NEW PERSPECTIVES OF FIGHTING CORRUPTION THROUGH AI*

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Attempts have been made to combat corruption for decades, mainly through shared international instruments such as the OECD Convention (Organisation for Economic Cooperation and Development) and the United Nations Convention against Corruption (UNCAC), the only multilateral international treaty working against this kind of crime.

Despite all efforts so far, the results are still unsatisfactory. On the one hand, the perceived level of corruption is still very high in the countries studied from this viewpoint. The 2020 Eurobarometer on Corruption[1] showed that perceptions of bribery and abuse of power are high in Europe, particularly in areas such as politics, health, and public administration. In fact, seven out of ten citizens believe that corruption is widespread in their society. On the international level, the corruption perception index has pointed to a worldwide increase.

The latest data published by Transparency International show that two-thirds of the countries monitored are below average. Italy has once again failed to improve its ranking. In recent years it had achieved a positive trend, gaining eleven places since 2012. However, despite the numerous anti-corruption strategies adopted, it has dropped one spot to 52nd in the global ranking.

On the other hand, the penalties threatened or imposed for corruption offences continue to be among the most severe. We must therefore ask why, despite so much effort, there is still a high perception of the phenomenon and why it cannot be countered.

To try and find an explanation and an alternative solution, we need to understand whether – and how – our judgement can be affected by how we perceive a given phenomenon.

A study by Nobel Prize winner for economics Daniel Kahneman demonstrating the existence of 'noise'[2] in all human judgements may be helpful here. According to Kahneman, 'noise' identifies the variation of assessments that should be identical, unlike bias, which is the predictable directional error in human decisions.

The study showed how our assessments, including professional ones, are affected by this 'noise'. For example, in the courtroom, the judge is expected to express his or her decision objectively, following objective evaluation criteria.

On the other hand, Kahneman has shown that 'noise' also contaminates the judge's work and sentencing. To do so, he cited the following experiment: 50 American judges from different districts were asked to adjudicate the same cases. Surprisingly, for the same crime, one judge handed down a sentence of twenty years' imprisonment, while another opted for only three years in prison.

To help understand whether such a different outcome was due to 'noise', a further study showed that the judge's mood could influence their sentencing.

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[1] Dal 1973 le Istituzioni europee commissionano sondaggi di opinione periodici in tutti gli Stati membri dell'UE, Eurobarometro 2020 sulla corruzione, in *https://data.europa.eu/data/datasets/s2247_92_4_502_eng?locale=en*.

[2] D. Kahneman, O. Sibony, Cass R. Sustein, *Rumore: un difetto del ragionamento umano*, Milano 2021. Il concetto di rumore descritto da Kahneman è rappresentato dalla distorsione che influenza le decisioni umane e che è alla base degli errori di giudizio che accompagnano tutti noi nei processi decisionali.

In fact, it was noted that in the days following a defeat of the local team, the judges' sentences were harsher. On the contrary, in the days following a victory, they are more lenient.

But if 'noise' affects our judgements and choices, is it possible that it has also affected anti-corruption strategies?

Insofar as it affects the perception of corruption, I believe 'noise' can lead to an over-production of rules to prevent and fight crime.

However, this leads to amplifying the idea of an ever-expanding phenomenon that cannot be defeated, aided and abetted by the media's emphasis on corruption cases.

So, as one may imagine, a distorted perception of the phenomenon also affects prevention policies, which keep repeating themselves in an attempt to respond to the "demand to do something".

The apparent ineffectiveness of the prevention measures conditioned, as mentioned, by "noise" ends up shifting the hopes of combating the phenomenon onto the judges, who may feel legitimated to impose severe sanctions to combat it.

Essentially, "noise" can affect the anti-corruption system in terms of analysis and perception of the phenomenon, as well as strategies of prevention and repression.

Let us try, at this point, to verify whether Artificial Intelligence can help limit or eliminate the effect of "noise" in anti-corruption. It is widely known that Oxford Insights has defined Artificial Intelligence as "the next frontier of anti-corruption".

Firstly, machine input can help measure corruption more objectively, freeing it from subjective factors such as perception. And identifying standard and objective indices for measuring corruption is the first fundamental step towards improving prevention and repression strategies.

Secondly, Artificial Intelligence can detect the signs of corruption before it occurs. A study by the Higher School of Economics and the University of Valladolid[3] isolated some factors fostering public corruption: property taxation, price increases, and the same political party remaining in power over time.

The research confirmed that by analysing these data, Artificial Intelligence can predict corruption up to three years before it occurs.

Regarding repression, according to Kahneman, using algorithms alongside the judge's decision on the degree of punishment can reduce or eliminate distortions due to 'noise'.

Using algorithms in judicial decision-making can lead to more uniform sentences, independently of the emotional involvement – and 'noise' – of individual judges.

Reduced discretion in decision-making would guarantee more objective decisions less contaminated by 'noise'.

Greater objectivity in handing down punishment would not only help judges decide without 'noise' but would also be a form of control for the citizens themselves, who would have greater certainty regarding criminal convictions thanks to 'judicial algorithms'.

In conclusion, applying Artificial Intelligence to anti-corruption strategies can bring many potential benefits. However, as machines cannot yet learn and calculate results in complete autonomy, it will be necessary to prevent the input fed to the machine that has to decide being vitiated by human 'noise'.

In other words, the risk of over-reliance on a machine's potential could lead to underestimating the risk of human-transferred information being contaminated by subjective and biased assessments.

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[3] F.J. López-Iturriaga, I. Pastor Sanz, *Predicting Public Corruption with Neural Networks: An Analysis of Spanish Provinces*, in *Social Indicator Research* 140 (2018) 975ss.

Only the instruction and training of those in charge of machines or responsible for their complete automation can guarantee the dawn of a new era of anti-corruption.
Thank you for your kind attention.