here, the girls share their experiences of being a part of the video co-production, their reflections on their immediate surroundings and how it has helped them to make a difference. Meera says, "In our area, [Khadar] people pay more attention to what others are doing than to themselves, and while the place is good on the surface, deep within, people's mentality continues to remain backward. Women have to bear the brunt and face a multitude of issues, and while many of them work in various households, men are often found playing tash (cards) in the park, gambling or drinking and subjecting women and children to violence."

Ritu, one of the eleven performers says, "This video marks a step out of suppression for every girl who is never allowed to cross the threshold of her home, who is subject to the same oppressive set of rules. When the video was being shot, I felt as though we were talking about those things that we are normally not able to with other people." She expresses how the video acted as a self-imposed challenge to her which also helped change the way others perceive her, "I feel like I have accomplished something I never thought would be possible. It came as a complete surprise to my parents too but they were happy when they saw the video."

Pooja too experienced challenges in facing the camera but is happy with the effect that the video has on her family. She says, "We had some trouble shooting it in the beginning, being in front of the camera and speaking proved to be a challenge. However, after it was up online, the entire family was happy to know that such a video had been made to give a message to those girls who cannot voice their rights."

Jagriti faced a strong reaction at home when they learned of the video. "When I told my father that I was on YouTube, he was very happy but he also asked why I had to show my face," Jagriti says, "So I said to him that it's not as if we are doing something wrong. If we are not seen, the viewer will not know who sang this, who made it happen. … Sometimes even sitting in the parks becomes a problem for the ladies, all of us are scared whenever a girl ventures out even for a short time, and women in the block simply cannot go out at night. We live in constant fear, keep thinking, 'what if something happens to her,' so my father, asked me to keep doing such work after watching the video and spread ideas that would bring about social change."

The music video works on multifaceted levels with the family and the neighbourhood. At the very beginning is the novelty of it all. To a generation who had largely grown up without the availability of a personal television, the age of mobile phones, followed by smartphones and universal internet came very rapidly. To see one's family member as the centre of attention in a highly articulated and planned video project is more than a mere surprise – while it receives mixed responses, it also generates a sense of achievement and pride.

The novelty is closely followed by the stigma. Stigma is a subject that is well documented within Indian societies. India has dealt with stigma related to HIV/AIDS, mental healthcare, and even with gender roles – widows who remarry, women who want to marry the men they choose as opposed to the

men their parents choose for them (an entire generation of cinema has been dedicated to break down this conservative way of thinking). As Jagriti's father voices about how 'showing her face' could be objectionable to her family and her extended society, it is common that women who appear in videos are subjected to similar scrutiny. Similarly, a lot of the apprehensions regarding the shooting for the music video emerged as there would be onlookers in the neighbourhood watching the shoot in progress as these young women faced the camera. Shooting in front of an audience is challenging for any performer but for those who have never performed before, to shoot in front of people who see them every day, who live in the same neighbourhood, and constantly judge women – was a challenge they faced with confidence.

Close Analysis of the Rap Video
The researcher examines the music video produced by Khadar ki Ladkiyan using close analysis as a phenomenological method to seek the meanings and subtleties in the music video's visualisation, soundtrack, lyrics and ambient sounds. It further demonstrates how the group fosters voice and enables agency by contesting the deeply entrenched patriarchal social and cultural values of their families, neighbourhoods, and social networks to reclaim public spaces in India. The production and circulation of the music video on YouTube is about enabling visibility and opening up a representational space in the digital ecology for women to have their voices heard. While the paper endorses the Khadar ki Ladkiyan project as an exemplary instance of fostering voice and enabling women's agency, it suggests that such creative endeavours confront a significant paradox: the call for inclusion in public spaces must be connected to women's exclusion from basic infrastructure like water, sewage, sanitation, electricity; and the potentialities enabled by digital technologies is contingent on access, digital literacy, data speed and costs. The paradox that is highlighted does not diminish the creativity of Khadar ki Ladkiyan in fostering voice and agency; rather it demonstrates the complex network of issues women from the global south confront in articulating their voice and construction of agency. A closer look at the freestyle hip-hop rap song music video will help to delve deeper into the adversaries faced by these girls, and their perspective on how it affects their life.

The opening scene showcases a busy road in Mandapur Khadar, a resettlement in the south-western fringe of Delhi. Before the song commences, we hear and see the bustle of a typical Indian market. We hear hawkers selling pickles and the cacophony of a crowd in the distance. The second shot, focuses on groups of men playing a card game in an open

space, showing them comfortable and claiming the public space. The scene establishes how most commonly, the public domain is dominated by the male presence and how standard it is for them to do anything in these common spaces without fear or judgement. We also witness how the buildings in the neighbourhood are distinct in their own way, representing a socio-economic setting that is a far cry from the urban middle class situation. The homes are clustered together, the streets are narrow and overcrowded, and the quality of the roads are not what you expect in the nation's capital.

The video then cuts to the Close-up of a painting of a woman with a traditional *bindi* on the forehead and a nose ring. In the following sequence, the titular girls are introduced by focusing on their eyes as they look straight into the camera and the audience. Through the camera, the audience looks into the eyes of the girls – these are the eyes that will continue to tell the story of their identity and their existence, and with a shot of the eyes is how we are introduced to these girls.

As the shot goes from girl to girl, the lyrics begin with:

We, the women of Khadar
Hear what we have to say
We, the women of Khadar
Live in the city night and day

As the freestyle lyrics begin, a recurring beat accompanies the lyrics, that of washing clothes. Sunayana Wadhawan, made a conscious choice of finding a common beat that all the girls were familiar with and they settled on washing clothes, something that was a part of their daily life since a young age. In most Indian households, domestic chores are solely done by the women in the family. So, this recurring motif is incorporated as a rhythm that accompanies the song. It is a patriarchal signifier, yet what is interesting is here the girls are using that very signifier to talk about their oppressions and the dire situation in that patriarchal setup.

Close-up shots are repeatedly used in the video to represent the emotions of the girls and their courage and strength. With the Close-up shots, the audience gets a feeling of being in close proximity with these girls, in their streets, standing right next to them. The Close-up shots are also a keen of way of exhibiting the bold step these girls have taken in simply shooting their video. Close-up shots are always about being up close and personal with the subject and that is not something these girls have ever been familiar

with. Yet, the Close-up shots here effectively show how the girls are now determined and are no longer holding back from speaking their mind, and singing their perspectives.

The girls waste no time in declaring who they are and what they want. They are young urban women with a voice and they are as much a part of the city as anyone. The opening words are an assertion of their identity that the viewer/listener will not easily forget. The very first step that these girls take is to identify who they are, where they belong and what they want to say. The place where these girls live is among the most unhygienic and polluted areas of the capital. Added to that, there is a common stigma that comes with belonging to this neighbourhood. The first lines of the song are a bold step against the stigmatised norms these girls have dealt with all their lives.

After the shot of the girls alone, the camera moves to mid-range shots of the girls. This creates a sense of equality and show the bond, camaraderie and sense of community that these women have built among themselves as they worked on this video. As they look directly into the camera at all times, they speak directly to the audience and other women as they try to empower them on the other side of the screen.

We then see the shot of one of the girls in a narrow, dark lane, among unfinished buildings which are used as dwellings in the resettlement. She walks towards the camera and talks about being removed from their original settlement areas and being moved to Khadar. The areas that she speaks of are all now areas that have now been developed into the middle class or posh localities and the dark lane shows further the stark contrast between the districts.

We were evicted from Nehru Place,
Nizammuddin, R.K. Puram,
And thrown into Khadar
We've faced our days of turmoil
With unsurpassed willpower

Most of the dwellers of Khadar began living there only after being evicted from other areas of Delhi, which have since been 'developed' in the postcolonial neoliberal masculine way. Many of these girls do not even have the memory of the mass-eviction. Yet, the exodus which happened during their parents' generation is an undeniable part of their identity. It is the first paper in the story that they identify themselves with. At the same time, the unsurpassed willpower that they are talking about also elucidates how they have coped against the dark side of the city for all these years.

In Aravind Adiga's Man Booker Prize winning book, The White Tiger, the writer describes how the protagonist who visits Delhi sees not one but two cities. The first is the Delhi we are all familiar with – of the government, of the big businesses and of the children of rich parents. The second Delhi is closer to the life that these girls have gone through. To the eyes of the protagonist, the proximity and the contrast of the two Delhis is utterly and thoroughly confusing and paradoxical. The very paradox is something these girls call life.

In the next shot, the girl is now on a wide and busy road. As she stands still, we see a time-lapse of the crowd go around her. This is juxtaposed with the lyrics as she says they have stood fast despite the many difficulties they faced in life.

The scene then changes to another girl at night at the side of a highway, where big trucks can be seen parked on the side. As she describes the area that they call home in bleak terms, we see a male presence in the background watching her. This becomes a recurring motif as we see the men look on at the women with interest, a common phenomenon every woman faces on a daily basis on the streets.

Forget living by a river
There are not even drains
Only mounds of garbage
Instead of mountains

In a report dated June 4th, 2019, by the Hindustan Times, it is stated that the 'Garbage Mountain' at Delhi's Ghazipur landfill will be taller than the Taj Mahal by 2020. Though not the biggest, the garbage mounds of Madanpur which are in close proximity to the marginalised resettlement where these girls have lived all their lives, is an eyesore, a nightmare for the olfactory senses, and all in all a great source of diseases for the entire city, starting with the community of these women.

Seema, one of the eleven girls who have created the video narrates her story of arriving at Madanpur in an interview with Safetipin.
"When my family and I moved to Madanpur Khadar, the place was a complete mess. There were no amenities and it was very dirty. The men in and around the area would be gambling and overall, it was just a very unsafe place… I used to feel a little unsafe when I would travel alone at night, but now it's become a habit. I remember before, when I used to travel to Nizamuddin, the buses would be so crowded that being pushed around

and groped was common. This was at the time when I was working with Jagori so I would share this with the office when I would reach."

These girls do not have the basic amenities that are expected from the government. The rights which were meant for all remain a distant dream for these girls. So, they sing.
If only on roads there were lights
If there were no ugly fight
Smart cities are only a fallacy
To trap the common man, in the quagmire of policy

As they talk about the smart cities, another girl is standing in front of a newly painted house and door, but the next shot immediately cuts to a common lane in Khadar, where we see half completed and dilapidated buildings, enforcing the ideas behind the farce of smart cities.

If a government fails to provide basic amenities in the nation's capital, then how can you expect it to run smart cities across the country? They are failing the people, but only indulging them in false promises of better days, of bullet trains and smart cities. It takes the eyes of the most disenfranchised to call out the government for what is true.

In the next shot, we see a girl get into a taxi as a driver and the next four shots show her in the taxi as she says:
From the dark streets and alleys
An inspired path I tread
Sometimes a guard, sometimes a taxi driver

Taxi driver, guards, these occupations are rarely seen done by women in India again due to the constraints of lack of personal safety. So these shots in the taxi portray the strength that these women have and at this point in the song, the girls start showing the audience how they have taken matters in their own hands to empower themselves.

Shot 18 and 19 are of four of the girls as they assert their will to claim their space in the public domain. The camera takes a 360 degrees shot with four of the girls standing back-to-back with their hands crossed in front of their chests, a sign of confidence, camaraderie and dominance.
Say it aloud with me
This city is for you and me
This city is not anyone's property
The sky is for you and me

This city is not anyone's property

They speak about reclaiming the public space and making it safe and accessible to women and the visuals express solidarity among themselves as well as all the women that the video speaks too.

The next shot (20) shows the group of girls of different age groups, walking in unison in one direction. The next shot shows them congressed together at a #MeToo protest and the lyrics accompany it with talking about the strife that all women have to face on a daily basis.
Girls in this city do have a tough life
And living alone is another kind of strife
Girls out here are 'auctioned' alive
Do you really think we are that naïve?

In the next shot, one of the girls speaks about rape and sexual harassment. She stands in front of the painting of the woman we see in the second shot of the video, and now see that it is actually the painting of a Hindu Goddess.
What is my fault that there is a sexual harassment cases daily
What is my fault
That Delhi has over six rape cases daily
Why has society kept me suppressed

In the next shot, the girl is now accompanied by a married woman in a sari and ghungat with an infant in her arms and next to her a teenager in pants and a T-shirt, further cementing, how all of the women are subjected to such violence, regardless of age, marital status, clothing, etc. And ironically in front of the painting of a Goddess who is widely worshipped. As the women stare at the camera, the feeling of the frustration and anger is brought through. In the next scene, a girl on a busy street questions:
Instead of ironing out its own faults
Why am I the one facing house arrest?

The next shot shows a girl in front of a police booth as she talks about the inept way the law enforcement and courts handle sexual abuse cases and women's safety, and how court cases go on for years without a resolution. The next is a night shot with three girls riding in an open-air rickshaw. The girl in the centre looks at the camera and speaks as the other two are in the background on their phones.

She speaks about wanting to live freely without fear. The image of travelling at night is a strong contrast as a majority of women in India feels

scared to travel alone by public transport at night because of the fear of being assaulted.
I want to spread my wings and fly
Our life fearless and joyful
I want to live with my head held high

Then we see one girl standing on a wide road at night asking "Oh Delhi, please open your heart'. In this shot, we see in the background only men, all slightly out of focus but obviously looking and staring at her, some chuckling while others looking on calmly or glancing at her while passing by.
This male gaze is one that every woman is used to while traversing public domains in India.

Shot 40 shows a group of girls walking together on the busy street. As they go on to the refrain, the camera moves to the front (shot 41) and we see the girls taking a selfie video and talking to the mobile phone as they chant over and over again in solidarity and directly to the audience and all the women they wish to reach out to:
More power to you sister
More power to you

They smile and walk through the market with confidence, happiness and a sense of togetherness and power. Through their own empowerment, they hope to empower and create safe spaces for all other women facing daily challenges and struggles like them, and they portray that this needs to be a group effort where all women need to stand together and for each other so that someday they can all walk freely in all public spaces without fear and with confidence.

