Coming to terms with biometrics in policing

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"Modern technology has dangers, but there should be hope that care and sophistication would transform investigation."

Ever since the police became a formal organisation nearly 150 years ago, there is global consensus that the police charter ought not to be restricted to a mere maintenance of peace in public places. It should focus equally on crime prevention and detection. Speaking of police handling of crime, the traditional argument of criminologists is that while preventing a crime is arduous and usually beyond human capacity (because of the dimensions and complexities of modern society), solving a crime is relatively easy.

Police history has shown up fault lines in law enforcement strategy in discharging the twin tasks. It is in the area of crime detection that the police in most nations have lost public confidence. Even police forces which have huge manpower and can afford to buy the latest technology have not exactly distinguished themselves in their efforts to boost success rates in solving crime — it is now between 30% and 40%. Except in sensational cases which have attracted public and media attention, the Indian police have also been guilty of underperformance.

Crime using knives continue to worry London's Metropolitan Police, while the frequency of gun violence is high in U.S. cities. All this despite robust and aggressive policing. While cases of grave sexual assault as in the Nirbhaya case have damaged the police's reputation as far as ensuring the safety of Indian women is concerned, . even allowing for substantial non-reporting of assaults on women, I believe there is a degree of enhanced sense of security among Indian women, attributable to some extent to greater police sensitivity and also to increased precautions being taken by women.

The two sides

However, there is a dismaying paradox here. Citizens no doubt demand newer crime control measures which will keep them safe. At the same time they resent productive and smarter police innovations in the field because of perceived danger to individual rights and privacy. Surprisingly, the campaign against police experiments has been spearheaded by some women activist groups. Their stand is that the end cannot and should not justify the means used by state agencies. This explains the sharp adverse responses, albeit only by a few groups, to a counter-crime facial recognition technology. This is the technology that seeks to make inroads into the underworld's ability to be elusive and their machinations in order to escape detection by the police radar.

Taking into account how criminals merge with the community to escape identification, the police in several countries have sought the help of expert security agencies to scan faces seen in public spaces. This is with a view, whenever necessary, to run them against available databases of faces used in crime fighting.

The resistance especially in the United States and the United Kingdom, against facial recognition software, has been baffling. Its modest use in India explains the lack of public discourse on the pros and cons of facial identification software.

Gauging the opposition

Opposition to facial recognition technology has come mainly from two groups. The first are those who believe that the software discriminates against minorities and ethnic groups, especially blacks and other non-whites. The suggestion is that there is a disproportionate number of black and non-white faces captured by this software if one considers their large numbers in a community. This charge applies mainly to the police in the U.S. It mirrors the movement until recently in New York City against the use of 'stop and frisk' practice to combat crime. Several studies conducted in reaction to sharp protests by African-American groups revealed that more black and brown people were stopped and frisked than was warranted. The same charge of bias has now been brought against face recognition technology. This is, however, not comprehensible because the cameras are meant to take pictures at random rather than of specific segments of the population. The police in such cases are on a roving mission hunting for faces that have already come to adverse notice.

Next are rights activists who focus on privacy violation. Criticism is mainly on the ground that technology, despite the tall claim of infallibility by those producing it, has many a time been found guilty of errors. Therefore, harassment of innocent citizens is not uncommon.

Perhaps the stoutest defender of facial recognition technology is Cressida Dick, Metropolitan Police Commissioner. Addressing the Royal United Services Institute recently, she dismissed the charge that the practice of capturing faces — "policing without consent" — harms individuals, either physically or in terms of reputation. She pointed out how the moment there is no match of a face with existing records, it is deleted. She commented on how citizens have no qualms in handing over their data to private companies, especially while unlocking phones using one's fingerprint. She added that data, even when there are matches with the existing Met database, are deleted within 31 days of capture if there is no requirement for further investigation. The Commissioner also referred to the solving of at least eight crimes in recent months with the help of facial recognition. There is no reason to believe that this is a specious claim.

U.S. study

In contrast to this one has the study of 2019 by the National Institute of Standards and Technology (NISDT) in the U.S. which found that many of the current facial recognition algorithms were likely to misidentify members of some groups 100 times more frequently than they do of the other groups. In its study, the NISDT took up 189 algorithms from 99 organisations and its findings raise doubts about the wisdom of employing facial recognition software indiscriminately. The study surmised that error rates could perhaps be brought down by using a diverse set of training data. Whether the misidentification is due to bias built into the software is not clear. However the danger of misidentification cannot be brushed aside.

The point that critics of facial recognition technology who raise privacy concerns should remember is that our faces are already online in a number of places. Increased use of CCTV cameras in a number of public places is in a sense a threat to anonymity. When this is the reality, how can we object to the police scanning us for the laudable objective of solving a case under investigation?

In the ultimate analysis, any modern technology is fraught with hidden dangers. There is no claim of infallibility either by the software maker or by the person selling it or who advocates its deployment. Grave errors from its use are however few and far between. Just as DNA testing establishes either the guilt or the innocence of a person arraigned for crime, facial recognition performs an equally vital role in criminal justice administration. Over the years I have seen a marked improvement in the way policemen, even at the bottom of the pyramid, handle digital evidence. The hope is that similar care and sophistication will soon mark criminal investigation by police forces across the globe.

Expected Questions (Prelims Exams)

Q. Consider the following statements in the context of Facial Recognition:

1. The data of CCTV cameras used in public places is not used in this technique.
2. The data collected from social media is used in this technique
3. Police uses this technique to find missing people and apprehend criminals.

Which of the above statements is / are correct?

(a) Only 1 (b) 1 and 2

(c) 1 and 3 (d) 2 and 3

Note: Answer of Prelims Expected Question given on 17 March., is 1 (c)

Expected Questions (Mains Exams)

The use of technology in prevention of crime and criminal identification by the police is associated with many doubts. Do you agree with this statement? Give arguments in favor of your opinion.

(250 words)

Note: - The question of the main examination given for practice is designed keeping in mind the upcoming UPSC main examination. Therefore, to get an answer to this question, you can take the help of this source as well as other sources related to this topic.