



ACCOMMODATING KLEROS AS A DECENTRALIZED DISPUTE RESOLUTION TOOL FOR CIVIL JUSTICE SYSTEMS: A THEORETICAL MODEL

Mauricio Virues Carrera
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Introduction.

Digitalization of formal and informal dispute resolution mechanisms is an essential tool to improve access to justice. For example, on 8 October 2020, the Council of the European Union held a meeting. It issued a series of conclusions under the name of 'Access to justice – seizing the opportunities of digitalization'¹.

One of these conclusions emphasizes that "the use of digital technologies can also improve access to out-of-court/tribunal and alternative methods of dispute resolution while respecting the right to effective judicial protection in each individual case and the right to a fair trial, as well as access to information tools on rights and obligations for citizens, which can contribute to avoiding disputes".²

The importance of 'informal' or 'alternative' dispute resolution mechanisms has grown. In terms of civil justice, since more and more disputes are dealt with through this kind of instruments, instead of traditional or 'formal' methods, typically judicial adjudication.

Recently, a new indicator was incorporated into the Sustainable Development Goals and targets of the United Nations' 2030 Agenda for Sustainable Development. This new indicator will measure the "proportion of the population who have experienced a dispute in the past two years and who accessed a formal or informal dispute resolution mechanism, by type of mechanism".³

This reveals the critical role that platforms like Kleros could have in the advancement of the sustainable development agenda. They are instruments specifically designed to provide digital access to dispute resolution. Also, they focus on efficiency in terms of accuracy, costs and time. It appears that the accommodation of digital dispute resolution into our civil justice systems is one of the fastest ways to advance in the sustainable development agenda.

Unfortunately, most legal systems are simply not equipped for digital dispute resolution, especially when it comes to decentralized schemes such as Kleros. And, even with a tendency towards digitalization, legislations may take decades to be reformed. Moreover, less developed regions or countries may take longer to create functional legal frameworks for digital justice, thus making the development gap even deeper throughout the world.

¹ "Access to justice – seizing the opportunities of digitalization". Available at: <https://data.consilium.europa.eu/doc/document/ST-11599-2020-INIT/en/pdf> (Accessed 27 October 2020).

² Ibid. (paragraph 22).

³ "Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development". Available at: https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202020%20review_Eng.pdf (Accessed 27 October 2020)



This paper presents a theoretical model to incorporate Kleros decentralized dispute resolution mechanism within civil justice systems. It aims to work with current legal frameworks, without any need for further legal or statutory reforms.

It relies on some provisions of the Mexican Federal Civil Code to provide examples. Still, these provisions refer to widely accepted notions of civil and commercial law, so it should be easy to understand and replicate in many jurisdictions, especially in the 'civil law' tradition.

The first part of this paper discusses the definition of Online Dispute Resolution (ODR) and its expansion. The second part explores the nature of Kleros within the ODR categories and the challenges it faces to make national jurisdictions to recognize and enforce its decisions. Finally, the third part presents a theoretical model to overcome those challenges and turn Kleros outcomes into legally binding decisions that most jurisdictions will have an obligation to recognize and enforce.



1. Online Dispute Resolution (ODR): Definition and Expansion

On 13 December 2016, Working Group III of the United Nations Commission on International Trade Law (UNCITRAL) adopted the 'Technical Notes on Online Dispute-Resolution', defining ODR as "a mechanism for resolving disputes through the use of electronic communications and other information and communication technology".⁴

This document states that ODR can encompass "a broad range of approaches and forms (including but not limited to ombudsmen, complaints boards, negotiation, conciliation, mediation, facilitated settlement, arbitration and others)".⁵

According to UNCITRAL's definition, the most important and distinctive feature of ODR is the usage of electronic communications, especially the internet, to resolve disputes. Any type of dispute resolution method can be considered as ODR as long as it uses electronic or internet-based communication channels.⁶

For a long time, the concept of ODR remained undefined, probably because of its elusive nature. The term can refer both to adjudicative or non-adjudicative dispute resolution, conducted or managed either by state or non-state actors, as long as it is conducted online. Any form of dispute resolution can be validly depicted as ODR as long as a relevant part of the process is conducted online.

