AI and the democratic decision perspective

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> *Democracy is a pathetic belief in the collective wisdom of individual ignorance.*
>
> Henry Louis Mencken [1]

AI technology is in its infancy. In the last less than two years, AI has exploded in the center of almost all types of human activities generating the most unpredictable reactions. The most inappropriate of these reactions are those that refer to the future implications of this technology. We are witnessing a beginning and any prediction in this stage is risky. Instead of insufficiently substantiated predictions, it is preferable to try to outline some projects based on what AI is now, even at the risk of utopian approaches. Let's try, supported by computer technologies – AI included –, reconsider the mechanisms of democracy. It is worth doing so because of the slippages to which democracy is subject in recent decades.

To paraphrase Mencken, we have *faith in a democracy based on the collective wisdom of individual **competence***. Thus, we must find the appropriate environment for individual competence to act. Fortunately, current information and communication technology (ICT) developments generate the context in which democracy can be exercised:

- on the basis of **competent** decisions,

- **converging** towards comfortable majorities through efficiently organized **iterative** decision processes

- at **any level** of the human society.

AI, as an ICT, is one of the main contributor in a new way of exercising democracy. Let's take one at a time the main aspects to be improved.

Can AI ensure *competent* decisions? Yes, if each vote is weighted according to the voter's set o skills. Any decision must be made by competent persons in the field in which the decision is made. The degree of competence can be parameterized according to the available voter data. ICT, including AI, allows, based on the huge data available, to establish the level of competence of each voter in the field in which the vote must decide. Any voter will have a vote with a weight depending on his skills and the field of competence to which the vote refers. Thus, electronic voting generates, practically instantly, a result based on competence.

Establishing the competence of each voter is achievable with increasing accuracy based on the huge amount of information available in social, administrative, commercial, professional networks. Even if some of us, involved in this process of establishing competence, feel uncomfortable, they must know that the process takes place independently of their options, both in their favor and against them. We live in a much too interconnected world to be able to evade this automated process of individual characterization. But an indisputable advantage can be obtained by creating the premises for decisions based on competence.

Can AI ensure *convergence through iteration* avoiding decisions taken with majorities within statistical error margins? Indeed, a decision made with a difference of a few percentages between those who approve and those who disapprove is established within the limits of a statistical error and cannot represent a valid decision. A proposal can be considered approved only when a comfortably large competent majority votes for it. An approval with 52%, for example, refers, with great probability, to a proposal that cannot be submitted to a decision, being insufficiently elaborated. Its reformulation is required in order to be approved with a comfortably large vote, which would foreshadow a consensus. We can get closer to consensus through *iterations* that propose successive reformulations of the solution until it really responds to a need felt by the majority of voters.

The use of ICT allows a very quick reception and evaluation of the vote. If it is found that there is too much distance from a possible consensus, then also through ICT, based mainly on AI, it can propose reformulations which are subject to a new electronic vote. And the process can be repeated until it reaches, if it reaches, the level of a credible decision. The voters and those who propose the regulations thus enter into a *dialogue based on competence*; the regulation is established through a negotiation mediated by ICT using AI technologies.

Can AI improve decision processes at *any level* in contemporary societies? Yes, but for this we have to accept important reconfigurations of the decision-making mechanisms. In the world we live in, too many important decisions are made through structures that mediate decision-making. These mediations were and still are limited by the inability to control increasing complexity. ICT advances today allow effective control of the complexities that manifest themselves at any level in our society. Representativeness in decision-making can be avoided by applying ICT under AI control.

Instead of deciding who are the decision-makers, we can decide directly on topics proposed for democratic debate. Thus, the mediation that introduces dysfunctionalities in the decision-making process disappears.

If an effective decision-making mechanism is not accompanied by correct application mechanisms, then the effects of a decision, no matter how well made, cannot be realised. It remains to be seen how we solve the problem of those who propose to validate the regulations by vote. The mentioned iterative process does not allow the imposition, uncensored by the voters competence, of inappropriate regulations.

The decision-making mechanism enabled by ICT based on AI will allow the reconsideration of the role and mode of action in politics. We will be in front of a historical process that will redefine what the political class should and could be.

References

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