Rapping the Gendered City
Rap has always been a voice of protest. It was always about the oppressed singing and talking about those who would oppress them – economically, socially, and culturally. It is no surprise that the genre of music emerged from the black communities of America – who are, in the context of history, among the most exploited, abused and persecuted communities in the world who actually lived to tell the tale. Even in India, it emerged in the marginalised settlements of Bombay, where they were singing about how life was and how the only ray of hope is holding each other's hands in solidarity. These girls echo the same sentiments – the emotions of the oppressed, the voiceless, the spirit of storytellers who have power to cast a

wider net with what they have to say – to ensure that everyone around them is listening.

'Khadar ki Ladkiyan' didn't become 'viral' overnight. Even after almost 17 months, the viewership is only at 44.5K. In that time, National Geographic has done a feature on them and that has invited eyeballs from across the world. Slogans of solidarity and consensus are universal and are coming in from across the world.

Francesco Parente of Italy, writes:
I have read with passion the story in the National Geographic, and trust me when I say that I am so sad for your women, but I am even happy now that I know that your voice finally can be heard. Even this is video is not perfect for the style, is amazing for the bravery you are showing staying in the streets, with the men watching you. The only thing I can do is make you know that my spirit is near to you all ^_^ One big hug form Lecce, Italy. <3
Aarón La of Galicia, Spain writes:
Seguid asi. Fuerza e igualdad desde Galicia España.
Which translates to
Keep going. Strength and equality from Galicia Spain.
There are nearly 50 comments which echo the same sentiments. It has had a genuine impact on all of these people and it achieved that by taking the unconventional route towards gender empowerment. Datta writes:

"It gave them agency and a safe-space. It started as WhatsApp diaries, where they could express their feelings and curate their experiences in a closed, supportive environment, that then organically evolved into a hip-hop music video. The power to direct the course of this project was exciting for them. The Khadar girls said that the project gave them the chance to 'speak', gave importance to their stories and made them feel like they counted. Most of all they said It made gender 'fun' by creating a safe space for hanging out, for producing laughter, and expressing solidarity towards one another. It triggered a process of re-negotiating their identities and relationships with their family, home, and the city."

Through this music video, the entire team took the mode of gender empowerment to the very geographical location it is needed the most: the streets. This music video has a much bigger impact because it was made in the same neighbourhood where they faced discrimination their entire lives. This music video is how they 'take back' the streets, they win back the space that has always been rightfully theirs.

"While filming the video, the Khadar girls stood against the control over their bodies by their families – defying curfew hours, defying their families' restrictions on showing their faces on YouTube, and through several other micro-subversions. Even the choice of filming in the streets of Khadar permanently changed aspects of the girls' lives, since it emphasised their visibility as 'celebrities' (their term). Although they had not considered the significance of their stories earlier, they began to realise the scale of it and what they were doing, when we required crowd control during the filming, when neighbours started asking what they were doing, when their friends wanted to join the project, when their parents asked relatives in their village to watch the video on YouTube, and most significantly, when people in Khadar began to recognise them on the streets as the 'Khadar ki Ladkiyan'."(Datta)

Their simple move to assert their identity became a movement which was made possible through co-creation, co-production and collaboration. Their stories, their songs are no longer their own. Their voice belongs to every girl and every woman across the world who has faced social, economic, classist and gender discrimination – both inside and outside their nation.
"Our Khadar girls are telling not just their own stories on YouTube, but the story of millions of young women living the contradictions of life in India's digital and urban margins." (Datta)

Khadar ki Ladkiyan have forged a community through the strength of their convictions and continue to inspire women across the world to speak up. With courage and confidence, they have reclaimed public spaces with an indomitable spirit and certitude. Their voices echo in our ears: More power to you sister, more power to you.

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Mandating User Verification in Social Media to Curb Cyberbullying: Public Opinion Study

D. Ramakrishnan
Central University of Tamil Nadu

Shamala R.
Central University of Tamil Nadu

Malini Srinivasan
Central University of Tamil Nadu

Abstract:
Social media is packed with powerful features. Some features help to build a better society. Some help to break a functional one. The feature that enables users to stay anonymous does the latter by fueling anti-social behaviours, including cyberbullying. The anonymity acts as a barrier for tracing the reported profiles. One of the recent arguments going around is mandating user verification for social media as a measure to trace fake/anonymous profiles. This study focuses on identifying people's presumed effects on mandating user verification and their perception of cyberbullying and anonymity being its cause. A quantitative online survey has been designed to identify the same. Results state that people in the majority have an understanding of cyberbullying and its effects. The participants with cyberbullying awareness have opined that anonymity has a role in inducing cyberbullying. A little more than 50% of participants responded in support of mandating user verification.

Keywords: Social Media, Cyberbullying, User Verification, Mandating User Verification, Public Opinion.

Introduction

The University of Montreal has presented findings that suggest aggressive behaviour is innate to humans. Though it seems like we are living in a most violent time, thanks to the media for help framing the opinion, Steven Pinker, a professor of psychology at Harvard University argues that this is the most peaceful time of the human species' existence. As humans evolve, they get less aggressive.

Ironically, as technology evolves, the instances and impact of cyberbullying don't seem to lower anytime soon. Many scientists share a view that the source for that aggressive behaviour in social media is the anonymity provided by technologies. As the technology evolves, the more secured the networks get, the more privacy the electronic devices deliver. The instances of aggressive behaviour on the internet get higher, as the privacy gets stronger. Aggressive and inappropriate behaviour on the internet includes sending messages in a threatening or intimidating sort.

Intimidation taking place over electronic devices like smartphones, computers, and tablets is called cyberbullying. Cyberbullying usually occurs through SMS, messengers, social media, forums where people view, comment, or share content. Passing harmful, negative, false, or mean things about someone is also considered bullying. It includes sharing private information about someone without consent causing embarrassment or humiliation.

Many measures are taken to bring cyberbullying to an end. That includes the Indian law that defines cyberbullying as criminal offences. Section 67 of the Information Technology Act designates 5 years imprisonment and a fine of up to rupees 10 lakh for posting or transmitting obscene material in digital form.

Section 507 of IPC states that if anyone receives anonymous criminal intimidation then the abuser shall be imprisoned for up to 2 years. Section 66 E of the IT Act prescribes that anyone who intentionally violates the privacy of another person by transmitting, capturing or publishing private pictures of others without consent shall be imprisoned for up to 3 years or pay a fine of up to 3 lakh rupees.

As these laws are not enough to put an end to cyberbullying, alternative measures are hypothesised such as spreading awareness, educating people and automated detection of cyberbullying. One such way, which is also an alleged potential threat to privacy, is mandating user verification for social media. User verification is a process of attaching any photo identification document issued by the government such as a Voter ID, Driver's License, Aadhaar card or a passport with social media accounts such as Twitter, Instagram and Facebook. Though it is an unpopular measure, it is also considered quite an effective one, as revealing the user's identity to the service provider, i.e., social media platforms destroy the abstract confidence fueled by the consciousness of being anonymous.

But it's a tough game to remove anonymity at the same time to provide the promised privacy by big-tech companies. In an attempt to contribute to the complications, this study is focused on finding the people's presumed assumptions and opinions on mandating user verification in social media, whether mandating user verification and bringing it as a policy will bring cyberbullying to an end. To verify if the respondents are giving informed opinions, we have designed the study to identify the respondents' awareness and perception of cyberbullying.

Though the benefit of the policy 'mandating user verification' could help in lowering the diffusion of disinformation, misinformation and mal-information, and it also could help social scientists make a more accurate opinion mining from social media analysis, we are concentrating only on cyberbullying, making a more focused study.

Statement of Research Problem
The issue addressed in this study is the increasing instances of cyberbullying that affects the mental health of youngsters. User verification is one of the proposed solutions for curbing cyberbullying. We plan to figure how people will react once a policy is formed to mandate user verification for social media. This study focuses on people's presumed effects on mandating user verification. This study also quests the participant's understanding of cyberbullying. The study further probes the correlation between the understanding of cyberbullying and the presumed effects of making user verification mandatory for social media handles.

Significance of Research
The research problem helps find the issues people have with mandating user verification. This will help identify the presumptions people have on mandating user verification and can help the state to implement a policy smoothly. This will presumably prevent the unrest and protests the state faces when an undesirable policy is made. The study will also find the extent of awareness people have on cyberbullying and their opinion on mandating user verification to curb cyberbullying. This study also analyses the participants' view on trolling as cyberbullying and anonymity as a cause for cyberbullying.

Research Questions
1. What are the presumed effects of mandating user verification for social media handles?
2. What is the perception of cyberbullying among social media users?

3. What is the correlation between the perception of cyberbullying and the presumed effects of mandating user verification for social media handles?

Objectives

1. To examine the presumed effects of mandating user verification for social media handles.
2. To identify the perception of cyberbullying among social media users.
3. To determine the correlation between the perception of cyberbullying and the presumed effects of mandating user verification for social media handles.

Literature Review

This is no minor issue: the effort to show authority and power over subjects through "anonymous" cyberspace has experienced as much as "93%" of youngsters who access the internet in North America. (Law, Shapka, Domene & Gagné, 2012). Young ladies were altogether bound to be users of email, social media sites, blogs and cells in contrast with young men. (Juvonen & Gross, 2008).

In February 2012, it was detailed that a lady who had been harassed at a youthful age about her red hair, endured that equivalent maltreatment as a 35-year-old after a childhood image of her had been posted on Facebook. The online assault turned out to be rankling to the point that she had to call the police, saying that at least at school, she had the option to see the harassers, however now, the bullies were anonymous, taking cover behind their machines. (Faulkner, 2012).

Victims of traditional bullying have the advantage to fight back by utilizing superior tech skills and staying anonymous and probably protected from harm's way. (Ybarra & Mitchell, 2004).

While Internet users land on different Websites, they leave behind proof of which sites they have visited. This continuous record of one's internet activity is known as "digital footprint." One among the huge dangers to youngsters on social media is their digital footprints and future reputations. (O'Keeffe, & Pearson, 2011). Very young kids specifically don't have the foggiest idea how to change their privacy settings and don't comprehend the potential consequences of their activities, like turning into an obvious target

for grooming or presenting themselves to risks to their internet reputation. (Krasznay, Rácz-Nagy & Dóra, 2020).

Hidden paid-for deeds comprising in-app purchases are difficult for youngsters to distinguish and can prompt unintended subjection to commercial content that is inappropriate for the youngster's age. Age verification and transparency are expected to address these issues. (Livingstone, Stoilova & Nandagiri, 2019).

Cyberbullying is a staggering type of conduct because the objective of the culprit may not be obvious to the person in question. The culprit may cover her or his personality in anonymous email addresses or pseudonymous names and abuse the victim without location all day, every day. (Phillips, 2010).

The most concerning issue with respect to cyberbullying is that the age of the offenders goes from as youthful as eight to the lawful adult age of eighteen and past. We will utilize a User Identity for enrollment on the system, one should give identity proof for enlisting on the system, else they won't be able to create an account. With this feature, we will actually be able to check the issues of fake accounts and furthermore, cyber-bullying will be controlled as far as possible as user accounts will be directly connected to their unique personality. This system will be useful for society and the victims. (Divyashree & Deepashree, 2016).

In May of 2001, violently hostile messages maligning and embarrassing a secondary school sophomore young lady who suffered from obesity and multiple sclerosis were posted anonymously on an online message board related to a local high school in Dallas, Texas. In no time, the bullying moved over to the actual world as the casualty's vehicle was vandalized, obscenities were composed on the walkway before her home, and a bottle loaded up with acid was tossed at her front door—which incidentally burned her mom. This model clearly portrays how bullying on the web can prompt actual mischief disconnected. (Patchin & Hinduja, 2006).

The site Formspring.me is an inquiry-and-answer based site where users straightforwardly welcome others to ask and answer inquiries. What makes this site particularly inclined to Cyberbullying is the feature to be anonymous. (Kontostathis, Reynolds, Garron & Edwards, 2013). The name, biodata and links were manually entered by the client who made the page (the Formspring.me account) so we can't confirm the legitimacy of the data in those fields. (Kontostathis, Reynolds, Garron & Edwards, 2013).

Techs like age/identity verification, require storing personal information, which raises security concerns. Observing online behaviour or automatically analyzing communication on the web may invade privacy. Likewise, prohibitive technology could violate the right to the freedom of articulation. Youngsters' privacy and their right to the freedom of articulation should be adjusted against the expected advantages of Internet safety technologies. (Zwaan, Dignum, Jonker & Hof, 2014).

The genuine reason for fake accounts is the low limitations to get such a record and the shortfall of legitimate verifications of user identities. The identities of by far most of the users on Twitter are not checked. Twitter's verification program is shut. Verification happens just for select users, partners and advertisers. (Tsoutsanis, 2012). Today, users sign on to most social media sites like Facebook and Twitter through weak identities, i.e., unverified accounts that don't require users to demonstrate that their online characters match their real-world identities. Weak verification brings down the sign-on barriers for users, offering users a specific degree of anonymity, however, they leave the sites vulnerable to fake accounts or Sybil assaults. (Goga, Venkatadri & Gummadi, 2015).

Facebook's endeavours in checking the genuine identity of users are also limited. As of late, Facebook declared that it will offer a "Verified Accounts" program for chosen clients. This is, notwithstanding, restricted to conspicuous well-known people and isn't available to standard users. From a policy point of view, one can puzzle over whether web organizations like Facebook or Twitter ought to have a guardian obligation to (all the more intently) verify the identity of their users. Considering the impact of social media today, there is a lot to be said in favour of such a commitment. Without legitimate verification, Twitter and Facebook fakes are digging in for the long haul. (Tsoutsanis, 2012).