That makes it an incredibly difficult concept to define, due to the wide range of specific dispute resolution methods in which it could be accommodated. ODR's adaptability is not surprising, considering that it was created within an internet-based environment, to address 'online-contained' disputes with no real practical legal ways to resolve them.⁷

Originally, ODR was not meant to substitute any specific regime or process, but rather to

⁴ "UNCITRAL Technical Notes on Online Dispute Resolution" (paragraph 24), in the United Nations Commission on International Trade Law (UNCITRAL) webpage. Available at: http://www.uncitral.org/pdf/english/texts/odr/V1700382_English_Technical_Notes_on_ODR.pdf (Accessed 24 February 2020).

⁵ Ibid. (paragraph 2). This definition assumes that ODR is primarily fitted for Alternative Dispute Resolution (ADR), making an express reservation for 'other methods', thus implying that ODR can enclose adjudicative processes.

⁶ MANIA, Karolina. "Online Dispute-Resolution: The Future of Justice", International Comparative Jurisprudence, Vol. 1(1) (2015) 78.

⁷ Some examples of 'online-contained disputes' could be: intellectual property breaches on YouTube or other streaming channels; conflicts relating to comments on forums; offensive or unauthorized contents, as well as inappropriate conducts on social media platforms like Facebook or Twitter; edition accuracy in open content databases like Wikipedia; reviews on Airbnb, TripAdvisor or similar platforms; and behaviour of users and drivers in Uber, or customer service in UberEATS, only to mention a few.



mimic traditional dispute resolution methods in a way suitable for online disputes.⁸

From its early developments in the 1990s, ODR has experienced remarkable growth, successfully moving from 'online-contained' disputes to practically any kind of dispute resolution process. ODR is increasingly perceived as 'the future of justice'⁹.

Furthermore, evidence suggests that the claim is accurate. Only in 2018, its second year of public operation, the European ODR Platform received 36,000 new cases, 50% more than in its previous year¹⁰. According to the UK government, in 2018 more than 150,000 people used its domestic online justice services¹¹, which became accessible thanks to the process of judicial modernization considered in a final report released in 2016 by Lord Justice Briggs.¹²

As of January 2020, the British Columbia Civil Resolution Tribunal (CRT), Canada's first online tribunal, had managed more than 15,000 disputes since its creation in 2012.¹³ On 4 December 2019, the Supreme People's Court of the People's Republic of China held a press conference at Wuzhen, Zhejiang¹⁴, releasing a 135-page white paper titled "Chinese Courts and the Internet Judiciary".¹⁵

As Katsh and Rabinovich-Einy observe, society has recognized that it is "necessary to create new dispute resolution models to respond to changes in the kinds and number of disputes (...) We are now facing, once again, the question of how to develop and make available dispute resolution systems that can meet a growing demand for them"¹⁶.

⁸ KATSH, Ethan and RABINOVICH-EINY, Orna. "Digital Justice: Technology and the Internet of Disputes" (Oxford University Press 2017) 25-29.

⁹ MANIA (n3).

¹⁰ "2nd Report on the Functioning of the Online Dispute-resolution Platform", in the European Commission webpage. Available at:

https://ec.europa.eu/info/sites/info/files/2nd_report_on_the_functioning_of_the_odr_platform_3.pdf

(Accessed 24 February 2020).

¹¹ "Press Release: More than 150,000 People Benefit from Online Justice in 2018", in the UK Government webpage, 4 January 2019. Available at:

<https://www.gov.uk/government/news/more-than-150000-people-benefit-from-online-justice-in-2018>

(Accessed 24 February 2020).

¹² See BRIGGS, Lord Justice. "Civil Courts Structure Review: Final Report", in the UK Judiciary webpage. Available at:

<https://www.judiciary.uk/wp-content/uploads/2016/07/civil-courts-structure-review-final-report-jul-16-final-1.pdf>

(Accessed 24 February 2020).

