

DECOLONIZING THE ‘ETHICS OF AI’¹

Jonathan Piedra

ABSTRACT: The first part of this paper contextualizes the debate on the ethical regulation of Artificial Intelligence, and then reviews the main Anglo-Eurocentric elements of public initiatives about the ‘Ethics of AI’ that have recently emerged. All this with the ultimate purpose of analyzing the basis of principlism of the Ethics of AI. We refer to this with the specific purpose of presenting it in terms of a paradigmatic case of ‘colonized’ ethics that hides the different moral judgments and the alternative cultural axiologies. We begin with the hypothesis that there is a possibility of questioning the real purpose and contribution of this applied ethics, using a dilemmatic perspective specific to human and legal sciences. To execute this type of analysis, which is highly required to understand what the future of these proposals is and how it can affect the regulation of AI, an analysis related to the contemporary literature from the Decoloniality field will be performed.

KEYWORDS: Decoloniality; Ethics; Principlism; Artificial intelligence

CONTEXTUALIZING THE DEBATE

Usually, there are two proposals on how the problems from the implementation of AI should be faced: (I) A *hard law* approach which aims at creating a proper legal framework to the problems inherent to AI, regarding its research, development, and use. From this position, the creation of clear rules, laws, or regulations that define the space for action of AI technologies is essential, as well as the responsibility derived from the potential damages that they may cause. For this, the participation of the State (and supranational bodies) is required in the promotion of public policies, as well as their effective compliance. An example of this position is found in the Chinese proposal about AI of the year 2017 – ‘New

¹ This is an English version of ‘Decolonizando la Ética de Inteligencia Artificial’ published in *Dilemata, International Journal of Applied Ethics*. N°. 38, 2022. Spain.

Generation Artificial Intelligence Development Plan' (AIDP)-. Based on this plan, two years later -2019- 19 municipalities in China formulated 26 strategies and policies related to AI, in order to meet all the objectives specific to each municipality (*China New Generation Artificial Intelligence Development Report -2019-*), but always in accordance with the general proposal of the country.

In contrast to this *hard* position, is (II) a *soft law* approach based on recommendations, statements, manifestos, or proposals that do not have the binding or coercive force of Law, but that can serve as elements to keep the discussion on the regulation going and generate guidelines that can lead the discussions to certain aspects of interest. Just to mention some cases, the European Union (i.e., *Ethics Guidelines for Trustworthy Artificial Intelligence*) or the United States (i.e., *Preparation for the Future of Artificial Intelligence*) have gone in this direction.

The first approach (I) is a basically legal discussion led by attorneys, lawyers, or *policy makers*. From this position, the dilemmas and problems of disruptive technologies are an issue that can be solved by fulfilling the existing legal regulations and, if this is not possible, by creating new ones. Meanwhile, the second approach (II) would be basically an ethical approach led by philosophers specialized in this area, political philosophy, and even academicians in general. In the last year, this perspective has proven to have greater development. From this point, the regulatory problems of AI are not only legal aspects that should be exclusively solved with the tools of the legal systems. It is worth mentioning that this perspective does not imply the development of any specific regulatory proposal or a clear position regarding the type of regulatory framework required. However, this has not prevented finding 89 documents of this type² under the name 'Ethical guidelines' in the year 2019, almost doubling (more than 160 Ethical Guides on AI) in the year 2020³. There might be two reasons for this: First, due to the lobby and influence of large private companies that dominate the AI field. It is well known that several of those companies consider that the regulation is inappropriate since it limits innovation due to a lack of knowledge of technological reality and of commercial dynamics; consequently, the *hard regulation*

²Anna Jobin, Marcello Ienca, & Effy Vayena, 'The global landscape of AI ethics guidelines', *Nature Machine Intelligence*, 1:9, (2019), pp. 389-399.