Some bots copy ordinary people's profiles to participate in malignant exercises like follower extortion. (Goga, Venkatadri & Gummadi, 2015). It tends to be particularly difficult to recognize abusers when they are impersonating someone else. On top of this, the cyberbullying that happens over Twitter has become extremely pervasive and a worry for many people. (Al-Garadi, Varathan & Ravana, 2016).

Research Methodology

The study aims to find the presumed effects of mandating user verification among the public and their perception of cyberbullying. The study also aims to find the extent of awareness people have of cyberbullying. This study also analyses the participants' view on trolling as cyberbullying and anonymity as a cause for cyberbullying. It requires an online survey, adapting a quantitative research design. The online survey consists of 5 multiple-choice questions and 21 questions with a 5-point Likert scale response excluding 4 demographic variables. The survey is aimed at collecting data from 197 people through convenience sampling. The questions used are tabulated in Table 1.
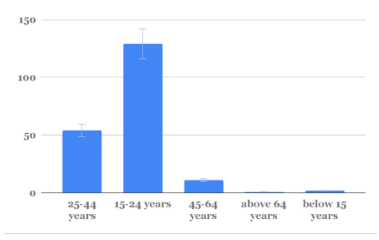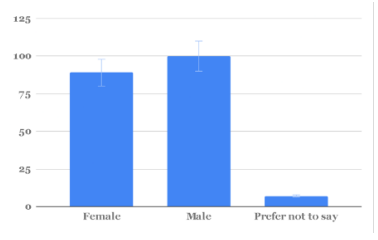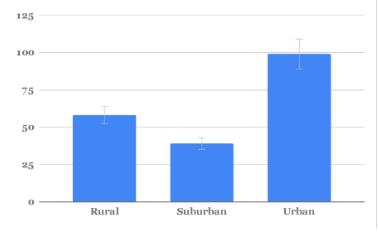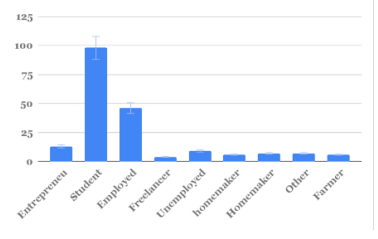
Variables	Questions
Demographics	1. Age group 2. Gender 3. Locality 4. Occupation
Cyberbullying Awareness	1. Cyberbullying is an act of sending a text message with words that are full of anger and frontal. 2. Cyberbullying is an action taken such as sending interruption messages on email, short messages and text messages on social networks that are carried out continuously. 3. Cyberbullying perpetrators usually pretend to be other people and send bad messages or status. 4. Cyberbullying is done by spreading the secrets of other people, or personal photos of others to spread the ugliness or privacy of that person. 5. Cyberbullying usually persuades someone with deception to get his secret or personal photo, which could one day be used as a weapon to blackmail or threaten. 6. Cyberbullying is an intentional and cruel act of removing someone from an online group. 7. Cyberbullying activities involve disturbing and defaming someone's reputation intensely to terror the victim.
Time Spent	1. How much time on average do you spend on social media per day?
Bully & Victim	1. I have bullied people on social media. 2. I have been a victim of cyberbullying

Anonymity	1. The ability to hide behind the screens gives courage to cyberbullies. 2. The anonymity in online results in increased cyberbullying.
Perception on Trolling	1. Trolling a friend on social media is not bullying. Strongly agree. 2. Trolling a stranger on social media is not bullying. Strongly 3. Even if it's a friendly tease, it's considered cyberbullying when the person gets hurt. Reverse code.
Effects	1. Cyberbullying has alarming effects. 2. Cyberbullying affects the mental health of the victim. 3. Victims of Cyber-bullying will be afraid to use social media in the future.
Response	1. How will you react to cyberbullying?
User Verification	1. Making User Verification Mandatory in social media will violate my privacy. 2. Making User Verification Mandatory in social media will be a threat to security. 3. Making User Verification Mandatory in social media will violate the freedom of expression of the users. 4. Making User Verification Mandatory in social media is a good idea. 5. Making User Verification Mandatory in social media will lower the creation of fake accounts. 6. Making User Verification Mandatory in social media will lower cyberbullying.
Support for policy	1. If the government came up with a policy to mandate user verification for social media accounts, would you support it?

Data Analysis

Descriptive Statistics -Simple pictorial representations of significant responses are presented below. The responses include demographic variables i.e., Age, Gender, Locality, Occupation and other variables including anonymity, trolling, effects, responses and presumed effects. We have also presented the counts of responses of participants who confessed if they have bullied others or if they have been victims of bullying. At the end

of this section we have presented the responses to the direct question "If the government came up with a policy to mandate user verification for social media accounts, would you support it?"

Demographics	
Figure 1.1.1 Count on Age group	**Figure 1.1.2** Count on Gender
Figure 1.1.3 Count on Locality	**Figure 1.1.4** Count on Occupation
Bully and Victim	
Figure 1.2.1 I have bullied people on social media.	**Figure 1.2.2** I have been bullied by people on social media.

Anonymity & Trolling

Figure 1.3.1 The anonymity in online results in increased cyberbullying.
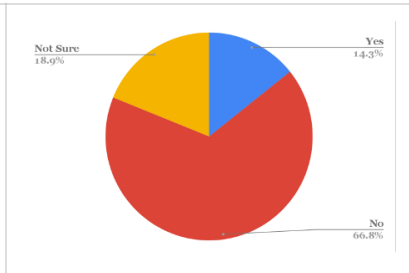
Figure 1.3.2 Trolling a stranger on social media is not bullying
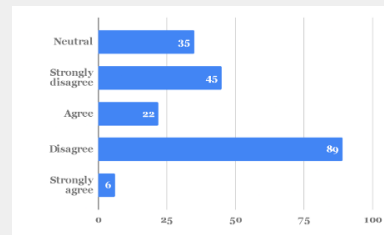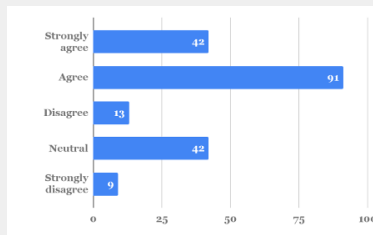
Effects & Response

Figure 1.4.1 Cyberbullying has alarming effects
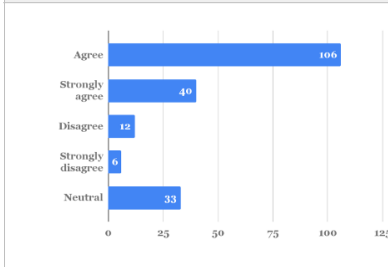
Figure 1.4.2 How will you react to cyberbullying?
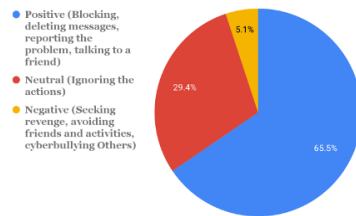
Presumed Effects

Figure 1.5.1 Making User Verification Mandatory in social media will violate my privacy.
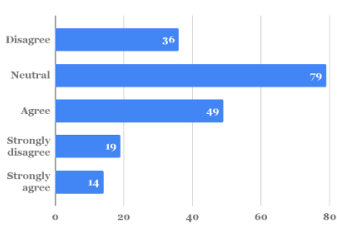
Figure 1.5.2 Making User Verification Mandatory in social media will be a threat to security.
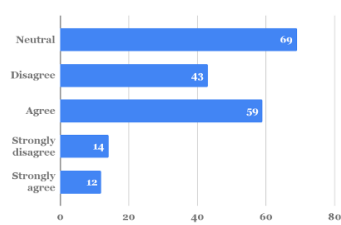
Figure 1.5.3 Making User Verification Mandatory in social media will violate the freedom of expression of the users.
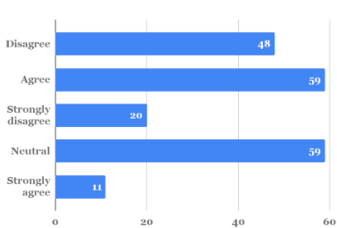
Figure 1.5.4 Making User Verification Mandatory in social media is a good idea.
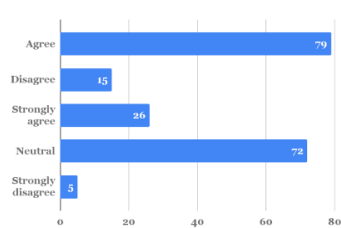
Figure 1.5.5 Making User Verification Mandatory in social media will lower the creation of fake accounts.
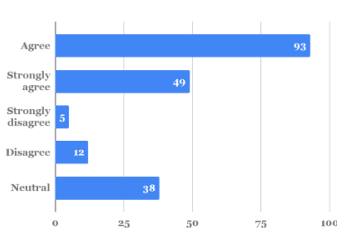
Figure 1.5.6 Making User Verification Mandatory in social media will lower cyberbullying.
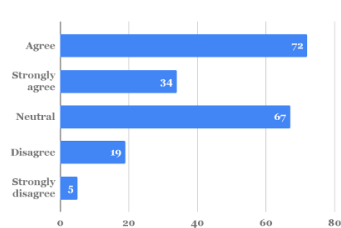
Figure 1.7 If the government came up with a policy to mandate user verification for social media accounts, would you support it?
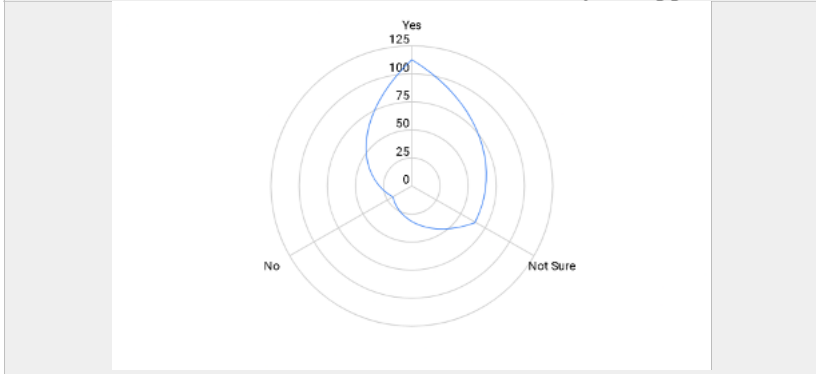
Hypothesis and Tests

Table 2 Hypothesis and Tests used

Hypothesis	Test
The demographic variable Age group has an association with dependent variables Cyberbullying Awareness, Time Spent, Anonymity, Perception on Trolling, Cyberbullying Effects and Opinion on user verification.	One way ANOVA
The demographic variable Gender has an association with dependent variables Cyberbullying Awareness, Time Spent, Anonymity, Perception of Trolling, Cyberbullying Effects and Opinion on user verification.	One way ANOVA
The demographic variable Locality has an association with dependent variables Cyberbullying Awareness, Time Spent, Anonymity, Perception on Trolling, Cyberbullying Effects and Opinion on user verification.	One way ANOVA

The demographic variable Occupation has an association with dependent variables Cyberbullying Awareness, Time Spent, Anonymity, Perception on Trolling, Cyberbullying Effects and Opinion on user verification.	One way ANOVA
The relationship between Cyberbullying Awareness, Time Spent, Anonymity, Perception on Trolling, Cyberbullying Effects and Opinion on user verification.	Correlation test

The variance between Age and dependent variables

The following will tell us the variance of demographic variable AGE to dependent variables, Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception.

Table 3.1.1 Variance between Age and dependent variables

	Sum Sq	Mean Sq	F value	Pr(>F)
Age Group vs Cyberbullying Awareness	0.87	0.8721	1.418	0.235
Age Group vs Time Spent	12.6	12.573	7.361	0.00726 **
Age Group vs Anonymity	4.59	4.590	5.211	0.0235 *
Age Group vs Perception on trolling	1.41	1.4129	3.596	0.0594 .
Age Group vs Cyberbullying Effects	2.17	2.1704	4.011	0.0466 *
Age Group vs Opinion on User Verification	0.11	0.1109	0.297	0.587

The Pr(>F) gives the p-value for this test.

1. The P-value of Age Group and Cyberbullying Awareness is 0.235. This indicates that there is no significant variance between Age and Cyberbullying Awareness.
2. The P-value of Age Group and Time Spent is 0.00726. This indicates that there is a significant variance between Age and Time Spent.
3. The P-value of Age Group and Anonymity is 0.0235. This indicates that there is a significant variance between Age and Anonymity.
4. The P-value of Age Group and Perception on trolling is 0.0594. This indicates that there is no significant variance between Age and Perception of trolling.
5. The P-value of Age Group and Cyberbullying Effects is 0.0466. This indicates that there is a significant variance between Age and Cyberbullying Effects.
6. The P-value of Age Group and Opinion on user verification is 0.587. This indicates that there is no significant variance between Age and Opinion on user verification.

Boxplots that present a graphical representation of variance of demographic variable AGE to dependent variables (Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception) is given below. The numbers 1-5 of the horizontal axis and the numbers 1-5 of the vertical axis in Figures 2.1.1-2.1.6 refer to the terms as mentioned in Tables 3.1.2.

