JOURNAL OF INTERNATIONAL CRISIS AND RISK COMMUNICATION RESEARCH
ISSN: 2576-0017
2024, VOL 7, NO S5

The Bases of Civil Responsibility Emerged from the Damages of Artificial Intelligence Entities

Dr. Zina Qudrat Latif

Assistant Prof., College of Law & Political Sciences, Iraqia University.azeena.qudrat@gmail.com

Abstract
We highlight through studying the basis of civil liability for damages caused by artificial intelligence in a dual plan divided into two sections and the section is divided into two requirements as follows:

The first section: Establishing civil liability for damages caused by artificial intelligence according to traditional foundations. The first requirement: Establishing civil liability for damages caused by artificial intelligence according to the rules of liability for things.

The second requirement: Establishing civil liability for damages caused by artificial intelligence according to the rules of liability for the products concerned. The second section: Establishing civil liability for damages caused by artificial intelligence entities according to emerging foundations. The first requirement: Establishing civil liability for damages caused by artificial intelligence entities according to the human deputy system.

The second requirement: Establishing civil liability for damages caused by artificial intelligence entities according to a new system.

We followed this research with a conclusion in which we showed the most prominent conclusions and proposals

Keywords:
Artificial Intelligence, Tort Liability, Legal Representative, Defective Products, Custody of Things

Introduction:

In the past, artificial intelligence was a subject of science fiction, but today it has become an established fact, and as much as this topic aroused interest and presented positives, it also raised concern and highlighted its negatives. Artificial intelligence performs activities that have always been unique to humans, such as speech production, understanding natural language, and recognizing faces. And even artistic expression and others. Artificial intelligence entities are becoming increasingly widespread in our daily lives, including drones, self-driving cars, and software that can assist judges and lawyers in their professional activities, or assist doctors in their diagnosis and operations.

Research problem:

This topic raises the question of the extent to which current civil liability rules can be adapted to the new reality imposed by artificial intelligence entities. Is it possible to find solutions to frame the harms of artificial intelligence in the existing liability systems while adapting them and developing their concepts? Or does it require rebellion against what exists and putting forward a new system that is more responsive to the damage caused by artificial intelligence entities and programs?

The entry of artificial intelligence into various areas of daily life poses a new challenge to the law. Are the general rules sufficient or appropriate to regulate it? In particular, determining who is responsible for the damage caused by artificial intelligence entities. Is it responsible for the damage caused by artificial intelligence itself? Or is the determination of who is responsible according to what is stated in the general rules regarding the custodian of things or the person responsible for the defective product? Or should we begin to formulate new rules that suit the nature of artificial intelligence, and define the responsibility of all those involved in creating it, including the manufacturer, operator, user, and others?

Research questions:

1- To what extent are tort liability provisions arising from damages from smart robots subject to the general provisions regulating tort liability according to general rules?

2- Who is civilly liable for damages caused by artificial intelligence entities and what is the basis of this liability?

3- Are these entities held accountable according to the rules of civil liability based on personal consideration, or according to the rules of responsibility for things, or the responsibility of the subordinate for the subordinate?

4- What are the effects of these damages and how is this liability paid?

Research aims:

Shedding light on the general provisions resulting from the harmful act and the extent of their application and application to the harmful act resulting from the harm resulting from artificial intelligence, and identifying the specific subjectivity of the harm resulting from robots, which is reflected in its determination of the extent to which it is permissible to compensate for it when proving responsibility for the harmful act resulting from artificial intelligence entities, as well as Addressing the causal relationship between the harmful act and the damage resulting from the use of artificial entities in terms of determining the content and nature of this relationship between the harmful act and the damage.

Research importance:

he research gains its importance from the fact that it discusses one of the most important legal topics that have preoccupied legal thought at the present time. It deals with a modern controversial legal topic that is directly related to modern scientific and technical developments, namely the phenomenon of artificial intelligence, which has become the focus of research in various fields, and what the law knows about it is far away. The importance of this research is highlighted by its novelty, especially with the lack of Arab studies and the abundance of foreign studies. The importance of the research also emerges after the issuance of legislation by the European Parliament on 2/26/2017 related to the rules of civil law for robots, and the presence of cases before courts in France and the United States with the same Relevance to the topic of the study.

Research Methodology:

Understanding the various aspects of research requires us to use several research methods in a consistent manner, in which we rely on the descriptive and analytical method, while resorting to the comparative method when necessary.

The descriptive approach is to explain the new concepts in the field of artificial intelligence, and describe them to show their specificity in the subject of the research. As for the analytical approach,

we will adopt it in analyzing jurisprudential opinions, legislative texts, and judicial rulings to determine the extent to which the legal rules of this newcomer can be understood. Relying on the analytical approach requires using the method. Sometimes comparative to show the position of the legislation regulating some aspects of the research topic, relying on the general rules in the Latin direction in the laws of France and Egypt, the position of the European Parliament's legislation and laws related to the research topic whenever necessary, and the legislative position in Anglo-American law, and then the possibility of benefiting from modern legislative positions. For developed countries with the aim of alerting the Iraqi legislator to the necessity of confronting these issues and drawing up the appropriate legislative framework for them in a way that guarantees the interest of society and enhances confidence in these technologies that are constantly developing.

Keywords: artificial intelligence, defective liability, legal representative, defective products, guarding things

First: Research topic:

In the past, artificial intelligence was a subject of science fiction, but today it has become an established fact, and as much as this topic aroused interest and presented positives, it also raised concern and highlighted its negatives. Artificial intelligence performs activities that have always been unique to humans, such as speech production, understanding natural language, and recognizing faces. And even artistic expression and others. Artificial intelligence entities are becoming increasingly widespread in our daily lives, including drones, self-driving cars, and software that can assist judges and lawyers in their professional activities.Or it helps doctors in their diagnoses and operations, in addition to the robot that has the ability to do self-thinking, make independent decisions, and perform certain movements without relying on anyone to carry out their tasks and deal with others. This functional independence that characterizes artificial intelligence is what represents the limit. The difference between it and mechanization is controlled by humans, or automation with steps drawn through human instructions.

The intervention of artificial intelligence in various areas of life has formed fertile ground for the establishment of responsibility for its new applications, whether they have a physical embodiment such as self-driving cars, robots, etc., or those applications that are limited to computer programming. They must face the rules of responsibility in order to compensate those harmed by their actions. What is meant by the basis of responsibility is the set of reasons, motives, and justifications that prompt the legislator to place the burden of compensation for damage on a specific person. Various legislations have clarified the basis of responsibility, either on the basis of error or damage, and the legislation has not yet determinedBasis of liability for AI damages; Due to the novelty of this application of liability, jurisprudence looked into several foundations to show the extent to which it could be applied to damages resulting from artificial intelligence. Among these foundations were what was mentioned by the general rules in civil law, such as in the application of the custodian of things liability system, or the implementation of the liability system for defective products. On the harms resulting from artificial intelligence, in addition to that, a part of jurisprudence called for the application of new rules commensurate with the nature of this newcomer, as in implementing the theory of the human representative, in addition to the callTo adopt new rules of liability for damages caused by artificial intelligence entities that are proportional to the nature of the latter.

Second: Research objectives:

Shedding light on the general provisions resulting from the harmful act and the extent of their application and application to the harmful act resulting from the harm resulting from artificial intelligence, and defining the specific subjectivity of the harm resulting from robots, which is reflected in its determination of the extent to which it is permissible to compensate for it when

proving responsibility for the harmful act resulting from artificial intelligence entities, as well as Addressing the causal relationship between the harmful act and the damage resulting from the use of artificial entities in terms of determining the content and nature of this relationship between the harmful act and the damage.