³Algorithm Watch, 'AI Ethics Guidelines Global Inventory', *Algorithm Watch*, (2020).

represents an obstacle. In contrast, the business proposal heads towards self-regulation. This means that the companies themselves establish ethical guidelines that serve as the basis of their business practices.

The other reason that might explain the ‘explosion’ of these *Ethical guidelines* is found in the basis of a legal problem known as the ‘*Regulatorisches Trilemma*’⁴. The *Trilemma* is a socio-legal theoretical model used to identify systematic dysfunctions derived from the lack of harmony in the structural organization among the Law, Politics, and Society fields, thus resulting in regulatory failings. One of the premises of this model is that the legitimation of legal regulations is reached on an analysis stage of the legal systems, where, through an indirect regulation (based on self-reference of social systems), the regulation of the activities of this same society is reached. Based on this, it is inferred that an excessive regulation might cause unexpected effects, thus creating new systematic dysfunctions.

This would clearly be one of the main problems of *hard law* approaches. The regulation of AI requires an understanding that goes beyond the classic aspects of traditional legislation. An exclusively formal approach could destroy the regulated system due to excessive regulation. In the case of AI, this problem implies that the application of ‘excessive regulation’ might cause unexpected secondary effects due to its mandatory nature. A thorough and detailed regulation of this concept (i.e., statutory regulation) might not be appropriate for a technology such as AI, where changes happen very quickly or where a high degree of creativity is required for its development. From this perspective, it may be concluded that the most appropriate solution for the regulatory problems of AI is found on less direct rules (i.e., ethical rules), since introducing strict rules into an area that is under constant change and transformation is not appropriate. Another conclusion resulting from this argument is that the businesses and technological companies themselves are the ones that should, in their own terms, solve AI problems, thus placing the strong state role on a secondary level. This approach is similar, *mutatis mutandis*, to the self-regulatory proposal of large

⁴ G. Teuber, ‘Das regulatorische Trilemma. Zur Diskussion um post-instrumentale Rechtsmodelle’, *Quaderni fiorentini per la storia del pensiero giuridico moderno*, 13 :1, (1984), pp. 109-149.

companies. Although, unlike the business approach, the state role is not unnecessary or an obstacle itself, it should not be the first option to solve the conflicts of AI. This is how several ethical guidelines or guides about AI could be understood based on this context.

COLONIZED ETHICS: CRITICISM OF THE PRINCIPLISM MODEL.

This problem somewhat explains the large number of public initiatives about the ‘Ethics of AI’ (EAI) that have recently emerged. The other part of the explanation is found on the desire of private companies to avoid the actual regulation⁵, focusing the discussion on technical solutions that do not address the core problem or drawing the attention to abstract problems⁶ that seem to be more oriented towards finding reasons to avoid regulation, instead of being a true guide or guideline on these issues. In both cases, several of these Ethical Guides are characterized by a series of vague proposals that bring little value to the creation of a true governance framework.

Our argument is focused on the fact that these documents are mainly full of general statements based on a principlism approach that follows the classic Anglo-Saxon tradition of bioethics⁷. Although this model may be considered as the most famous version of applied ethics, it is not necessarily the most appropriate or the most convenient one for a ‘global context’ in AI.

To start, it is necessary to mention that the classic principles of the Beauchamp and Childress proposal limited Bioethics exclusively to the biomedical context. Particularly, Potter’s⁸ initial proposal was limited to a series of moral issues related to biomedical research and limited to what was later known as the ‘Georgetown mantra’ due to the mechanical repetition⁹ of these four principles to resolve any conflict, thus replacing the ethical theories and even hiding

⁵ Luciano Floridi, ‘Translating Principles into Practices of Digital Ethics: Five Risks of Being Unethical’, *Philosophy & Technology*, 32, (2019), pp.185–193.

⁶ Ben Wagner, Ethics As an Escape From Regulation: From “Ethics-Washing” To Ethics-Shopping? In Bayamlioglu E., baraliuc I., Janssens L., & Hildebrandt M. (Eds.), *Being Profiled: Cogitas Ergo Sum: 10 Years of Profiling the European Citizen*, (Amsterdam: Amsterdam University Press, 2018).