Figure 2.1.1 Age Group vs Cyberbullying Awareness

Figure 2.1.2 Age Group vs Time Spent

Figure 2.1.3 Age Group vs Anonymity

Figure 2.1.4 Age Group vs Perception on trolling

Figure 2.1.5 Age Group vs Cyberbullying Effects

Figure 2.1.6 Age Group vs Opinion on User Verification

Table 3.1.2 Reference for Horizontal in Figures 2.1.1-2.1.6

Horizontal	1 -> Below 15	2 -> 15 - 24	3 -> 25 - 44	4 -> 45 - 64	5 -> Above 65
Vertical	1 -> Strongly Disagree	2 -> Disagree	3 -> Neutral	4 -> Agree	5 -> Strongly Agree

The variance between Gender and dependent variables

The following will tell us the variance of demographic variable GENDER to dependent variables, Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception.
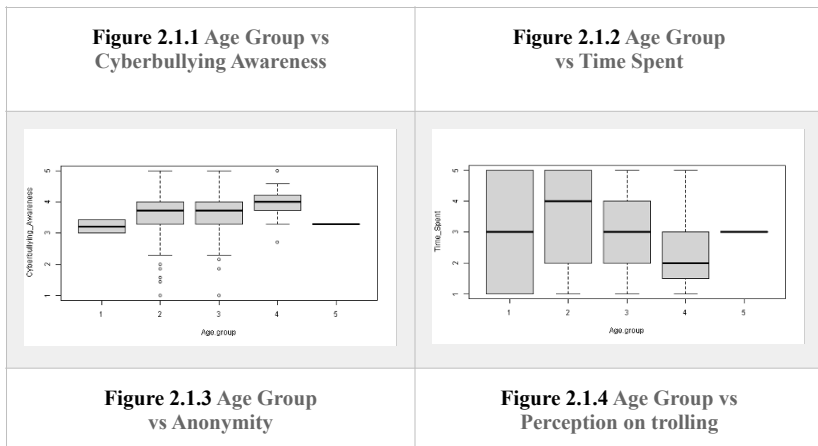
Table 3.2.1 Variance between Gender and dependent variables

	Sum Sq	Mean Sq	F value	Pr(>F)
Gender vs Cyberbullying Awareness	2.02	2.0225	3.32	0.07 .

Gender vs Time Spent	0.4	0.4019	0.227	0.634
Gender vs Anonymity	1.45	1.4526	1.62	0.205
Gender vs Perception on Trolling	0.28	0.2773	0.695	0.405
Gender vs Cyberbullying Effects	0.19	0.1896	0.344	0.558
Gender vs Opinion on User Verification	0.02	0.0244	0.065	0.799

The Pr(>F) gives the p-value for this test.

1. The P-value of Gender and Cyberbullying Awareness is 0.07. This indicates that there is no significant variance between Gender and Cyberbullying Awareness.
2. The P-value of Gender and Time Spent is 0.00726. This indicates that there is a significant variance between Gender and Time Spent.
3. The P-value of Gender and Anonymity is 0.205. This indicates that there is no significant variance between Gender and Anonymity.
4. The P-value of Gender and Perception on trolling is 0.405. This indicates that there is no significant variance between Gender and Perception in trolling.
5. The P-value of Gender and Cyberbullying Effects is 0.558. This indicates that there is no significant variance between Gender and Cyberbullying Effects.
6. The P-value of Gender and Opinion on User Verification is 0.799. This indicates that there is no significant variance between Gender and Opinion on user verification.

Boxplots that present a graphical representation of variance of demographic variable GENDER to dependent variables (Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception) is given below. The numbers 1-3 of the horizontal axis and the numbers 1-5 of the vertical axis in Figures 2.2.1-2.2.6 refer to the terms as mentioned in Tables 3.2.2a and 3.2.2b.
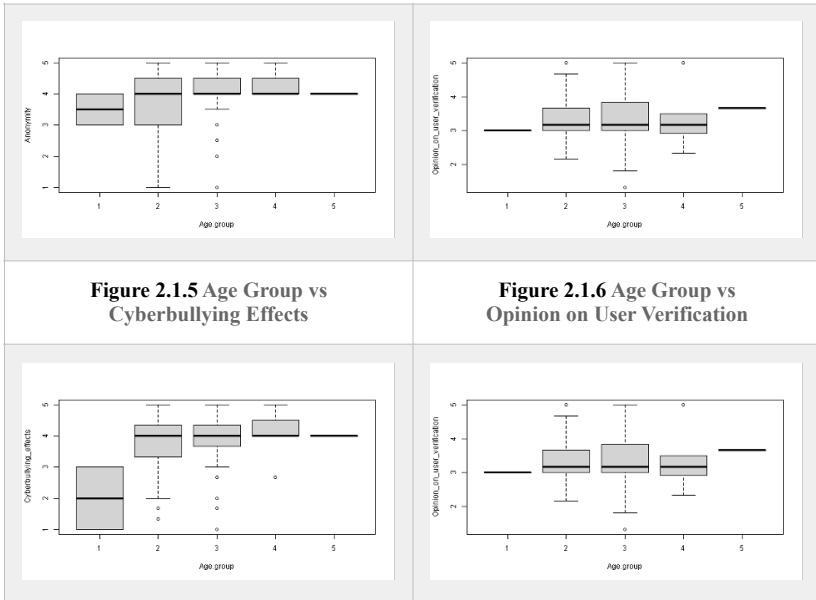
Figure 2.2.1 Gender vs Cyberbullying Awareness	**Figure 2.2.2** Gender vs Time Spent
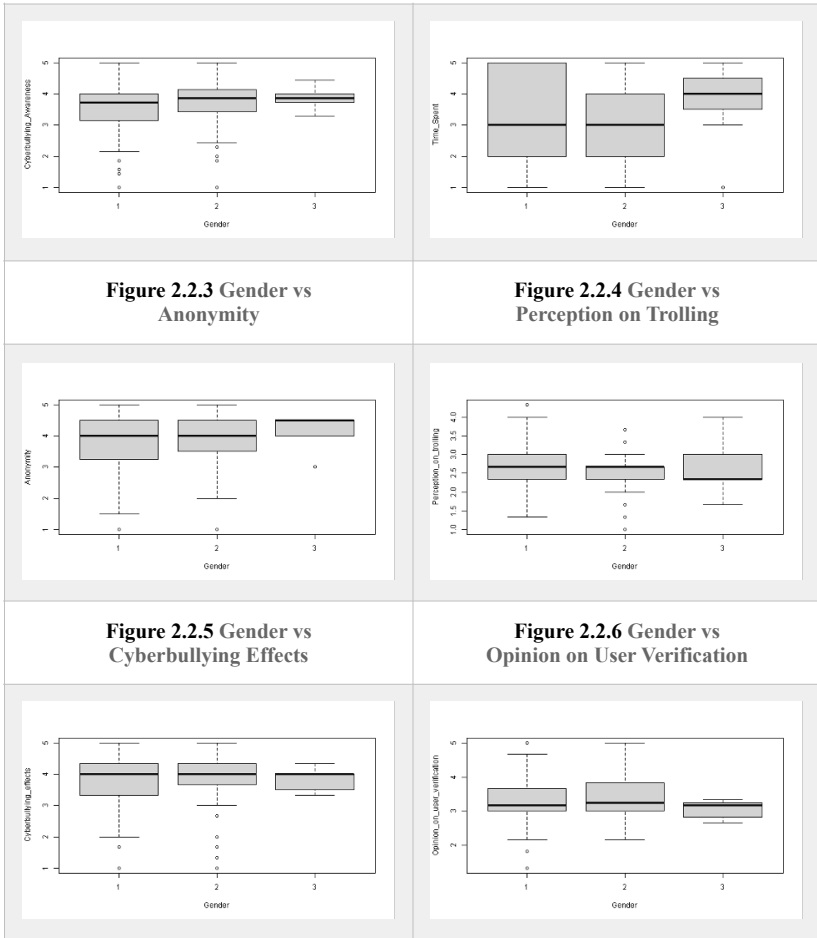
Figure 2.2.3 Gender vs Anonymity	Figure 2.2.4 Gender vs Perception on Trolling

Figure 2.2.5 Gender vs Cyberbullying Effects	Figure 2.2.6 Gender vs Opinion on User Verification

Table 3.2.2a Reference for Horizontal axis in Figures 2.2.1-2.2.6

Horizontal	1 -> Male	2 -> Female	3 -> Prefer not to say

Table 3.2.2b Reference for Vertical axis in Figures 2.2.1-2.2.6

Vertical	1 -> Strongly Disagree	2 -> Disagree	3 -> Neutral	4 -> Agree	5 -> Strongly Agree

The variance between Locality and dependent variables
The following will tell us the variance of demographic variable Locality to dependent variables, Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception.

Table 3.3.1 Variance between Locality and dependent variables

	Sum Sq	Mean Sq	F value	Pr(>F)
Locality vs Cyberbullying Awareness	2.02	2.0225	3.32	0.354
Locality vs Time Spent	7.2	7.159	4.124	0.0436 *
Locality vs Anonymity	0.14	0.1430	0.158	0.691
Locality vs Perception on trolling	0.46	0.4606	1.158	0.283
Locality vs Cyberbullying Effects	0.21	0.2103	0.381	0.538
Locality vs Opinion On user verification	0.00	0.0003	0.001	0.976

The Pr(>F) gives the p-value for this test.

1. The P-value of Locality and Cyberbullying Awareness is 0.354. This indicates that there is no significant variance between Locality and Cyberbullying Awareness.
2. The P-value of Locality and Time Spent is 0.0436. This indicates that there is a significant variance between Locality and Time Spent.
3. The P-value of Locality and Anonymity is 0.691. This indicates that there is no significant variance between Locality and Anonymity.
4. The P-value of Locality and Perception on trolling is 0.283. This indicates that there is no significant variance between Locality and Perception on trolling.
5. The P-value of Locality and Cyberbullying Effects is 0.538. This indicates that there is no significant variance between Locality and Cyberbullying Effects.

6. The P-value of Locality and Opinion on user verification is 0.976. This indicates that there is no significant variance between Locality and Opinion on user verification.

Boxplots that present a graphical representation of variance of demographic variable LOCALITY to dependent variables (Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception) is given below. The numbers 1-3 of the horizontal axis and the numbers 1-5 of the vertical axis in Figures 2.3.1-2.3.6 refer to the terms as mentioned in Tables 3.3.2a and 3.3.2b.

Figure 2.3.1 Cyberbullying Awareness	**Figure 2.3.2** Locality vs Time Spent
Figure 2.3.3 Locality vs Anonymity	**Figure 2.3.4** Locality vs Perception on trolling

Figure 2.3.5 Locality vs
Cyberbullying Effects

Figure 2.3.6 Locality vs Opinion
On user verification

Table 3.3.2a Reference for Horizontal axis in Figures 2.3.1-2.3.6

Horizontal	1 -> Urban	2 -> Rural	3 -> Suburban

Table 3.3.2b Reference for Vertical axis in Figures 2.4.1-2.4.6

Vertical	1 -> Strongly Disagree	2 -> Disagree	3 -> Neutral	4 -> Agree	5 -> Strongly Agree

The variance between Occupation and dependent variables
The following will tell us the variance of demographic variable Occupation to dependent variables, Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception.

Table 3.4.1 Variance between Occupation and dependent variables

	Sum Sq	Mean Sq	F value	Pr(>F)
Occupation vs Cyberbullying Awareness	1.62	1.6161	2.644	0.106
Occupation vs Time Spent	0.0	0.0302	0.017	0.896
Occupation vs Anonymity	2.21	2.2101	2.475	0.117
Occupation vs Perception on trolling	0.00	0.0017	0.004	0.948
Occupation vs Cyberbullying Effects	0.58	0.5776	1.052	0.306
Occupation vs Opinion on user verification	0.28	0.2754	0.739	0.391

The Pr(>F) gives the p-value for this test.

1. The P-value of Occupation and Cyberbullying Awareness is 0.106. This indicates that there is no significant variance between Occupation and Cyberbullying Awareness.
2. The P-value of Occupation and Time Spent is 0.896. This indicates that there is no significant variance between Occupation and Time Spent.
3. The P-value of Occupation and Anonymity is 0.117. This indicates that there is no significant variance between Occupation and Anonymity.
4. The P-value of Occupation and Perception on trolling is 0.948. This indicates that there is no significant variance between Occupation and Perception on trolling.
5. The P-value of Occupation and Cyberbullying Effects is 0.306. This indicates that there is no significant variance between Occupation and Cyberbullying Effects.

6.   The P-value of Occupation and Opinion on user verification is 0.391. This indicates that there is no significant variance between Occupation and Opinion on user verification.