Third: The importance of research:

The research gains its importance from the fact that it discusses one of the most important legal topics that have preoccupied legal thought at the present time. It deals with a modern controversial legal topic that is directly related to modern scientific and technical developments, namely the phenomenon of artificial intelligence, which has become the focus of research in various fields, and the law has not known much about it. The importance of this research is highlighted by its novelty, especially with the lack of Arab studies and the abundance of foreign studies. The importance of the research also emerges after the issuance of legislation by the European Parliament on 2/26/2017 related to the rules of civil law for robots, and the presence of cases before courts in France and the United States with the same Relevance to the topic of the study.

Fourth: Research problem:

This topic raises the question of the extent to which current civil liability rules can be adapted to the new reality imposed by artificial intelligence entities. Is it possible to find solutions to frame the harms of artificial intelligence in the existing liability systems while adapting them and developing their concepts? Or does it require rebellion against what exists and putting forward a new system that is more responsive to the damage caused by artificial intelligence entities and programs? The entry of artificial intelligence into various areas of daily life poses a new challenge to the law. Are the general rules...Is it sufficient or appropriate to organize it? In particular, determining who is responsible for the damage caused by artificial intelligence entities. Is it responsible for the damage caused by artificial intelligence itself? Or is the determination of who is responsible according to what is stated in the general rules regarding the custodian of things or the person responsible for the defective product? Or should we begin to formulate new rules that suit the nature of artificial intelligence, and define the responsibility of all those involved in creating it, including the manufacturer, operator, user, and others?

Fifth: Research methodology:

Understanding the various aspects of research required us to use several research methods in a consistent manner, in which we rely on the descriptive and analytical method, while resorting to the comparative method when necessary. The descriptive approach is to explain the new concepts in the field of artificial intelligence, and describe them to show their specificity in the subject of the research. As for the analytical approach, we will adopt it in analyzing jurisprudential opinions, legislative texts, and judicial rulings to determine the extent to which the legal rules of this newcomer can be understood. Relying on the analytical approach requires the use of...Sometimes using the comparative approach to clarify the position of legislation regulating some aspects of the research topic, relying on the general rules in the Latin direction in the laws of France and Egypt, the position of the European Parliament's legislation and laws related to the research topic whenever necessary, and the legislative position in Anglo-American law, and then the possibility of benefiting from legislative positions. Modern technologies for developed countries with the aim of alerting the Iraqi legislator to the necessity of confronting these issues and drawing up the appropriate legislative framework for them in a way that guarantees the interest of society and enhances confidence in these ever-developing technologies.t continuous.

Sixth: Research structure:

We shed light by examining the basis of civil liability for artificial intelligence damages) in A dual plan divided into two sections, and the section is divided into two topics, as follows: The first topic: Establishing civil liability for artificial intelligence damages according to traditional foundations. The first requirement: establishing civil liability for artificial intelligence damages according to the rules of liability for things. The second requirement: Establishing civil liability for damages to artificial intelligence in accordance with the rules of liability for defective products. The second topic: Establishing civil liability for damages to artificial intelligence entities according to new principles. The first requirement: Establishing civil liability for damages to artificial intelligence entities according to the human representative system. The second requirement: Establishing civil liability for damages to artificial intelligence entities according to a new system.

The first topic Establishing civil liability for artificial intelligence damages according to traditional principles The features that characterize the civil liability system revolve around one axis, which is the legal person. Responsibility falls only on a distinct human being, and it never occurred to anyone to assign responsibility to someone other than a natural person except with the emergence of artificial intelligence, as it reveals the development of civil liability from subjective to Objectivity: The machine is the main reason for this development, but jurisprudence at that stage did not think about holding the machine accountable, but rather searched for the beneficiary of this machine.And the nature of the dangers created by the machine, the risk theory emerged, which is considered one of the strongest theories in justifying objective responsibility [1]. We are examining the suitability of the rules of liability for objects and liability for defective products to compensate for damages caused by artificial intelligence entities, and the extent to which it is possible to benefit from the legislative positions of developed countries with the aim of opening the path for the Iraqi legislator to keep pace and confront these issues and their legal regulation, in a way that guarantees the interest of the individual and society and enhances confidence in technology. Artificial intelligence continues to develop day by dayTherefore, we divide this study into two topics as follows:

The first requirement Establishing civil liability for artificial intelligence damages according to the rules of liability for objects In this hypothesis, we show the extent to which the legal system can apply the responsibility of the guardian of things for damages arising from artificial intelligence, and we review the position of the Latin trend and the Anglo-American trend. Regarding the Latin trend, the system of liability arising from the doing of things in French legislation places the burden of compensation for damages arising from things on their custodian; Because of his powers regarding these things in their use, direction, and control, Article (1242) of the amended Civil Code of 1804 confirms that a person is not only responsible for the damage resulting from his personal action, but he is also responsible for the damage resulting from the actions of the people whom he asks. On their behalf or on the things under his custody, and the same article states that the owner of the thing is its custodian unless proven otherwise.

This position is what the Egyptian legislator adopted in Civil Law No. (131) of 1948 in Article (178)[2]. As for the position of the Iraqi legislator in Civil Law No. (40) of 1951 as amended, Article (231) of it stipulates that ((Anyone who has at his disposal mechanical machines or other things that require special care to prevent damage to them shall be responsible for the damage they cause unless it is proven that he took sufficient precaution to prevent this damage from occurring, without prejudice to the special provisions contained therein.) The responsibility of the custodian of the

[1])Youssef Islam: Civil Liability and Artificial Intelligence: Any Solution, published research, Annals of the University of Algiers, special issue, International Forum Artificial Intelligence is a New Challenge for Law, November 2018, p. 235

[2]Article (178) of the Egyptian Civil Law No. (131) of 1948 stipulates that "Every foreigner who undertakes the guarding of objects whose guarding requires special care or the guarding of mechanical machines shall be responsible for the damage caused by these objects, unless it is proven that the damage occurred due to... He has no hand in it, without prejudice to the special provisions contained therein.)

items is based on the supposed error, so the injured party is not responsibleBy proving the error, the legislator assumed its existence with a sufficient presumption to establish responsibility, and this legal presumption means the legislator's deduction of a fact for which he did not establish direct evidence, so the legislator made the possible thing exist [3], and the presumption is either conclusive and cannot be proven to the contrary, and therefore the error in it is presumed by an unacceptable assumption. To prove the opposite, it cannot be denied except with proof .The foreign cause is like proof of force majeure. In order for the accident to be considered force majeure, it must be external and cannot be expected or avoided, and its consequences cannot be prevented. It is also considered a foreign cause due to the fault of the injured person and third parties. In such cases, the guard's responsibility is denied [4], or the presumption is not Conclusive, that is, capable of proving the opposite, and the error in it is hypothesized and accepts proof of the opposite, and the one to whom the error is attributed can deny it in two ways: proving the foreign cause, or proving that he exercised the necessary caution and exercised the necessary care[5]

Jurisprudence differed in explaining its concept into two theories. The legal guardianship theory believes that the meaning of guardianship is legal control by the person who is granted by law the right to manage, monitor, and use the thing. This legal authority is derived from the right that this person has over the thing, regardless of the source of this right. The existence of this authority The law is sufficient to establish custody[6]

The second theory is the theory of physical guarding, which means that guarding is the actual authority over the thing. The guard is the one who has the three powers of control, use, and direction. The physical element of guarding, represented by the three authorities, must be present, and the moral element is through exercising these powers on his own account. The owner of the thing must not He is considered his guardian if he is deprived of his use, direction, and control [7], and both the ideas of legal guardianship and physical guardianship were nothing but a difference in wording, so the legislator must be concerned with ensuring compensation for the harmed person [8].