⁷ Luciano Floridi, Josh Cowls, Monica Beltrametti, *et al.*, AI4People—‘An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations’, *Minds & Machines*, 28, (2018), 689–707.

⁸ Van Potter, *Bioethics: bridge to the future*, (New Jersey, Prentice-Hall, 1971)

⁹ Danner Clouser, Gert Bernard, ‘A critique of principlism’, *Journal of Medicine and Philosophy*, 15 :2, (1990), 219-236.

alternative moral proposals. A similar situation occurs in the EAI. Based on the success of this model, basically all the Ethical Guides on AI are based on this quadruple system. In the case of the AI, the principles are summarized as follows: respect for (human) autonomy, prevention (or reduction) of damage, justice, and explicability. Transparency also appears as a fifth principle although what it means differs depending on the document where it appears. Sometimes, some others are included, but they are always derived from this core.

The private AI initiatives at Google: our principles (2018), Perspectives on Issues in AI Governance (also from Google), Some Thoughts on Facial Recognition Legislation (2019) -Amazon-, Microsoft AI principles (2019), IA Ethics- IBM-, AI Principles (2008) from GE Healthcare or Guidelines for Artificial Intelligence (2019) by Deutsche Telekom, follow this line. The same happens with another series of public proposals. The Australia's Ethics Framework (2019), Ethical Principles for Artificial Intelligence (2020) from the U.S. Department of Defense, Principles on Artificial Intelligence (2019) from the OECD, or the proposal from a group of high-level experts on AI (composed by the European Commission in 2018) are based on a system of principles for a 'Reliable AI'. As with the Beauchamp and Childress' proposal, the 'principlism of AI' lacks the elements required for properly solving ethically complex situations resulting from the interaction of AI and society -mainly the dilemmas related to Human Rights or the economic structures underlying these technologies. It is particularly strange how for such a dynamic and changing technology, a highly limited list of static ethical principles is promoted without operating criteria or even without contextualizing elements. As stated by Mittelstadt,¹⁰ unlike Bioethics, EAI does not have common objectives (based, for example, on a medical ideal), a code of ethics for AI professionals, a methodology for translating the principles into the practice, or effective legal mechanisms of professional liability. Nonetheless, this principlism seems to be the solution for all the problems related to AI, despite there is no clear theoretical foundation in these proposals with which the solutions can be placed within a conceptual framework that allows properly addressing the moral dilemmas.

It must be considered that each principle reflects an ideal; therefore, each

¹⁰ Brent Mittelstadt, 'Principles alone cannot guarantee ethical AI', *Nat Mach Intell* ,1, (2019), 501–507.

principle implies a specific value. In the case of Bioethics, these principles were created from a common moral basis that reflected a specific aspect of morals of a specific country: American pragmatism. Holm¹¹ considers that this principlism is influenced by what he called *American common morality*; this is, by the American morals and culture of that time. This also happens in the case of the EAI. The basis of this ethics is a moral narrative focused on the West. With this, I mean to an Anglo-Eurocentric moral and cultural perspective based on a liberal criterion of the human being and on a utilitarian ethical proposal where a techno-instrumental rationality structure consolidated in the modern capitalist system underlies.

It is in this *narrative* where the *ethical colonialism* of these proposals is evidenced. On one hand, it is highly pretentious considering that a series of rules (i.e., the European or American proposal) serves to regulate all the world developments in this area¹², without considering the characteristics of problems that might arise in other countries. This is where the *colonialism of knowledge* works, since this -universal- EAI serves as a domination mechanism legitimated by some control dynamics in the technical field, as well as in the epistemological aspect. Coloniality is '[...] one of the constituents and specific elements of the worldwide standard of capitalist power. It is based on the imposition of a racial/ethnic classification of the world's population as cornerstone of said pattern of power, and it operates in each material and subjective level, field, and scope of daily life and on a social scale'.¹³ If we take principlism as a category of analysis of western origin, it is clear that the EAI responds to some systematic rules that coordinate the relations between the hegemonic centers of technical-scientific knowledge and the peripheries in a subtle way. An example of this is the number of papers published on AI. According to the *Artificial Intelligence Index Report* from 2019, 86% of the papers presented at AI conferences in 2018 were from authors from the United States and Canada, Europe, or East Asia. Regarding other regions in the world, less than 10% came from other places. This is a sample of power inequality