Boxplots that present a graphical representation of variance of demographic variable OCCUPATION to dependent variables (Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception) is given below. The numbers 1-8 of the horizontal axis and the numbers 1-5 of the vertical axis in Figures 2.4.1-2.4.6 refer to the terms as mentioned in Tables 3.4.2a and 3.4.2b.
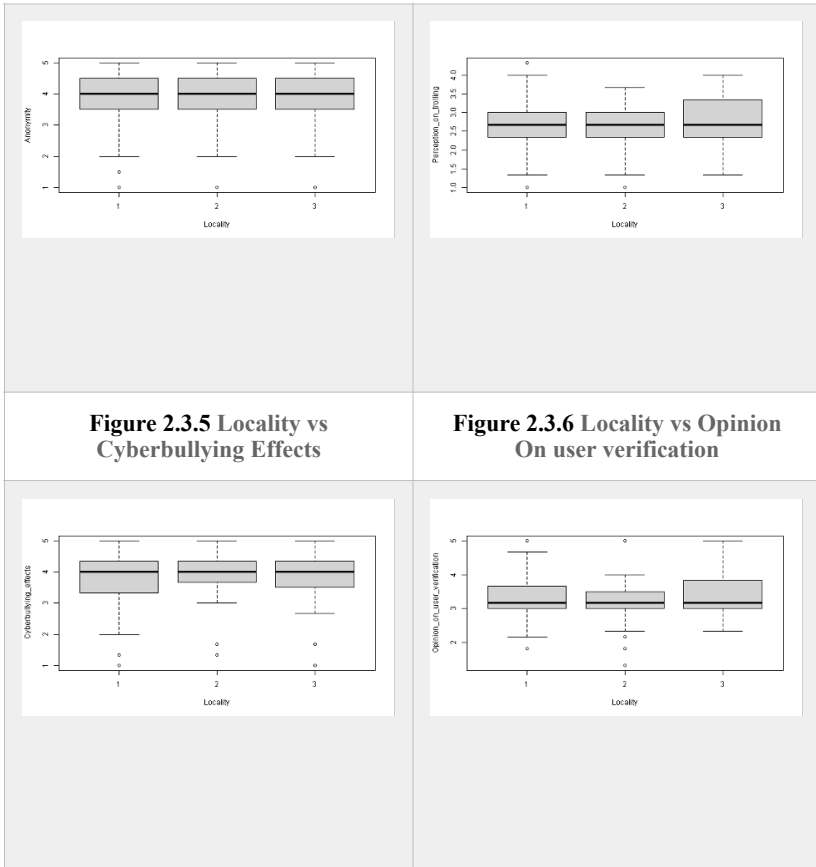
Figure 2.4.1 Occupation vs Cyberbullying Awareness	**Figure 2.4.2** Occupation vs Time Spent
Figure 2.4.3 Occupation vs Anonymity	**Figure 2.4.4** Occupation vs Perception on trolling
Figure 2.4.5 Occupation vs Cyberbullying Effects	**Figure 2.4.6** Occupation vs Opinion on user verification
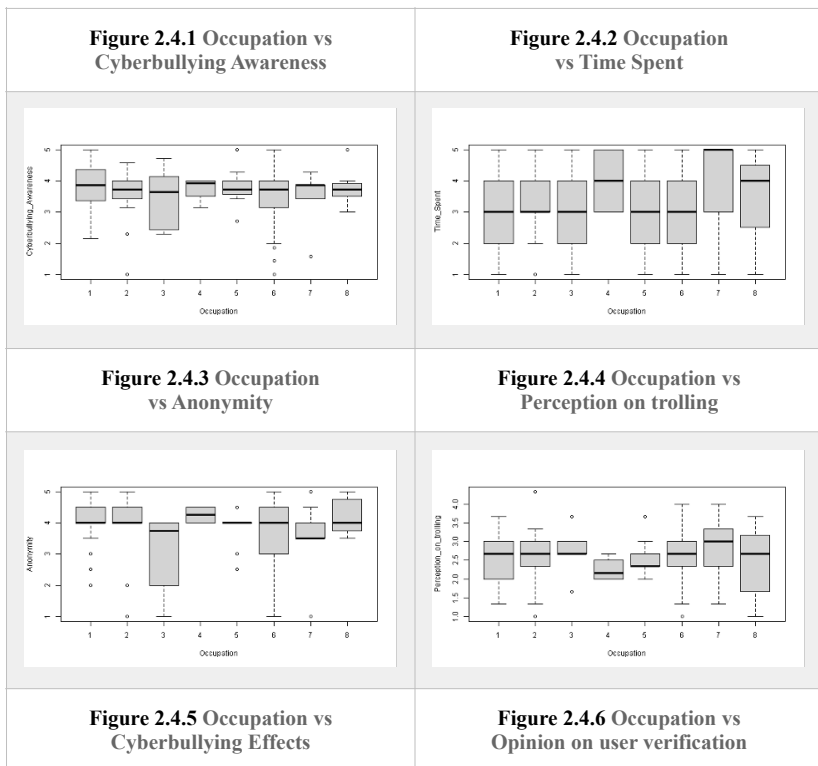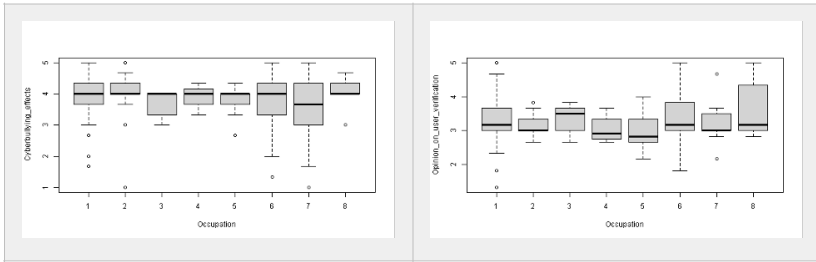
Table 3.4.2a Reference for horizontal axis in Figures 2.4.1-2.4.6

Horizontal	1 -> Employed	2 -> Entrepreneur	3 -> Suburban	4 -> Freelancer
Horizontal	5 -> Homemaker	6-> Student	7-> Unemployment	8 -> Other

Table 3.4.2b Reference for vertical axis in Figures 2.4.1-2.4.6

Vertical	1 -> Strongly Disagree	2 -> Disagree	3 -> Neutral	4 -> Agree	5 -> Strongly Agree

A bivariate correlation test was carried to test the relationship between the variables Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception. Pearson correlation test was used.

Table 4 Bivariate Correlation Test Results

Pearson Correlation	Cyber bullying Awareness	Time Spent	Anonymity	Perception On trolling	Cyber bullying effects	Opinion on user verification
Cyber bullying Awareness	1	-0.034	.582**	0.001	.603**	0.058
Time Spent		1	-0.023	-0.054	0.079	-0.016
Anonymity			1	-0.059	.615**	0.124
Perception on trolling				1	-0.106	-0.085
Cyberbullying effects					1	0.129
Opinion on user verification						1

According to the results,
- Cyberbullying Awareness is positively correlated with the variable Anonymity.
- Cyberbullying Awareness is positively correlated with the variable cyberbullying Effects.
- Cyberbullying Effects is positively correlated with the variable Anonymity.

There is no negative significant relationship with any of the variables. There is also no significant relationship between the rest of the variables.

Relationship between Cyberbullying Awareness, Perception on trolling and Opinion on User verification.

The variable *Opinion on User verification* is degrouped into two variables Privacy concerns and Supporting user verification to find the correlation among themselves and correlation between them and Cyberbullying Awareness & Perception on trolling.

Figure 3.1 Privacy concerns vs Cyberbullying Awareness

Figure 3.2 Supporting User Verification vs Cyberbullying Awareness

Figure 3.3 Privacy concern vs Perception on Trolling

Figure 3.4 Supporting User Verification vs Perception on Trolling

Figure 3.5 Supporting User Verification vs Privacy concern
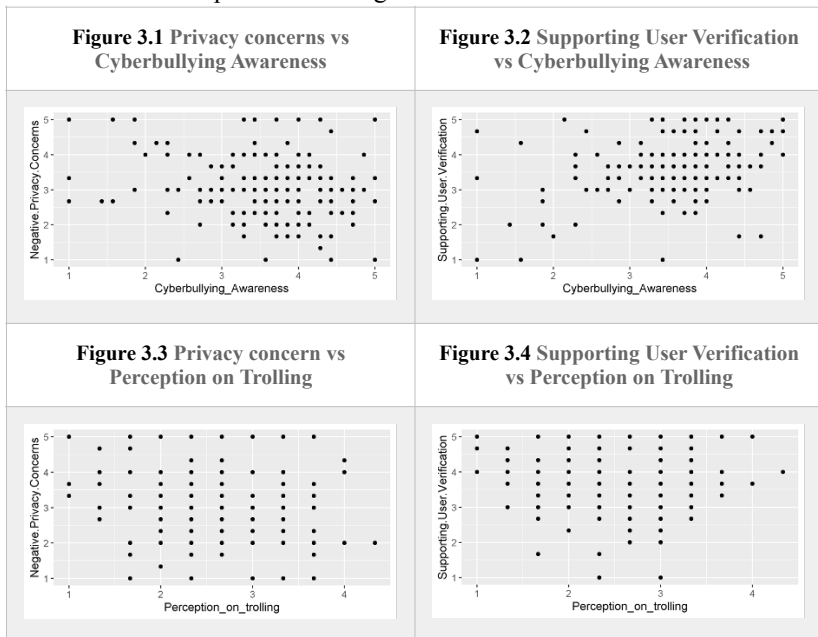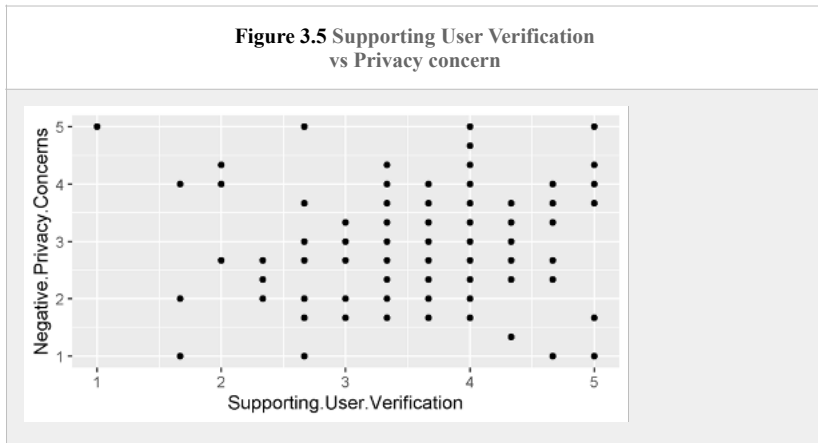
The numbers 1-5 of the horizontal and vertical axis in Figures 3.1-3.5 refer to the terms as mentioned in Table 5.

Table 5 Reference for horizontal and vertical axis in Figures 3.1-3.5

1 -> Strongly Disagree	2 -> Disagree	3 -> Neutral	4 -> Agree	5 -> Strongly Agree

Pearson's product-moment correlation test is done between variables Privacy Concerns and Cyberbullying Awareness. The test returns -0.2468133, a weak negative correlation between privacy concerns and cyberbullying awareness. A plot portraying the same is provided in Figure 3.1.

Pearson's product-moment correlation test is done between variables Supporting User Verification and Cyberbullying Awareness. The test returns 0.3690079, a weak positive correlation between Supporting User Verification and cyberbullying awareness. A plot portraying the same is provided in Figure 3.2.

Pearson's product-moment correlation test has been done between variables Privacy Concerns and Perception of trolling. The test returns -0.1214091, with no correlation between Privacy Concerns and Perception of trolling. A plot portraying the same is provided in Figure 3.3.

Pearson's product-moment correlation test has been done between variables Supporting User Verification and Perception of trolling. The test returns

0.005582902, with no correlation between Supporting User Verification and Perception of trolling. A plot portraying the same is provided in Figure 3.4.

Pearson's product-moment correlation test has been done between variables Supporting User Verification and Privacy Concerns. The test returns 0.05729795, with no correlation between Supporting User Verification and Privacy Concerns. A plot portraying the same is provided in Figure 3.5.

Discussion

The purpose of this study is to find the extent of awareness people have on cyberbullying and their opinion on making user verification to curb cyberbullying. This study also analyses the participants' view on trolling as cyberbullying and anonymity as a cause for cyberbullying. The combined mean score of 197 participants is 3.608412. This states that the participants have a basic knowledge of what is cyberbullying, which makes this study valid to an extent.

Of 197 respondents, 106 agreed and 40 strongly agreed that cyberbullying has alarming effects. Of 197 participants, 91 have agreed and 42 have strongly agreed that anonymity over the internet causes cyberbullying. Of 197 participants, 89 disagreed and 45 strongly disagreed that trolling a stranger doesn't come under cyberbullying. From the data collected, we can understand that 6.1% of respondents have said they have bullied people online. Also, 14.3% of our respondents have said that they have been a victim of bullying.

This has been verified with an overall bivariate correlation test that has been done among variables Time Spent, Perception on Trolling, Cyberbullying Effects and User Verification perception. The results show Cyberbullying Awareness and Anonymity as a cause for cyberbullying positively correlated. The test shows Cyberbullying Awareness is positively correlated with the variable cyberbullying Effects. The tests show Cyberbullying Awareness is positively correlated with the variable cyberbullying Effects.

We further divided the variable User verification into positive and negative opinions. Positive being Supporting user verification and negative being showing Privacy concerns. We studied the relationships between Supporting user verification in mandating user verification and Privacy concerns in mandating user verification. The test shows 0.05729795, with no correlation between variables. We studied the relationships between the Privacy

concerns in mandating user verification and the Perception of trolling among people. The test shows -0.1214091, with no correlation between variables. We studied the relationships between Supporting user verification in mandating user verification and Perception of trolling. The test shows 0.005582902, with no correlation between variables.

We studied the relationships between the Privacy concerns in mandating user verification and Cyberbullying Awareness among people. The test shows -0.2468133, a weak negative correlation. We studied the relationships between Supporting user verification in mandating user verification and Cyberbullying Awareness among people. The test shows 0.3690079, a weak positive correlation. From this, we can understand that persons who showed a basic awareness of cyberbullying, have shown a weak positive attitude towards supporting user verification.

Also, from a direct question asking the respondent if they would support the policy mandating user verification for social media, 19 answered No, 65 answered Not Sure and 113 answered Yes.

Conclusion

Cyberspace is just as complex as physical space and has all the natures that are prevalent in the physical world. Be it good or bad. We tend to raise our voices more against injustice in social media, and we tend to do more anti-social things on social media. In the cyber world, we do things that we don't normally do in the physical world. Such things can be toxic and hurtful to others. This calls for a regulation that is similar to the ones seen in the physical world. These regulations should not restrict our freedom of expression. At the same time, we need to find the anti-social elements and try them for their behaviour.

The main reason that is associated with people being more antisocial or more prosocial is the courage or a false shield provided by the anonymity that is omnipresent in social media. Mandating user verification in social media is expected to wipe away that image of anonymity. The consciousness of being able to be identified easily is expected to prevent anti-social acts.

Our study is designed to inquire how people presume the effects of mandating user verification to curb cyberbullying. Our findings state that people in the majority have an average understanding of cyberbullying and

its effects. A little more than 50% of respondents said they will support mandating user verification. We could understand that the participants with cyberbullying awareness are positive that cyberbullying has harmful effects. The participants with cyberbullying awareness have also opined that anonymity has a role in inducing cyberbullying.

The study has limitations such as not measuring the perception of cyberbullying with any standard scales. A proper scale should be prepared and wider studies should be conducted in future with diverse respondents. Though many support the policy, some find issues regarding security and privacy. Activists in social media with anti-establishment views might feed even more concerns into people's thoughts. More awareness and experts' advice need to be brought to the public's knowledge before drafting such a policy.

Conflict of interest
The authors declare that there is no conflict of interest.