The second condition: damage caused by something: Meaning that the interference of something in causing the harm is positive, and if the interference is negative then Before the thing, the harm does not result from doing that thing. However, the interference of the thing in causing the damage does not require direct physical contact between the damage and the thing [9]. A part of jurisprudence adds, in addition to the previous conditions, the condition that the thing be dangerous, and the thing

[3]Abbas Al-Aboudi: Explanation of the provisions of the Evidence Law, a comparative study in light of the provisions of the Electronic Signature and Electronic Transactions Law No. 78 of 2021 and the comparative laws supported by judicial applications, Dar Al-Sanhouri, Beirut, 2017, p. 250. Dr.. Adam Wahib Al-Nadawi: The summary of the law of evidence, the Legal Library, Baghdad, 2005, p. 164.

[4]Muhammad Shanab, Lessons in the Theory of Commitment, Sources of Commitment, Arab Renaissance House, Cairo, 1977, p. 420.

[5]Dr.. Abdul Majeed Al-Hakim, Abdul Baqi Al-Bakri, and Muhammad Taha Al-Bashir: Al-Wajeez in the Theory of Commitment in Iraqi Civil Law, Sources of Commitment, Part One, The Legal Library, Baghdad, 2012, p. 273.

[6]Salem Muhammad Radayan Al-Azzawi: Producer Responsibility in Civil Laws and International Agreements, Dar Al-Thaqafa for Publishing and Distribution, Amman, 2009.

[7]Dr. Ayed Raja Al-Khalayleh, Electronic Tort Liability, Liability Arising from Misuse of Computers and the Internet, A Comparative Study, Dar Al-Thaqafa for Publishing and Distribution, Amman, 2011, p. 190.

[8]Dr. Hassan Al-Khatib, The Scope of Tort Civil Liability and Contractual Liability in French Law and Comparative Iraqi Law, Haddad Press, Basra, 1968, p. 191

[9]Abdel Razzaq Ahmed Al-Sanhouri: The mediator in explaining the new civil law, the theory of obligation in general, sources of obligation, Part One, Volume Two, Nahdet Misr, Cairo, 2011, p. 1090.

may be dangerous by its nature, that is, by using the objective standard, or dangerous by its circumstances and circumstances, that is, by using the subjective standard [10].
It can be said that it is undesirable to hold the owner of an AI entity or its user accountable for damages caused by the AI; The fact that the latter represents intelligent technologies that have their own decision and whose owner has no control over them in most cases, is what necessitates the search for a more effective system for establishing civil liability for artificial intelligence.

The second requirement Establishing civil liability for damages to artificial intelligence entities under the rules of liability for defective products In this hypothesis, we review the extent to which the product liability system can be implemented for defective products and damages caused by artificial intelligence. It was adopted by the French legislator and transferred its provisions to the Civil Code under the law issued on May 19, 1998. This responsibility is determined by law and is based on insufficient safety and security in the products, so the producer [11] is responsible for the damages arising from the defect in the product, and this responsibility It is distinguished by its special legal nature, as its system applies to all those affected by product defects, regardless of the seriousness of the products or the nature of their relationship with the product, whether there is a contract or not, so it is not considered a tort or contract liability, but rather a legal liability of a special nature .[12]
Liability for defective products is an objective responsibility, meaning that the element of fault is not taken into account, so the injured person is not required to prove the fault, but rather he must prove the existence of the defect in the product, i.e. the failure of safety and security specifications in it and the defect is determined as a basis for liability on the basis of an objective standard. It is represented by the legitimate expectations of consumers [13], and the rules of this responsibility are peremptory and of public order, [14]so any agreement to reduce or exempt from it is invalid .
A producer, as defined by European Directive 374/85 in Article 1.3, is ("producer" means the manufacturer of the final product, the producer of any raw material, or the manufacturer of a component part, and any person who affixes his name, trade mark, or any other distinguishing feature The producer shows himself as the producer.)) In the same sense, Article (6/1245) of the French Civil Code defined it, as the Iraqi legislator defined it in the Iraqi Consumer Protection Law No. (1) of 2010 in Article (1/Sixth) as the supplier, which is ((Every natural or legal person who is a producer, importer, exporter, distributor, seller of a commodity, or provider of a service, whether principal, intermediary, or agent)).

For this liability to apply to damages resulting from artificial intelligence, and for the manufacturer of these entities to be responsible, three elements are required, the first of which is the presence of a defect in the artificial intelligence entity, and the defect is as defined in Article (6) of European Directive 85/374 and Article (4/1245) of The French Civil Code states that "a product is considered defective if it does not provide the safety that a person can legitimately expect." Defects that threaten the economic benefit or cause the product to fail to achieve the purpose for which it was

[10]See: Dr. Iyad Abdel-Jabbar Maluki: Previous source, p. 35 et seq

[11]A producer, as defined by European Directive 374/85 in Article 1.3, is ("producer" means the manufacturer of the final product, the producer of any raw material, or the manufacturer of a component part, and any person who affixes his name, trade mark, or any other distinguishing feature The producer shows himself as the producer.)) In the same sense, Article (6/1245) of the French Civil Code defined it, as the Iraqi legislator defined it in the Iraqi Consumer Protection Law No. (1) of 2010 in Article (1/Sixth) as the supplier, which is ((Every natural or legal person who is a producer, importer, exporter, distributor, seller of a commodity, or provider of a service, whether principal, intermediary, or agent)).

[12]See Article (4) of European Directive 85/374 of 1985 and Article (1245) of the French Civil Code.

[13]See Article (1) of European Directive 85/374 of 1985 and Article (5/1245) of the French Civil Code.

[14]See Article (6) of European Directive 85/374 of 1985 and Article (3/1245) of the French Civil Code.

created do not fall within the scope of this liability. This responsibility requires proof of the danger of the products and not proof of error, but rather proof of the defect and damage [15], and in this way this responsibility differs from the responsibility to guarantee hidden defects,[16] which consider the defect to exist if it reduces the value of the item sold or serves a valid purpose [17].

The second element is harm. If the occurrence of harm is not proven, then there is no place to discuss liability. Damage is any harm that befalls another as a result of violating one of his rights or a legitimate interest of his, whether it relates to his body, money, affection, honor, or reputation [18]. The third element is the causal relationship, meaning that the damage occurred due to the defect. The European legislator assumed the existence of the defect in the product before launching it on the market, to facilitate the burden of proof on the injured party. The producer has the right to deny responsibility by proving that the defect did not exist at the time the product was launched on the market, or that the commodity was not placed in Trading at the will of the producer, in addition to possibility of paying liability by proving the foreign cause[19]. In the event that more than one person contributes to the production of the product until it reaches the consumer in its final form, here we are faced with multiple producers, and the established principle in French law and European directives is to oblige all producers, in the event of multiple ones, to stand in solidarity in confronting the affected person, but searching for the responsible person is a matter. It's especially tricky when the AI robot operating software is open source

Iraqi legislation lacked a clear regulation of liability for defective products, unlike the French and Egyptian legislators [20]. The Iraqi legislator limited the mention of producer responsibility to one article and did not include the clear wording of this system of liability. Article (8) came from Consumer Protection Law No. (1) of 2010 by saying ((Without prejudice to the provisions of Clause (Second) of Article) of this law, the supplier shall be fully responsible for the rights of consumers for his goods, goods or services, and his responsibility shall remain in place throughout the warranty period agreed upon in Paragraph (C) From Clause (First) of Article - 6 - of this law)

[15]See Article (12) of European Directive 85/374 of 1985 and Article (14/1245) of the French Civil Code.