¹¹ Soren Holm, 'Not just autonomy--the principles of American biomedical ethics', *Journal of Medical Ethics*, 21 :6, (1995), 332-338.

¹² As stated by the Secretary of the United States, Gina Raimondo (Brussels Bureau, 2021).

¹³ Aníbal Quijano, Colonialidad del poder y clasificación social. En: Santiago Castro-Gómez & Ramón Grosfoguel (eds.) *El giro decolonial. Reflexiones para una diversidad epistémica más allá del capitalismo global* (Bogotá: Colombia, Iesco-Pensar-Siglo del Hombre Editores, 2007), p. 93.

between the hegemonic center and periphery regarding knowledge. It is from the hegemonic centers of knowledge where a scientific and ethical reality is produced, based, as we have mentioned, on the historic-geographic context of colonialism/coloniality¹⁴. Situations like these ones get worse given that most of the well-known international publishing houses -due to this excluding system- are in North America (mainly in the United States) and Europe, thus spreading the beliefs, cultural methods, moral manners, and ideals focused on the West¹⁵. This evidently generates a series of differences that serve as boundaries regarding scientific knowledge. Santos¹⁶ refers to this as *abysmal thought*. Modern western thinking is based on a series of abysmal differences, creating two different universes: West/Other Worlds. The *Other Worlds* are all the cultural-moral realities that are excluded and that are forced to adapt to the rules of the western world. From this interpretation framework, the ethical field might be understood from the imposition of Anglo-Eurocentric values that are presented as the single way of knowing and interpreting reality. This coloniality of knowledge on AI rejects the intellectual production of other cultural contexts (feminine, indigenous, Afro-descendants) as true knowledge¹⁷. Even though, in colonialism, rejection occurred only due to skin color or place of origin, now rejection is more subtle (but equally xenophobic and racist); it is currently presented under the argument of a neutral, objective, and universal knowledge. The national and identity ontology typical of the narratives focused on the West take the lead versus the other cultures¹⁸ which are simply hidden based on an ethical project like the one we have mentioned. This generates significant inequality in the production of knowledge that '[...] is governed by epistemic mechanisms that validate the type of social system aimed at being implemented as the model to be replicated

¹⁴ Anibal Quijano, *Cuestiones y horizontes: de la dependencia histórico-estructural a la colonialidad/descolonialidad del poder* Anibal Quijano, (Ciudad autónoma de Buenos Aires, Editorial CLACSO, 2014).

¹⁵ Jonathan Okeke Chimakonam, 'African philosophy and global epistemic injustice', *Journal of Global Ethics*, 13 :2, (2017), 120-137.

¹⁶ Boaventura de Sousa Santos, *Para descolonizar Occidente. Más allá del pensamiento abismal*, (Buenos Aires, Editorial CLACSO, 2010)

¹⁷ Catherine Walsh, '¿Son Posibles Unas Ciencias Sociales/culturales Otras? Reflexiones En Torno a Las Epistemologías Decoloniales' *Nómadas*, 26, (2007), pp. 102-113.