¹³ "CRT Statistics Snapshot - January 2020", in the British Columbia Civil Resolution Tribunal webpage. Available at:

<https://civilresolutionbc.ca/crt-statistics-snapshot-january-2020/>

(Accessed 24 February 2020).

¹⁴ "China's Top Court Releases White Paper on Internet Judiciary", in The Supreme People's Court of the People's Republic of China webpage, 4 December 2019. Available at:

http://english.court.gov.cn/2019-12/04/content_37527763.htm

(Accessed 16 May 2020).

¹⁵ "Chinese Courts and Internet Judiciary", in The Supreme People's Court of the People's Republic of China webpage. Available at:

<http://english.court.gov.cn/pdf/ChineseCourtsandInternetJudiciary.pdf>

(Accessed 16 May 2020).

¹⁶ KATSH (n8) 15.



Indeed, as stated before, digital dispute resolution mechanisms like Kleros could play a vital role in this quest. The next part of this paper will explore what place does Kleros have within the ODR schemes and the challenges it faces when it comes to being recognized and enforced before national jurisdictions.



2. The Nature of Kleros Decisions Within ODR: the Challenge of Recognition in National Jurisdictions

As seen in part II, ODR can comprise a vast number of dispute resolution mechanisms, from simple negotiation to complex arbitration. Also, ODR often incorporates several technological tools such as artificial intelligence, controlled built-in information input design, or blockchain.

So, how can Kleros decisions be best represented within the ODR world? The most evident answer to this question would be to consider Kleros as an arbitration scheme, and thus its decisions as arbitral awards, susceptible of being recognized and enforced according to the 1958 Convention on the Recognition and Enforcement of Foreign Arbitral Awards, also known as the 'New York Convention'.¹⁷

Nonetheless, many subtleties in the arbitration world might be troublesome when trying to get a decision reached by Kleros to be recognized and enforced by national jurisdictions. Enforceability is a critical feature when dealing with disputes that are not arisen from, nor connected to, smart or self-enforceable contracts.

This represents a significant area of opportunity for Kleros and private digital justice. There is a great demand for efficient, economical and fast resolution methods for areas such as: non-electronic commerce; small debts and investments; real estate; leasing; and many other everyday disputes involving issues that are not small enough to drop the claims but not big enough for investing in arbitration or smart contracts.

This kind of conflicts typically ends up in formal litigation. As a consequence, the litigants' resources are consumed disproportionately, and the courts become saturated, ultimately diminishing access to justice both for the litigant parties and for the public.

Following the theory that represents Kleros as arbitration, its decisions should be legally

¹⁷ See NAROZHNY, Dmitry. "Is Kleros Legally Valid as Arbitration?". Available at: <https://blog.kleros.io/is-kleros-legally-valid-as-arbitration/> (Accessed 27 October 2020)



treated as arbitral awards. Yet, there is one aspect that could jeopardize its recognition and enforceability: its decentralization. Paradoxically, this aspect is also fundamental in Kleros mechanics.

Without decentralization, Kleros could not be the same, nor could it function in the same way. For example, if the jurors were not anonymous or were allowed to interact with the parties (personal decentralization), or if the platform itself was subject to a particular jurisdiction (territorial decentralization). Kleros is designed to be essentially decentralized both in terms of territory and persons.

Decentralization is instrumental for many features that make Kleros as a reliable dispute resolution tool and changing that would diminish some of its distinctive advantages over traditional methods. Anonymity enables to promote accuracy through economic incentives for the jurors, something that would be very difficult to achieve if the parties or the jurors knew each other's identities.

Also, not being territorially attached to any particular country or place enables the platform and the jurors to operate practically beyond the scope of national legislation and courts. The chances of receiving injunction orders or liability claims are very scarce. Among other things, this allows Kleros to function in a standardized way, to enlarge its reserves of potential jurors and to keep its costs reasonable.