[16]Dr .Salem Muhammad Radayan Al-Azzawi: Producer Responsibility in Civil Laws and International Agreements, Dar Al-Thaqafa for Publishing and Distribution, Amman, 2009, pp. 111 et seq.

[17]Dr. Dhafer Habib Jabbara: The modern concept of defect in light of the systems governing product liability, a comparative study, Law Journal for Legal Research, No. 8, 2014, pp. 12 et seq.

[18]Hassan Ali Al-Dhanoun, The General Theory of Obligations, Sources of Obligation, Provisions of Obligation, Proof of Obligation, Freedom Printing House, Baghdad, 1976, p. 226

[19]See Article (7) of European Directive 85/374 of 1985 and Article (8/1245) of the French Civil Code.

[20]The Egyptian legislator stipulated the responsibility of the producer through the text of Article (1/67) of Trade Law No. (17) of 1999, which stated that: “The producer and distributor of the commodity shall be liable before anyone who suffers physical or material damage caused by the producer if this person proves that the damage It arose due to a defect in the product)).

[21], and this is considered a legislative vacuum that requires the legislator to frame it in legal texts in a way that ensures the evaluation of legal protection for those dealing with these products.The traditional school called for the possibility of applying the principles regulating responsibility for the actions of products to hold artificial intelligence entities accountable for damages that can be attributed to a defect in smart systems as a product. Thus, research into the extent of the product's involvement with artificial intelligence in causing the resulting damages requires investigating the technical cause that led to the damage[22]. The product does not meet consumer expectations. At first glance, it seems that product liability is an effective system for confronting the harms of artificial intelligence. Because it holds the manufacturer of the products responsible for the damages they cause, for example when a self-driving car is manufactured in a defective manner and poses a danger to those around it, or when the company fails to notify customers of the risks associated with this product, product liability applies [23]

Despite the justifications for this trend, by analyzing the concepts of the liability system for defective products and the concepts of artificial intelligence entities, it becomes clear that this system is not suitable for such an application, due to the presence of several problems, the most important of which are: First: The difficulty of adapting the artificial intelligence system as a product: Referring to European Directive 374/85 of 1985 and Article (1245-2) of the French Civil Code, we find that the definition of the product is (movable property)[24], so the question arises about the possibility of compatibility between the definition of the product and the artificial intelligence system, which is classified among intangible entities such as computer programs. orAlgorithms? Describing the latter as a product requires a legal basis that leads to the application of product liability [25], and due to the difficulty of consensus, part of French jurisprudence believes that the liability system for defective products was not designed to frame intangible funds in general, and the damages resulting from artificial intelligence in particular, so what is meant by primary matter in These things, is it appropriate to talk about the manufacturer or importer of these things? Therefore, although the definition of the product helps to include artificial intelligence, the spirit of the provisions of this responsibility requires its exclusion, even if we overcome this problem by deciding thatSince artificial intelligence and its entities can be classified as products

[21]For more information about product liability in Iraqi law, see: Dr. Salem Muhammad Radayan Al-Azzawi, previous source, p. 101 et seq.

[22]Ahmed Ali Hassan Othman, The implications of artificial intelligence on civil law, a comparative study, research published in the Journal of Legal and Economic Research, Faculty of Law - Mansoura University, Issue 76, 2021, p. 1604.

[23]Muammar Ben Taria and Qada Shahida: The harms of robots and artificial intelligence technologies are a new challenge to the current civil liability law. Glimpses at some of the innovations in comparative law. Research published in the International Forum. Artificial Intelligence: A New Challenge to the Law, Annals of the University of Algiers, special issue, Algeria, 2018, p. 123.

[24]The Iraqi legislator has defined in Consumer Protection Law No. (1) of 2010 the product with the term commodity in Article (1/Second) ((Commodity: every industrial, agricultural, transformational, semi-manufactured, raw material, or any other product that can be calculated or estimated by counting... Or the weight, measure or measurement is prepared for consumption

[25]Dr. Sabri Hamad Khater: The extent of adaptation of traditional legal rules in the face of information, a comparative study, Dar Al-Kutub Al-Qanuni, Cairo, 2014, p. 240.

based on the supports they represent, such as the robot's body and other things, the problem of proving that the product was defective arises before us.

Second: The problem of proving defects in artificial intelligence entities:
The application of the term product defect, which is the inability of the product to provide safety or security, with the specificity of artificial intelligence being a non-material thing, raises many problems. How can the affected person prove a non-material product defect? One of the difficulties of proving the technical reason that raises liability in artificial intelligence entities is The element of complexity is in its composition, so it is difficult to prove the unsafety of the product by comparing it with other similar products of the same type, or to prove the technical or technical reason for this defect [26], so the complexityArtificial intelligence systems and entities are an obstacle facing the injured person [27].It is difficult for the plaintiff to prove the presence

of defects in artificial intelligence products, especially when these defects are present in them at the moment they leave the hands of their manufacturer or developer. It is difficult to draw a dividing line between damages inspired by the self-determination of artificial intelligence entities. And the damages resulting from defects in it [28].Artificial intelligence makes its decisions according to the nature of the situation, far from saying that the programmer or manufacturer must be aware of this decision. Artificial intelligence entities have a number of options that they must choose among, and all options are correct for them, but the authority to choose between these decisions is not in the hands of the programmer or manufacturer. But it is in her hand. The defect in artificial intelligence is related to its programming moral concept, especially what is related to the product's ability To adhere to the state of scientific and technical knowledge, at the time the product was put into circulation
. Third: The weakness of the effectiveness of the product liability system in the event that development risks are excluded:The product liability system excludes damages resulting from defects that arose as a result of the development of the product [29], so the producing company argues that the damage occurred as a result of the self-development of the artificial intelligence beyond its initial programming [30], and this exception represents a threat to compensate those affected by the artificial intelligence entities, including the defective ones. It is expected that the companies producing these entities will adhere to this exception; In order to exempt itself from responsibility, by proving that the technical knowledge during the launch of the product was impossible to detect the defect. requiring compensation, and this exception approved by the legislator is more beneficial to manufacturers than what the force majeure exception provides liability[31] for defective products

[26]Muammar Bin Tariya, The Concept of Product Defectiveness in the Civil Product Liability System and the Solutions Provided by Insurance to Cover It, Journal of the Kuwait International Law College, Kuwait International Law College, Issue No. 22, 2018, pp. 647 et seq.

[27]Dr. Ahmed Hassan Othman, previous source, p. 1609

[28]Dr.. Abdel Razzaq Wahba Sayed Ahmed Mohamed, Civil Liability for Artificial Intelligence Damage, Analytical Study, Research Published in Al-Jeel Journal for In-depth Legal Research, Issue 5, 2020, p. 45

[29]See: Dr. Hammad's Shield: Civil Liability for the Risks of Technical Development, Journal of the Faculty of Law, Al-Nahrain University, Issue 16, 2006, pp. 6 et seq.

[30]Ahmed Ali Hassan Othman, previous source, p. 1612.