¹⁸ Nelson Maldonado-Torres, 'Sobre la colonialidad del ser: contribuciones al desarrollo de un concepto'. En Santiago Castro-Gómez & Ramón Grosfoguel (eds.) *El giro decolonial. Reflexiones para una diversidad epistémica más allá del capitalismo global*, (Bogotá: Colombia, Iesco-Pensar-Siglo del Hombre Editores, 2007).

in the world¹⁹. In the case of ethics, this unequal distribution of power prevents and hinders a true participation of countries at the periphery in the discussions about ethics, specifically regarding AI. The ‘global’ debates on the ethics of this technology are based on a limited epistemological framework where there is not a conversation with other cultural rationales that allow reconsidering other alternatives versus this colonial epistemological model.

OTHERS-ETHICS

This can be observed in the case of the principle of autonomy. From the Kantian perspective, autonomy has to do with the human capacity of establishing its own rules; this means, a capacity of self-legislating without submitting to any external element. Human beings, as rational beings, are not obliged by the compliance with externally imposed moral laws, but; on the contrary, they ‘are submitted to their own legislation’²⁰. In western liberal-utilitarian societies, this is translated into a series of ‘personal freedoms’ where individual rights and utility are prioritized over social relationships. However, this does not necessarily happen in African, Asian, or Latin American cultures. As evidenced by *The Moral Machine Experiment*,²¹ the values and elements under consideration when making a moral decision greatly differ from the *individualist ethics* of Anglo-European societies and from the *collectivist ethics* of countries from the Middle East, Asia, and Africa. From the perspective of collectivist ethics, decisions are not measured by personal interest or by the maximization of utility, but they are based on the needs and characteristics of the group or collectivity. The same can be said about the Latin American context, specifically from the ancestral values and traditions of the indigenous population. Let us take a specific case as reference. In the community ethics of *Sumak Kawsay* (a moral theory from Ecuador and Bolivia), the purpose is to ‘think well, feel well to do good, in order to reach harmony with the community, family, nature, and cosmos’²². The human being is not the focus of all decisions, and it is not expected to act pursuant to an objective morality (as

¹⁹ Claudio Maldonado, *De-colonialidad en la era tecnomediática* (Quito, Ediciones CIESPAL, 2018), p.41

²⁰ Immanuel Kant, *Lógica. Un manual de lecciones*, (Madrid: España, Editorial Akal, 2000), p.432.

²¹ Edmond Awad, Sohan Dsouza, Richard Kim, Jonathan Schulz, Josep Henrich, Azim Shariff, et al, ‘The moral machine experiment’, *Nature*, 563, (2018), 59–64.

²² Javier Lajo, ‘¿Qué dice el Sumaj Kawsay? La escuela indígena de “Qhapaj Ñan”. ¿Qué dice el Sumaj Kawsay? La escuela indígena de “Qhapaj Ñan”’. Retrieved, June, 14, 2008.

implied by Kantian perspective). Community and social relations have existed even before the concept of individual. The ethics of the *Sumak Kawsay* is linked to a community virtue and not to a series of individualistic values. The human being is another element of Mother Earth -*Pachamama*-. This model looks for *good living* (*buen vivir*) of others and the wellbeing of the community, along with a balance of nature. Within this perspective, autonomy even takes a regional nuance since the territorial basis is a key element of culture. Autonomy could not exist without this ethnic-cultural element. The perspective of an abstract autonomy of a rational agent -based on principles- has no place in this type of approach.

Something similar would occur with the privacy concept. This concept is vaguely used to refer to several different ideas. However, regarding AI, it is, *grosso modo*, related to three main²³ topics related to personal data: The creation and persistence of data in time, the use of this data, and the data leakage. As we can see, privacy is related to a personal and individual level of the human being, specifically regarding its identification. This would imply that privacy is a logical derivation of individuality. A reasonable assumption of this would be that autonomy is also protected through privacy -a situation that is coherent with individualistic morals. However, the sense of privacy changes depending on the different traditions and social contexts. For Latin American indigenous cultures, the individualistic sense of privacy does not apply either. In this case, it would be more appropriate to refer to a 'collective privacy' since the human being is seen as a whole and not as an isolated individuality. The *Whole* exists before the idea of individuality. 'It is about a subjectivized time and space, this is, private, that refers to a vital habitat, where *our* time and *our* space merge on the bare fact of living here and now when it involves the time of *my* life, *my* profession, *my* family, and in this place, of *my* community.'²⁴ The sense of identity is created from a community basis and from a sense of native belonging with nature. Life can be only understood from collectivity -*sumak kamaña*-. This implies that privacy should be understood as a social way of being, and specifically, as a phenomenon related to the way how (human and non-human) beings share the world among them.