Unfortunately decentralization, a feature that adds so much value to Kleros, is also the main reason why its decisions may not be recognized and enforced by national jurisdictions. It comes with various legally questionable issues in the eyes of the New York Convention. The following lines will address some of these issues:

2.1. Kleros Decisions and the Concept of 'Foreign Arbitral Awards'

Kleros decisions happen in an entirely digital online environment. Jurors do not know each other, and their decision-making process is through a voting system: they vote and decide on the disputes. Then, Kleros renders the decision into a form communicable to the parties. Following the 'Kleros as arbitration' theory, this decision would be an arbitral award. As such, it should comply with the New York Convention's minimum requirements to be recognizable and enforceable by contracting States.

Now, the very first requirement of the New York Convention is expressed right in its title and gets reiterated in Article I: this convention regulates 'foreign arbitral awards' only, meaning that it does not apply for domestic awards or arbitration processes. The very first question that needs to be asked when discussing Kleros under the scope of the New York Convention is whether or not its decisions can be considered as a 'foreign award' by any of the contracting States.



Given the fact that Kleros is essentially delocalized, its decisions cannot be attached or related to any particular State and, by logical exclusion, they cannot either be considered as 'foreign' by any State at all. The plain fact is that Kleros decisions are not made in any territory at all. Therefore, it falls out of the scope of New York Convention, according to its Article I (1): "This Convention shall apply to the recognition and enforcement of arbitral awards made in the territory of a State other than the State where the recognition and enforcement of such awards are sought..."

2.2. Name and Signature of the Arbitrators

Article IV (1) of the New York Convention does not express any specific requirements of an arbitral award in terms of form nor content. It merely states that a party seeking recognition and enforcement must supply a "the duly authenticated original award or a duly certified copy thereof". This has left open for national courts to determine the substantive and formal requirements that the document of an arbitral award should have. Of course, one of the most important aspects has been whether or not the awards should bear the name and signature of the arbitrators.

There are at least two precedents in which national courts have denied the recognition of arbitral awards because they lacked the signature of all the appointed arbitrators¹⁸. Other cases have granted recognition on the basis that at least one of the arbitrators, the president of the panel, did sign the award, explaining as to why the other arbitrators did not sign it¹⁹. However, there are no precedents about upholding the recognition and enforcement of awards that have no signatures at all.

Kleros decisions are not signed. Names of the jurors remain anonymous even after the resolution. This is instrumental for its mechanism to function according to its design properly. The lack of signatures could be a great obstacle in terms of getting Kleros decisions recognized as arbitral awards. It is important to consider that many jurisdictions have shaped their domestic regulations on arbitration after the 1985 UNCITRAL Model Law on International Commercial Arbitration.

This document contains most of the international consensus about arbitral rules. Accordingly, most domestic statutes are shaped after it. Article 31 of this model law establishes the form and contents that an arbitral award should have:

¹⁸ *Società Distillerie Meridionali v. Schuurmans & Van Ginneken BV*, Court of Cassation, Italy, 14 March 1995, 2919, XXI Y.B. Com. Arb. 607 (1996) and *Oberlandesgericht [OLG] Köln*, Germany, 10 June 1976, IV YB Com. Arb. 258 (1979).

¹⁹ Federal Tribunal, Switzerland, 4 October 2010, 4A_124/2010.



Requirement	Does Kleros meet it?
(1) The award shall be made in writing and shall be signed by the arbitrator or arbitrators. In arbitral proceedings with more than one arbitrator, the signatures of the majority of all members of the arbitral tribunal shall suffice, provided that the reason for any omitted signature is stated.	No. Jurors remain anonymous before, during and after the process. They do not sign the decision.
(2) The award shall state the reasons upon which it is based, unless the parties have agreed that no reasons are to be given or the award is an award on agreed terms under article 30.	Kleros does not require its jurors to provide the reasons for their vote. However, this requirement can be opted-out by the litigant parties, so the lack of reasons for Kleros verdict would not affect its enforceability.
(3) The award shall state its date and the place of arbitration as determined in accordance with article 20(1). The award shall be deemed to have been made at that place.	No. Kleros is fundamentally delocalized and happens in a wholly digital environment. There is no 'place of arbitration'.
(4) After the award is made, a copy signed by the arbitrators in accordance with paragraph (1) of this article shall be delivered to each party.	No. Kleros jurors do not sign the decisions. Hence, signed copies cannot be provided to the parties.