[31]Ahmed Ali Hassan Othman, previous source, p. 1612.

and holding the manufacturers of this technology responsible; This is because artificial intelligence entities, such as robots and programs, are systems that have the ability to self-learn, have independent decisions, learn from their mistakes and rely on their experience, and therefore it is difficult for the injured person to prove the existence of a defect in the artificial intelligence product, and it is also difficult for the plaintiff to prove (condition The defect was introduced, meaning that the defect existed at the moment the AI entity left its manufacturers In addition to the difficulty of setting boundaries between the damages caused by artificial intelligence entities the same, in other words, the damages derived from the decision of
the intelligent autonomous system for the rest of the damages resulting from a defect or manufacturing defect present in it [32]. Several cases were presented to the American judiciary related to claiming compensation for the artificial intelligence system specializing in surgery (The Da Vinci system) for the damage it caused, but all the lawsuits failed. Because of the difficulty of proving the flaw of the artificial intelligence system [33]
In the case of Bryn Mawr vs Mracek, which was presented to the American judiciary, the patient plaintiff (Mracek) demanded compensation from the hospital and the artificial intelligence surgical system based on the rules of defective products, for the damages he sustained as a result of the surgical operation performed on him using the Da Vinci system, although The system experienced technical problems when it was operated during the operation, but the court did not award compensation to the plaintiff and the lawsuit was dismissed without entering into the details of the case. The court judge based the merits of his decision on the fact that the medical expert's report was not sufficient to hold him accountable.The intelligent surgery system is civil, although during the operation the Da Vinci system issued incorrect messages and stopped taking orders from the human operator. The court stated that the most important thing is not to prove the causal relationship between the behavior of the artificial intelligence system and the harm to which the plaintiff was exposed, but rather the expert testimony that The evidence assesses that the smart surgery system was marred by a malfunction during the operation, and although the plaintiff adhered to the messages sent by the system during the operation as evidence of the existence of a defect in the system, the court did not take his evidence [34].
Civil Society to take note of its aspects, but the problem arises in the issue of the independence enjoyed by artificial intelligence. This independence, no matter how small or extensive, remains a source of reconsideration of the current civil liability rules and the extent of their ability to determine who is responsible for the damage and compensate the injured person. We believe that adapting civil liability for damages to artificial intelligence in accordance with the available rules is the responsibility of the custodian of things and responsibility for defective products, although it carries many difficulties and raises many problems. However, the matter does not prevent it from being adapted by the judiciary as much as possible to protect the injured person as a first stage and a temporary judicial solution. Until a new type of civil liability is developed, in particular With artificial intelligence.

The second topic

Establishing civil liability for damages to artificial intelligence entities in accordance with the new principles After the failure of traditional systems of responsibility in confronting artificial intelligence was proven, comparative jurisprudence called for the necessity of considering a comprehensive reform of the rules of civil liability framing artificial intelligence. One part of

[32]Abdel Razzaq Wahba Sayyed Ahmed Muhammad, previous source, p. 43

[33]Bashar Talal Al-Moumani and Munther Talal, Al-Moumani, Civil Protection from the Risks of Artificial Intelligence in UAE Legislation, research published in the Journal of Law, Issue 2, Volume 17, 2020, p. 283.

[34]Ibid

jurisprudence called for holding artificial intelligence entities responsible for their personal actions. By granting it legal personality, it bears the burden of compensation for the direct damages it causes [35], but this recognition seeks to establish the principle of personal responsibility.For intelligent entities, it will create fundamental contradictions that will be difficult to solve in the future, such as the difficulty of separating the error of the intelligent system from the error of its operator, and how to estimate the behavior of artificial intelligence entities individually. Thus, it is difficult to isolate the error of artificial intelligence entities from the error of their designers, except in cases where the damage is the result of the user's negligence or indoctrination. The latter shows that artificial intelligence has deviant behavior that results in harm [36]. Also, one of the most famous things proposed in establishing responsibility for artificial intelligence is the implementation of the theory of the human representative mentioned by the European legislator in the Civil Robot Law of 2017, in addition to theTo call on a large part of jurisprudence to implement a new system of civil liability for damages from artificial intelligence that is commensurate with its nature and specificity, we therefore divide this topic into two demands as follows:

The first requirement Establishing civil liability for damages to artificial intelligence entities according to the human representative system The legislator still maintains a position of suspicion towards artificial intelligence entities that may cause serious harm to people and money. The current legal definition of artificial intelligence entities is that they are a thing, and that their owner is merely a keeper of things who bears the burden of the supposed error like the owner of a traditional car. It has become clear to us the difficulty of applying these concepts. Is it reasonable to apply a theory dating back to the last century, even though artificial intelligence entities move and make independent decisions?Therefore, they are not submissive machines that are deaf until they are described by things. It is necessary to develop the traditional general rules of civil law to confront the harms of artificial intelligence entities. It is not fair to question artificial intelligence entities when they do not have a legal personality, just as it is not fair to question their owner. According to the theory, they belong to the era of traditional machines, and they do not have custodial control or even control. Directing and controlling it.

Also, establishing responsibility on its programmer or maker is not possible in light of the deviation of these entities from their behavior, and this deviation is not related to their manufacture.And its programming is based on the changing circumstances of the situation that do not fall under the inventory.

For this reason, the European legislator came up with a new theory for the basis of civil liability for damages from artificial intelligence, which is the theory of the human agent. This theory was contained in the provisions of the Civil Robot Law issued on February 16, 2017, where it imposed responsibility for the operation of artificial intelligence entities on a group of people according to the extent of Their interference in its manufacture or exploitation, or the extent of their negativity in avoiding the actions expected from these smart entities, without assuming error and without considering smart entities as objects, the legislator stated that ((in light of the legal frameworkCurrently, robots cannot be held personally liable for actions that cause harm to third parties, while in cases where the reason for a robot's action can be traced back to a specific human representative such as the manufacturer, operator, owner, or user, and where
this representative can anticipate and avoid the robot's harmful behavior, it is possible to hold Manufacturers, operators or users are fully responsible for the actions of the robot)[37]

This theory is consistent with the nature of artificial intelligence entities in terms of their independence and in terms of their ability to interact with what is around them and learn from their

[35]Dr. Ahmed Ali Hassan Othman, previous source, p. 1571.

[36]Dr. Abdel Razzaq Wahba, previous source, p. 49

[37]See Article (10) of European Directive 85/374 of 1985.

mistakes. The European legislator did not consider these entities on the basis of a thing, and did not consider them to be irrational beings. He described the person responsible for it as a "deputy" and did not describe him as a guard or a watchdog. The European legislator also moved closer to approving the responsibility of artificial intelligence entities themselves by stating that the inability to impose responsibility for personal actions is due to the legal system and not to artificial intelligence entities [38]

Referring to the position of the European legislator contained in the civil law for robots, it becomes clear that the idea of a human representative is an innovative and new idea that differs from the theories and ideas known in civil law. Responsibility according to the theory of a human representative differs from ideas that may be similar to the recipient, so it differs from the idea of responsibility for things, as It differs from the idea of bail, in addition to its difference from the idea of legal representation. The idea of a human representative's responsibility cannot be considered within the framework of responsibility for things; This is because European legislation has described who is responsible for intelligence entitiesThe idea of a human representative contained in European legislation differs from a personal guarantee. The guarantee includes a pledge to the creditor that the guarantor will fulfill the obligation in the event that the debtor fails to fulfill the obligation. As for responsibility for entities, there is no agreement between the human representative regarding the intelligence entity. Artificial intelligence and between the injured person, artificial intelligence. The responsibility of the human representative is assumed by law, unlike the guarantee, for which there must be an agreement. The idea of the responsibility of the human representative differs from the idea of the legal prosecution.The representative, by law, represents another person who has legal personality, whether he is incapacitated or incomplete. As for artificial intelligence entities, legislation has not yet recognized them as having legal personality, and it seems that the closest legal idea to the idea of a human representative is the idea of liability insurance, as if it is Insurance for the benefit of artificial intelligence entities to confront an unspecified harm, but it differs in that the insurance system aims to achieve the interest of the person causing the harm, and that directing the insurance must be carried out through a licensed company [39].