Another difference between the individualistic and the collective position is

²³ Catherine Tucker, 'Privacy, Algorithms, and Artificial Intelligence' NBER Chapters, in: *The Economics of Artificial Intelligence: An Agenda*, National Bureau of Economic Research, Inc, (2018), pp. 423-437

²⁴ Rodolfo Kusch, *Obras completas II*. (Rosario, Santa Fe, Editorial Fundación Ross, 1999), p.422

found in the instrumental perspective of nature present on the first position. Regarding documents from AI ethics, the human being is presented as the core of development of this *-human-centric approach-* technology. This is a categorical argument, but riskily ambiguous since it is not only evident that all technologies should be based on the human interests and values, but also because almost always “‘humancentric’” seems to be synonymous with “‘anthropocentric’”²⁵. This type of thinking continues a line of analysis that only considers the environmental aspects from the perspective of utility. An anthropocentrism that only values nature as a reserve of raw materials. This mindset has led us to all the environmental problems of the Anthropocene. Nature is seen as an ‘ontological extractivism’²⁶, a way of being inherent to these narratives focused on the west, a way *being in the world* that only aims at ownership and benefit -another aspect of colonialism inherent to the western culture. Any opposition to this worldview is seen as ‘anti-progressive’; therefore, it is hidden, ridiculed, or even worse, eliminated. Regarding EAI, nature is addressed from an instrumentalization that depoliticizes and decontextualizes the different cultures through proposals – such as principlism – which eliminate the different senses or ways of being, or, at best, take them to the Anglo-European cultural moral matrix.

In view of this instrumentalism and commercialization of nature, we can use as an example, again, the *Sumak Kawsay* as a decolonial tool that has been used by some South American countries as an alternative to the capitalist economic model and to its ontological extractivism. *Good living* is based on an economic development that respects and has the Pachamama as its limit. In this context, nature is not object of protection but is subject of rights. If classic anthropocentrism implies a destructive superiority of the human being regarding everything else, the ethical paradigm of the *Sumak Kawsay* looks for a relationship of balance and plenitude with nature, a harmonious way of living collectively based on social responsibility and not on the exploitation of the environment or on personal benefit.

²⁵ Luciano Floridi, ‘The European Legislation on AI: a Brief Analysis of its Philosophical Approach’, *Philosophy & Technology*, (2021), p.218.

²⁶ Ramón Grosfoguel, ‘Del extractivismo económico al extractivismo epistémico y al extractivismo ontológico: una forma destructiva de conocer, ser y estar en el mundo’, *Tabula Rasa*, 24, (2016).

CONCLUSIONS.

More studies are needed on the ethical proposals of AI to show the political and social implications of this type of documents (in Latin American countries, for example). The approach that we carry out, what it seeks is to show in an exploratory way an important problem of these Guidelines: The invisibility and exclusion of different epistemologies, as well as non-westernized knowledge in relation to alternative cultural axiologies.

However, the initial implications of all this for EAI are clear. Concepts such as privacy, autonomy, concepts of social robotics or data management, among several other topics, should be reconsidered from an intercultural framework. It is necessary to legitimate and accept epistemological and moral positions different from the Anglo-Eurocentric universalist perspective. A truly global discussion about AI, where non-western knowledge is not marginalized, is inevitable. For this, the recommendations or ethical guides should consider the contexts and special features of the different social groups. This would only be possible if interdisciplinary groups with people from very different origins and vital conditions are established in the communities and bodies debating about these topics.