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'Patient' and 'Survivor': The Antipoles in the Context of Acid Attacks on Women in India

Kanika Sharma
National Forensic Sciences University, Gandhinagar

Abstract

The present article focuses on the intersection between society and medical institution which is a shared perimeter where the information is exchanged among the survivors, medical institution and civil society organisations. In order to understand this 'intersection', which creates the antipoles of 'patient' and 'survivor', reconstructive surgery for the survivors is outlined to explain the process of this diversion. The explanation of procedures of reconstructive surgery as described in medicine textbooks at undergraduate level is utilised for content analysis. This article brings forth the contradictions and similarities in universality and particularity debate in the medical establishment and the society.

Key words: acid attack and reconstructive surgery, sts and medicine, surgery and textbooks, medicine and acid attack, patient and surgery, acid attack, reconstructive surgery

1. Introduction

Reconstructive surgery is just not a singular term. It consists of many techniques and depends on the site on which it needs to be performed.[1] The terms being given to this procedure also vary. On the other hand, acid attacks are described in some textbooks and in some it is not even entitled to have separate space. The question arises is how these two concepts are dealt with in the textbooks and other reference books, and articles in the undergraduate course of medicine. What meanings are attached to the concept of burns and for its surgery? What are the positions given to acid attacks and reconstructive surgery as individual concepts? The pivotal area

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[1] Annemarie Mol in her book *The Body Multiple: Ontology in Medical Practice* (2002) where she traces the concept of enactment of a disease namely atherosclerosis. In this book, she argues that "'a single object may appear to be more than one'" (ibid: vii) that is there are many layers to an object which is considered as one. This multiplicity of an object can be traced through the analysis of texts which are provided in the platform related to that object.

of research would be to analyse whether acid attacks play any role in shaping of reconstructive surgery as a technology.

To elucidate this notion, books referred in undergraduate syllabi of medicine (Bachelor of Medicine Bachelor of Surgery, MBBS) in relation to acid attacks and reconstructive surgery. Textbooks are the entry points for the understanding of a discipline. As Kuhn had stated that, '"the scientific achievements... are recounted... by scientific textbooks... [which] expound the body of accepted theory, illustrate... successful applications"' (Kuhn, 1970: 10). These can be considered as focal points for the '"historical contingencies"' that influence the scientific practice and advance the regularity of vocabulary, linguistics and scientific idiom (Olesko, 2006: 873). In other words, they provide with a structure and stabilised knowledge which creates a foundation that should be known by the people engaged with that discipline. For the present work, undergraduate medical textbooks and reference books will be analysed. These books provide the beginning for the actual understanding of the discipline. MBBS is a five and a half year course in India. The first year deals with the basics of anatomy, physiology and biochemistry which is termed as pre-clinical phase, then the next one and a half year deals with the para-clinical subjects which include forensic medicine, and in the third year students are introduced to surgery as a subject[2]. The student is made to be accustomed with the structure of the body, medicine for community and legal aspects of medical work for two and a half years. The basic framework for the 'working' of the doctor (who could be a medicine specialist or surgeon) is set. The textbooks and reference books provide with the 'orientation' of the future doctor/medical professional.

2. Acid Attacks in Forensic Medicine and Toxicology
The field of medicine which directly deals with the acid attacks is forensic medicine and toxicology.[3] Forensic medicine is considered as para-clinical, that is, parallel to clinical medicine (clinical is surgery and its allied subjects) which is introduced in the second year of undergraduate course of MBBS. Acid attacks are dealt with in the field of toxicology[4] as

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[2]Given in the syllabus for medicine in All India Institute of Medical Sciences, 2003.

[3]This branch of medicine directly gets involved with law and together they form the basis for justice in the criminal justice system, see further for the historical development of forensic medicine in Smith, 1951 and Wecht, 2005.

[4]Toxicology is the study of poisons. It has been specially dealt along with the forensic medicine.

'vitriolage'.[5] The description of vitriolage is provided in the chapter titled as 'Corrosives', 'Corrosive Poisons' and 'Caustics'. Corrosives which are being mentioned in the texts are the acids or bases depending on their properties. In this section, the various textbooks assigned in the curriculum define these terms as '"... substance that has corroding and destructive effect on the human body"' (Vij, 2011; 453). The terms 'corrosive', 'destroy', 'necrosis of tissue' signifies the negative impact on the body if it comes in contact with these substances. The brutal invasion of the 'living' tissue resulting in the destruction or even death just as acid is thrown it invades the 'living' person's identity making the person a by-product of its side-effects such as scars, fused neck, loss of vital organs like eyes and disfigurement. And sometimes it even leads to death of the person. The mechanism when any part of the body comes in contact with the corrosive substance described in the forensic textbooks is the water being extracted out from the tissue resulting into 'coagulation necrosis'[6] and formation of eschar.[7] These descriptions are provided at the level of cells or tissue, for instance necrosis is accidental 'cell' death and when acid comes into contact with the tissue cell loses its water content as acid has the property of extricating it and as a defense mechanism to this shock eschar is formed which tries to prevent it. However, scientific disciplines while defining these processes forget about the mentioning of their effects on the person as a whole; the fragmentations which are drawn to analyse the working of certain substances lose the site where these reactions are happening, that is the body of a person who has to undergo the social interactions with this 'visible' irreversible damage and who has to face the stigma which becomes part of the routine.

The corrosives are divided into acidic and basic. The former is further divided into inorganic[8] and organic[9] acid. The basic corrosives are alkaline

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[5] Vitriolage has been discussed in chapter 1 of the thesis.

[6] Necrosis is an accidental cell death and when acid is thrown there is denaturation of intracellular proteins in response to this action. (http://medical-dictionary.thefreedictionary.com/coagulation+necrosis accessed on 17th march, 2016).

[7] Third degree burns which are also known as full thickness burns leads formation of a thick band which is leathery and non-elastic (Tiwari, 2012).

[8] These are also known as mineral acid. These are strong acids and origin is from inorganic compounds and does not have any carbon atoms and soluble in water.

[9] They have biological origin and are weaker in comparison of inorganic acids. They contain hydrogen and carbon atoms with other elements and are insoluble in water.

in nature. Inorganic corrosives are the concern here since sulfuric acid, hydrochloric acid and nitric acid are examples. And these acids are mostly used in acid attacks. As the properties are discussed separately of these acids, the emphasis is on the ingestion of acid, that is, as poison. While describing the characteristics of sulphuric acid, 'vitriolage' is introduced as a topic of short description which elucidates the throwing of acids on face or body with the intention to disfigure or blind the person. The characteristics of determining that it is a vitriolage, for instance, are formation of brown scars. In some books, there is a mention of the section of IPC (320) under which the punishment is given. A recent policy change has been made due to Laxmi's PIL in 2006 (asking for regulation of acid) acid was included in the Poisons Act, 1919.[10] This inclusion was in the background of scientific knowledge which studies it as a poison. The irony is that the decision by Supreme Court was made on the social issue by public litigation on acid attacks and the knowledge of science was applied in order to understand it. For forensic medicine to be mandatory included in the curriculum at the undergraduate level of medicine was a High Court's decision.[11] Supreme Court has also mentioned in one of its decisions[12] that when the opinion of the expert is accepted this opinion becomes the viewpoint of the court. In this context science and judiciary involvement can be seen in the form of policy changes.

Forensic medicine is in direct relation with the judiciary and as the name is originated from latin *forensis* which means 'of and for forum' (Rao, 2010). It is also known as legal medicine depending on its usage by the authors like Wecht, 2005, or it is synonymous with medical jurisprudence, and state medicine (Mittal et al., 2007). Since forensic medicine is the application of knowledge for the purpose of courts, so the books are aligned according to the law of the land. For instance, India has acquisitorial or adversarial justice system.[13] Though the Indian judicial system has colonial roots, the books which are being referred are from Indian authors. The other books

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[10]An act to regulate and control the sale and use of poisons which are described in poisons list.

[11]Muniammal vs The Superintendent of Police on 16 February, 2008, Point 30, 31 and 32 which describes the need of forensic expertise in the cases and the emphasis on curricula of undergraduate course and the training of a medical graduate to handle medico-legal cases. (http://indiankanoon.org/doc/1392199/ accessed on 15/01/2020).

[12]Madan Gopal Kakkad vs Naval Dubey and Anr on 29 April, 1992 (http://indiankanoon.org/doc/1314858/ accessed on 15/01/2020).

[13]in which both the parties prosecution and defence further their facts in front of the judge who is neutral (Aggarwal et al., 2007).

that provide an understanding of the knowledge-field in the undergraduate medicine mostly have foreign authors. The Indian authored textbooks are used just to understand a few topics that are specific to some aspects relevant to Indian context. The books which are assigned is not only for the students who are pursuing the course but also for the postgraduate students, lawyers, medical practitioners, investigative officers, forensic experts and the judiciary. In *Muniammal vs The Superintendent of Police*, 2008, the judge has referred to the books authored by Modi, Krishna Reddy (point 20 in the case) which are also assigned in the syllabus. The forensic expert is called at the crime of scene for investigations. In acid attack cases, the forensic expert deals with the evidences such as clothing, or presence of a bottle in which acid is present that is being sent by the police for establishing the properties of the chemical whereas the victim is taken to the hospital where plastic surgeon deals with this medico-legal case by preparing case sheets at the emergency ward and work with police for its investigation. In India, the forensic experts are only referred at the beginning or in the courts only if it requires testimony from the expert.

3. (Acid Attacks) in Surgery Textbooks

The sub title itself is a misnomer since the surgical textbooks do not deal with the acid attacks or 'chemical assaults'.[14] But it is the surgeons who deal with the formalities of medico-legal case at the emergency ward and in the further treatment. The surgery captures the major portion in MBBS curriculum beginning from IIIrd year and is the clinical practice around which all the other information about other branches is utilised, on the other hand, forensic medicine is just introduced at the preliminary level. In the surgical textbooks, it is the section 'burns' which describes about its types. Bailey and Love's *Short Practice of Surgery* is the textbook which is assigned for understanding surgery. Though there are other books by Indian authors such as, *The Concise Textbook of Surgery* by S. Das; *Manipal Manual of Surgery* by Shenoy; nevertheless, they are not followed so rigorously as *Bailey and Love's Short Practice of Surgery.* The reason cited by the students for its usage is that it is comprehensive and deals with all the topics that are required to study. The book was at its 26th edition at the time of study.[15] The pointer of the surgery books is that there is no separate title for acid attacks or vitriolage as was introduced in the forensic medicine

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[14]Chemical assault is majorly used in medical terminology instead of acid attacks or vitriolage (which is used in forensic medicine). In India, surgical books do not recognise the terminology. Even in the prescription of the survivors the surgeons identify it as 'chemical burn'.

[15]Now the book is at its 27th edition.

textbooks. Rather there is a chapter on burns which describe the types of burns such as thermal, electrical and then a small introduction of 'chemical burns/injuries'. The terms 'burns/injuries' vary in the editions of the textbook and other reference books.

The first edition was published in 1932 and the recent that is twenty-sixth edition in 2013. Almost all the editions have emphasized on the contributions of science and technology varying from surgical, diagnostic and therapeutic procedures which are utilized for clinical practice along with art of healing. There has been a drastic change in categorization of burns in the various editions. To begin with, in the previous editions burns was composed with the chapter on skin titled "Skin. Burns. Skin Grafting" or "Skin. Burns", till the twenty second edition. The most probable reason for keeping burns with description of skin and its various conditions that may happen is that skin is the first line of defense as well as the first organ which comes in contact with any type of burns. Chemical burns in the eighteenth and nineteenth edition are described in a short paragraph in an instructive mode about its first aid of acid, alkali and phosphorous burns. Instruction for first aid becomes clearer in twenty first edition of washing the burns till litmus paper does not react.[16] These burns are mentioned in the treatment programme for burns whereas from twenty second edition there is categorization of chemical burns under the subtitle 'Other Burns' with cold injury[17], friction burns[18] and burns due to ionizing radiation. The causes, incidence, effect and first aid had been explained. The causes include accidental industrial and laboratories burns. Twenty third edition introduces a chapter devoted to burns and separating the reconstructive surgery for another chapter in this volume. The introduction of burns chapter is written in a sensitive manner assessing the '"suddenness of the accident…pain, damage, fear and reaction"' (Russell et al. 2000:188). It advises to treat burns cases as '"like any other trauma case"' (ibid: 188). In this edition, the area of private sphere that is domestic accidents is identified with industrial accidents and the strength of the substance, its span of contact and the quantity is recognized. The intensity of penetration of the substance is also acknowledged and the effect of chemicals is mentioned with the first aid of diluting the chemical. The trend of providing burns a separate space continues to its twenty sixth edition. Though in the twenty-fifth edition the

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[16]Litmus paper test is to determine the acid and alkali quotient in a mixture (http://www.collinsdictionary.com/dictionary/english/litmus-test accessed on 15/01/2020).

[17]Tissue damage from cold for eg. Frostbite (Mann et al. 1995).

[18]Tissue damage due to heat and abrasion (ibid).

various chapters are categorized under various titles and burns is arranged under trauma and is sustained in its recent edition. From the twenty fourth edition onwards, there is a stabilisation of chemical burns section as chemical injuries. The terms 'burns and injury' are employed similarly. The stabilised version is explained with the approximate number of chemicals available in the industry but the burden of chemical causing burns is devalued by the use of terms like *occasionally*. The two ways chemical injuries are given as corrosion of the skin or by poisoning. The first aid is consistent from the previous editions of profuse rinsing with water. The next step is to ascertain the characteristic of chemical, its strength and any risk for patient's health. In the reference books on surgery, the emphasis is on accidental aspect of chemicals in the domestic space and more to the industrial accidents. The noticeable viewpoint is that there is no mention of 'chemical assaults' per se in the textbook or in reference books of surgery.