From the above, it becomes clear to us that the traditional conditioning of the responsibility of the human representative does not give a satisfactory answer to the relationship between humans and artificial intelligence entities. Humans are representatives of artificial intelligence entities in bearing responsibility. This European case is a new and innovative case in legal thought, and it assumes the existence of a legal representation for Responsibility between artificial intelligence entities and humans according to his role and interference in the work of intelligent entities, and this is indicated by the phrases of the European legislator when he mentioned the phrase (transferring the burden of responsibility (Traced Back)[40] to the human representative).

The European legislator stated in the civil law for robots that liability for harm caused by artificial intelligence is a complex issue. According to the current legal framework, artificial intelligence entities cannot be held responsible for personal actions for the harm they cause to people. However, the current rules of liability can cover cases in which it is possible to attribute The action of artificial intelligence entities to a specific human agent, that is, to a human representative such as

[38]Muhammad Ahmed Al-Maadawi, Civil Liability for Damage to Robots with Artificial Intelligence, a Comparative Study, Legal Journal, Issue 71, 2021, p. 293.

[39]Mohamed Boumedian: Artificial Intelligence is a new challenge to the law, Masarat Journal of Legal Research and Studies, Morocco, No. 10, 2019, p. 214.

[40]See Article (10) of European Directive 85/374 of 1985

the manufacturer, operator, owner, or user, whenever that person had expected the artificial intelligence entities to perform harmful behavior.[41]

The human representative, according to what the European legislator has stated in the civil law for robots, has four forms: the manufacturer, operator, owner, or user bears responsibility [42], and these forms differ according to the circumstances of the accident that may have been caused by artificial intelligence entities on the one hand, and the degree of actual control of the representative over it, which will be evaluated. Whether the representative made an error or not, on the other hand, contradicts the Guardian of Things theory, which assumed the existence of the error. These images are as follows:

First: The company that produces artificial intelligence entities: In such a case, the manufacturer is responsible for the defects of the artificial intelligence entities resulting from poor manufacturing that led to the artificial intelligence entities falling outside the scope of their normal use. For example, if a medical care robot moved the patient incorrectly as a result of a defect in its manufacturing, which caused harm to the patient, then the company is responsible. The manufacturer has this responsibility, in addition to the manufacturer's responsibility for neglecting to maintain the smart entities [43].

Second: Operators of artificial intelligence entities:

That is, a professional person who exploits artificial intelligence entities, as in a bank that runs a smart application in managing some banking operations, such as FinTech companies. An error may occur in managing customer accounts, and the operator bears responsibility [44].

Third: Owners of artificial intelligence entities:

That is, the person who operates artificial intelligence entities to serve him or his clients, as in the case of a hospital owner who uses medical artificial intelligence entities and causes harm to patients, even though the hospital owner knows what they cause. It should be noted that the European legislator in the civil law for robots did not place the owner as the first human representative for the entities. Artificial intelligence, rather, was introduced by the manufacturer and the operator, and this is contrary to what was demonstrated by the theory of the keeper of things, which imposes responsibility on the owner, so the presumption of guarding the thing exists on his side, even if the accident occurred with the operator .[45]

Fourth: Users of artificial intelligence entities:

That is, the person who uses artificial intelligence entities and is not their owner or operator, as in the case of a traveler who uses a self-driving car and sends a wrong direction causing a traffic accident, and thus he has violated The European legislator has established general rules for

---

[41]Dr. Muhammad Ahmed Al-Maadawi, previous source, p. 298.

[42]Dr.Muhammad Ahmed Al-Maadawi, previous source, p. 299

[43]It should be noted that in one of the lawsuits filed before a court in the state of Philadelphia in the United States of America in 2005, the court assigned the plaintiff to prove that the da Vinci robot did not work better than a human, and to prove the error of the doctors in the hospital, after the doctors in the Bren Hospital Maor used the robot to remove a patient's tumor.

[44]Muhammad Jaber Abdel Hamid Al-Beltagy: The impact of artificial intelligence on the stock market, Journal of Legal and Economic Research, Mansoura University, Issue 75, March, 2021, p. 1932. Dr.. Fatiha Belt: Challenges of Civil Liability for Doing Smart Things, published research, selections from the works of the National Forum on the Future of Civil Liability, Mohamed Bougara University of Boumerdes, Algeria, January 28, 2020, p. 454.

[45]Dr.Abdul Razzaq Ahmed Al-Sanhouri: Al-Waseet, Part One, p. 1087.

establishing liability on the owner if the dependent causes the accident. Contrary to the theory of the responsibility of the subordinate owner for the actions of the subordinate - the user - [46].

The responsibility of the human representative is based on established error, so the one who suffers harm must prove it. Error is not assumed by law, as is the case with the responsibility of the custodian of things. The one who is harmed by artificial intelligence entities must prove the error of the owner, operator, or user [47], in other words, prove their ability to avoid The harm if they exercised the necessary care, in addition to proving the harm and the causal relationship between the error and the damage, and we support what one side of jurisprudence sees as the necessity of assuming error in the operation of artificial intelligence entities, as in the responsibility of the custodian of things, so that responsibility is not denied except by proving the existence of the cause as for the foreign one, The issue of operational independence of artificial intelligence entities should not be a reason to deny responsibility.[48]

The European legislator also stated in the civil law for robots the possibility of establishing the contractual liability of the human representative for the damages caused by artificial intelligence entities to the clients of the companies operating or owning them. The failure of these entities to perform their duties for the benefit of the person contracting with the company or to do so in violation of the contract gives the affected contractor the right By demanding compensation after proving the company's fault, the occurrence of damage, and the causal relationship between them, but the European legislator did not make these provisions a matter of public order, so he permitted an agreement to violate them[49] . Since the entities of intelligenceArtificial intelligence is characterized by its ability to make decisions and implement them independently. This possibility has been approved by the European legislator. These rules are not sufficient to protect the injured person from harm caused by artificial intelligence entities. The independence characteristic of these entities makes it difficult to determine the party responsible for causing the harm, and it is Then demand compensation for what was caused by artificial intelligence entities; This is why the European law calls on the Civil Law Rules Committee, when it reconsiders this law in the future, to rely on the risk management approach, that is, the responsibility.Instead of relying on the established error on the part of the human representative, objective responsibility only requires proof of the occurrence of the damage and the causal relationship between it and the action of artificial intelligence entities, so the focus is not on the person who acted negligently as being entirely responsible.Individual, but about the person who is able, under certain circumstances, to reduce risks and deal with negative effects. In addition, determining the parties who bear responsibility should be proportional to the actual level of instructions given to smart entities and the degree of their independence[50] . The theory of the responsible representative is a temporary case and has a special purpose, aiming to move from the theory of the guardian of things with the supposed error to representing responsibility for human artificial intelligence entities, either on the basis of a fixed error in its manufacture or operation, or refraining from avoiding a dangerous accident expected from it, as intelligence entitiesArtificial objects are no longer among the things that can be guarded, nor are they like people that can be monitored. Rather, they are intelligent machines that are independent in thinking and autonomous in making decisions after the

[46]Shelihi Karima: Problems of determining the civil responsibility of people within the framework of artificial intelligence systems, published research, selections from the works of the National Forum on the Future of Civil Liability, Mohamed Bougara University of Boumerdes, Algeria, January 28, 2020, p. 472.

[47] Bin Othman Farida: previous source, p. 164

[48] Dr..Hammam Al-Qusi: The problem of the person responsible for operating the robot, previous source, p. 91.