2.3. Procedural Issues

In terms of procedural fairness, due to the significant autonomy parties and arbitrators have to conduct proceedings, Kleros protocol does not directly collide with any provision of the New York Convention or the UNCITRAL Model Law. Nevertheless, the fact that the procedure is decentralized both in terms of territory and people could entail certain procedural dilemmas, fundamentally because the litigant parties cannot communicate with the jurors.

Thus, they cannot present arguments on the case nor confront the evidence, among other 'procedural limitations' that the use of Kleros implies. For this paper, it suffices to state that the decentralized nature of Kleros might lead to procedural particularities that could be used to question the fairness and the validity of its outcomes according to regulations of commercial arbitration.



3. A Theoretical Model to Overcome the Obstacles: Kleros Not as a System but as a Tool for Dispute Resolution

As seen in the previous part of this paper, it is not easy to present Kleros as a valid and enforceable arbitration, mainly due to its decentralized nature. Hence, it would be convenient to find alternative ways of representation to accommodate it into civil justice systems.

One of these alternatives is to consider and present Kleros not as a complete system but as a tool for dispute resolution. It is true that, according to most current regulations, Kleros would probably be rejected as arbitration, because of many reasons, some of which have been listed in this paper.

However, this does not mean that individuals cannot use Kleros to conduct 'traditional' arbitration, or other types of alternative methods such as negotiation, mediation, conciliation, collaborative law or ombudsman schemes. The following lines present a theoretical model that portrays Kleros not as a complete system but instead as a tool for dispute resolution, using two examples: Kleros as a transaction agreement, and Kleros as a tool for *ex aequo et bono* decision making in arbitration.

3.1. Kleros as a Transaction Agreement

Most domestic civil regulations allow private parties to enter transaction agreements to bring present disputes to an end or to prevent future ones. This kind of agreements usually have very distinctive legal effects compared to other contracts: transaction agreements are usually treated as *res iudicata*.

This means that, once the parties have settled a dispute through a transaction agreement, they cannot litigate over its substance, and the courts and judges are supposed to make the parties adhere to their commitments, being only capable of reviewing the validity of the transaction agreement itself, but not the substantive aspects of the transaction reached by the parties.

For example, Article 2944 of the Mexican Federal Civil Code establishes that the "transaction agreement is a contract in which the parties, by making reciprocal concessions, end a present controversy or prevent a future one". Article 2953 says that "the transaction has on the parties the same power and authority of a judicial ruling; nonetheless, claims can be made for its annulment or rescission on those cases that the



law authorizes'. There are similar provisions regarding transaction agreements in most civil law jurisdictions, and though there are some matters over which transactions are not allowed, most private disputes can be submitted to it.

In theory, this means that private individuals can enter a transaction agreement to prevent or resolve a dispute using the Kleros protocol. Its outcome should be binding for parties as well as for courts and judges, regardless of any procedural aspect. The delocalized nature of Kleros should not be relevant in this situation. Courts and judges could only assess the validity of the transaction itself, only as a contract, which has nothing to do with the Kleros protocol itself, including its proceeding and outcomes.

3.2. Kleros as a Tool for 'Ex Aequo et Bono' Decision Making in Arbitration

A widely accepted principle in arbitration is that the parties can authorize to adjudicate the matters and render arbitral awards 'ex aequo et bono', meaning "a manner of deciding a case pending before a tribunal with reference to the principles of fairness and justice in preference to any principle of positive law"²⁰. This principle is expressly recognized in Article 28 (3) of the UNCITRAL Model Law.

'Ex aequo et bono' is an ancient legal principle; it can be traced back to the classical period of the Roman Law²¹, and has survived through the Medieval Law Merchant to modern times²². This principle has faced much criticism, and its practice is generally discouraged for the sake of legal certainty. This kind of arbitration is very rarely used, considered to be essentially a way for the arbitrator to operate outside the law²³.