By analysing the different texts in relation to acid attacks it can be deduced that in undergraduate medical course different subjects perceive distinct meanings, likewise forensic medicine is more engaged with the poisoning by acid that is ingestion of acid and surgery textbooks are more engaged with the accidental injuries. Chemical assaults find its place as vitriolage in a short paragraph at the end of description of sulphuric acid poisoning whereas surgery textbooks don't even mention that. Forensic medicine identifies acid throwing from the Glasgow industrial riots in 1820s. Chemical injury made its presence in the eighteenth edition which was published in 1981. The most probable reason of entry of this topic could be Iran-Iraq chemical weapon war from 1980-1988 in which there were many disastrous effects on the human species and thousands of casualties were reported (Ali, 2001). The most significant part of these books is the coloured, black and white and line photographs for illustration of various practices. In interview with one of the surgeons in response to recognition of acid attack survivors by the Supreme Court he said, '"…doing surgery on acid attack victims for past thirty years and have *boxes of photographs*"' (emphasis is mine). In the preface or in the foreword of surgical and forensic textbooks there is a great deal of stress on the '"clinical photographs…which is very much a *Bailey & Love* tradition"' (Williams et al., 2008: Preface). '"Extensive placement of photographs, illustrations…"' (Vij, 2011: Preface). Photographs and illustrations are the most prominent tools in science (Wilder, 2009). Since forensic medicine textbooks are Indian authored, the photographs are majorly of Indian males showing various types of burns that could impact

the body parts. In the burns chapter of the surgical textbook[19] (which is foreign authored), it is the male body which has been highlighted in the illustrated diagram while describing about the percentage of burn area to be calculated. And also, the body is fragmented into different parts to show the types of burns and the people or their parts are white. The photograph is taken either inside the operation theater where the patient is anaesthetised or in the ward where '"he"' is not unconscious. Some of the photographs portray a white kid showing the type of burn. In the chapter on Plastic and Reconstructive Surgery, to show the severity of the burn, photograph of the male black child is presented and his half smile could be seen in it. In this chapter many photographs of male South Asian body parts are present to show the various procedures being done for the surgery. Wherever there is a procedure on the face, it is depicted on a female white woman. This textbook is widely used due to its photographic images of step by step depiction of the procedures as it helps students to understand and visualise the procedure.

When I went to interview one of the surgeons and told him about my area of research, the first question was '"why burns as a whole are not being studied?"' and the other surgeon, Head of Department of one of the renowned government hospital said, '"Other burns do not get more importance over acid attacks"'. According to him, '"acid attack is just *one type* of burns which affects the limited area and causes disfigurement but the other burns are ghastlier and cause *death*"' (emphasis is mine). These questions here could imply why so much of insistence is given on these attacks and other burns are not being questioned and organizations which raise voice for them. It is this friction that is happening between medical establishments and civil society organizations (CSOs). Whenever there is an attack on a person and that person is taken to a public hospital rather than private hospital there forms a bee line of media persons, CSOs outside hospital which creates a pressure on hospital authorities and whenever they are questioned about the treatment of the victim the surgeons of govt. hospitals are prevented to give any kind of answers because of the sensitivity. This friction can be attributed to social implications attached with acid attacked disfigured person. One surgeon has rightly called it as '"social death"'. For them it is the 'burnt' body which needs treatment. These views could be ingrained in the fact that in the textbooks and reference books the chapter on burns takes it as a whole and the treatment for all burns is the same, the major difference is at the level of first aid. In the editions of the book with the description of burns there is a section on

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[19]The description of photographs is from the recent edition (twenty-sixth edition).

general treatment to preview the intensity of damage and stabilizing the person's vitals and then skin grafting is provided and there is no distinction for the different types of burns surgery. Skin grafting is the procedure in which skin is taken from normal skin to be applied on the affected area (Rosin, 1991).

The step by step uniformity is being followed and undergraduates are being trained to understand these practices as universal or uniform. In interview with the surgeons, the same procedure as given in books is highlighted. As mentioned above the difference of treatment for any burns differ at the stage of first aid though to recognize the burn litmus test is done in some hospitals. On being asked about the treatment, quoting one of the surgeons, '"Philosophy is same for all plastic surgeons but the management of patient depends on the plastic surgeon and the patient"'. This implies that any plastic surgeon would save the vitals first and then will think about the reconstructive procedures. If, for instance, a patient comes with the acid burns the clothes are removed first, if remained on the patient after in contact with the acid. One of the survivors, recounts that she was wearing a salwar kameez which was silk, '"I was wearing a new dress whose texture was silk... As the acid was thrown the silk cloth melted and got constricted"'. One of the probable reasons of removal of clothes could be to reduce the impact of acid on the body as acid gets soaked by the clothes. [20]

And immediately washed with running water to neutralize the effect of acid with the body; patient's burn is analyzed and given medicine or IV fluids and nutrition is being taken care of and no antibiotics is given only analgesics is provided to manage pain; skin grafting is only done after the skin is healed and there is no infection…the important part is dressing wherein dressing is done with an ointment of silver sulphadiazine every alternate days and the procedure is followed by reconstructive surgery almost after an year of the attack and also depends on the availability of beds in the hospitals.

The texts define a procedure which is to be followed when the surgeons are encountered with the chemical burns. But these procedures depend on the institutional infrastructure and the surgeons who are present at the time. As much as it depends on the abovementioned factors it also depends on the burns of the patient and the patient him/herself. Some of the patients who come to the emergency room of the public hospital have delayed first aid

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[20]This demands a lot of tacit knowledge being generated at the level of practice, which is not declared but is conveyed through the practicing community.

care at the primary health centres, or sometimes the doctor on duty does not understand the immediate requirement of the first aid. Acid attack occurred to a girl named Sita[21] in a rural area from north India and was shifted to the hospital in the nearby city due to the non-availability of proper treatment in the local clinic. I went to the city hospital soon after to visit her. I asked Sita about what treatment had been given and how was her physical condition to the concerned doctor. The doctor replied, "The burns had been bandaged with the sulphadizine ointment and there were 65% burns covering her face, upper torso and hands. Her face and body have swollen so nothing can be done right now except for dressing". When I asked him about whether first aid had been given, he was shocked and replied, '"...As soon as she came to the hospital, we put her on the saline"'. The girl has been transported from the place of attack to the city hospital in a record time as this case had garnered a lot of attention and political parties as well as various NGOs working in this area got involved at a very early stage. The lapse of one step in the procedure could have many reasons, for instance, pressure from the politicians, social workers, or laxity from the doctor's side. In another instance, an acid attack survivor was not able to enter into the burns department of a renowned government hospital due to lack of beds in that department and in addition the staff mistreated her for being attacked by acid.

4. Plastic Reconstructive Surgery or Reconstructive Plastic Surgery

The two terminologies in the title describes the trajectory of engulfing phenomenon of an umbrella term 'plastic surgery'. Reconstructive surgeries were accounted in *Susruta Samhita* and in it is described the procedures nasal (rhinoplasty), ear lobule (lobuloplasty) and hare lip reconstruction (Singh and Vyas, 2011: 1445; Santoni-Rugio and Sykes, 2007: 170-171; Suhas, 2011). The rhinoplasty was made popular as Sushruta's Samhita describes a lot of diseases and their treatment, duties of the physician and various surgical related operations. Sushruta in his text has delineated the course of action for a surgery[22], the surgical instruments required for surgery are described[23], how the cuts are made[24] and also the description of burns

[21]Name changed.

[22]The technique of surgery is divided in eight categories (incision, excision, scraping, puncturing, searching or probing, extracting, secreting fluids and suturing) described in chapter V of Samhita (Bhishagratna, 1907, p. 172).

[23]This is described in chapter VII and VIII (ibid).

[24]In chapter IX (ibid).

which are categorised on the basis of degree of burns.[25] The degree of burns is characterised just as described in the textbooks which are assigned undergraduates of medicine (first degree, second degree and third degree burns). For the present work, the most important description is the use of skin flaps that he describes in chapter XVI (Bhishagratna, 1907: 142-154). He had also enumerated the procedure to correct the defective earlobes with the use of skin from the cheek (Bhishagratna, 1907: 147). The procedure is described as '"slicing off a patch of healthy flesh from one of the regions of the cheeks and in adhering it to one of the severed lobes of the ears which is more elongated on its anterior side than the other (Plastic-operations[26])"' (ibid: 147). In the same chapter he has described the procedure for artificial nose: '"First the leaf of a creeper, long and broad enough to fully cover the whole of the severed or clipped off part, should be gathered ; and a patch of living flesh, equal in dimension to the preceding leaf, should be sliced off (from down upward) from the region of the cheek and, after scarifying it with a knife, swiftly adhered to the severed nose... the adhesion of the severed parts has been fully effected and then insert two small pipes into the nostrils to facilitate respiration, and to prevent the adhesioned flesh from hanging down... and the nose should be enveloped in Karpasa cotton and several times sprinkled over with the refined oil of pure sesamum. Clarified butter should be given to the patient for drink, and he (sic) should be anointed with oil"' (ibid: 153-154). The skin flap that has been explained is still relevant, which is known as the pedicle flap[27] (Singh and Vyas, 2011: 1447), though the place of taking the flesh for reconstruction has seen a transformation from cheek to forehead and to underarm. One of the survivors said on asked about her nose reconstruction, '"...my right arm was raised and bandaged with the head for two months so that the skin from the underarm could expand and could be used for reconstruction of nose"'. The flap used in the survivor is the tubed pedicle flap. In the other survivor, to prevent the nostrils from melting away 'two tubes' were inserted as described in *Samhita* as is utilised in the contemporary period.

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[25]In chapter XII (ibid).

[26]The term 'Plastic operations' used in this english translation is written to accommodate the texts so as to be recognized in the mainstream text of Plastic surgery. The term 'plastic' was coined by Pierre Joseph Desault in 1798 (Thompson, 2011). He gave the name 'Plastic' to the surgery whose main objective was to alter the body's appearance (Hurst, 2015).

[27]It is defined in the textbooks assigned (Bailey and Love's Short Practice of Surgery- 19th edition) as a "flap of skin with some subcutaneous tissue, which remains attached to the body of one of its margins through which it retains a blood supply (that is by a pedicle or a stalk) until it has a united in its new position" (Rains and Ritchie, 1984:137).

Figure 3: The nostrils are kept open by the pipes

Source: Photo from Stop Acid Attacks Archive (Permission taken from the SAA campaign)[The image has been blurred by the author to maintatin the anonymity of the survivor]

The above photo shows the two pipes which were inserted so that the survivor can breathe through them and preventing nostrils from fusing. The insertion of pipes is similar to the procedure described by Sushruta for nasal reconstruction. In the medical prescription of the survivor, the surgeon had prescribed her to massage her burn of the hand with coconut oil and while interviewing the survivors, one of them described; '"... My mother use to rub my arm with coconut oil day and night so that I can straighten my arm"'. This knowledge of applying oil is predominantly practiced in Indian contexts as even in *Samhita*, Sushruta has written the use of oil after reconstructive surgery.

4.1 In the Textbook, *Bailey and Love's Short Practice of Surgery*
A separate chapter was introduced titled 'Plastic and Reconstructive Surgery, Skin lesions' from twenty third[28] edition. In the previous editions from

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[28]Twenty second edition is not available but the contents of this edition were available and contents were same as the twenty first edition, that is, there was no separate chapter for the plastic and reconstructive surgery.

sixteenth edition till nineteenth edition,[29] the chapter title consisted of skin grafting along with skin and burns. But in twenty first edition, skin grafting is removed from the title as the description of burn wound care was detailed with each procedure. The description from the dressings to be done and for how many days and then the skin grafting to be done and its method is described.[30] The nutrition that needs to be provided and a mathematical equation is provided so that surgeon can decide the diet of the patient.[31] More emphasis was led on the infection that could create problem for the graft so antibiotic therapy is explained with physiotherapy and the need of psychological support[32] is mentioned and late complications are laid down. To reduce the effect of contractures that had been highlighted in previous editions is now been described with a solution, that is, use of pressure garment which are made from elasticated material. The other technique which was introduced in the textbook was the use of 'tissue expanders' so that the skin could be transposed over the contracture that has formed. It is the insertion of these techniques which were missed from earlier texts introduced the term 'reconstructive surgery' in the twenty first edition as sub-title. As the innovations in this arena increased so was the requirement of this chapter.

Plastic surgery is defined in this edition as '"repair or reconstruction of lost, injured or deformed parts of the body chiefly by transfer of tissue"' (Russell et al., 2000: 163). As the definition suggests plastic surgery is mostly a reparative procedure. The body which has deviated from the 'norm' due to any reason needs to be 'corrected' so as to make its place in the 'normality' of the society. As in the textbooks itself it is '"encouraged"' that the burn patients should '"return to normal life"' (Mann and Russell, 1991:191). In

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[29]Twentieth edition of Bailey and Love's Short Practice of Surgery is not available.

[30]In the previous editions it was just the method of skin grafting and different types of flaps and grafts were explained and detailed, though they mentioned about the contractures that form afterwards.

[31]The equation is known as Formula of Sutherland: For adults: Protein: 1g X kg body weight + 3g X per cent burn. Calories: 20K cal X kg body weight + 70 kcal X percent burn; per 24 hrs (Rosin, 1991).