[49]European Parliament, Civil Code Rules on Robotics 2017, paragraph AG.

[50]European Parliament, Civil Code Rules on Robotics 2017, paragraph 53-56.

establishment of (Robot Autonomy) [51], and the European legislator took a middle position in them and did not consider them to be something that can be guarded for the purpose of Preparing for granting her legal personality in the future, and he did not consider her a person lacking capacity for the purpose of not implicitly recognizing her legal personality at the present time.We conclude from the above that the theory of the human representative mentioned in the European Civil Law for Robots represents a middle state between the responsibility of the keeper of things, which is based on an assumed error, and the responsibility for personal actions, which is based on an established error, even though the theory of the human representative comes close to responsibility for personal actions. In terms of the basis of responsibility, it differs from it in terms of the responsible party. Responsibility in the theory of the human representative falls on the human representative and not on the artificial intelligence entities personally, as the latter do not have legal personality - evenToday, we believe that it is better for the legislator, when this theory is clarified, to base it on the basis of an assumed error that cannot be proven to the contrary, in preparation for establishing it on the basis of damage alone later, to protect the injured person in order to facilitate his path to obtaining compensation, rather than basing it on the basis of an established error, as we see that It is appropriate to oblige the humanitarian representative to provide compulsory insurance for all damages caused by artificial intelligence entities to people, and to establish special funds to compensate for damages covered by insurance. We believe that the theory of the human representative mentioned by the European legislator in the civil law for robots in its current formulation does not bring anything new with regard to determining who is responsible, and that the problems that were raised regarding the implementation of the guardian of things liability system or the liability system for defective products will be raised here as well, and we see that the objective liability system and the application The theory of bearing responsibility is the system most capable of confronting the damages resulting from artificial intelligence. The basis of this responsibility is that whoever creates new risks in society through his actions must bear their consequences, as the jurist said to his father.Abbe (L) was the first to say this theory: “Whoever introduces into society for his personal benefit something that would double the risks to which people are exposed, must either dispense with its benefit, or compensate others for what befalls them as a result of the explosion of this thing, or Its refraction)[52]. Although this was mentioned in 1890, it could apply to what we are experiencing today in terms of the interference of artificial intelligence entities in all areas of daily life.

The second requirement

Establishing civil liability for damages to artificial intelligence entities according to a new system

The tendency of countries to invest in various fields of artificial intelligence has become a reality that cannot be ignored, with the aim of the well-being of societies and facilitating life, and the entry of artificial intelligence into various fields requires the establishment of new rules in the field of civil liability under the title (civil liability arising from artificial intelligence).

Artificial intelligence has characteristics that require its individuals to have rules governing responsibility, especially the characteristics of independence and the ability to learn. An aspect of jurisprudence has suggested devoting a new type of responsibility similar to the responsibility of an animal keeper [53]so the special nature of the animal is similar to some extent with artificial

[51]European Parliament, Civil Code Rules on Robotics 2017, paragraph AA

[52]Iyad Abdel-Jabbar Maluki: Previous source, p. 160

[53]Muhammad Ahmed Al-Maadawi, previous source, p. 299

intelligence. Animals are difficult to guard and monitor, and the damages resulting from them are often unexpected, and this matches what is the case with artificial intelligence. Thus, this new type of responsibility can be established by drawing on the existing rules of guardian responsibility as guidance the animal, and we see that the responsibility of the animal keeper is nothing more than a form of guarding things, and therefore there is nothing new in this proposal. Artificial intelligence also differs from animals in that the kinetic, inanimate concept of artificial existing rules of guardian responsibility as guidance the animal, and we see that the responsibility of the animal keeper is nothing more than a form of guarding things, and therefore there is nothing new in this proposal. Artificial intelligence also differs from animals in that the kinetic, inanimate concept of artificial intelligence does not bring it closer to the objective nature of the animal, given the special considerations of the animal, especially in light of its physical, not virtual, entity, unlike artificial intelligence, and the animal is a living thing, while artificial intelligence is inanimate. Living, even if not static, in addition to the fundamental point of differentiation between animals and artificial intelligence represented by the concept is the same intelligence that the latter possesses, unlike animals [54]. By extrapolating the ideas we have presented about the solutions that the general rules of liability provide for framing the harm resulting from artificial intelligence, it is possible to establish a comprehensive system of responsibility for the harms of artificial intelligence that combines several systems that alternate between each other to determine who is responsible. Thus, it is possible to acknowledge the system of individual liability for actors in the field of artificial intelligence. Then there is a system of sequential responsibility, and then a system of collective responsibility for actors in artificial intelligence, and we explain them in separate paragraphs:First: The system of individual responsibility for actors in artificial intelligence: According to this system, the damage caused by artificial intelligence is inflicted on a specific person; Because of his powers, responsibility is assigned to him based on the standard of actual authority that he has, as is the case with the standard of guarding in general rules, but here standards that do not accommodate the specificity of artificial intelligence must be excluded, such as the standard of guarding or authority, and jurisprudence has presented three standards that can be implemented. In this hypothesis, the first of these criteria relates to the operation of the smart system, in which case it can be held accountableThe entity that has the ability to program the system or modify its operating data, such as the company that updates the artificial intelligence entity. The second criterion is who has the authority to initiate the operation of the system, and includes both the operator or the user. Because they are the ones who risk using these systems. The third criterion is the criterion of physical control, and depends on the basis in which artificial intelligence decisions are embodied [55]

The right to economic harm; The owner or operator is responsible for these damages, but if the damage is the result of a defect in the configuration of the smart system, all actors in the chain of origin of the smart system must be held accountable.[56]

Third: The system of collective responsibility for actors in artificial intelligence: This system seeks to hold several parties accountable who contributed to the creation of the artificial intelligence entity, jointly and without error. This proposal was inspired by the idea of the institution's collective responsibility, which acknowledges the possibility of holding the active parties in the institution's work jointly and jointly accountable for their activity, so responsibility is established.By the force of the law, the shoulders of the groups involved in designing the artificial

[54]Muhammad Irfan Al-Khatib, Civil Liability and Artificial Intelligence, Possibility of Accountability, previous source, p. 129.

[55]Dr.. Abdel Razzaq Wahba, previous source, p. 49.

[56]Dr. Ahmed Ali Hassan Othman, previous source, p. 1574

intelligence entity are placed on the shoulders of the groups concerned with the design of the artificial intelligence entity. This system would further raise the concern and care of the designers and producers who participated in bringing this entity into existence. This system will also be in the interest of those affected and will push the groups contributing to the creation of these entities to participate in Gatherings for the purpose of agreeing to cover their responsibility and compensate for its effects.[57]

Conclusion

We investigated the basis of civil liability for damages to artificial intelligence entities, and through the research we reached a set of conclusions, and we will present a set of proposals in two separate paragraphs as follows: following:

First: Conclusions

: 1. It became clear to us through the research that legal jurisprudence began by examining the rules available in civil liability to establish liability for damages to artificial intelligence entities, and one side went to the possibility of implementing the theory of responsibility of the custodian of things, and we turned to the impossibility of establishing civil liability for artificial intelligence entities on this basis due to the difficulty of describing systems. Artificial intelligence with things on the one hand, and the inability to apply the standard of guarding to artificial intelligence on the other hand, in addition to the difficulty of proving the doing of the thing that leads to responsibility.