This implies a double challenge for the EAI: First, the epistemic decolonization of the theoretical proposals with universal ambitions is required, enable the knowledge of other subjectivities and other geographic areas, thus expanding the Anglo-Eurocentric narrative regarding EAI which are constantly reproduced as the single valid cognitive frameworks. A highly important aspect is the access and participation in the scientific platforms to draw attention to alternative paradigms. In order to highlight their ideas, researchers of 'epistemic periphery' are forced to publish in international publishing houses that have high 'impact rates' but little space for positions different from the Anglo-Eurocentric ones, or that, in fact, are not interested in alternative knowledge. Although there are several alternative means, they are not legitimated by institutionality, which causes some sort of crisis in knowledge. Allocating more financial resources to these alternative means, as well as to research from these excluded spaces is required.

This takes us to the second challenge: the praxeological dimension.²⁷ Decolonizing the EAI also implies an analysis about power. Work should be done on the criticism of the socio-economic basis of these proposals, the tendency towards monopoly of companies and the material conditions the use of AI implies. Attention should not only be focused on the technological aspect, instead, the current structural, environmental, and economic conditions on which these technologies are based should be reconsidered.

Finally, a series of principles (whatever they might be) cannot guarantee EAI by itself. In contrast, an intercultural approach would be a beneficial space to generate alternative solutions or paradigms that promote different epistemic contributions, thus generating a true global debate on these topics.

REFERENCES

- Albert, R. Jonsen, *The birth of bioethics*, New York and Oxford : Oxford University Press, 2003.
- Algorithm Watch, 'AI Ethics Guidelines Global Inventory', *Algorithm Watch*, April, 30, 2020, <https://inventory.algorithmwatch.org/>
- Aníbal Quijano, *Colonialidad del poder y clasificación social*. En: Santiago Castro-Gómez & Ramón Grosfoguel (eds.) *El giro decolonial. Reflexiones para una diversidad epistémica más allá del capitalismo global*, Bogotá: Colombia, Iesco-Pensar-Siglo del Hombre Editores, 2007.
- Aníbal Quijano, *Colonialidad del poder, eurocentrismo y América Latina*. En Edgardo Lander (ed.) *La Colonialidad del saber: Eurocentrismo y Ciencias Sociales. Perspectivas Latinoamericanas*, Caracas, Editorial CLACSO, 2000.
- Aníbal Quijano, *Cuestiones y horizontes: de la dependencia histórico estructural a la colonialidad/descolonialidad del poder* Aníbal Quijano, Ciudad autónoma de Buenos Aires, Editorial CLACSO, 2014.
- Anna Jobin, Marcello Ienca, & Effy Vayena, 'The global landscape of AI ethics guidelines', *Nature Machine Intelligence*, 1:9, (2019), 389-399.

²⁷ Claudio Maldonado, *De-colonialidad en la era tecnomediática* (Quito, Ediciones CIESPAL, 2018).