[32]The psychological support is described as "the patients becoming depressed and encouragement and reassurance needs to be provided to prevent their becoming *lethargic* and *anorexic*" (ibid: 190, emphasis is mine). The title has been given for mental health per se but as the description could be seen how mental health was required for the body to recover, as the use of terms 'lethargic' and 'anorexic' shows that surgeons are made aware if they want the work that has been done on the patient to be worth they must deal with these problems of mental health so that the body could be able to recuperate.

extended definition of this surgery is '"(the) moulding and reshaping of tissues"' (Russell et al., 2000: 163), which suggests malleability of the body which can be given any kind of shape as desired. This pliability feature of the body becomes the basis for the plastic surgery. The surgeon explained plastic surgery as an umbrella term depending on its usage, '"from [P]lastic surgery...plastic comes into picture, word has come from '*plastikos*' that is Greek word which means things to mould what we do in plastic surgery is moulding of tissue, a moulding of tissue is either for reconstruction or for improving *cosmesis*. When you use it for reconstruction the term 'reconstructive surgery' comes when you use for *cosmesis* cosmetic surgery so you can say plastic surgery broadly as two divisions, when you are moulding the tissue for either restoration of form , function or for improvement of aesthesis or cosmesis"'. Another surgeon explains the same that '"plastic surgery is a broader term which is further divided into reconstructive and cosmetic surgery"'. Though when I read the scientific texts or the department of this specialization visited the titles of the chapters or books are 'Plastic and reconstructive surgery', 'Reconstructive burn surgery', 'Reconstructive plastic surgery' whereas name of the departments are 'Department of Burns and Plastic Surgery', 'Department of Burns and Plastic and Maxillofacial Surgery', 'Department of Plastic, Reconstructive & Aesthetic Surgery', 'Department of Burns, Plastic, Maxillofacial and Microvascular surgery'. About being asked regarding the changes in the titles of the department, surgeon replied, '" ... the addition of surgeries apart from plastic is the depiction of expertise in the surgery"'.

In this edition, the outlining of the priorities for the reconstruction which is healing, function and cosmetic has been made. Cosmetic as a term, which is described more as an 'appearance', is the last priority for the plastic surgeon rather should be the last priority. As one of the surgeons said,

> You will not find any department of cosmetic surgery in India. It is always a plastic and cosmetic surgery department, if people are practicing cosmetic surgery alone but all government department cosmetic part is not that field. It is basically the reconstructive part is bigger than cosmetic for all because lot of trauma and burns patient. Most of the private set up departments they have the 'cosmetic' as prominent word because that is cosmetic surgery, especially in west it was more lucrative because of money involved.[33]

This part of government hospitals being more of reconstructive saving the burnt patient, one of the surgeons was not particularly happy about how one of his patients went to private hospitals for further cosmetic treatment of

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[33]8th June, 2015.

hers without informing him. He said, '"we do the preliminary work and then the patients go to private hospitals cosmetic purposes"'. It was like the government surgeons prepare the canvas and the painting is done by the surgeons of private hospitals, that is, they save the patient when directly bought to them in emergency, the dressing is done and vital parts of the body is saved and when it is the turn for proper reconstructive procedures survivors go for private hospitals.

In the twenty fifth and twenty sixth (the recent one) edition of the textbook is mentioned the historical context of the surgery. Very short paragraphs about the historical context by citing the Egyptian papyrus and the rhinoplasty of the Sushruta are given. In this it is mentioned that the nose was reconstructed in India by forehead flap which is not correct. In *Samhita* itself it is mentioned that it used cheek for the flaps for nose reconstruction. However, the transition from use of cheek flap to forehead flap was available in India only (see Santoni-Rugio and Sykes, 2007; Rana and Arora, 2002, p. 76). The major figures who had made their place in the textbook are Al-Zahrawi[34] and Sir Harold Gilles[35] and the significance of anaesthesia. In the textbook first world war has more significance as it was

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[34]He wrote Al-Tasrif (The Method) which is the first illustrated scientific textbook, designs of over 200 surgical instruments and developed the *art* of plastic surgery and was more concerned with the cosmetic results (Santoni-Rugio and Sykes, 2007). Plastic surgery is considered as an art for some of the surgeons who are more inclined towards the cosmetic surgery. One of the senior residents said, "We are artistic people...[Plastic surgery] is an art with a scientific background but we do not follow rigid rules. We give to patients' requests and tailor the treatment accordingly". On asking about the plastic surgeons being called quack in earlier times, he responded, "...we use to fix noses of women and men whose noses were cut as a punishment for adultery...that's why the bias". According to him, since noses were cut due to punishment so the society was not happy with this kind of help from the medicine so they called them 'quacks' for sidelining them. Though 'quacks' in history of plastic surgery had no idea of surgical procedures and their experiments by injecting paraffin into the body of the patient for beauty enhancement caused for the problems of the patient (Santoni-Rugio and Sykes, 2007).

[35]He is considered as the 'father of modern plastic surgery'. He had worked mainly on facial reconstructions and published a book 'Plastic surgery of the Face' in 1920 (http://www.sciencemuseum.org.uk/broughttolife/objects/display?id=6116 accessed on 15/01/2020) where he had described about his experiences in the wartime, that is World War I and he popularized the much use of tubed pedicle flap and established plastic surgery as a specialty (Santoni-Rugio and Sykes, 2007) as he opened many units for the reconstruction purposes (http://www.sciencemuseum.org.uk/broughttolife/objects/display?id=6116 accessed on 16 June 2016). It is considered that he was the one who developed this technique but it is contested as some authors have pointed that there were three other people apart from him who had developed this technique but due to chaos of World War I they might were not able to share it (see Milton, 1969, p. 53 and Santoni-Rugio and Sykes, 2007).

considered the revival of reconstructive surgery with the focus on appearance also.

These editions are 'International Students' edition' since it is published in London, United Kingdom. In the text of last two editions it is mentioned how reconstructive plastic surgery is most needed in 'developing nations' due to road, war and domestic injury which can minimize the effects. The surgeon exclaims, "Bailey and Love is there from *ages*. There were *no books* for surgery textbook except this, when we were studying MBBS twenty-five years back. It is *universally* followed and shows effect of *colonialism*. Now also, there is no *good substitute* for the book" (emphases are mine). The no questioning attitude of the surgeons themselves shows how the textbook and procedures which were meant to be universally followed are embedded in the study structure of the medical students. For the colonialism he explains how the plastic surgery units were developed in colonial period, so the textbook shows that impact. He describes the history of plastic surgery in India,

> at the time of independence, there was no plastic surgery unit in India. There were a few medical college, there were four surgeons they were selected from different parts of India to learn plastic surgery they all went to the UK. Out of those four one came here also Dr. R.N. Sharma the department existed in Lucknow, Nagpur, Mumbai and finally Delhi. So they had four departments and all these people they started teaching and training in those departments I mean they gradually picked up new department schemes, right now a plastic surgery has got around say in UP we have 3 departments all over India, more than 50 units of plastic surgery and at least more than 100 trainees are coming round per year as plastic surgeons so basically that was only 25 and we were 20s, in 2004 or 5 twenty five to thirty seats per year but recent increase in capacity of all these teaching programs now we have our own, plastic surgery training is like 3 year. [36]

The textbook from its twenty fifth edition had divided all of its contents in groups. Burns and the plastic and reconstructive surgery chapters are under the rubric of 'trauma'. There is no explicit mention of cosmetic surgery in the chapter as in the textbook more emphasis is on the function and correction. The irony is though India shows ancient history of reconstructive surgery but still it was not considered till the methods were recognized by the European surgeons and was accounted in a language which also needed to follow universality, that is, English.

4.2 Multiplicity of Reconstructive Surgery

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[36] 8th June, 2015.

As the plastic surgery departments emerged so does the techniques to perform procedures. The many layers are accorded with reconstructive surgery as the specialisations within this procedure increased. Even name of the departments was changed on these specialisations that has been described in the above section. The other way of showing how RS is not a unitary concept is by looking at many techniques that are considered the part of this surgery, such as, skin grafts, skin flaps, artificial skin and implants and prosthesis. These procedures have different types of techniques.

Figure 4: *Many layers of RS as a Procedure*
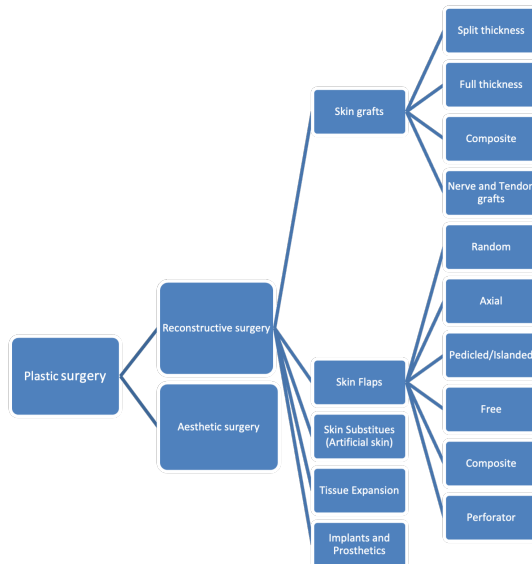
Source: Author's Compilation

Depending on the thickness of the tissue that needs to be transferred as graft divides the types of graft as shown in the figure. The skin flaps have their own blood supply when it is to be transferred to the affected area. The application of these techniques depends on the type of burns, depth of burns and the patient's vitals at the time.

India as a nation is still not open to innovative techniques of plastic surgery such as artificial skin and face transplantation. There is just the beginning of development of skin banks. One of the surgeon elucidates on why skin banks are not popular in India, '"The idea of skin banks is very new in this country and the concept of 'skin donation'[37] doesn't appeal to the people"'. He also mentioned about how people are afraid of doing anything with the body of the deceased claiming that it would affect the afterlife of the deceased. He also explains that, '"... (use of) artificial skin is also not possible due to socioeconomic conditions of our country. It is difficult for the burnt patient to afford tissue expanders[38] and ointments rather an artificial skin"'. Most of the burnt patients that he had done surgery on belonged to low socio-economic class making them dependent on the aid which can be given by the government and whatever resources they have. The resident in plastic surgery department also pointed, '"...there are not enough tissue expanders for all the burn patients and they can order a limited number of them"'. The face transplantation is a faraway thought in Indian context due to the abovementioned reasons.

5. Conclusion

The article discussed about the understanding of terminologies for both acid attacks and reconstructive surgery in the texts which are part of undergraduate medicine. The main focus was to analyse the relationship of RS and acid attacks. It can be concluded that acid attacks do not have considerable share of shaping reconstructive surgery as a procedure. In the texts, acid attacks have not made any profound impact but it is in the outer realm from the medical establishment that the furor is present. This uneasy relationship between the science and society creates a friction between them, which shows the complexity within the boundaries of this establishment. The orientation provided by the textbooks which are assigned can be seen present in the practice of the procedure. In both the medical

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[37]Skin donation is done after death and can be donated within six hours of the death (http://skindonation.in/facts.html accessed on 18 June 2016). The skin is harvested from the donor sites, that is, thighs and legs and is screened and evaluated so that it can be used for transplantation on burns' victim (ibid). This skin can help in deep burns where the skin of the patient is not enough so that infections can be prevented and the donated skin has a shelf life of about five years (As told while visiting the skin bank in National burns Centre, Mumbai).

[38] They help in regeneration of skin to an amount that can be utilized for the procedures of skin flaps and grafts. It can be round, rectangular, crescent and is made up of silicon elastomer bases (http://www.mentorwwllc.com/Documents/smooth_tissue_expander.pdf accessed on 18 June 2016).

disciplines which deal with these topics there is a short description of 'vitriolage' 'chemical injuries' exhibiting in their interviews.

There is a discord inside the medical specialties themselves. This conflict begins itself as the syllabus is set for the undergraduate course. The yardstick for dividing medicine in phases is the clinical medicine which primarily consists of surgery whereas forensic medicine comes under para-clinical phase. Though legality of the cases is taught through forensic medicine course but when it comes to practice it is the surgical specialist who deals with the filling up of medical legal proforma. Forensic expert has been rounded to their laboratories and investigation of the case. There is also disharmony at what needs to be done in case of acid being thrown or there is interaction with it in both the disciplines for the first aid. In the forensic it is instructed if acid is present needs to be washed with milk. On the other hand, surgery textbook instructs to wash the acid with plenty of water.

This article brings forth the contradictions and similarities in universality and particularity debate from sciences in the context with the society. Acid attacks altogether have a different spectrum outside the medicine. It has touched the 'emotional nerve' of the society and has changed its equations with the society. However, the 'patient' in the medicine is 'docile' and takes up an identity of 'survivor' only when outside of the medical institutions and struggles with its biosocial negotiations with the society.

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About the Contributors

Sindhu Eradi is currently working as a Reseracher, Curriculum Developer and Facilitator in Dubai, UAE. She is a final year doctoral level scholar in the field of media studies with MICA, Ahmadabad, India. She was a visiting scholar with Michigan State University, USA and a prior student of Tampere University, Finland.   Sindhu is also a Google and KHDA certified digital marketing practitioner, a certified competent communicator from Toastmasters USA and awardee for language skills from the Dale Carnagie Institute.

Dr. Radhika Khanna teaches in the School of Media and Communication, Pondicherry University and heads the Department of Electronic Media and Mass Communication. She is also the Director i/c, Educational Multimedia Research Centre (EMRC), Puducherry. An alumna of AJK MCRC, Jamia Millia Islamia with a specialisation in filmmaking and research in the pedagogy of cinema, she has been a Theatre-in-Education (TIE) facilitator and a freelance media professional since 1992. In academia since 2005, she has engaged learners with issues of gender, education and environment, especially through documentary films, journalism and theatre. She has recently developed a Massive Open Online Course (MOOC) on Photojournalism with 50 video lessons for GoI's free e-learning portal, SWAYAM.

Ramakrishnan D. is a Postgraduate research student in the Department of Media and Communication, Central University of Tamil Nadu, Thiruvarur, India. His area of interest is New media studies, Social media, Digital Communication

Dr. Shamala R. is Assistant Professor in the Department of Media and Communication, School of Communication, Central University of Tamil Nadu, India. Her research area is Radio communication, ICT and media, New media studies, Rural communication and Tribal communication.

About the Contributors

Malini Srinivasan is a PhD Research Scholar in the Department of Media and Communication, Central University of Tamil Nadu, Thiruvarur, India. Her area of interest is New media studies, ICT, Digital media studies and Rural communication.

Dr. Kanika Sharma is Assistant Professor (Criminology) in the School of Forensic Psychology at the National Forensic Sciences University, Gandhinagar.

Department of Communication
School of Interdisciplinary Studies
The English and Foreign Languages University
Tarnaka, Hyderabad 500007
India

www.efluniversity.ac.in