2. The research revealed that one of the traditional foundations that some of the jurisprudence used in establishing the responsibility of artificial intelligence entities is to establish it according to the rules of liability for defective products, so the product of the artificial intelligence entities is responsible for the damages resulting from them, and we see the impossibility of implementing these rules for the damages of artificial intelligence entities; This is due to the difficulty of adapting artificial intelligence systems as a product, the problem of proving a defect in artificial intelligence entities, and the weakness of the effectiveness of this system if the risks of development are excluded, especially since artificial intelligence entities are distinguished by their ability to develop themselves over time through machine learning, and the difficulty of specifying the product for artificial intelligence entities. With multiple parties involved in its development.

3-We have concluded that the damages caused by artificial intelligence entities that raise civil liability in the form of mechanical defects or damage that befall them do not raise legal problems, and the traditional rules of liability in the system of guardians of defective objects or products are sufficient to confront them, but the problem arises in the issue of the independence that artificial intelligence enjoys, as this Independence, no matter how small or extensive, remains a source for reconsidering the current civil liability rules and the extent of their ability to determine who is responsible for the damage and compensate the injured person.

4-We concluded through research that the European legislator came up with a new theory for the basis of civil liability for the harms of artificial intelligence, which is the theory of the human representative. This theory was contained in the provisions of the Civil Robot Law issued on February 16, 2017, where it imposed responsibility for the operation of artificial intelligence entities on a group of people according to the extent Their interference in its manufacture or exploitation, or the extent of their negativity in avoiding the actions expected from these intelligent entities, without assuming error and without considering intelligent entities as things, and this theory does not coincide with the theory of the keeper of things, and thisThe European case is a new and innovative case in legal thought, and it assumes the existence of a legal representative for

[57]Dr.Muhammad Ahmed Al-Maadawi, previous source, p. 302.

responsibility between artificial intelligence entities and humans according to his role and interference in the work of smart entities. We see that the theory of the human representative mentioned by the European legislator in the civil law for robots in its current formulation does not bring anything new. With regard to determining who is responsible, the problems that were raised regarding the implementation of the custodian's liability system or the liability system for defective products will also be raised here.

5-It became clear to us that legal jurisprudence called for the adoption of new foundations for establishing civil liability for damages to artificial intelligence entities, which is the establishment of a comprehensive system that combines several systems that alternate between them to determine who is responsible. Thus, it is possible to acknowledge the system of individual liability for actors in the field of artificial intelligence, and then the system of cascade liability, Hence, there is a system of collective responsibility for actors in artificial intelligence.

6-We believe that the system of objective responsibility and the application of the theory of liability is the system most capable of confronting the damages resulting from artificial intelligence, so the principle of vindictiveness can be applied and thus it is asked about the damages of artificial intelligence to the user who obtains the financial benefit from using these intelligent entities as a temporary solution to the judiciary in the event that it does not apply. Conditions for material liability or liability for defective products until legislation provides a new solution that suits the nature of artificial intelligence.

Second:

Proposals:

1. We call on the Iraqi legislator to amend Consumer Protection Law No. (1) of 2010 to include a tight legal regulation of liability for defective products similar to what exists in comparative legislation, and to add texts obligating companies to develop and evaluate the existence of artificial intelligence entities for the service and comfort of humans and to limit any possibility of them posing any danger. on him.

2-We guide the Iraqi judiciary to adapt the texts available in the Civil Law and the Consumer Protection Law as much as possible to accommodate the damages arising from artificial intelligence entities to protect the injured, as a temporary judicial solution until the legislator creates a new type of civil liability for artificial intelligence that is appropriate to its nature.

3. We call on the Iraqi legislator to legislate a mandatory insurance law for artificial intelligence entities, similar to the Compulsory Insurance Law for Car Accidents No. (52) of 1980, to facilitate the injured party's obtaining compensation for what is caused by artificial intelligence entities.

4. When it wasThe entry of artificial intelligence entities with the approval of the state, and they were of tangible benefit to society. We suggest that the state intervene as a reserve guarantor in the event that the compensation exceeds the financial capacity of the official, with the state returning to the official at another time if he left, so that the affected person can obtain full compensation, so we call on the legislator. Iraq to legislate a law to compensate those harmed by artificial intelligence entities.

First: books

1. Adam Wahib Al-Nadawi: The summary of the law of evidence, the Legal Library, Baghdad, 2005

2. Iyad Abdul-Jabbar Maluki: Responsibility for things and its application to legal persons in particular, a comparative study, Dar Al-Thaqafa for Publishing and Distribution, Amman, 2009.

3. Ayman Muhammad Al-Asyouti: Legal Aspects of Applying Artificial Intelligence, Dar Misr, Cairo, 2020.

4. Hassan Al-Khatib: The scope of tort civil liability and contractual liability in French law and comparative Iraqi law, Haddad Press, Basra, 1968.

5. Hassan Ali Al-Dhanun: The General Theory of Obligations, Sources of Obligation, Provisions of Obligation, Proof of Commitment, Al-Hurriya Printing House, Baghdad, 1976.

6. Salem Muhammad Radayan Al-Azzawi: Producer Responsibility in Civil Laws and International Agreements, Dar Al-Thaqafa for Publishing and Distribution, Amman, 2009.
7. Sherif Al-Tabbakh: Compensation for tortious liability and contractual liability in light of jurisprudence and jurisprudence, Dar Al-Fikr Al-Jami'i,Alexandria, 2017.
8. Sabri Hamad Khater, the extent of adaptation of traditional legal rules in the face of information, a comparative study, Dar Al-Kutub Al-Lawaniyya, Cairo, 2014.
9. Atef .Al-Naqeeb: The general theory of liability arising from doing things in its legal principles and practical aspects, Legal Publications, Beirut, 1999.
10. Ayed Raja Al-Khalayleh, Electronic Tort Liability, Liability Arising from Misuse of Computers and the Internet, A Comparative Study, Dar Al-Thaqafa for Publishing and Distribution, Amman, 2011.
11. Muhammad Irfan Al-Khatib Civil Liability and Artificial Intelligence The Possibility of Accountability An in-depth analytical study of the rules of civil liability in French civil law Kuwait International Law College Journal, eighth year, issue 1, March, 2020
12. Muammar Ben Taria and Martyred Leaders: The harms of robots and artificial intelligence technologies are a new challenge to the current civil liability law. Glimpses at some of the innovations in comparative law. Research published in the International Forum. Artificial Intelligence: A New Challenge to the Law, Annals of the University of Algiers, special issue, Algeria, 2018.
13. Muammar bin TariyaThe concept of product defects in the civil liability system for the product and the solutions provided by insurance to cover it, Journal of the Kuwait International College of Law, Kuwait International College of Law, Issue 22, 2018.
14. Nariman Masoud Bourgda: Responsibility for the actions of smart electronic systems, Annals of the University of Algiers 1, No. 31, Part One, 2017.
15. Hammam Al-Qusi: Mistakes of the algorithmic trading robot working with artificial intelligence, a prospective study into the prospects for civil liability in the stock exchange, Generation Journal of In-depth Legal Research, Generation Scientific Research Center, Issue 41, July, 2020
16. Humam Al-Qusi: The problem of the person responsible for operating the robot (The impact of the theory of the human representative on the feasibility of the law in the future) A prospective analytical study in the rules of European civil law related to robots, Generation In-depth Legal Research Journal, Generation Scientific Research Center, Issue 25, 2018
17. Youssef Islam: Civil Liability and Artificial Intelligence: Any Solution Published Research, Annals of the University of Algiers, Special Issue, International Forum Artificial Intelligence is a New Challenge for Law, November, 2018.

Third:

Laws

1. Egyptian Civil Law No. (131) of 1948.
2. Iraqi Civil Law No. (40) of 1951.
3. Iraqi Consumer Protection Law No. (1) of 2010.
4. French Civil Code of 1804. 5. European Civil Robot Code of 2017.