- Ben Wagner, Ethics As an Escape From Regulation: From “Ethics-Washing” To Ethics-Shopping? In Bayamlioglu E., baraliuc I., Janssens L., & Hildebrandt M. (Eds.), *Being Profiled: Cogitas Ergo Sum: 10 Years of Profiling the European Citizen*, Amsterdam: Amsterdam University Press, 2018.
- Boaventura de Sousa Santos, *Para descolonizar Occidente. Más allá del pensamiento abismal*, Buenos Aires, Editorial CLACSO, 2010.
- Brent Mittelstadt, ‘Principles alone cannot guarantee ethical AI’, *Nat Mach Intell*, 1, (2019), 501–507. <https://doi.org/10.1038/s42256-019-0114-4>
- Brussels Bureau, US-EU need to write the rules for new technologies 'before China', *Euronews*, (2021) from <https://www.euronews.com/2021/06/15/us-and-eu-need-to-write-the-rules-for-new-technologies-before-china-says-us-secretary-ram>
- Catherine Tucker, ‘Privacy, Algorithms, and Artificial Intelligence’ NBER Chapters, in: *The Economics of Artificial Intelligence: An Agenda*, National Bureau of Economic Research, Inc, (2018), pp. 423-437.
- Catherine Walsh, ‘¿Son Posibles Unas Ciencias Sociales/culturales Otras? Reflexiones En Torno a Las Epistemologías Decoloniales’ *Nómadas*, 26, (2007), 102–113.
- Claudio Maldonado, *De-colonialidad en la era tecnomediática*, Quito, Ediciones CIESPAL, 2018.
- Danner Clouser, Gert Bernard, ‘A critique of principlism’, *Journal of Medicine and Philosophy*, 15 :2, (1990), 219-236, doi :10.1093/jmp/15.2.219
- Edmond Awad, Sohan Dsouza, Richard Kim, Jonathan Schulz, Josep Henrich, Azim Shariff, et al, ‘The moral machine experiment’, *Nature*, 563, (2018), 59–64. <https://doi.org/10.1038/s41586-018-0637-6>
- G. Teuber, ‘Das regulatorische Trilemma. Zur Diskussion um post-instrumentale Rechtsmodelle’, *Quaderni fiorentini per la storia del pensiero giuridico moderno*, 13 :1, (1984), pp. 109-149.
- Immanuel Kant, *Lógica. Un manual de lecciones*, Madrid: España, Editorial Akal, 2000.
- Javier Lajo, ‘¿Qué dice el Sumaj Kawsay? La escuela indígena de “Qhapaj Ñan”. ¿Qué dice el Sumaj Kawsay? La escuela indígena de “Qhapaj Ñan”. Retrieved June, 14, 2008, from <https://sumakkawsay.tieneblog.net/?p=1988>
- Jonathan Okeke Chimakonam, ‘African philosophy and global epistemic injustice’, *Journal of Global Ethics*, 13 :2, (2017), 120–137. <https://doi.org/10.1080/17449626.2017.1364660>
- Luciano Floridi, ‘The European Legislation on AI: a Brief Analysis of its Philosophical Approach’, *Philosophy & Technology*, (2021), DOI: 10.1007/s13347-021-00460-9

-
- Luciano Floridi, 'Translating Principles into Practices of Digital Ethics: Five Risks of Being Unethical', *Philosophy & Technology*, 32, (2019), 185–193. <https://doi.org/10.1007/s13347-019-00354-x>
- Luciano Floridi, Josh Cowls, Monica Beltrametti, *et al.*, AI4People—'An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations', *Minds & Machines*, 28, (2018), 689–707. <https://doi.org/10.1007/s11023-018-9482-5>
- Nelson Maldonado-Torres, Sobre la colonialidad del ser: contribuciones al desarrollo de un concepto. En Santiago Castro-Gómez & Ramón Grosfoguel (eds.) *El giro decolonial. Reflexiones para una diversidad epistémica más allá del capitalismo global*, Bogotá: Colombia, Iesco-Pensar-Siglo del Hombre Editores, 2007.
- Ramón Grosfoguel, 'Del extractivismo económico al extractivismo epistémico y al extractivismo ontológico: una forma destructiva de conocer, ser y estar en el mundo', *Tabula Rasa*, 24, (2016), 123–143.
- Rodolfo Kusch, *Obras completas II*. Rosario, Santa Fe, Editorial Fundación Ross, 1999.
- Soren Holm, 'Not just autonomy--the principles of American biomedical ethics', *Journal of Medical Ethics*, 21 :6, (1995), 332–338. doi:10.1136/jme.21.6.332
- Steering Committee, *Artificial Intelligence Index Report 2019 Steering Committee* https://hai.stanford.edu/sites/default/files/ai_index_2019_report.pdf
- Van Potter, *Bioethics: bridge to the future*, New Jersey, Prentice-Hall, 1971.