However, for this paper, an essential aspect of this principle, in Trakman's words, is that "the practical reasons that guide decisions ex aequo et bono may also justify adopting alternative processes of dispute resolution, including but not limited to those that are provided for by law".

There is no reason why arbitrators could not use Kleros platform as a tool to produce their awards and decisions. It is true that 'ex aequo et bono' has certain limitations. Most commentators agree that, even when choosing this kind of arbitrations, the awards still would have to be governed by the terms of the contract, trade usages and mandatory rules of law²⁴.

However, if correctly established in the arbitration clause, *prima facie* there is no aspect

²⁰ Aaron X. Fellmeth ; Maurice Horwitz, 2009. Ex aequo et bono. , pp. Guide to Latin in International Law, 2009-01-01.

²¹ TERAMURA, Nobumichi. "The Strengths and Weaknesses of Arguments Pertaining to Ex Aequo Et Bono." Asian International Arbitration Journal, Vol. 15(2) (2019) 65-66.

²² TRAKMAN, Leon. "Ex Aequo et Bono: Demystifying an Ancient Concept." Chicago Journal of International Law, Vol. 8(2) (2008) 621.

²³ Ibid. 622.

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of Kleros protocol that could potentially disregard any of these aspects. Ultimately, there are plenty of reasons to argue that Kleros dispute resolution system is entirely based on morality and informed by practical reasoning. Since it is designed to achieve substantive accuracy, Kleros decisions are most likely to respect the terms of the contract as well as trade usages and adjudicate matters accordingly. About mandatory rules, each national jurisdiction has its own mandatory or public interest rules.

Still, most of them are consistent with the 'ex aequo et bono' principle and allow a fair amount of discretion to the private autonomy of the parties when it comes to a decision about how they want to settle their disputes. For example, Article 2771 of Mexican Federal Civil Code establishes that "when people use the means of chance, not as a bet or game, but to divide commonly-owned things or to end differences, it will produce, in the first case, the effects of a legitimate participation, and in the second, of a transaction".

So, if even a means of chance like tossing a coin or any other method of that sort is legally recognized as a legitimate way to resolve disputes, there is no reason to object to the usage of a much more sophisticated tool such as Kleros for exactly the same purposes. Similar provisions may be found in many jurisdictions.

Even in the absence of them, common sense and strong historical evidence show that external decision-making tools have always existed in arbitration and private dispute resolution. In the end, as Tarkman remarks, "condemning ex aequo et bono decisions on grounds that they operate not only outside the law but contrary to it does more than challenge adjudicative activism. It discourages adjudicators -and the parties who empower them- from pursuing the fair resolution of disputes when it is most needed: when the law fails to react adequately to the need for justice".²⁵

²⁵ Ibid. 642.



Conclusions

There is a clear tendency towards accommodating and regulating ODR within civil justice systems throughout the world. However, it is not clear how long these processes will take, and it is possible that more advanced jurisdictions will make the appropriate reforms sooner, hence deepening the development gap between countries and regions.

In the meantime, even in the absence of a specialized legal framework yet to come, Kleros faces several challenges to operate as a dispute resolution system, primarily because of its decentralized nature. This feature entails some consequences that can prevent it from being considered as a valid arbitration and its decisions as recognizable and enforceable awards.

However, it is possible to overcome these obstacles even within current legal frameworks, by considering Kleros not as an independent system but as a tool for dispute resolution. It can be used in at least two forms: either as the content of a transaction agreement or as a decision-making tool in 'ex aequo et bono' arbitration.

Both ways theoretically guarantee that decisions reached via the Kleros protocol legally become *res iudicata* and could be therefore recognized and enforced in formal jurisdictions. Further research is needed to test the practical validity of this theoretical model, preferably through strategic litigation seeking to establish legal precedents in key jurisdictions upholding the recognition and enforcement of resolutions reached through Kleros protocol.